

THE UNIVERSITY OF CALGARY

A COMPARATIVE DEVELOPMENTAL ANALYSIS OF AGGRESSIVE AND NON-  
AGGRESSIVE CHILDREN'S NARRATIVES

by

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## **ABSTRACT**

This exploratory research investigated the topic and thematic similarities and differences in the narratives of aggressive and non-aggressive boys and girls, across grade four and grade seven. Participants were assigned to the aggressive or non-aggressive group based on Teacher ratings on the Aggressive and Prosocial Behaviour Scales of the Caprara and Pastorelli Behaviour Checklist. Participants completed two narrative tasks: the Problem Story and the Conflict Story. The Problem Story task was analyzed to examine: 1) the topic; 2) the theme; 3) the amount and type of aggression; and 4) the depiction of characters. The Conflict Story was analyzed in the same manner, although an analysis of the story topic was not undertaken.

The results indicated that the aggressive and non-aggressive participants wrote stories with largely similar topics and similar themes, although some trends toward differences between genders, grades and groups were noted. No differences were found in the topics of the stories across the aggressive and non-aggressive groups. Trends were noted in the themes of the stories across the groups. In the analyses of aggression, the aggressive group wrote stories with greater amounts of aggression and violence. Developmental differences were found in both the topics and themes of the participants' stories. Developmental differences were also evident in the amount of aggression in the stories, and the depictions of characters. Gender differences were not found in the topics of the stories. Few trends toward gender differences were noted for the thematic analysis suggesting that boys and girls tend to write similar stories. Gender differences were found in the amount of aggression, and in the type of aggression depicted in the stories. These findings suggest that children's stories, and analysis of their meaning making, provide us with a wealth of information regarding their world views and developing senses of identity.

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## **DEDICATION**

To Nhan, whose support and encouragement over the past few years have helped me to accomplish things I only dreamed of.

And to my Parents, who's love and care taught me to reach for the stars and all would be possible.

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## **CHAPTER I**

### **INTRODUCTION**

Story telling, or narrative, has traditionally been important as a way of learning, understanding and making meaning of our world. Stories are a very powerful tool for understanding the world and transmitting knowledge and beliefs. Not only do they tell of past events, but also provide knowledge about future expectations. Stories link action and consequence enabling us to interpret the intentions of others by laying out the actions and thoughts of protagonists (Polkinghorne, 1988).

Bruner (1987) suggested that we “account for our actions and for the human events that occur around us principally in terms of narrative, story, drama...” (p.94). Not only do stories help us to make meaning of the “possible explanations and possible goals” that confront us in daily life, they also provide us with a medium by which to transmit cultural and personal values (Bruner & Haste, 1987, p. 5). Thus, stories are not merely expressions of our interpretations of events, but they are also tools for developing our understanding of said events. Through narrative, we are able to organize our experiences and knowledge of the social world and give them meaning within the cultural context (Bruner, 1990).

Culture is imbedded within our narratives. Through culture, meaning becomes public and shared; we learn values, expectations, and history. Narrative is both a function of and creator of culture. Similar to culture, a function of narrative is to clarify and create our values and social norms (Bruner, 1986). Our identity development and our ideas of self become understandable to ourselves and others by virtue of our cultural systems of

interpretation (Bruner, 1990).

The development of self and identity is inherently linked to the stories we tell about ourselves. It is through stories that the past is reconstructed, the present is understood and the future is anticipated (McAdams, 1998). Identity can be understood as a collection of internalized stories that one uses to make sense of one's own life and that of others (McAdams, 1998). Through our stories, we are able to interpret, understand, and make meaning of our experiences, as well as anticipate future events. Self-narratives are a rich source of information regarding the story teller's psychological reality, social and cognitive functioning, and developmental growth (McKeough, Yates, & Marini, 1994; Noam, 1988). Narrative provides the frame by which events are interpreted, and creates a consistent pattern of themes drawn from social and cultural traditions (Gee, 1991). Narrative writing provides a window into how children are representing their understandings of the social world (Fox, 1997). Through narrative we are able to gain information about the children's world views, as well as the social and cultural influences that have shaped their world views. Studies have shown that the stories people tell give us a glimpse of how they organize the events of their lives into meaningful experiences (Bruner, 1990; Polkinghorne, 1988).

Our understanding of aggression is enhanced through using a narrative approach as we can gain insight into how the behaviourally aggressive child is organizing his or her world. This approach allows us to begin to understand the child's world view and the way the child interprets and assigns meaning to events. The stories told by maltreated children have shown the negative impact that dysfunctional parent-child relationships

have on moral development (Buchsbaum, Toth, Clyman, Cicchetti, & Emde, 1992). Furthermore, the stories of disturbed children have more themes of conflict, aggressive goals, and negative outcomes (Yule, 1985), their characters are typically left in problematic situations, and are unable to take positive action (Howard, 1994; McGrew & Teglasi, 1990; McKeough, Yates, & Marini, 1994). Evidently, these children are viewing the world from a very different perspective, one that needs to be further understood.

Aggressive behaviour in children is problematic for several reasons. Not only does such disruptive behaviour present difficulties for parents, teachers, and peers, it also negatively impacts the development of the aggressive child. Aggressive behaviour in children is becoming increasingly apparent in our society (Groves, 1997; Ollendick, 1996). The increasingly violent expression of anger in children poses a problem for not only the child and the immediate environment, but also impacts society both economically and socially (Grotmeter & Crick, 1996). Behaviourally aggressive children are at risk for a number of concurrent and long-term adjustment difficulties including academic failure, school drop out, adolescent delinquency, and adult criminality (Grotmeter & Crick, 1996).

To better understand aggression, researchers have proposed several typologies of aggression. Shields and Cicchetti (1998) defined two types of aggression: instrumental (proactive) and reactive. Instrumental aggression is described as unemotional and methodical, and appears to be motivated towards obtaining physical goals such as a desired object, or non-material goals such as social dominance. Reactive aggression refers to an emotional response that is associated with some physiological response such

as angry reactivity. Reactive aggression is believed to be a reaction to some threat, either real or perceived, and the subsequent desire to protect oneself from said threat (Shields & Cicchetti, 1998). Shields and Cicchetti (1998) suggested that different life experiences might lead to the expressions of particular types of aggression. Children who have been maltreated tend to be more likely to exhibit reactive aggression. Furthermore, Dodge, Pettit, and Bates (1990) found that children who had been physically abused tended to be extra vigilant to aggressive stimuli and were more likely to attribute hostile intent in ambiguous situations. As a result, they may be more likely to perceive their aggressive acts as being justified, as they were responding to a perceived threat.

Aggression has also been described as being overt and/or relational (Grotmeter & Crick, 1996). Overt aggression refers to aggressive acts that are directed towards others and are physical in nature. Relational aggression is the use of manipulation and exclusion in intimate friendships. The expression of different forms of aggression by children may be indicative of their representations of their world. Research has suggested that understanding how children view the world and their own behaviour is fundamental to being able to help them change (McKeough, Yates, & Marini, 1994; Noam, 1988).

### **Statement of the Problem**

The prognosis for many aggressive children is poor. Ollendick (1996) reported that 33-50% of aggressive children continue demonstrating aggressive behaviours into adolescence and adulthood. For these children, aggressive behaviours often increase in intensity, frequency, and duration over time. Furthermore, although there is evidence that traditional treatments have produced desired change (Guerra & Slaby, 1990), other

studies suggest that these treatments have not proven to be successful in the long run with chronically violent children and adolescents (McMahon & Wells, 1998; Weisz, Walter, Weiss, Fernandez, & Mikow, 1990). Researchers hypothesize that by gaining an understanding of the child's world view, effective treatments might be uncovered (McKeough, Yates, & Marini, 1994; Noam, 1988). Children are not merely products of their development, they are also active producers of it (Lerner, 1996). Children's stories can help us begin to understand how they construct their developing sense of the social world as part of their own understanding and development of self.

This research investigated the content and thematic similarities and differences in the narratives of aggressive and non-aggressive children, across developmental ages. It was motivated in part by the position that children will write about issues that are of concern to them, and also their stories will reflect their beliefs about the social world. Through the stories they write, we can begin to understand how children are constructing their senses of the social world and their self-identities, which may aid practitioners to better help children who struggle with aggressive behaviour.

### **Organization of the Thesis**

In the following chapter the theoretical and empirical literature related to the development of narrative and aggression is explored, providing the research basis for the current study. Chapter III delineates the methodology used in the study, including a description of participants, tasks and scoring criteria. Chapter IV describes the results of the analyses. In Chapter V the results of the analyses and their practical implications are discussed. As well, methodological issues, including limitations and implications of the research, and directions for future research are discussed.

## **Chapter II**

### **LITERATURE REVIEW**

#### **Narrative Thought**

Narrative is the organizing framework through which one gains an understanding of, and makes sense of the social world. Before the widespread use of written text, oral narratives were used to tell of important events, pose problems, and provide solutions to dilemmas (Bettelheim, 1976; Campbell, 1988). Stories, as a way of understanding the world and recounting experience, knowledge and beliefs, are a very powerful and natural tool (Robinson & Hawpe, 1986). Not only do they tell of past events, but also set the stage for interpreting future events, and provide information regarding future expectations (Polkinghorne, 1988). Life events are given meaning, perspective, and are fit into the patterns of actions and motivations drawn from our social context and traditions (Gee, 1991).

Bruner (1986) suggested that narrative is one of two modes of thought: paradigmatic and narrative. Although both modes of thought are concerned with establishing cause and effect of events (Robinson & Hawpe, 1986), paradigmatic thought is concerned with establishing universal truths as to the nature of events and is representative of what is known as scientific thought. The laws or truths that are generated are context free and abstract. The outcomes of paradigmatic thought are testable only through further scientific study. In contrast, narrative thought attempts to understand human action and is representative of understanding in the social realm. Narrative thought attempts to give meaning and purpose to human affairs and as such, provides understanding as to the nature of humans in the context of social interactions

(Polkinghorne, 1988). Narratives help us to understand the actions of others around us by assigning context-bound and concrete meanings to human experience (Polkinghorne, 1988; Robinson & Hawpe, 1986). The product of narrative thought is testable through everyday interpersonal verification. Through narratives, we are able to make meaning of the events that occur in our lives. The way in which we have constructed our understanding of social events, then provides a template for understanding future events (Robinson & Hawpe, 1986; Smorti, 1998; Yussen & Ozcan, 1996). Narrative is the most common form of thought used to organize and record social and personal experience (Robinson & Hawpe, 1986), however, it is not an immediate process. It is only through reflecting on our experiences that we are able to construct a narrative to understand our experiences (Robinson & Hawpe, 1986). Events are interpreted and reinterpreted according to the context and time in which they occurred. Stories are dependent upon the point of view of the constructor, and as such are flexible and subject to change with the beliefs, values, feelings, and goals of the constructor (Robinson & Hawpe, 1986). Stories can be reconstructed to fit with any one person's beliefs and values. As such, stories are not static, but rather subject to change over time.

The narrative mode of thought is based upon the temporal and causal ordering of two types of events: 1) those that take place in the physical world, on the "landscape of action"; and 2) those that take place in the mental life of the character, on the "landscape of consciousness" (Bruner, 1986). The "landscape of action" is located within intentional thought. An actor's behaviour is understood through examining or hypothesizing about what events transpired before the action occurred. In examining the antecedent events, one is able to make sense of the behaviour. For example, the girl hit the boy because the

boy hit her first. By examining the antecedent behaviour (the boy hit the girl) one is able to make sense of why the girl then hit the boy. In contrast, the “landscape of consciousness” is rooted in interpretive thought. Behaviour is interpreted in terms of characters’ psychological characteristics, their states of mind. For example, the girl hit the boy because she enjoyed picking on those smaller than her. In this case, the girl’s behaviour is understood in terms of her psychological makeup. Narrative thought enables an individual to make meaning of both the concrete aspects of experience, and their own or other’s intentional and mental states (Bruner, 1986; 1990). Stories enable us to interpret the action and intention of others by laying out and linking the action, thoughts or protagonists with consequences (Polkinghorne, 1988). Therefore, it follows that through children’s stories, we can gain understanding of both their understanding of the event, and their inferences as to the intentional or mental states of others. Conclusions regarding the meaning of the event are embedded within the social and cultural contexts from which they are drawn (Bruner, 1986; 1990; Polkinghorne, 1988).

### **Cultural Influences on Narrative**

Narrative is the most common form of thought used to organize and record social and personal experience (Robinson & Hawpe, 1986). It is apparent in every culture (McAdams, 1993), and thus provides a useful tool for understanding meaning making across cultures. Narrative presents us with information not only about how children and adults view their worlds, but also about the influences that have shaped their world views, namely family, social, and cultural life. Culture is inherently connected with our narratives. Through culture, we learn societal values, expectations, and history. Narrative serves a similar function, in creating our own values and aiding us in

interpreting social norms (Bruner, 1986). In constructing narratives, the storyteller reshapes the world of experience to fit with a system of values. This system of values is drawn from the story-teller's own social and cultural base (Fox, 1997). Stories are emotionally powerful when they incorporate and support the values and beliefs of the culture.

Culture provides the interpretive system by which meaning is given to action in the social world (Bruner, 1990). As such, culture serves to shape human life, and provides the guidelines and expectations for behaviour. Narrative also serves to shape the cultural context. It is a tool by which we create culture. For example, narratives in both their oral and written histories have become incorporated within our culture. The stories that we construct to explain social phenomena become ingrained in the cultural context. Thus, not only is narrative a function of culture, it also serves to shape the cultural context. Bruner (1990) suggested that in all cultures, a folk psychology develops that provides the norms by which human beings operate. Folk psychology refers to what we believe about the nature of events, and thus, is an expression of what our culture holds to be true. Narrative is an effective means of both expressing the folk psychology of the culture and shaping it. Narrative is sensitive to what is canonical and what is not. As such, through narrative we strive to make sense of those events that violate the social expectations, those that breach canonicity. Culture provides the social norms by which we recognize breaches of canonicity, and also provides the procedures for understanding these disruptions from established patterns of beliefs. Through story, we are able to develop the reasoning to make sense of deviations from canonical cultural patterns. Folk psychology provides the cultural system of interpretation required to make

sense of and understand others and ourselves. We modify our expressions of desires and beliefs in accordance with the cultural values and expectations; we attempt to express the norm. Folk psychology and narrative serve to frame and construct our social world.

The morals and lessons contained in stories are consistent with the values and beliefs of the culture (Yussen & Ozcan, 1996). Culture is explicitly embedded in narrative through the themes and principles expressed in the stories. Smorti (1998) suggested that narrative thought is an effective mode by which to interpret social interaction, from whatever culture the person lives. Children's understanding of the world occurs through culture. The result of the cultural tradition of narrative is that children's understanding of psychology, of the social world, and their systems of values are represented in their narratives (Fox, 1997). Furthermore, children's developing sense of self, and their beliefs about self are reflected through the stories they tell (Fox, 1997).

### **Narrative Account of the Development of Self**

The development of self is inherently linked to the stories we tell about ourselves. Through the story, one is able to interpret and understand one's own experiences. Through reflection on our experiences, and their subsequent placement within the narrative structure, identity is developed. Identity is developed through internalizing a collection of stories that we use to make sense of our own life and that of others (McAdams, 1998). The ongoing development of one's sense of self results from the integration of personal events into an historical unity that includes what one has been, and anticipates what one will be (Polkinghorne, 1988). Identity is a result of developing an integrative and internalized life story. A life story refers to a story or collection of stories that make social sense of an individual's behaviours and motivations (McAdams,

1998). One's life story is continually evolving over time (McAdams, 1998). Its primary role is to integrate experiences into a unified whole. As our experiences expand, and narrative is expanded, our views of self are synthesized through the beliefs, values and goals that are apparent within the narratives (Bruner, 1990; McAdams, 1993; Robinson & Hawpe, 1986). Personal identity and self-concept is achieved through the use of narrative. In developing a single life story, our understanding of ourselves creates our sense of personal identity (Polkinghorne, 1988).

Cultural traditions and literary works are embedded within the developing self-narratives and identity. For example, fairy tales become meaningful within children's lives (Bettelheim, 1976; McAdams, 1998). Fairy tales teach children about good and evil, the consequences of behaviour, and instill beliefs within the child's developing identity. Characters in fairy tales present absolutes in terms of what is good and what is evil. For example, in Cinderella, Cinderella is clearly presented as a good character. She is honest, beautiful, and hard working. Her wicked stepsisters are manipulative, cunning, and hurtful. Fairy tales provide models that children can identify with, and allow children the freedom to vicariously express their unconscious desires. Through these expressions, children gain a sense of triumph over evil and their developing identities are shaped through these experiences (Bettelheim, 1976).

Life stories provide the basis of identity development (McAdams, 1998). As life stories are developed, they are internalized, and through this process of internalization identity is formed. Life stories are composed with some audience in mind. Usually this audience is internalized and is representative of the cultural, social, and interpersonal worlds in which one lives. Life-stories are told in a manner that sustains and reinforces

one's ideas of self. Thus, life events that are not canonical with the cultural, social, and interpersonal worlds are not tellable to external audiences (McAdams, 1998). As well, life events are tellable to the extent that the internal audience can make sense of them. One's inner voice has the capacity to approve or disapprove of the constructed stories. It is through this inner acceptance or disapproval of the stories that we begin to understand ourselves and the events of the world and anticipate our future (McAdams, 1998). Those stories and experiences that do not fit within the life story are then re-written, encapsulated, or separated from the integrated collection of stories. McAdams (1998) suggested that people use defense mechanisms when dealing with breaches of canonicity. For example, stories that are discordant with one's life story may be repressed, intellectualized or denied. Thus, one may or may not be aware that one is not including all stories in the integrated life story. Through different experiences, we may become aware of discrepancies in our life stories and at those times we may choose to revise our stories. Life narratives are not static, they are constantly changing, being revised and reconstructed as life is experienced (Noam, 1988).

### **Applying Narrative**

Narrative is a primary scheme by means of which hermeneutical meaningfulness is manifested (Polkinghorne, 1988). Narrative has been used in a number of different research areas including moral development (Tappan & Packer, 1991), self-knowledge (Polkinghorne, 1988), and gender roles (Gilligan, 1990).

Investigating the meaning or theme of a story requires interpretation of events and plot (Beatty, 1981) as often times the theme of the story is not explicitly stated (Mishler, 1986). That is, in analyzing and interpreting stories, one can gain an understanding of

how individuals are constructing their view of self and the world. As such, children's narratives can provide us with a rich source of information as to how children are constructing and viewing themselves and the world. Particularly we can gain information about how children with behavioural difficulties are constructing their worlds and themselves. Interpretation of narratives can help to establish the context between individuals' past experiences and their behaviours in the here and now (Wyatt, 1986).

### **Aggressive Behaviour in Children and Adolescents**

Past behaviour is the strongest predictor of a child's involvement in violent acts (Ollendick, 1996). As children get older, their use of aggressive behaviours becomes increasingly resistant to change (Coie & Jacobs, 1993). Thus, it is important to intervene early in childhood in attempts to disrupt the developing pattern of aggressive behaviour. The role of culture in the development of aggression is complex and multidimensional. Dietz (1998) suggested that children in our culture are inundated with images of violence and aggression through television programming, commercials, and video games. The effects of viewing these images are similarly complex, although there appears to be some relationship between the viewing of aggressive acts, and participation in aggressive acts. Furthermore, children who grow up in homes where they witness or are subjected to violence and aggression are more likely to exhibit these behaviours. If these behaviours are further reinforced, for example, the child gains rewards or approval by using aggressive behaviours, the behaviours will continue to be observed (Coie & Jacobs, 1993).

## **Factors Related to Aggression**

A number of factors have been found to be related to the development of aggression in children. These can be classified as physiological, familial and emotional and cognitive factors. Although these factors can be divided into separate sections, it is likely that there is much interplay among them, and thus they cannot be easily teased apart.

**Physiological Factors.** Several physiological differences have been found between aggressive and non-aggressive children. Aggressive individuals have been found to have lower levels of the brain enzyme monoamine oxidase, lower levels of cerebrospinal fluid, lower heart rate levels, and reduced skin conductance response as compared to non-aggressive individuals (Ellis, 1991; Ellis et al., 1994). Aggressive children have also been found to have elevated levels of central serotonergic activity (Pine, Coplan, Wasserman, Miller, Fried, Davies, Cooper, Greenhill, Shaffer, & Parsons, 1997).

Damage or insult to the specific regions of the brain has also been linked to the development of aggression. The limbic system in particular has been linked to the expression of aggression. As a child's brain continues to develop, it can be positively or adversely affected by early life experiences. Perry (1994) reported that childhood experiences of trauma, such as abuse and neglect can impact brain development, possibly explaining the differences in the limbic system. For example, children who have been neglected and abused, often lack the physical nutrients and social connections that are necessary for the brain to properly develop. Caution must be used when interpreting

these results as not all children who experience or witness violence later exhibit aggressive behaviours.

While physiological differences certainly exist between aggressive and non-aggressive children, it is unclear as to whether or not these differences are causal or a result of aggression. Further research is needed to clarify the impact of abuse and neglect on young children. Perry (1994) argued that early interventions are of great importance and may possibly minimize the negative effects of maltreatment on brain development. In order to develop better treatments, researchers suggested we need a better understanding of how these children view the world (McKeough, Yates & Marini, 1994). Another set of factors that has been related to the development of aggression in children is familial factors. Insight into the aggressive child's world view may come from the gaining an understanding of their family environments.

**Familial Factors.** Homes of aggressive children typically exhibit high rates of parental rejection, permissiveness for aggression, lack of supervision, extreme punitiveness, failure to reward prosocial behaviours, unsatisfactory communication patterns (e.g., inconsistent reactions from parents), and poor intrafamilial problem-solving strategies (Ollendick, 1996; Patterson, Capaldi, & Bank, 1991). While ethnicity and race have been linked to aggression in the past, studies have demonstrated that when socioeconomic status is controlled, there are no differences in ethnicity or race when it comes to the incidence of aggression (Loeber & Hay, 1997). The development of aggression in children has also been found to coincide with early childhood maltreatment, specifically physical abuse, although other forms of abuse have also demonstrated a correlation with the development of aggression. Not only might maltreatment and abuse

lead to physiological changes as previously described, they have also been related to a variety of psychological difficulties. Maltreated children are at risk for attachment difficulties, poor peer relationships, and deficits in language development and cognitive functioning. Maltreated children typically develop insecure attachment styles and have difficulty trusting adults. They also tend to misread social cues and misinterpret the actions of peers, which leads them to behave aggressively (Dodge, 1991). The family environments of children who have been maltreated typically do not have as much conversation in them and as a result these children suffer in their acquisition of language.

Neglect and the witnessing of violence, particularly when the victim or perpetrator is a family member, have also been found to contribute to the development of aggression in children (e.g. Groves, 1996; Quinn et. al., 1995; Shields & Cicchetti, 1998). Children who witness violence are adversely affected in many ways including school functioning, emotional stability and ability to establish peer relationships, and tend to engage in aggressive behaviour and/or substance abuse in adolescence and adulthood (Groves, 1996). Symptoms of Post-traumatic Stress Disorder (PTSD) have been found in children who witness violence. These symptoms include a decreased ability to concentrate in school because of intrusive thoughts, sleep disturbances, disordered attachment styles, and a fatalistic orientation to the future, which includes excessive risk-taking. Research has suggested that exposure to early childhood trauma, produces fundamental changes in how children feel about the world, and their place in it (Groves, 1996). As young children lack the cognitive and physical abilities to anticipate trauma or protect themselves, they are especially vulnerable to trauma associated with witnessing violence. Subsequently, the child's future behaviours, ambitions, and dreams are

affected. A third set of factors that have been found to contribute to the development of aggression in children is cognitive factors.

**Emotional and Cognitive Factors.** Emotional dysregulation and difficult temperament are among the earliest antecedents of violence and aggressive behaviours (Loeber & Hay, 1997). Externalizing behaviours, of which aggression is a part, have been found to be associated with attenuated empathy, poor emotional understanding, and contextually inappropriate displays of positive and negative emotions (Shields & Cicchetti, 1998).

Cognitive antecedents of aggression include low intelligence, reading problems, attention problems, and hyperactivity. Social cognitive deficits have been found in aggressive children. Aggressive children tend to interpret ambiguous situations as aggressive and accordingly act aggressively towards others. Behaviourally aggressive children have also been found to lack social skills (McMahon & Wells, 1998). For some aggressive children, their acts of aggression have been reinforced and supported through the family and their previous social interactions. As the child's aggressive behaviours are reinforced, the likelihood of changing the aggressive response is decreased. The aggressive child then develops a mental script that favors using aggression (Dodge, 1991).

Research has shown that aggressive children tend to view ambiguous situations, in which the intentions of others are unclear, as hostile, leading them to engage in aggressive acts. While the aggressive youth then sees their actions as "justified" other children view their actions as excessively aggressive (Dodge, 1991). Subsequently, the aggressive child's peer group rejects the child over time. The aggressive child's isolation

provides social cues to the child that the environment is indeed hostile. This attributional bias of aggressive children in turn becomes a perpetual circle of aggressive behaviour and negative peer reactions that serve to maintain the aggressive child's use of aggressive behaviours (Dodge, 1991). Furthermore, the aggressive child is then isolated from the non-aggressive peer group, so the chances of learning prosocial alternatives are further reduced (Ollendick, 1996). This cycle then decreases the chances for adaptive change as the aggressive behaviours of the child are reinforced (Kazdin, 1994).

Dodge (1991) suggested that cognitive deficits, such as a decreased problem solving skills, make it difficult for some children to generate non-aggressive alternatives to interpersonal dilemmas. Some children may not have learned problem-solving strategies that do not involve aggression. If the child is not given the opportunity to master the steps involved in social information processing, the child will then lack the skills needed to navigate new social situations (Fraser, 1996). These cognitive deficits make it difficult for the aggressive child to generate diverse solutions to problems and also contribute to the aggressive child's difficulty interpreting the intentions of others.

Children develop their attitudes toward aggression through construction of a general world view that is based on their interpretations of their experiences (Loeber & Hay, 1997). If their world view is supportive of aggression, it is more likely that they will engage in aggressive acts. Similarly, if their world view is not supportive of aggression, it is more likely that they will have alternative means of interacting in the social world.

Research in cognitive problem solving has found evidence of differences between aggressive and non-aggressive children (Dodge & Tomlin, 1987). There are six steps

that describe the process used to make decisions in social situations: encoding, interpretation, goal formulation, response search, response decision, and enactment. It is possible for errors in processing to occur at each stage. It has become apparent that aggressive children make multiple errors (Dodge & Tomlin, 1987).

Encoding refers to an individual's assessment of the situation. Through attending to social cues and selecting the relevant cues from all available, individuals make an assessment of the situation on which future decisions are based. In contrast to non-aggressive children, aggressive children have been found to attend to fewer cues and tend to miss the most important cues available. Aggressive children tend to make use of the most recent and stimulating cues, typically missing the cues that establish the meaning of the situation.

The second step of cognitive problem solving is interpretation. This step involves assigning meaning to social cues. Aggressive children tend to commit errors in this stage when they assign hostile meaning to the social cues. This hostile attributional bias (Crick & Dodge, 1994) leads the child to assign hostile meaning to social cues that are either neutral or ambiguous leading them to misinterpret the situation.

Goal formulation is the third step of cognitive problem solving. In this step, individuals make decisions regarding the desired outcome from the situation. Aggressive children tend to select inappropriate goals that are not conducive to maintaining social relationships. Aggressive children tend to ignore the long-term consequences of using aggressive acts to solve social problems. Aggressive children tend to value winning, gaining control and asserting social dominance as outcomes without regard to the

potential consequences. Non-aggressive children are more likely to develop goals that enhance peer relationships like sharing, and developing cooperative solutions.

During response search and formulation, individuals brainstorm around the possible responses to the situation. The generation of possible responses is based on the information of the above steps. Aggressive children tend to identify fewer alternatives, seeing fewer behavioural options than non-aggressive children. Aggressive children in an attempt to meet their goals, tend to generate more coercive responses to the situation.

Response decision refers to the problems solving step in which one makes a decision regarding the action/response to be taken to the situation. Typically during this phase, individuals assess the possible outcomes of the alternative responses, choosing the response that is most likely to result in obtaining the goal. Aggressive children tend to choose those responses, which are physically and verbally coercive.

In the enactment phase, the chosen response is carried out. Aggressive children have been found to struggle with taking action that involves multiple steps. Aggressive children tend to rely on force to solve social problems. Once action has been taken, one typically evaluates the outcome and the process becomes incorporated into one's understanding of the world.

Crick and Dodge (1994) have expanded this model of cognitive problem solving from a linear model to a circular model whereby multiple steps can occur simultaneously. While encoding is viewed as occurring first in the linear model, in a circular model, it is occurring before, during, and after all phases. Similarly, goal formulation can be revised as the child's enactment of the response either supports or negates their choice in action. Steps occur and are continually adjusted depending on the social cues that one is

receiving. The process of cognitive problem solving is not static, but rather is continually adjusting based on the feedback one receives.

### **Typologies of Aggression**

In an effort to understand the various factors that are thought to contribute to aggression, researchers have developed several typologies of aggression. One typology of characterizing aggression has labeled aggressive acts as either proactive or reactive in nature (Dodge, Lochman, Harnish, Bates, & Pettit, 1997). Reactive aggression involves the defensive use of force. It typically results from frustration. Anger is expressed, temper tantrums and vengeful hostility characterize reactive aggression. Dodge (1991) hypothesized that early experiences of personal maltreatment and rejection by parents will lead to a child developing reactive aggression. This hypothesis has subsequently been supported. Reactively aggressive children typically come from backgrounds of harsh violence, typically being victim to or witnessing extreme aggression during early childhood (Dodge, Lochman, Harnish, Bates & Pettit, 1997). Furthermore, early rejection by peers may lead a child to react aggressively (Coie, Dodge, & Kupersmidt, 1990). Reactively aggressive children are more likely than proactively aggressive children to have a hostile attribution style in the cognitive processes (Dodge et al., 1997).

Proactive aggression tends to be less emotional, and typically is driven by the expectation of some favorable outcome or reward. Bullying, domination, teasing, name-calling, and coercive acts are demonstrative of proactive aggression. Rewards may consist of material goods, improved status in peer group, inflated self-esteem (Dodge, 1991).

Similar to the distinction between proactive and reactive aggression, Schwartz, Dodge, Pettit, and Bates (1997) have identified two types of aggressors: aggressive victims and non-victimized aggressors. Aggressive victims tend to be easily angered, and provoked whereas non-victimized aggressors tend to be more goal-oriented and use aggression as an instrumental strategy for achieving peer group dominance or acquiring material goods (Dodge, 1991). Aggressive victims have been found to experience more peer rejection and tend to be more disliked than non-victim aggressive children or non-aggressive/passive victims (Stephenson & Smith, 1989).

Research indicates that non-victimized aggressive boys tend to have been exposed to aggressive role models but not abuse or parental rejection (Crick & Dodge, 1996). Typically these children have witnessed adult conflict and aggression, but have not been recipients of the aggression. From these experiences, non-victimized aggressive children have learned that aggression is a suitable behavioural strategy for attaining desired goals. In contrast, aggressive victims typically come from homes in which there was frequent exposure to violence and consequently these children most likely suffered some form of abuse (Schwartz, et. al., 1997).

Crick and Grotpeter (1995) characterized aggression in terms of overt and relational. Overt aggression refers to behaviours that are physical in nature and are intended to harm another, such as kicking, hitting, or the threat of physical force. Overt aggression has been found to be more characteristic of boys (Crick & Grotpeter, 1995; Grotpeter & Crick, 1996). Relational aggression refers to aggressive behaviours that are less observable than overt aggression. These aggressive behaviours attempt to inflict harm on others by manipulating the peer relationship through means such as the silent

treatment, and rumors. Relational aggression has been found to be more characteristic of girls (Crick & Grotpeter, 1995).

Grotpeter and Crick (1996) found these two types of aggressive behaviours are reflected in children's friendships. Overtly aggressive children tend to form relationships with others who are overtly aggressive. These friendships are characterized by joining together to act aggressively towards those outside of the friendship. Friendships of girls who are relationally aggressive often are built upon sharing and telling secrets. In contrast, boys who are considered to be relationally aggressive do not show evidence of close dyadic friendships (Grotpeter & Crick, 1996), possibly because male peers tolerate overt aggression more than relational aggression.

Both overt and relationally aggressive children have been shown to have concurrent and future adjustment difficulties within the peer-group (Crick & Grotpeter, 1995). Although the effects of overt aggression are generally more evident, the effects of relational aggression can be just as injurious. High levels of depression, loneliness, and social anxiety have been found in victims of relational aggression (Grotpeter & Crick, 1996).

Pepler, Craig, and Roberts (1998) have characterized aggression in terms of whether the aggressive act occurs in isolation, that is the aggressor is acting alone, or whether the aggressive act occurs in a group context, that is the aggressor(s) are acting in a group, or being supported by a group of peers. Research has found differences in the physiological responses of the aggressors when the aggression is occurring in an isolated versus group context (McMahon & Wells, 1998).

Although the typologies of aggression help to characterize different forms of aggression and provide more information regarding the specific aggressive act, they are merely descriptive of the events that have already transpired. Furthermore, typologies do not provide information regarding the developmental progression of aggression. Thus, it is important to examine changes in aggression that occur across the developmental span.

### **Development of Aggression**

It is useful to consider a developmental approach when examining aggression, as its manifestation appears to change throughout childhood, adolescence and adulthood. Physical aggression tends to decrease as children get older. As children are increasingly socialized into the norms and rules of society, they learn more ways to respond to social situations, and can increasingly choose the more acceptable response. Although the frequency of aggression decreases with age, serious acts of violence tend to increase with age. This is especially true in adolescence as older adolescents have greater access to weapons, are stronger, and can thus inflict greater harm (Loeber & Hay, 1997). Here, the characteristics of aggression are discussed across early childhood, middle childhood, and adolescence.

**Early Childhood.** Expressions of anger and frustration are apparent in infants (Loeber & Hay, 1997). Both boys and girls display signs of anger and frustration with no difference between genders. Infant temperament is believed to be the earliest predictor of later aggressive tendencies (Kingston & Prior, 1995). Infants classified as having a difficult temperament, typically characterized by extended crying, and decreased ability to be calmed, generally have difficulty with aggressive behaviours later in life.

Attachment difficulties have also been found to be predictive of aggression in childhood and adolescence (Crick & Dodge, 1994). Children who failed to develop secure attachments with their caregivers, have difficulty trusting relationships. As a result, they are more likely to attribute negative intent to the actions of others. Furthermore, parents' reactions and attachments to their infants influence the babies' abilities to self-regulate emotions (Kingston & Prior, 1995). If children fail to develop the means to self-regulate, they are subsequently unable to control their emotions later on. Gender differences in emotional regulation have been found in infants (Weinberg & Tronick, 1997). Males in general express more emotions, positive and negative, than females, and females are typically better at regulating their own emotions rather than relying on their mothers to cue them to their emotional states (Weinberg & Tronick, 1997).

By age 2-3, expressions of anger towards others are observed, and minor gender differences are noted. In laboratory observations, groups of young children consisting of more girls than boys used more force to resolve conflict and observations of dyadic relationships among children reveal greater aggression among same-sex dyads (Caplan et al., 1991).

**Middle Childhood.** Expression of overt aggression are still common in middle childhood (Santrock, 1996). The expression of relational aggression is increasing especially among girls (Grotmeter & Crick, 1996). By age six, marked gender differences exist. This growth in gender differences coincides with the child's increased participation in social situations such as day care, play groups and school. Children are learning to exercise their social skills for the first time. Physical aggression becomes more apparent in boys than girls (Coie & Dodge, 1997). Crick and Grotmeter (1995)

suggested that girls engage in more indirect and relational aggression as compared to boys. Girls are more likely to use relationships to harm others through peer exclusions, rumors and gossip, and collusion aimed at breaking friendship bonds. Research in this area is inconsistent, however. Pepler and Craig (1995), using remote audiovisual equipment, observed girls using physical aggression against their peers in rates similar to that of boys. However, girls were more likely to hide their use of overt aggression from adults and other observers. In follow up interviews, girls were less likely to admit to bullying than were boys. As our culture tends to disapprove of females using aggressive behaviours in interpersonal relationships, it is likely that the girls have learned that overt aggression is not appropriate for females. As a result they attempt to cover up their overtly aggressive behaviours.

Aggression is generally found to decrease during childhood as children gain competence in interpersonal skills (Loeber & Hay, 1997). Although for a small subgroup, aggressive behaviour continues to be problematic.

**Adolescence.** Typically in adolescence there is a decrease in the amount of aggressive behaviour. The importance of the family in the development and maintenance of aggressive behaviours is reduced by the increasingly important role of school and peer influences. Although the majority of aggressive behaviours seem to desist in adolescence, two forms appear to increase. During adolescence, there is an increased likelihood of gang formation (Loeber & Hay, 1997). Peer groups in school are more likely to engage in collective forms of violence and aggression during adolescence than in childhood. Secondly, during adolescence, there is an increase in cross-gender aggression (Cairns & Cairns, 1994). Adolescent girls tend to report more conflicts with

boys than boys report with girls (Cairns & Cairns, 1994). Furthermore, although in general aggression tends to decrease with age, aggressive acts tend to become more extreme during adolescence (Loeber & Hay, 1997; Ollendick, 1996). As adolescents age, they become stronger, and have greater access to weapons, possibly accounting for the increase in the extreme nature of aggression. Furthermore, the introduction of gang-related violence may also be responsible for the increase in extreme forms of aggression. Furthermore, children who continue to display aggressive behaviours may also be seen as progressing along the continuum of aggression. As such, their behaviours are becoming more intense, extreme and frequent as their aggression persists (McMahon & Wells, 1998).

During adolescence, there is a general decrease in the overt expression of aggression among females. Whereas boys continue to demonstrate aggressive responses to direct confrontation (Cairns & Cairns, 1994; Olweus, 1991), girls tend to develop other ways of expressing anger. Cairns and Cairns (1994) suggested that this decrease in overt aggression might be partly related to the development of gender identity and sex-typed behaviour. As children begin to develop their own sense of identity, they begin to incorporate societal and cultural norms in regards to acceptable and unacceptable behaviours. These cultural norms are often gender specific. Girls learn that physical fighting, such as hitting and kicking is less acceptable for girls than for boys. Consequently, they reduce their involvement in such activities. This reduction is then reinforced by both peers and adults.

In order to further understand the way aggressive children are making sense of the world, and understanding their own behaviours, it is useful to examine their narratives.

Through examining the narratives of aggressive and non-aggressive children, we can gain insight to the similarities and differences that exist between these groups.

### **Narrative Investigations of Aggression**

Narrative frameworks have been utilized to examine the issues of concern, including hostile and aggressive issues, in an adolescent sample (Bates, 1997), the cognitive functioning of boys diagnosed with conduct disorder or oppositional defiant disorder (Howard, 1994; McKeough, Yates & Marini, 1994) and the cognitive functioning of a non-clinical sample of aggressive children (Misfeldt, 1999). Narrative frameworks have also been used to examine the differences in cognitive processing in bullies and non-aggressive children (Smorti, in press), and cross-cultural influences on the development of aggressive behaviour (Zahn-Waxler, Friedman, Cole, Mizuta, & Hiruma, 1996).

Bates (1997) examined the content of adolescents' stories, positing that the adolescent voice would best describe issues of concern for adolescents. Bates utilized a four-factor model of adolescent concerns that suggested that adolescents were primarily concerned with issues regarding Health and Drugs, School and Career, the Personal Self and Social Self (Violato & Holden, 1988). Bates proposed that, if adolescents are concerned about these topics, then their narratives would reflect that concern. The findings indicated that indeed participants wrote stories about the issues reflecting these four categories. She also found support for a fifth category of Hostility and Harm that consisted of issues such as war, bombing, kidnapping, and suicide. Bates concluded that adolescents are concerned about these topics, and also are concerned about issues regarding Hostility and Harm.

McKeough, Yates and Marini (1994) examined the developmental differences in boys clinically diagnosed with either oppositional defiant disorder or conduct disorder compared to a non-aggressive, normal functioning sample of boys. The aggressive boys' stories were found to be less socially adaptive, and more negative in their story worlds than those of the non-aggressive boys. Furthermore, the aggressive group scored half to one full substage lower than the non-aggressive when the structural complexity of the narratives was examined. These results suggest that the aggressive boys showed evidence of a cognitive delay perhaps indicating that early life experiences have delayed their abilities to interpret and react to social interactions.

Howard (1994) conducted a follow up study of McKeough, Yates, and Marini (1994) utilizing a subgroup of the original study's participants. She examined developmental and content differences between the aggressive and non-aggressive boys' stories on their problem stories and their responses to the Thematic Apperception Test (TAT). Howard broke stories into T-units, that is, the smallest grammatically correct segment that a passage can be divided into without creating groups of words without meaning (Hunt, 1977). Each T-unit was given a rating of either extreme hostility, less extreme hostility, or lacking in hostility. The aggressive boys were found to continue to score approximately one substage below their behaviourally normal peers. Additionally, Howard found that the aggressive group included more references to conflict and aggression than the non-aggressive group on the TAT, but not in their problem stories. Howard also examined the depictions of characters in the stories. The findings indicated that the aggressive boys tended to portray characters more negatively than the non-aggressive boys.

Zahn-Waxler, Friedman, Cole, Mizuta, and Hiruma (1996) examined the cross-cultural differences in prosocial and aggressive themes in Japanese and American school children. Their research revealed significant cultural and gender differences. American children were found to exhibit greater amount of aggressive behaviour and language as compared to the Japanese children. Furthermore, American children were found to be less adept at self-regulating their emotional responses. Regardless of culture, girls were found to exhibit more prosocial behaviours than boys. The authors suggested that one of the determining factors in the cultural differences might be parenting styles.

Warren, Oppenheim, and Emde (1996) examined the usefulness of using children's play themes as a diagnostic measure of certain behavioural problems. They rated the child's narrative play themes. The Child Behaviour Checklist was also used as an assessment tool and the play themes were correlated with the checklist. The results indicate that indeed children's narrative play themes correlate with ratings on the Child Behaviour Checklist. The authors proposed that children's narrative play themes are useful in diagnosis and treatment planning for children with behavioural difficulties.

Smorti (in preparation) examined the cognitive strategies used by victims and bullies when interpreting socially incongruent situations. The results indicated two types of interactions: progressive incongruent processes and regressive incongruent processes. Progressive incongruent processes refer to instances when a negative situation is changed to a positive direction and regressive incongruent processes refer to instances when a positive situation is changed to a negative direction. Smorti found that bullies typically used both action and mental states to interpret the discrepant stories. Recall that Bruner (1986) described two types of events with which narrative is concerned: the "landscape

of action” and the “landscape of consciousness”. Bullies appear to use both types of information in interpreting the stories. Smorti also found that victims tend to rely on the “landscape of action” or those events occurring in the real world rather than using mental states to interpret the stories. Smorti suggested that these differences help to reinforce the individuals’ world views and views of self. Bullies use both types of events in their interpretations in order to justify their actions, whereas victims rely on action as the cause of the aggression is external which protects the victims sense of self in that they are not responsible for or have control over the situation.

### **The Current Study**

The current study is based on previous research that found content and thematic differences in the stories of clinically diagnosed aggressive boys as compared to non-aggressive boys (Howard, 1994). The current study explored whether or not these differences would be found in a non-clinical sample of aggressive children. This study attempted to characterize the aggression found in children’s stories and examine if such characterizations could differentiate aggressive children from non-aggressive children.

### **Hypotheses and Research Questions**

The following research questions sought to explore the differences between teacher identified aggressive and non-aggressive boys and girls across grade four and seven classrooms. The following research questions and predictions were examined:

1. What are the similarities and differences in the story topics between aggressive and non-aggressive children’s stories, and are gender and developmental effects evident?

2. What are the similarities and differences in the story themes between aggressive and non-aggressive children's stories, and are gender and developmental effects evident?
3. What are the similarities and differences in the Overall Ratings of Aggression between the aggressive and non-aggressive children's stories, and are gender and developmental effects evident?
  - a) Based on the findings that boys are traditionally more aggressive than girls (Coie & Dodge, 1997), it was predicted that gender differences would be evidenced in the overall rating of aggression.
  - b) Based on the finding that older adolescents have had more opportunity to be exposed to extreme forms of violence (Loeber & Hay, 1997), it was predicted that grade differences would be evidenced in the overall rating of the aggression.
  - c) Based on the finding that aggressive children tend to demonstrate more extreme aggressive behaviour (McMahon & Wells, 1998), it was predicted that group differences in the overall rating of the aggression would be evidenced.
4. What are the similarities and differences in the Type of Aggression: Proactive/Reactive, Overt/Relational, Solitary/Group portrayed in the aggressive and non-aggressive children's stories and are gender and developmental effects evident?
  - a) Based on the finding that aggressive children are more likely to use aggressive acts in an attempt to meet their social goals (Fraser, 1996),

it was predicted that the aggressive children would describe more instances of proactive aggression than reactive aggression as compared to the non-aggressive group.

- b) Based on the finding that boys tend to use overt aggression more so than girls, and as girls tend to use relational aggression more so than boys (Crick & Grotpeter, 1995), it was predicted that the girls' stories would demonstrate more instances of relational aggression whereas the boys' stories will contain more instances of overt aggression.
  - c) Based on the finding that overt aggression tends to decrease with age (Loeber & Hay, 1997), it was predicted that the grade four stories would include more instances of overt aggression than the grade seven stories.
  - d) Based on the finding that aggression tends to take more of a group form in later adolescence (Loeber & Hay, 1997), it was predicted that the grade seven stories would contain more instances of group aggression.
5. Who is the Perpetrator of Aggression: Main Character or Other Story Character: in the aggressive and non-aggressive children's stories and are gender and developmental differences evident?
- a) As children tend to write about their own experiences, and that aggressive children tend to be the perpetrators (Polkinghorne, 1988), it was predicted that the stories of the aggressive group would contain

more instances of the main character as the perpetrator of the aggression.

6. How are the characters (Main, Peer and Adult) depicted in the aggressive and non-aggressive children's stories and are gender and developmental effects evident?

- a) As children tend to write about their own experiences, and aggressive children are typically viewed as exhibiting more negative traits (McMahon & Wells, 1998), it was predicted that the aggressive children would write more about negative main characters than the non-aggressive group.
- b) As aggressive children tend to negatively interpret ambiguous actions and social cues (Dodge, 1991), it was predicted that the adult and peer characters would be more negatively portrayed in the aggressive groups stories (Howard, 1994).

7. Based on Howard's (1994) work, what are the frequencies of extreme, less extreme, and aggressive t-units in the aggressive and non-aggressive children's stories and are gender and developmental differences evident?

- a) Based on the finding that boys tend to use more extreme forms of aggression (Coie & Dodge, 1997), it was predicted that the boys' stories would contain more extreme t-units as compared to the girls' stories.
- b) Based on the finding that older adolescents use more extreme forms of aggression (Loeber & Hay, 1997), it was predicted that the grade

seven group will contain more extreme t-units in their stories as compared to the grade four group.

- c) Based on the finding that aggressive children tend to use more extreme forms of aggression (McMahon & Wells, 1998), it was predicted that the aggressive group would have more extreme t-units in their stories than the non-aggressive group.
- d) Based on the finding that aggression tends to decrease with age (Loeber & Hay, 1997), it was predicted that the grade four group would have more less extreme t-units and more total number (extreme + less) of aggressive t-units in their stories.
- e) Based on the finding that aggressive children use more aggressive behaviours in peer relationships than non-aggressive children (Dodge, 1991; Fraser, 1996), it was predicted that the aggressive group would have more less extreme t-units and more total number of aggressive t-units in their stories than the non-aggressive group.

## **Chapter III**

### **RESEARCH DESIGN**

This exploratory study investigated the qualitative and quantitative differences between children identified as behaviourally aggressive and those identified as non-aggressive across developmental ages. This study was designed to expand upon research that has found qualitative differences in the story content of boys who met the clinical criteria for either conduct disorder, or oppositional defiant disorder, or both (Howard, 1994; McKeough, Howard, & Martens, 1997). Participants were screened using the Caprara and Pastorelli Behaviour Checklist: Teacher's version (Caprara & Pastorelli, 1989) of the Aggressive and Prosocial Behaviour scales. The participants for this study were then identified as either part of the behaviourally aggressive or non-aggressive groups based on predetermined criteria.

Two tasks were utilized in the analysis: the problem story and the conflict story. Task scoring included content and thematic analyses, analysis of the amounts and types of aggression and conflict, and a character depiction analysis.

#### **Method**

##### **Participants**

The participants for this study were Canadian students residing in a large urban setting and enrolled in a publicly funded separate school board. From a total of 238 volunteers, ninety-seven students met the inclusion criteria for this study<sup>1</sup>. Fifty-four participants were in grade four, 43 participants were in grade seven. Of the grade four

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<sup>1</sup> Because of absenteeism, the number of protocols analyzed was less than 97. Further, the number of protocols analyzed differed for each protocol.

students, 21 were identified as behaviourally aggressive (approximately 22% of the 97) and 33 were identified as non-aggressive (approximately 34% of the 97). The mean age of the grade four participants identified as behaviourally aggressive was 10.07 years (sd = 5.37 months). The mean age of the grade four participants identified as non-aggressive was 9.92 years (sd = 3.98 months). Of the grade seven students, 14 were identified as behaviourally aggressive (approximately 14% of the 97) and 29 were identified as non-aggressive (approximately 30% of the 97). The mean age of the grade seven participants identified as behaviourally aggressive was 13.07 years (sd = 4.49 months). The mean age of the grade seven participants identified as non-aggressive was 12.96 years (sd = 3.6 months). The sample included both female and male participants. The sample demographics are summarized in Table 3.1. A one-way analysis of variance found no significant differences in ages between the aggressive and non-aggressive groups. Socio-economic status (SES) was estimated using the National Occupational Classification System (Employment & Immigration Canada, 1993). This system assigns a numerical value from one to eight, to occupations based on the level of education achieved, and the projected income. For example, a secretary would be assigned a rating of three as this occupation requires a high school diploma, an electrician would be assigned a rating of six as this occupation requires a technical school diploma, and a dentist would be given a rating of 8 as this occupation requires more than an undergraduate university degree. Each parent was rated on this system based on their reported job and education. The code from both parents was summed and assigned to the child as an SES rating, unless the family indicated it was a single income family, in which case only the code from the employed parent was utilized. A one-way analysis of variance found no significant

differences between the grades or the aggressive and non-aggressive groups for SES.

Table 3.2 summarizes the cultural diversity of the sample<sup>2</sup>.

### **Inclusion Criteria**

A total of 238 students participated in the tasks. The participants were rated on the aggression and prosocial scales of the Caprara and Pastorelli Behavior Checklist for Children: Teacher's Version (CPBCC). Participants were not included in the study if less than 50% of the items on the CPBCC were completed. If participants were rated as falling above the 75<sup>th</sup> percentile on the aggression scale, and below the 50<sup>th</sup> percentile on the prosocial scale, they were identified as behaviourally aggressive. If participants were rated as falling below the 50<sup>th</sup> percentile on the aggression scale, and above the 50<sup>th</sup> percentile on the prosocial scale, they were identified as non-aggressive. These criteria were selected in order to ensure a behavioural differentiation between the two behaviour groupings. Using the above 75<sup>th</sup> percentile ranking as a cut off for the aggression scale was an attempt to target those participants whose aggressive behaviour is particularly notable within the classroom or school context. Using the below 50<sup>th</sup> percentile criterion as a cut off on the prosocial scale was used as it is suggestive of tendencies toward social inadequacy and aggressive behaviours. This is consistent with past research that indicated that a lack of prosocial behaviour is characteristic of social problems and aggression (Center & Wascom, 1987). Alternatively, including participants who scored below the 50<sup>th</sup> percentile on the aggression scale and above the 50<sup>th</sup> percentile on the prosocial scale, provided a sample that can be considered non-aggressive.

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<sup>2</sup> Neither SES nor ethnicity was used in the data analysis due to sample size limitations. This information is presented for the purpose of sample description.

Table 3.1

## Demographic Information

Grade	Group	N (male)	N (female)	Age (years)	sd (mos.)	SES	sd
Grade 4	Non-aggressive	17	16	9.92	3.98	8.91	3.32
	Aggressive	11	10	10.07	5.37	7.97	2.53
Grade 7	Non-aggressive	14	15	12.96	3.6	10.65	3.76
	Aggressive	8	6	13.07	4.49	9.45	3.22

Table 3.2

## Cultural Diversity of Sample

Ethnic Background	Non-Aggressive (%)	Aggressive (%)
European: English as 1 <sup>st</sup> Language	77.4	70.6
Asian	8.1	8.8
African	1.6	0
European: English as 2 <sup>nd</sup> Language	3.2	2.9
Hispanic	4.8	4.8
Unknown	4.8	17.6

**Screening Materials****Caprara and Pastorelli Behaviour Checklist for Children: Teacher's Version**

The Caprara and Pastorelli Behaviour Checklist for Children (CPBCC) is composed of three scales: Prosocial Behaviour, Aggressive Behaviour, and Emotional Instability; and can be utilized for self, peer, parent and teacher ratings. The CPBCC was chosen as this study is part of a larger cross-cultural study, which includes an Italian sample, and the CPBCC is available in both English and Italian translations. For the purposes of this study, only the teacher's rating scale for the aggressive behaviour and prosocial behaviour scales were used as a clinical population was not being identified. The Prosocial Behaviour Scale contains fifteen items, including five control items. The

Aggressive Behaviour scale contains twenty items, including five control items. Although the original checklist is scored on a three point ordinal scale: 1=never, 2=sometimes, 3= often, a fourth category was added, 0=unknown, recognizing that Canadian teachers may have limited contact with students, especially those in grade seven. Although the original scale is scored by summing the numerical value of each of the items, the including the option of “0=unknown” resulted in a large amount of data appearing as though it was missing. Furthermore, a number of questions were consistently answered as “unknown”. As such, in order to obtain a meaningful score, items to which teachers responded “unknown” more than 25% of the time were removed from the scale. The remaining questions were averaged resulting in a possible score of 1 to 3. The omitted items are in Table 3.3.

This was the first time that the CPBCC was used in Canada. As such, a principal components factor analysis was completed on the remaining scale items (Misfeldt, 1999). Misfeldt (1999) found that the remaining scale items loaded on the appropriate factors with the exception of item PB5: The student is gentle, which was found to load more heavily on the factor representing the aggressive scale. As such, this item was included in the aggressive scale. Thus, the scale items of the CPBCC used to differentiate the aggressive and non-aggressive groups, based on the above described criteria are presented in Table 3.4.

Table 3.3

## Items Deleted from the Prosocial and Aggressive Behaviour Scales of the CPBCC

Aggressive Behaviour Scale	Prosocial Behaviour Scale
A3. The student kicks and hits or punches	PB10. The student lets others use his or her toys
A8. The student bites others to harm them	PB15. The student hugs his or her friends
A10. The student argues with older children	
A11. The student is envious	
A12. The student tells lies	
A20. The student likes to fist-fight	

Table 3.4

## The Two Adjusted Factors for the CPBCC

Factor 1: Aggressive Behaviour Scale	Factor 2: Prosocial Behaviour Scale
A1. The student gets into fights	PB1. The student tries to make sad people happier
A4. The student gets even when she or he is mad	PB2. The student spends time with his/her friends
A5. The student hurts others	PB4. The student tries to help others
A7. The student threatens others	PB7. The student helps others with their homework
A13. The student says bad things about other kids	PB12. The student likes to play with others
A15. The student insults other kids or calls them names	PB15. The student trusts others
A16. The student pushes and trips others	
A18. The student teases other kids	
A19. The student uses bad words (he or she swears)	
PB5. The student is gentle	

### Task Description, Administration, and Scoring Procedures

In the present study, each participant was required to complete two narrative tasks: a Problem Story, and a Conflict Story. Both tasks were completed using paper and pencil. The Conflict story was completed in one thirty minute time period. The Problem story was completed in three half hour periods. The tasks were administered in randomized order, with the problem story randomized as three tasks.<sup>3</sup>

<sup>3</sup> In the larger study, six tasks were administered in randomized order. However, only two of the tasks were used for the current study.

### **Problem Story**

The problem story task asked participants to write a story about someone who has a problem that he or she wishes to solve (McKeough, 1992). The problem can be either fictional or real. This task allows participants freedom to discuss different types of problems they may have read or heard about, encountered or even anticipated in their lives. Within a narrative framework, it is anticipated that such a task will allow a glimpse into the child's world view, their cultural milieu (Gee, 1991; Polkinghorne, 1988). This task has been used to uncover a variety of themes and concerns that children face (Bates, 1995; Howard, 1994).

### **Administration**

The instructions were provided both in writing and verbally. Participants were instructed: "I would like you to tell me a story about someone, around your own age, who has a problem they want to solve. It can be real, made up, or sort of half and half." A researcher was available at all times to answer questions or provide direction.

### **Scoring Procedures**

The problem stories were analyzed for their content and themes. As well, those stories containing aggression were further analyzed in order to explore the aggressive nature of the story.

**Topic Analysis.** The goal of this analysis was to determine if the stories written by the children identified as behaviourally aggressive differed in the topics they wrote about as compared to those written by the non-aggressive group. The stories were read through once to familiarize the researcher with their content. The stories were then re-read and labeled as to the topic(s) they presented. Based on previous research, Violato

and Holden's (1989) model of adolescent concerns was used as a template in scoring the stories' topics (Bates, 1997). This model asserts that adolescents are primarily concerned about four factors: (1) Health and Drugs; (2) Future and Career; (3) Personal Self; and (4) Social Self. Previous research found evidence of a fifth category, Hostility and Harm (Bates, 1997) that was also present in and added to the classification process in the current study. The stories were categorized according to the topic or content of the story that was presented without "reading between the lines" for the underlying message. If a story had more than one topic, the primary topic was chosen for classification. Table 3.5 presents the topics included in the categories. Italicized items indicate the items included by Bates (1997) to better reflect the story topics.

**Thematic Analysis.** The coding scheme for the stories emerged from the data. A theme refers to the central idea, the thesis, or the message of the story (Beatty, 1981). The stories were read through once to familiarize the reader with their content. Story themes were then identified by reading each story and identifying the global theme or meaning of the story. The stories were then re-read and themes re-identified to verify the presenting theme. Following the identification of the themes presented in the stories, an exploratory classification process was undertaken in which thematic categories of the themes were developed. Themes that shared commonalities were grouped together and classified under the same heading. Following this classification process, the stories were then re-read and assigned to thematic categories to ensure information was not lost in the development of the thematic categories.

Table 3.5

## Topics Included Within Each Category

Topic	Category 1: Health & Drugs	Category 2: School & Future	Category 3: Personal Self	Category 4: Social Self	Category 5: Hostility & Harm
Drug Problems	*				
Smoking Problem	*				
Alcohol Problems	*				
Pregnancy	*				
<i>Safety/Basic Needs</i>	*				
<i>Eating Disorders</i>	*				
<i>Death</i>	*				
School		*			
Attendance/Performance					
Extracurricular Activities		*			
<i>School Violence</i>		*			
Parent Conflict			*		
Sibling Conflict			*		
Identity			*		
Family			*		
<i>Pets</i>			*		
Personal Appearance				*	
<i>Romance</i>				*	
Peer Acceptance/Rejection				*	
<i>Theft</i>					*
<i>Kidnapping</i>					*
<i>Bombing</i>					*
<i>Homicide</i>					*
<i>Abuse</i>					*
<i>War</i>					*
<i>Suicide</i>					*

Italicized topics Bates (1997)

**Amount of Aggression and Violence.** This analysis examined the amount of aggression and violence found in the story. The stories were broken down into terminable (or t-units) units, that is, the smallest grammatically correct segment that a passage can be divided into without creating groups of words without meaning (Hunt, 1977). Based on Howard's (1994) work, each t-unit was given a rating of either extreme

hostility, less extreme hostility, or lacking in hostility. Frequencies were tabulated as to the number of t-units that were categorized as either extreme or less extreme. Following this tabulation, the stories were assigned an overall rating of extreme, less extreme or mixed. A rating of extreme was assigned if the story contained predominantly extreme t-units. A rating of less extreme was assigned if the story contained predominantly less extreme t-units. A rating of mixed was assigned if the presentation of both extreme and less extreme t-units was equal. For example, if a story contained one instance of threatening to kill (extreme conflict) and one instance of pushing (less extreme) the story was given a "mixed rating". If the story contained 3 instances of extreme violence and one instance of less extreme violence, it was given a rating of predominantly extreme. Stories that did not contain conflict or hostility were noted as such and not included in this analysis. The scoring system is demonstrated in Table 3.6.

**Type of Aggression.** The stories that included aggression and/or conflict were further analyzed as to the type of aggression presented in the stories. The stories were scored as to whether the aggression was proactive (Shields & Cicchetti, 1998), that is aimed at obtaining some desired object or position, or reactive (Shields & Cicchetti, 1998) that is aimed at protecting oneself from some form of assault. Stories in which the aggressor was using aggression in order to obtain some desired resource were categorized as proactive. Stories in which the aggressor was responding to some perceived or real attack were assigned a rating of reactive.

The stories were also scored as to whether or not the aggression was overt (Crick & Grotpeter, 1995), that is physical in nature, or relational (Crick & Grotpeter, 1995), for

example spreading rumors, or mixed, that is a combination of both overt and relational aggression.

The stories were also scored as to whether the aggression was perpetrated in a group or alone (Pepler, Craig, & Roberts, 1998). Aggression that occurred in a group context was categorized as group aggression. Aggression that occurred in a socially isolated situation was categorized as solitary aggression.

**Perpetrator of Aggression.** The stories containing aggression were also analyzed as to who the perpetrator of the aggression was, based on previous research (Bates, 1997). The stories were scored as to whether or not the main character was the perpetrator of the aggression. Stories in which the perpetrator was the main character were given a rating of main, stories in which the perpetrator was not the main character were given a rating of other.

**Character Depiction.** This analysis was conducted on all the stories regardless if aggression was present or not. Character depiction relates to whether the characters of the story are portrayed positively or negatively. Similar to Howard's (1994) work, three character groupings emerged from the stories: main character, peer, and adult (family members, teachers, others). All characters mentioned in the story were given a rating of positive, negative, or mixed. A character was determined to be positive or negative if they met the criteria as described in Table 3.7. A character was given a rating of mixed if they were described in both positive and negative terms approximately equally in the story.

**Frequency of Aggression.** The frequencies of aggression were calculated by totaling the number of t-units exhibiting extreme aggression and the number of t-units exhibiting less extreme aggression. Furthermore, the total number of aggressive t-units

(extreme + less extreme) were tabulated. The corresponding percentages for each raw score number of t-units was also calculated.

Table 3.6

**T-unit Rating of Conflict and Aggression**

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**Extreme Forms of Conflict and Violence:**

1. Are extreme forms of physical violence or antisocial actions carried out against person/property (e.g. Torture, assault, shooting, stabbing, beating, arson, and theft)?
2. Is extreme hostility expressed as angry words, threats, curses (e.g. "I told him I would beat him up", "he said he would kill me")?
3. Is extreme aggression contemplated or intended (e.g. "I wished he were dead", "I thought about beating him up", "I almost took a knife")?

**Less Extreme Forms of Conflict and Violence:**

1. Are less extreme acts of aggression carried out (e.g. Bullying, chasing, shoving, pushing, fighting, and rejecting)?
2. Is less extreme hostility expressed verbally (e.g. Teasing, insults, arguments)?
3. Is less aggressive conflict contemplated or intended (e.g. "I thought he might hurt me", "I wished I would have pushed him back")?

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Adapted from Howard (1994)

Table 3.7

**Scoring for Character Depiction**

	<b>Generally Positive</b>	<b>Generally Negative</b>
<b>Main Character</b>	<b>Competent</b>	<b>Incompetent</b>
	<b>Kind</b>	<b>Aggressive</b>
	<b>Cooperative</b>	<b>Uncooperative</b>
	<b>Adequate</b>	<b>Inadequate</b>
<b>Peers:</b>	<b>Helpful</b>	<b>Unreliable</b>
	<b>Friendly</b>	<b>Rejected/rejecting</b>
	<b>Accepting</b>	<b>Withdrawn</b>
	<b>Protective</b>	<b>Aggressive</b>
	<b>Competent</b>	<b>Stupid</b>
<b>Adults</b>	<b>Helpful</b>	<b>Unreliable</b>
	<b>Affectionate</b>	<b>Withdrawn</b>
	<b>Encouraging</b>	<b>Blaming/Judging</b>
	<b>Competent</b>	<b>Stupid</b>
	<b>Protecting</b>	<b>Neglectful</b>

Howard (1994)

### Conflict Story

The second task analyzed in this study was the conflict story narrative task. This task asked participants to describe a school related event that involved some sort of interpersonal conflict in which they participated, were witness to, or had heard about. This task provided a contrast to the problem story. Whereas the problem story could be either true or fictional, the conflict story is a recount of a real conflict. Seven questions followed the conflict story to help assess how the participants interpreted the conflict situation. The questions were asked to determine the participants' feelings about the conflict, their assignment of blame, and their ability to generate alternative solutions to the conflict. The questions were:

1. To make sure we understand the situation you wrote about, please underline the part of your story that tells about the main or most important problem.
2. When you saw the problem situation happen or when you heard about it, what did you think or feel? Try to think back to the situation and tell as much as possible about your different thoughts and feelings then.
3. Do you think any person was to blame for this situation? YES NO
4. If YES, who?

Mark on the scale below how much you think this person was to blame.

---

0%	25%	50%	75%	100%
(None)	(a little)	(Half)	(A lot)	(Totally)

5. Was anyone else to blame? YES NO

6. If YES, who?

Mark on the scale below how much you think this person was to blame.

---

0%	25%	50%	75%	100%
(None)	(a little)	(Half)	(A lot)	(Totally)

7. Try to think of another way the problem could have been handled.

### **Task Administration**

This task was administered in class by the researcher who remained available to answer questions. Participants were given 30 minutes to complete the task. The following instructions were provided both in writing and verbally:

I want you to write a story about a time when you or one of your classmates were involved in a problem situation at school that needed to be solved. Maybe you were there when it happened, so that you actually saw it happening, or maybe you just heard about it a bit later. The situation might have happened in your classroom, somewhere else in the school, or around the school. You can decide how long your story will be, but please make sure you describe the situation in enough detail that a stranger, who might be reading your story, will be able to understand what happened. After you finish writing your story, I have a few short questions for you to answer.

### **Scoring Procedures**

The conflict stories were analyzed using the same procedures as for the problem stories: analysis of content, themes, amount of aggression, the type of aggression (overt or relational, solitary or group, instrumental or reactive), the perpetrator of the

aggression, and a character depiction analysis. A content analysis was not performed as the task did not permit participants the flexibility to write about concerns. Rather the task was specific to describing a conflict situation that was true and that occurred at or around the school.

### **Procedure**

Upon receiving ethical approval from the school board and the Faculty of Educational Psychology at the University of Calgary, five publicly funded elementary schools in a large urban center in Western Canada were approached for participation. Principals of the selected schools were contacted and asked to participate in the study. Upon receiving consent from the principals, interested teachers were approached and the purpose and procedures of the study were explained. Letters of consent were provided to interested teachers (See Appendix A). Teachers who agreed to participate were asked to rate all of their consenting students for pro-social and aggressive behaviour using the Caprara and Pastorelli Behaviour Checklist (Caprara and Pastorelli, 1989). Parental consent was obtained for each student considered for the study (see letter of information and consent: Appendix B). A demographic questionnaire was included with the letter of consent addressed to the parents (Appendix C). The questionnaire was used to assess SES and education level of the parents, as well as to control for variation due to ethnicity. SES was calculated using the National Occupational Classification System (NOCS; Employment and Immigration Canada, 1993).

Participants were assigned to groups (aggressive or non-aggressive) based on the teachers' ratings on the Caprara and Pastorelli Behaviour Checklist for Children (1989).

The experimental tasks were presented in a randomized across classes, and the class sizes ranged up to 30 participants.

### **Summary**

The current study was designed to examine the content and thematic similarities and differences in the stories told by behaviourally aggressive and non-aggressive children. Analyses of the amounts and types of aggression were also completed for those stories containing aggression. A character depiction analysis was also completed. Participants completed two narrative tasks: the problem story and the conflict story. The problem story task asked participants to write a story, real or fictional, about someone their age who had a problem. The conflict story asked participants to write a story about a conflict that had occurred at school, then to answer seven questions. The conflict story was scored in the same manner as the problem story although a topic analysis was not completed.

### **Plan of Analysis**

The tasks were scored using both qualitative and quantitative methods. The chi square, t-test and 2-way ANOVA were applied to examine differences between genders, grades (four and seven), and groups (aggressive and non-aggressive). All analyses were declared significant at the 0.05 level unless otherwise stated. The results of the analyses are presented in Chapter IV. The topic analysis is presented first, followed by the thematic analyses, and the aggressive trends analysis.

## **Chapter IV**

### **RESULTS**

#### **Introduction**

The purpose of this study was three fold: 1) to investigate group (aggressive and non-aggressive) similarities and differences in the topics and themes of children's narratives; 2) to investigate developmental similarities and differences in the topics and themes of children's stories irrespective of group (aggressive and non-aggressive) membership; 3) to investigate gender similarities and differences in the topics and themes of children's narratives irrespective of group (aggressive and non-aggressive) membership.

The problem story task was scored for the general topic, themes, and aggressive trends in the story. The conflict story was scored using the same procedures, however the topic of the story was not analyzed as the task instructions provided the participants with a general topic for the story. Scoring for the topics, and the analyses of aggressive trends were based on previous research (Bates, 1997; Howard, 1994). The criteria were modified in order to best capture the differences that emerged from the stories. The researcher completed all scoring and two graduate students who had been trained by the researcher completed inter-rater reliability checks.

This chapter is organized by first reporting the results of the topical analysis for the problem story, followed by the thematic analysis for both the problem and conflict tasks. The results of the statistical procedures used in the aggressive trends analysis are then reported.

### **Topic Analysis**

A topic analysis of the problem stories was completed. A topic analysis was not undertaken for the conflict story as the instructions for the conflict story provided the topic of the story. In the problem story, participants were asked to write about someone about their own age who has a problem. It was posited then, that children would write about things that are of concern to them. In the conflict story, the participants were asked to write a story about a conflict of which they had either been a part, witnessed or heard about that had happened at or around the school. Thus the specific nature of the task somewhat ruled out this particular analysis.

As explained in Chapter III, the scoring procedures for the topic analysis were based Bates (1997) study that evaluated the topics of adolescents' stories. The stories were read through once to familiarize the reader with the story topics. Next, the stories were grouped according to the topics they discussed. As in Bates, the stories were analyzed using Violato and Holden's (1988) four-factor model of adolescent concerns as a template. This model suggested that adolescents are primarily concerned with: (1) Health and Drugs; (2) School and Future; (3) Personal Self; (4) Social Self. Bates found evidence of a fifth category of Hostility and Harm, and it was included in the current study as the story topics were found to support the addition of this category. Within each topical category, there are a series of related issues that are reflective of the category (Table 3.5), however, the model was adapted in the current study to include several additional items to better reflect the specific topics of the problem stories. These items are marked by an asterisk in Table 4.1.

The stories were read through once and then re-read to identify the main topic of the story. Once the topics had been identified, they were compared to the scoring criteria, and grouped according to the five topical categories. To provide the reader with a better understanding of the topics of the stories within each topical category, a description of the category and an example story that is typical of stories within the category is provided. Stories are reported verbatim, however spelling errors have been corrected for ease of reading. Proper names or identifying information have been changed in order to maintain anonymity. In the case where the story author omitted words, the word has been added in square brackets to aid in the reader's understanding.

### **Topic Categories**

#### **(1) Health and Drugs**

This topical category included drug, smoking, and alcohol problems (Violato & Holden, 1988), and gambling problems. Gambling problems were added in to this category to capture the topics of the stories of the current sample. These topics are thought to reflect the physiological functioning of adolescents (Violato & Holden, 1988). In the following story segment, Chris and Bob experiment with drinking beer. Though they promise each other not to drink anymore, Chris is unable to stop. Drinking is causing him problems and Bob attempts to help Chris. Thus, this story was classified in the Health and Drugs category, as the primary topic is alcohol problems.

Tom told Bob and Chris to come with him. They went behind the school and then Tom pulled out a can of beer. Tom said "Want to try?" Bob and Chris did lots of things together so they thought why not try it. At first it was bitter but then after they got used to it. Once they got in school they were woozy. They

couldn't walk straight or think straight. During lunch they snapped out of it they weren't woozy anymore but they had a huge headache. Bob and Chris promised each other not to do it again. The next day Chris didn't walk with Bob, Bob thought that was weird but he didn't mind. But once he got to school Chris was hanging around with older kids. Chris was acting kind of weird. After school Bob went to Chris's house and talked with him. A week went past and one day Chris went to class and started getting angry. "Oh great, time for Mr. Boring." [Then] he started snoozing and that's when the teacher said "That's it go home!" Bob then said "Teacher could I go talk with Chris and see what's wrong?" Teacher said "alright". Bob went to Chris's locker and said "What is wrong with you?" Then Chris pulled out a can of beer. "Chris what are you doing, I thought we quit?" Chris said "Well you're wrong!" Bob grabbed it, then Chris punched Bob and went into shock. "I'm sorry, Bob, I'm sorry, I [don't] know what got into me?" "I know Chris, beer!" Then Chris said "Can you help me please? I, I don't know how to quit?" Bob then said "You got it." (Grade 7 boy)

## **(2) School and Future**

This topical category included stories involving school attendance, performance, and extracurricular activities (Violato & Holden, 1988). Violato and Holden (1988) suggested that this category reflected the realization of individual potential through school related activities. In the following story George is anxious about attending a new school, and how he will perform. Thus, as it deals primarily with the topic of school attendance and performance, it was classified in the School and Future category.

George had a problem. He didn't want to go to the 4<sup>th</sup> grade. George would be going to a new school. His teacher would be Ms. Smith. She was very nice. The new school was [Elementary School]. It is very nice. It has a big gym, a cafeteria, music room, art room, and 2 playgrounds. It was time for school to start. George said, "I don't want to go to school!" George's Mom made him go to school and he had a hard time answering questions. The next day he met a robin. The robin promised to help George. About 3 months later, George had [a] test. He remembered everything the robin had taught him. He did very well on the test. George got an A+. That was a very good mark. From then he did really well. (Grade 4 girl)

### **(3) Personal Self**

This category included parent conflict, sibling conflict, identity, and family (Violato & Holden, 1988). Stories primarily about pets and friendships were added to this category in order to better reflect the problem story topics. Previous research has found support for the inclusion of such items (Bates, 1997). These topics are thought to reflect the adolescent's subjective sense of well being (Violato & Holden, 1988). In the following story segment, Cassie is struggling to make a decision about what is important in her life. She decides that she does not want to continue in gymnastics as it is taking too much time away from other extracurricular activities. She confronts her parents with the news, and is eventually allowed to make her own decision. As this story primarily dealt with parent conflict, it was classified in the Personal Self category.

...She didn't really want to be a gymnast anymore. She didn't have anytime to spend with her friends, play sports or do anything fun. More than anything she

wanted to play basketball but she couldn't because she was always at the gym and everyone made fun of her because she wasn't as tall as some of the other girl basketball players.

One day she went to tell her mom and dad how she felt about these dilemmas of hers. She said calmly and coolly "Mom, dad, I love you both very much and I appreciate your time, effort, and money put into my gymnastics but I can't do it anymore, I want to live like a normal teenager." Holding her breath waiting for an answer from the zombie eyed look from her parents, she had a feeling they didn't like what she had said.

"Cassie, darling, gymnastics has improved your balance and made you more muscular and confident. I think you should stay in!" said her mother in her calm sweet voice.

"Yes I also agree Cassie, you're wonderful at gymnastics. [You're] talented and brave. Stay in!"

"Is anyone listening to me!?!?" I don't want to do gymnastics! I wanna play other sports like basketball, badminton, and volleyball! But I can't I'm always at the gym!! I never ever get to eat junk food because you can't get good height. Please let me make this decision on my own!" With that Cassie picked up her school books and left the kitchen. Leaving her parents standing in awe that she said all she did.

Later that night, Cassie came down stairs and her parents were sitting at the kitchen table in a gaze of deep thought sipping cups of tea. "Mom, dad, I'm

sorry for the way I acted but I needed to tell you how I felt.” She still felt a pang of guilt at the way she spoke to them earlier.

“It’s alright Cassie, your father and I understand that people need to move on in life and this is what you’re doing.” Replied her mother with her well known soft comforting voice. Her father nodded to her mother’s remark. “Thanks you guys for understanding, I’m glad I had your support and I love you!” (Grade 7 girl).

#### **(4) Social Self**

The topics included in the Social Self category address issues of role fulfillment and social effectiveness (Violato & Holden, 1988). The following topics were included within this category: personal appearance, peer acceptance or rejection (Violato & Holden, 1988) romance (Bates, 1997), and peer conflict. Peer conflict was included within this category as these stories reflected a developing sense of a social self.

Research has suggested that as children experience peer conflict, they are learning how to navigate the social world (Fraser, 1996). In the following story segment, Carl is teased because of his hair. As the story primarily dealt with the topic of peer acceptance and rejection, it exemplified the Social Self category.

...Carl and his two cousins were going to Disney World. One night at their hotel they saw a stand outside, and what it was was a hair wrap stand. There they got a piece of your hair and wrapped it with thread. As soon as Lisa saw this, she asked her mom if she could do this, and she said yes. So Lisa and her sister Stella and Carl their cousin got their hair wrapped. When Carl went back to school after his vacation with his hair wrap in, everyone in his class made fun of him. They

called him mean names that weren't very nice. There were only three boys who didn't make fun of him, and he decided that those were his real friends...

The next day they still made fun. Finally he said "the only reason why you make fun is because you're jealous, and if you could go to Disney World you would get it done too. After hearing that they knew what they were doing was wrong, and they apologized. Now Carl isn't being teased. (Grade 4 boy)

### **(5) Hostility and Harm**

The topics within this category reflect instances of violent, hostile and aggressive acts. These stories included topics of theft and property damage, homicide, abuse, war, bombing (Bates, 1997), school violence, bullying, suicide, and gangs. School violence, bullying, suicide, and gangs were included within this topic category in order to best capture the problem story topics of the current sample. The following story deals with bullying and thus was classified in this category.

My friend Jake is 9 years old and he has a problem. A bully keeps picking on him for no reason. He told the bully to stop but the bully would not. Jake tried everything to get the bully to stop but he [the bully] didn't. The bully only picked on Jake at school.

The bully started to pick on the other kids but he still picked on Jake. Then Jake moved to Edmonton. The bully got so mad that he broke another kids arm and got expelled. Then he moved to Edmonton and Jake and the bully go to the same school again and he [the bully] was very happy because he got to pick on Jake again. When Jake got home that night he told his mom and dad about the

bully. When he got to school the bully was mad Jake told on him so he beat him [Jake] up. He got expelled and had to go to a new school. (Grade 4 boy)

### **Quantification of Topic Analysis**

After the stories were grouped into topical categories, the number of stories within each category was counted. Percentages were calculated based on the number of stories in each category. An interrater reliability check was conducted on the assignment of stories to categories for 30% of the stories, randomly selected. The two raters agreed on .95 of the assigned categories. Table 4.1 summarizes the number of stories found within each category. In Table 4.2, the number of stories for grade, gender, and group by topical categories are presented.

The most prevalent topics among the stories were regarding Social Self (30%) followed by Hostility and Harm (26%) and Personal Self (22%). Finally 13% of the stories were categorized within the Health and Drugs topic category, and 9% within the School and Future topic category. Cell numbers were too low to use a statistical test to establish differences between grade, group and gender as too many cells have an expected frequency of less than five (See Table 4.2). As this study was exploratory, trends in the data were analyzed in order to establish where possible differences are for follow up in future research. Gender trends were identified by evaluating the difference between the percentages of girls' stories within a category with the percentage of boys' stories within the same category. If the difference was greater than one third of the total percentage of stories within that category, then it was considered a trend. Similarly for grade and group, if the difference between the percentage of grade four and grade seven, or between the percentage of aggressive and non-aggressive stories was greater than one

third of the total percentage of stories within that category, then a trend was noted.

Although this manner of identification of trends presents some problems, especially in the case where few stories are within a category, this analysis was completed solely to gain insight into areas for potential follow up studies.

Table 4.1

Topic Frequency for Problem Stories.

Topic	Category 1: Health and Drugs	Category 2: School and Future	Category 3: Personal Self	Category 4: Social Self	Category 5: Hostility and Harm
Drug Problems	3				
Smoking Problems	4				
Alcohol Problems	5				
Gambling*	1				
School attendance/ Performance		6			
Extracurricular Activities		2			
Parent Conflict			2		
Identity			1		
Family			2		
Pets			3		
Friends			12		
Personal Appearance				3	
Romance				3	
Peer acceptance/rejection				16	
Peer conflict				7	
Theft/property damage					6
School Violence*					4
Bullying*					2
Homicide					2
Abuse					2
War					4
Bombing					2
Suicide					1
Gangs*					2
<b>Total</b>	<b>12</b>	<b>8</b>	<b>20</b>	<b>28</b>	<b>24</b>

Note: Starred topics were included in the topic categories to better reflect the story topic of the present data. Five stories were not classified as they were missing due to students being absent on the day of data collection.

### **Gender Trends**

No gender trends were found in terms of the topic categories of the problem stories. In all the topic categories, there was less than a one-third differences between the boys and girls.

Table 4.2

Summary of the Topic Frequencies for Gender, Grade, and Group.

Topic	Total	Gender		Grade		Group	
		Female	Male	4	7	Agg	Non-agg
Health and Drugs	12 (13%)	7 (15%)	5 (11%)	0 (0%)	12 (26%)	3 (9%)	9 (15%)
School and Future	8 (9%)	3 (7%)	5 (11%)	6 (13%)	2 (4%)	3 (9%)	5 (9%)
Personal Self	20 (22%)	11 (24%)	9 (20%)	15 (33%)	5 (11%)	7 (21%)	13 (22%)
Social Self	28 (30%)	13 (28%)	15 (33%)	16 (35%)	12 (26%)	12 (35%)	16 (28%)
Hostility and Harm	24 (26%)	11 (24%)	13 (28%)	9 (20%)	15 (33%)	9 (26%)	15 (29%)

### **Grade Trends**

Grade trends were noted for the Health and Drugs, School and Future, and Personal Self topical categories. In the Health and Drugs category, only grade seven stories were found in this category. Grade four students wrote a greater percentage of stories dealing with School and Future, and Personal Self than the grade seven participants.

### **Group Trends**

No group trends were found in the topical categories. In all the topic categories the difference between the percentages of aggressive and non-aggressive stories was less than one third.

### **Summary of Topic Analysis**

Participants wrote most frequently about issues concerning the Social Self, following by Hostility and Harm and the Personal Self. The results are suggestive of possible grade differences among the topical categories. The topic analysis indicates that adolescents are concerned about these topics. Support for the addition of a fifth category of Hostility and Harm (Bates, 1997) was also found.

### **Thematic Analysis**

As explained in Chapter III, the scoring procedures for the thematic analysis emerged from the data. Themes were coded by reading each story and identifying the global theme of the story. A theme is the central idea, the thesis, or the message of the story (Beatty, 1981). Upon identification of the theme, an exploratory classification process was undertaken in which categories for types of themes were developed. Themes that shared commonalities were grouped together and classified under the same heading. The stories were then re-read and matched to the thematic categories to ensure that in the grouping of themes, information about the stories was not lost. The thematic analysis was completed for both the problem and conflict stories.

### **Problem Story**

The instructions for the problem story task asked participants to write a story that was about someone around their own age who had a problem. The story could be true,

fictional or some combination of both. The following thematic categories emerged from the problem story: 1) Friendship Is Transient; 2) Supportive Relationships Are Helpful and Important; 3) Helping Yourself and Self-Advocacy Leads to Positive Results; 4) Peer Acceptance Is Important; 5) Life Will Work Out; 6) Evils of Drugs, Smoking, and Alcohol; 7) The Paranormal; 8) Aggression and Illegal Activities Work. They're Acceptable; and 9) Aggression and Illegal Activities are Wrong.

In order to ensure the reader a better understanding of the above thematic categories, a brief summary of the thematic category and an example story that is representative of the category is provided. As in the topic analysis, the stories are reported verbatim, however, spelling errors, and real names or identifying information have been changed. Omitted words have been added in square brackets to aid in the reader's understanding.

### **Thematic Categories**

**(1) Friendship is Transient.** The stories in this category were characterized by descriptions of friendships where children were friends then the friendships were terminated and possibly re-formed at some point. Friendships ended for a variety of reasons including, getting in a fight, someone spreading rumors, and preferring certain friends to others. The following story characterized the friendship is transient category. In the story, Lisa's group of friends is torn apart by Donna. In the end, only some of her friends want to continue their friendship, while the other girls choose to be friends with Donna. Their friendship circles are ever changing.

"Hi? How are you?" I asked Gail:my best friend.

“Um...I’m fine.” Gail said awkwardly. “I’m going to go now.” “Why?” I called after her, but Gail ignored my question and hurriedly hustled out of the classroom. My arch-enemy (Donna) snickered “Having trouble with your friends Lisa?” I hated how Donna managed to make my name into a 3 syllable word (Li-a-sa). “Sorry but you’re wrong. Gail is...” Why did Gail leave I asked myself. “Gail is what.” Donna shot at me. “How about, Gail is mad.”

“What-ever Donna.” I said as I left the room. Gail’s just busy and being short with me. Donna is always like that, but what if Gail is mad?

I decided to go ask my other friends what was up with Gail. When I arrived Julie, Mona, Debra, and Brandy got up and left the cafeteria. Luckily Carrie was still at the table.

“Carrie, what’s up with everyone.” I asked. “As if you didn’t know.” Carrie snapped. “Oh, by the way I suggest you find some new friends!” Then Carrie stormed out of the room. Then Jean (the biggest gossiper in the school) ran up to me and said “Why did you call your friends 2-faced losers?”

“Why’d I do what” I asked in surprise.

“Well, Gail said that Mona said that Carrie said that Donna said that you said to Donna that you think your friends are 2-faced losers.” Explained Jean.

“I never said such a thing ever.” I said in rage. That Donna has such a nerve. I’m going to go give that 2-FACED LOSER a piece of my mind!”

“You go girl.” Jean encouraged. Then left and was obviously satisfied with that new piece of gossip.

[Then] I found Donna in center of attention with MY friends. Then an idea popped into my head: why don't I confront Donna with MY friends there. Donna would be so embarrassed.

"Hey, you lying, cheating, friend stealer." I said firmly with a edge to my voice, attracting everyone around.

"Well anyways, you're a lying cheating name caller." She said calmly and then continued the story she was telling everyone. I was really irritated by Donna's smooth reaction.

"You make me sick, you have to lie, cheat, and steal MY friends before your satisfied." I snapped.

"Excuse [me], but I'm not the one who betrays My friends" Donna said as if she were actually telling the truth.

"That's a lie, and you know it." I revealed.

That's when Gail said "You've never lied before and [I've] known you for a long time. I believe you're telling the truth." Then Gail gave Donna a disgusted up and down look.

Julie suddenly said "Well even if you're not lying Lisa, I still would rather be Donna's friend, she really knows how to make me laugh." Several girls nodded in agreement and took Donna's side. Then 3 people came to my side.

"Well now I know who my real friends are" Then me and my real friends walked away from Donna's group. (Grade 7 girl)

**(2) Supportive Relationships Are Helpful and Important.** The stories in this category presented a number of different problems, but in the end, resolutions are

achieved either through the aid of friends or adults. Stories in this category also described situations in which the value of friendship or other relationships was depicted. The following story is representative of this category as it describes a situation in which adults are helpful and supportive. In the story, the relationships with the teacher and parent help support the main character in her learning. The teacher spends extra time with Christine, and the parents encourage and support her in her endeavors.

Hello, my name is Christine. I am in grade 4. I have a friend in my class and her name is Elizabeth. We both have a big trouble on math. We don't understand math that much so we want to try to learn how to do multiplication fast. Our teacher, Mrs Jones helps us learn math by using normal flash cards. We also get a math sheet that helps us learn division and multiplying. We are still counting on our fingers to figure out division and multiplying. My mom and dad are hoping that I'm better at it soon. My Dad said to not [get] frustrated doing it because it was hard when he was young too. (Grade 4 girl)

**(3) Helping Yourself and Self-Advocacy Leads to Positive Results.** This category included stories that depicted characters who were able to help themselves, and who realized the benefits of hard work. The following story exemplified this thematic category. Through hard work, Joe was able to achieve a high grade on a test. The story demonstrated the idea that through hard work and dedication, one can help one's self achieve desired outcomes.

In the peaceful community of --, there was a boy named Joe, he wasn't an ordinary grade 7 boy. He was strange because when ever he went to write a test he would get a bad mark because he didn't study for the test. On Monday he had

to write a test and he really wanted to improve his mark. The night before the test he took his text book home to study. He had studied for hours and hours so he finally dropped the text book on his desk and said to himself, "I know this stuff and I don't need to study anymore." He left his room to go down stairs and get a drink because he was exhausted after studying for hours and hours. Monday had come it was the final math test for the unit, Joe was sure he was going to get a good mark on the test. The test looked hard at first but after going through the test and writing all the answers down he finally raised his hand and said I'm finished the test. Everybody stared at Joe with a glare because Joe usually is the last one to hand in his math test because he doesn't know any of the answers. The teacher came to pick up the test and he said to Joe good job! The next day, the class was anxious to get the results from their test even Joe was anxious about getting the result because he had studied so hard. When it was time to go to math class, everybody ran there because they wanted their mark from the test, the teacher called everybody to come to the front desk to get their mark from the test. When he handed out Joe's test everybody was surprised because he got 90% instead of getting 40% like he normally does. When Joe went home that night he showed his mom the test and she said "Good Job" and Joe said thank-you. Then Joe said "the only way I got a good mark was studying" His mom was surprised because he had never studied before in his life. (Grade 7 boy)

**(4) Peer Acceptance Is Important.** This thematic category encompassed stories in which the major theme was the importance of being accepted within one's social group. Discussion of the importance of "fitting in" in terms of clothing, size, and grades

were common themes. The following story characterized the peer acceptance category. In this story, it was important to the girl to be accepted. She consulted with the counsellor and changed her appearance in an attempt to fit in. She also learned how important it was for others to be accepted and began accepting all people.

There was a girl who moved from -- to --. She was new at the school and she was in grade seven. Her name was Alexis. Alexis was a teacher's pet, on the first day of school she came to school wearing a long dress. She was teased that whole day. In her other school she was the most popular student.

The next few weeks she was still getting teased. She went to the school counsellor to tell her what is happening, all the counsellor said it may be your style in clothes. The counsellor said the teens are mostly wearing Nike, Adidas, Fila, and Tommy Hilfiger these days. They are baggy and [the kids don't] care about anything but appearance, friends, and money.

The next day, she came wearing a Nike jacket, Hilfiger shirt, and baggy jeans and Nike shoes. Then the kids started calling her a try-hard. The kids still did not like her. Next month, she wasn't getting teased as much cause the children did not care anymore. She was getting asked her phone number so they could do something together on the weekend.

The next school day she was not getting teased at all. She was accepted in her class now. A year later she was the most popular student in her school. She know what it feels like not to be accepted in to a new school, now she welcomes every person new in her group and while eating lunch. (Grade 7 boy)

**(5) Life Will Work Out.** The general theme of this category is that things have a way of working out. Typically the stories presented some problem or dilemma, but in the end everything worked out. In the following story, Rhonda wants a puppy but her mother refuses. Rhonda conspires to hide the dog from her mom, worrying if her mom finds out that she'll have to return the puppy. Things have a way of working out, suggesting that all in all life's not so bad and neither is her mother as she lets Rhonda keep the dog. This story exemplified this thematic category as in the end, everything worked out.

Hi my name is Rhonda and I am going to the pet store with my friends today.

When I got there I saw this cute puppy dog I really wanted it. But my mom [said] you're too young to have a pet.

I really wanted this pet so I got it! This is my plan I will hide it from my mom and dad. I went up stairs and made him a bed in my closet so I put my puppy named Lucy in to his bed and closed the closet. So you can sleep and I went down stairs to do my homework [while] my mom was making supper.

The next day came and I had to go to school and I [had] to take care of Lucy. I got it I will do the same thing I did yesterday put him in the closet but this time I'll leave the door open. I went on the bus. When I was in class I thought about Lucy I wonder[ed] if he was sleeping.

When I got home I went up stairs in my [room] and looked in the closet and Lucy was gone. Oh no, I hope my mom hasn't seen him if she has I would be dead meat. I went down stairs and guess what I saw my mom and my brother sitting on the [couch] with Lucy. My mom was smiling. I went to my mom and said do you like Lucy my mom said yes! So we kept Lucy! (Grade 4 girl)

**(6) Evils of Drugs, Smoking, and Alcohol.** The stories in this category contained the major theme that drugs, alcohol and smoking are not good choices. Furthermore, those who use drugs, alcohol and /or smoke are at risk for a number of difficulties. The following story exemplified the thematic category that drugs, alcohol and smoking are not positive acts. The main character (Susan) is ill and wishing she had not participated in drinking and smoking. She wishes she could return to a simpler time when she played and did not engage in such activities.

Susan looked sick, but Laura and Kayla just laughed. Just turn around and run Susan thought to herself, but this was easier said than done. The alcohol had now sunk in and Susan felt ready to throw up. The cigarettes she had smoked were tempting her to cough, but she couldn't do that in front of them. The alley became dark. Night had fallen and the huge oak trees glared on the three girls. Susan could almost feel her parents' eyes in disbelief when she got home stoned. It seemed it was [only] yesterday that the three girls were 6 and excitedly awaiting their first day of grade 1. They had been best friends ever since then, but lately it had definitely seemed like Laura and Kayla were spending more time together. When Susan was old enough to understand her Mom had explained that three was never a good number because 1 person always got left out. Now standing crouched over in the alley she felt like a little girl. She needed her mother's help to hold back her hair while she threw up and her father's support when she was sick. She felt hopeless, lost, like a failure.

Susan started bawling. Laura and Kayla made it worse by laughing, and cursing at her. Calm down Susan, she silently said to herself, don't make the problem worse than it seems.

Dawn pushed the darkness out of the sky, Susan woke up. She had a terrible headache and remembered the alcohol. Must be a hangover she thought. Laura and Kayla rounded the corner, and into the alley with a police officer. They were in handcuffs. Just what they deserve Susan thought, forcing the alcohol and cigarettes into her mouth.

The next thing Susan remembered was waking up in her bed. Laura and Kayla were beside her.

"About time," Laura said.

"You passed out Susan, how do you feel?" Kayla whispered.

Susan looked around. The room was decorated with balloons. Susan's mother rushed in with presents and a cold cloth.

"Happy Birthday, sweetheart!" It was all a dream. The pain, the agony and now Susan was back here with her two best friends and family! (Grade 7 girl)

**(7) The Paranormal.** The general themes of this category were that the paranormal is part of life. These stories described some kind of paranormal existence, such as aliens or some "evil" force. The following story was characteristic of this category. In it, strange looking aliens kidnap a boy exemplifying the thematic category that the paranormal exists.

One day a boy was playing in his back yard with his new micro-machines then all of a sudden a very strange spaceship came very close to the boy. As the boy looked up he saw the big shadow above him. When the boy looked up he saw a spaceship and then all of a sudden the boy was inside the spaceship and then he looked around. The boy saw a pinkish-gray figure zoomed by as fast as light. The boy said, "Who are you" no answer.

The boy repeated "Who are you", so the boy decided to hide but he was in an invisible wall it was a circle going around. The boy banged on the glass and then started crying. All of a sudden the pink figure appeared in front of the invisible wall. The pink figure had big green oval shaped eyes that are tilted. The pink figure didn't have a nose. His legs are very small and he only has 4 toes and 4 fingers. His arms were as long as an apes. His paws were very big. They had 7 claws on each paw end. His feet were very small and also had seven claws on each foot. But then the alien said "Wrong kid". Then dropped the boy back down to his toys in backyard.

**(8) Aggression and Illegal Activities Work, They're Acceptable.** The stories in this category included instances of aggression, which were directed towards solving a problem, or used to achieve desired resources. Violence is also meant to encompass all forms of aggressive and hostile acts including theft, homicide, and threats to injury. The themes of these stories depicted situations in which violence was allowed or viewed as justified. In the following excerpt, Sally beats up a boy who stole her money. In the story, Sally is justified in beating up the boy as he has wronged her.

One day a girl named Sally put up a lemonade stand. All and all she had 7 dollars and 18 pennies. When she left to go make more lemonade a boy came and took all her money. When Sally came back she noticed all her money was gone. She put up a poster Lost 7 dollars and 18 pennies. The next day she set up the lemonade stand again. And that very same day [a boy] came back and took out seven dollars and 18 cents. There was a twooney that was scratched up and a five dollar bill with coffee stains on it and all 18 pennies were bitten on the sides. Sally said HEY THAT'S MY MONEY. But the kid just stood there and stared at her and gave her back the money. [Sally] said to him you're going to pay. One day as Sally and the kid met again they stared at each other, then I came along and [tried] to break it up but Sally got the best of him and the boy had a black eye...

**(9) Aggression and Illegal Activities are Wrong.** The stories in this category were characterized by their lack of acceptance of aggressive or conflictual acts (including theft). In the following story, John was unable to go through with stealing of Ralph's shoes and was willing to risk his friendships in order to do the right thing. As a result, the thematic category that violence/aggressive acts are unacceptable is evident in the story.

RRING! "Hello," John asked into the phone sleepily. "John?! Meet the DOGS and me in 12 minutes in front of the school!" "What, wh-?" The line went dead. 12 minutes later John was waiting in front of [school] for his best friend Michael and the DOGS to show up. The DOGS was a gang Michael and John set up for people who hated animals, and teachers. They had a reputation for mouthin' off to elders and stealing. All of the DOGS members had to be 13. John suddenly

remembered about the track tournament he was running in and that he had to start training. John was the second best runner on --. The top runner was a nerd named Ralph. They were going against --, the undefeated team for 12 years straight. Now Ralph was the -- only chance. The tournament was in 2 weeks and it was Saturday today, so he didn't have very much time. Suddenly, there was a loud BANG! and several snickers. Then the whole DOGS gang appeared around the corner (about 10 people) holding a small brown lunch bag. John yelled, "Waddya got there Michael?" Michael ran up to John with a wicked grin on his face. He opened the bag and inside were Ralph's brand new Nike/Adidas running shoes. They were worth about \$300.00 (Ralph's parents were richer than most people thought). "HOLY CROW! Where'd ya find them?" John yelled. "Ralphie was sooo stupid and left them on the bench inside the locker room. Now John, you'll be the track star!" A short blonde girl with her hair spiked 5 cm up replied. "Wow-Are you crazy?" John bellowed. Michael's grin disappeared. "Awww John, we're just gonna make you the track star!" He gave John a hard slap on the back. John stared at Michael in disbelief and went home.

1 week passed and Ralph still hadn't found his shoes. After school one day, John was over at Michael's house. When he went into Michael's room, he saw the shoes! When Michael was gone, John quickly put the shoes in his bag and ran! The next day, it was the track tournament. When John presented the shoes to Ralphie, his face lit up like a light bulb. -- won the tournament. Michael was still friends with John because he knows how he felt! (Grade 7 boy)

### **Quantification of Thematic Categories**

Table 4.3 provides a summary of the thematic categories, along with the types of stories included within each category. After the stories were grouped into the thematic categories, the number of stories in each category was counted and percentages were computed for the total number of stories within a thematic category. As well, the number of stories and corresponding percentages were calculated for each of the independent variables, gender, grade and group. An interrater reliability check was conducted on the assignment of stories to the thematic categories for 30% of the stories, randomly selected. The two raters agreed on .85 of the assigned thematic categories. Table 4.4 summarizes the breakdown of the thematic categories according to gender (female, male), grade (four, seven), and group (aggressive and non-aggressive).

Statistical analyses were not completed on the thematic categories due to the small sample size, which when divided amongst the independent variables, resulted in a number of cells containing fewer than five stories. As a result, the statistical analysis would become unstable. Although statistical analyses were not deemed feasible, it is of interest to note trends in the story thematic categories in general and between genders, grades, and aggressive and non-aggressive groups. Trends were identified in the same manner as in the topic analysis. A trend was defined as greater than a one third difference between the percentages of stories within the independent variable. Although this analysis is problematic, it is only meant as an initial starting point for future research.

Table 4.3

## Examples of Stories within the Thematic Categories

Thematic Category	Type of Story	Example
Friendship Is Transient	Stealing friends	One character seeks to break up friendships in order to obtain new friends.
	Losing friends	Friends are in a fight and as a result they no longer talk or play with one another.
	Inconsistency across friendships	The friendship is continually ending and renewing. Story characters are changing their groups of friends, and friendship allegiance is broken.
Supporting Relationships Are Help and Important	Friends or adults are helpful	Story character is having difficulty with Math and the teacher and parents provide extra assistance
	Friends protect friends	A friend is in trouble with some other children at school and friends offer their assistance and support.
	Seeking out adult to help solve the problem	Children are being bullied at school and they tell their parents and/or teachers and are helped.
	Help that is offered is accepted	A story character does not know how to play baseball. A friend offers to teach him and he accepts.
	Value of friendship	Story character refuses to pick sides between friends
Helping Yourself, Self Advocacy Leads to Positive Results	Through hard work, one sees results	A story character is struggling with school. By studying hard, they get a good mark.
	By standing up for yourself, you can achieve success	A story character is being picked on in school and decides to stand up for themselves in a positive manner
Peer Acceptance Is Important	Fitting in is important	Having the right clothes and look is important
	Trying to change because of peers rejection	A girl's friends and boyfriend reject her because she is too fat. She then tries to lose weight to regain their acceptance.
	Learning to accept others	As a result of being rejected, the character learns how important it is to be accepted and begins to accept others.
Life Will Work Out	Feel good story	Just when things look hopeless, something unexpected happens and things work out.

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	Things have a way of working out	Story character is stuck in a no-win situation, but things manage to resolve positively.
Evils of Drugs, Smoking and Alcohol	Drugs, alcohol and smoking are dangerous	Drugs, alcohol and smoking can cause you to die.
	People who use drugs etc get in trouble	Characters are caught using drugs/drinking and are expelled from school.
	Drugs and alcohol can cause someone to do something bad	Parent develops a drinking problem and starts abusing the family.
The Paranormal	Aliens coming to Earth	Aliens come to Earth and try to take over
	Unexplained phenomena occur	Something peculiar occurs that is not in the normal realm.
Aggression and Illegal Activities Work. They're Acceptable	The end justifies the means	Story characters manipulate (lie, cheat, steal) the situation in order to obtain desired objects.
	To teach a lesson	Story characters justify violence towards those who have wronged you.
	To protect self and others	Story character is in trouble with some children at school and friends offer their assistance to hurt the other children.
Aggression and Illegal Activities Are Wrong	To assert power	Bullying to assert schoolyard dominance.
	Stealing is wrong	Something is stolen and the perpetrator is punished, and victim feels bad.
	Respect other's belongings	Property damage is perpetrated, perpetrator is punished, and victim feels bad.
	Fighting is wrong	Students are punished for fighting, regret is expressed

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The most prevalent thematic categories across the total sample was Supporting Relationships Are Helpful and Important and Friendship Is Transient (about 20% each). About 12% of the stories were categorized within the Helping Yourself and Self-Advocacy Leads to Positive Results and the Evils of Drugs, Smoking, and Alcohol thematic categories respectively.

Table 4.4

## Problem Story Thematic Categories

Thematic Category	Total	Gender		Grade		Group	
		Female	Male	Four	Seven	Agg	Non-Agg
Friendship Is Transient	18 19.6%	10 22%	8 17%	13 28%	5 11%	7 21%	11 19%
Supportive Relationships Are Helpful and Important	20 21.7%	10 22%	10 22%	10 22%	10 22%	8 24%	12 21%
Helping Yourself and Self-advocacy Leads to Positive Results	11 12%	4 9%	7 15%	8 17%	3 7%	1 3%	10 17%
Peer Acceptance Is Important	6 6.5%	3 7%	3 7%	2 4%	4 9%	2 7%	4 7%
Life Will Work Out	9 9.8%	5 11%	4 9%	7 15%	2 4%	4 12%	5 8%
Evils of Drugs, Smoking, and Alcohol	10 10.9%	7 15%	3 7%	0 0%	10 22%	2 7%	8 13%
The Paranormal	4 4.3%	0 0%	4 9%	2 4%	2 4%	2 7%	2 3%
Aggression and Illegal Activities Work, They're Acceptable	6 6.5%	2 4%	4 9%	3 7%	3 7%	4 12%	2 3%
Aggression and Illegal Activities Are Wrong	8 8.7%	5 11%	3 7%	1 2%	7 15%	3 9%	5 9%

Note: agg=aggressive, non-agg=non-aggressive; Five stories were missing due to participant being absent on that particular day of data collection.

**Gender Trends.** Gender trends are evident in terms of the Evils of Drugs, Smoking, and Alcohol with 15% of girls composing stories within this thematic category as compared to 7% of boys. Trends are also evident in the Paranormal category with 9% of boys and no girls writing stories within this thematic category. The Aggression and Illegal Activities Work, They're Acceptable thematic categories also demonstrated a gender trend with a greater percentage of boys (9%) writing stories within this category than girls (4%).

**Grade Trends.** Within the Friendship Is Transient thematic category, a greater percentage of grade four students wrote within this thematic category (27%) as compared to the grade seven students (12%). In the Helping Yourself and Self-Advocacy Leads to Positive Results category there was a trend in grade differences with a greater percentage

of grade four students (16%) writing stories in this category than grade seven (7%). Also, within the Life Will Work Out category, a greater percentage of grade four students wrote stories within the thematic categories as compared to the grade seven stories. Within the Evils of Drugs, Smoking and Alcohol and the Aggression and Illegal Activities are Wrong and the Peer Acceptance Is Important thematic categories, a greater percentage of grade seven students wrote stories within these categories than did the grade four participants.

**Group Trends.** A greater percentage of non-aggressive children (17%) wrote stories about Helping Yourself and Self-Advocacy Leads to Positive Results as compared with the percentage of aggressive children (3%). A trend towards grade differences was also evident in the Aggression and Illegal Activities Work, They're Acceptable category with aggressive participants writing a greater percentage of stories within these thematic categories than the non-aggressive participants.

### **Conflict Story**

The instructions for the conflict story asked participants to write a story about a conflict that had occurred at or around the school. The stories were to be true. Thematic categories similar to those identified for the problem stories emerged from the Personal Conflict Stories. As well, several new categories emerged: 1) Friendship is Transient; 2) Supporting Relationships Help; 3) Aggression and Illegal Activities Work and They are Acceptable; 4) Violence is Wrong; 5) Fair Play is Important; 6) Conflicts are Resolved Through Positive Acts; 7) Adults Can't Always Protect You; 8) People/things Aren't Always What They Seem. Protocol analysis methods for the conflict stories were identical to those used for placing the problems stories into thematic categories.

## **Thematic Categories**

**1) Friendship is Transient.** Friendship transience was characterized by descriptions of unstable friendships. The friendship circles of the children were constantly changing with friends being cast out from the group, then possibly re-united at some later date. Friendships ended for a variety of reasons including: getting in a fight, someone spreading rumors, and preferring certain friends to others. The following story is an example of the stories included within this category. Friends begin fighting and then choose sides regarding with whom they want to continue being friends.

One day two of my friends got into a fight and decided that they did not like each other and neither should their friends. They made 6 girls (their friends) choose which friend they liked best and they could not be friends with the other person of the people on her side. (Grade 4 girl)

**2) Supporting Relationships are Helpful and Important.** The stories in this category tell about a number of different problems but, in the end, resolutions are achieved through the aid of friends or adults. Stories in this category also described situations in which the value of friendship or other relationships was depicted. The following excerpt is from a story in which a friend is helpful.

One day one of my friends was biking to school and he forgot his bike lock at home. He asked me if I could share my bike lock with him and I said yes. So I put my lock around his bike and my bike. (Grade 7 boy)

**3) Aggression and Illegal Activities Work; They are Acceptable.** The stories in this category included instances of aggression that was directed towards solving the conflict. Violence is interpreted as an aggressive or hostile act that is directed towards

another person or property (see Table 3.6). The following story is representative of this thematic category as it described a situation in which violence was acceptable. In the following story the main character feels justified in beating Brad up as Brad called him a name.

Me and Brad were fighting last year because Brad was calling me names so I beat Brad up. I started to choke Brad and punching him maybe I would have killed Brad. (Grade 4 boy)

**4) Aggression and Illegal Activities are Wrong.** The stories in this category were characterized by their lack of acceptance of aggressive or hostile acts (including theft). In the following story, the friend is punished because she has stolen money.

Aggressive acts are punished because they are not right.

One time at school, my friend needed money really bad at the end of the day my friend noticed the \$5.00 bill on our teacher's desk. My friend took the money and left. The next day our teacher noticed that her money was missing. My friend didn't confess. But eventually she was caught stealing from the teacher again. My friend got in a big mess with her teacher and her friends, no one could trust her. (Grade 7 girl)

**5) Fair Play Is Important.** This category was characterized by stories in which the characters valued fair play. In the following story, the characters needed to make teams in order to play soccer but they experienced difficulty because the teams were not fair.

We could not make fair soccer teams. Everyone was arguing with the teams. We needed to make the teams. (Grade 4 boy)

**6) Conflicts Resolved Through Positive Acts.** This category referred to conflict stories in which some positive resolution strategy was used to resolve the conflict. These strategies included talking it out, getting assistance from a teacher, planning a solution other than aggression. In the following story, conflict was resolved through talking. By adopting a positive strategy to resolve conflict, a resolution is achieved.

This story happened last month in my class, which is --. Me and my friend was in a fight because she thought that me and my friends didn't want to be her friend and we thought that she didn't want to be our friend anymore. And then we started talking and found out that we both thought that we didn't want to be friends but we talked and we are friends again. (Grade 7 girl).

**7) Adults Can't Always Protect You.** This category referred to stories in which an adult attempted to intervene but was unsuccessful. Typically the intervener attempted to stop the aggression but was unsuccessful. The following story is representative of this category. In it, the teacher attempts to intervene in the fight but, the intervention was unsuccessful as Dale was able to kick the writer.

In the gym Dale had attacked me when I had tried to throw a soccer ball to somebody else so that he could throw it to the pitcher. (we were playing kick ball) the teacher came over and got Dale off of me but then Dale kicked me in the back. (Grade 7 boy)

**8) People/Things Aren't Always What They Seem.** The stories in this category reflected the idea that sometimes things happen for reasons that are not always known to the observers. For example, sometimes we think we know people but they act in some way that is inconsistent with what we know of them. In the following story, Sara is

having a difficult time in her home life and, as a result, she is treating others poorly. It is not that Sara is necessarily a bad person, but rather, circumstance is affecting her behaviour.

Once there was a time when a girl at our school had stolen some money from our teacher. Her name was Sara. Sara was having a tremendous amount of problems in her life. Her family was falling apart and she didn't treat anyone very nice. The day the teacher found her activity day money missing she confronted the students and asked if they knew who had taken the money. Sara denied it but we all know she had taken the money. I had tried to help Sara but she wouldn't let me or anyone else help out. Poor Sara. The teacher never did get her money back and Sara never told anyone that she took it. But we all knew because one day she was loaded with cash. Sara doesn't go to our school anymore and there is no more missing money. (Grade 7 girl)

### **Quantification of Thematic Categories**

Table 4.5 provides a summary of the thematic categories for the conflict story, as well as examples of the types of stories contained within each category. After the stories were grouped within the thematic categories, they were counted and percentages were computed as to the number of stories within each thematic category. An interrater reliability check was conducted on the assignment of stories to thematic category for 30% of the stories, randomly selected. The two raters agreed on .90 of assigned categories. A summary of frequencies of the thematic categories for gender, grade and non-aggressive and aggressive groups is presented in Table 4.6.

Table 4.5

## Examples of the Themes within the Thematic Categories

<b>Thematic Category</b>	<b>Type of Story</b>	<b>Example</b>
<b>Friendship Is Transient</b>	<b>Friendship Breakdown</b>	Story characters get into an argument; find new friends with whom they can agree.
	<b>Jealousy among friends</b>	Friends seek out new friends whom they do not feel jealous of.
	<b>Rumors end friendship</b>	Rumors are spread about a friend and subsequently friendship is ended.
	<b>Friendship is ended and renewed</b>	Friends get into a fight and over time the friendship is renewed. In the case where someone takes positive action to resolve the conflict, the story was coded in Conflicts Can Be Resolved Through Positive Acts
<b>Supporting Relationships Are Helpful and Important</b>	<b>Adults intervene to help resolve a conflict</b>	Teacher observes a fight and intervenes to end the disagreement
	<b>Friends protect friends</b>	Character is being threatened by someone at school and the friends intervene to protect the character.
	<b>Adults protect you</b>	Conflicts are reported to an adult in order to help resolve/end the conflict.
	<b>Value of Friendship</b>	Friends refuse to take sides or decide between friends because they value friendship.
<b>Aggression and Illegal Activities Work, They're Acceptable</b>	<b>The end justifies the means</b>	Story characters manipulate (lie, cheat, steal) the situation in order to obtain desired objects.
	<b>To teach a lesson</b>	Story characters justify violence towards those who have wronged you.

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	To assert power	Bullying to assert schoolyard dominance
Aggression and Illegal Activities Are Wrong	Stealing is wrong	Something is stolen and the perpetrator is punished, and victim feels bad
	Respect other's belongings	Property damage is perpetrated, perpetrator is punished, and victim feels bad.
	Fighting is wrong	Students are punished for fighting, regret is expressed
Fair Play Is Important	Fair teams are needed for a fair game	Game cannot start until teams are fair
	People copying other people's work	Feelings of injustice surface when one's work is copied and no credit is given.
	Everyone needs to agree	Before decisions can be made, consensus needs to be achieved.
Conflicts Resolved Through Positive Acts	Talking things out	Before getting into a "big" fight, the characters talk about what is bothering them. Friendship is maintained through positive action.
	Other positive acts	Students solve conflicts using problem planning sheets.
Adults Can't Always Protect You	An adult attempts to intervene but is unsuccessful	Characters are physically fighting and teacher is not able to stop them from continuing.
Things Aren't Always What They Seem	People learn what they live	A person is abused at home and subsequently becomes a bully.
	Can't trust everyone	Sometimes your friends turn on you and hurt you.

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Table 4.6

## Conflict Story Thematic Categories

Thematic Category	Total	Gender		Grade		Group	
		Female	Male	Four	Seven	Agg	Non-Agg
Friendship Is Transient	18 20%	13 27%	5 11%	14 29%	4 9%	8 21%	10 18%
Supporting Relationships Are Helpful and Important	18 20%	10 21%	8 17%	7 14%	11 24%	7 18%	11 20%
Aggression and Illegal Activities Work, They're Acceptable	17 18.7%	6 13%	11 24%	8 16%	9 20%	8 21%	9 16%
Aggression and Illegal Activities Are Wrong	16 17.8%	8 17%	8 17%	8 16%	8 18%	5 13%	11 20%
Fair Play Is Important	6 6.7%	3 6%	3 7%	3 6%	3 7%	3 8%	3 5%
Conflicts Resolved Through Positive Acts	4 4.3%	2 4%	2 4%	2 4%	2 4%	1 3%	3 5%
Adults Can't Always Help	9 10%	4 8%	5 11%	4 8%	5 11%	4 11%	5 9%
People/Things Aren't Always What They Seem	6 6.7%	3 6%	3 7%	3 6%	3 7%	2 5%	4 7%

Note: Three Conflict stories were missing due to children being absent on the day of data collection.

Friendship Is Transient and Supporting Relationships Are Helpful and Important were the thematic categories that had the greatest number of stories within them.

Additionally, the Aggression and Illegal Activities Work, They're Acceptable and the Aggression and Illegal Activities Are Wrong thematic categories were prevalent. As in the problem story, statistical analyses as to differences between grade, gender, and group for the Thematic categories were not feasible. However, some trends were noted as to the number of stories written by different groups within the thematic categories. Trends were identified in the same manner as for the topic analysis and thematic categories for the problem stories.

**Gender Trends.** In terms of Friendship Is Transient, a greater percentage of girls (29%) wrote stories within this category than did boys (9%). For the majority of the thematic categories, gender trends were not evident.

**Grade Trends.** Friendship Is Transient also showed evidence of possible grade differences with the grade four students (29%) writing a greater percentage of stories within this category than the grade seven students (9%). For the majority of the thematic categories, grade trends were not evident.

**Group Trends.** No group trends were evident in the thematic categories of the conflict story. The aggressive and non-aggressive groups wrote a similar percentage of stories within each thematic category.

### **Summary of Thematic Analyses of Problem and Conflict Story Tasks**

Similar thematic categories arose from both the problem and personal conflict stories. In both tasks, Friendship Is Transient and Supporting Relationships Are Helpful and Important emerged as the most common thematic categories. While statistical analyses were not feasible due to a relatively small sample size and the number of categories, gender, grade and group trends were evident. Trends were noted across the overlapping categories from each task. Across both tasks, a trend in grade and gender differences was noted for the Friendship Is Transient category, with grade four students writing proportionally more stories within this thematic category than the grade seven participants, and girls writing proportionally more stories than boys within this thematic category. The conflict stories contained more thematic categories related to the Aggression and Illegal Activities Work, They're Acceptable and the Aggression and Illegal Activities Are Wrong categories than did the problem stories.

## Aggressive Trends Analyses

### Problem Story

The problem story task was analyzed in five ways: a) overall aggressive rating of the story; b) type of aggression: proactive or reactive; solitary or group; overt or covert; c) the perpetrator (main character or other); d) character depictions of main, peer and adult characters; and e) frequency of aggressive t-units: number of extreme t-units, number of less extreme t-units, total number of aggressive t-units and the corresponding percentages. The chi-square test was used to investigate differences in the ratings for analyses (a) through (d) as the data was categorical. The t-test was used to investigate differences in the frequency of aggressive t-units as the data was continuous. As the sample size was relatively small, all separate chi-square comparisons were completed in an attempt to collapse the data across gender and grade in order to increase the power to detect any group differences. The results of the chi-square analyses are presented in Table 4.7.

Table 4.7

Results of Chi-square Analysis of Aggressive Trends for Gender, Grade, and Group

Analysis	Gender			Grade			Group		
	Chi-square	Df	P	Chi-square	df	P	Chi-square	Df	P
Amount of Aggression	1.755	2	.416	6.678	2	.035*	.050	2	.975
Type of Aggression									
Proactive/Reactive	.015	1	.902	.682	1	.409	2.169	1	.141
Solitary/Group	1.627	1	.202	.624	1	.430	.033	1	.857
Overt/Covert	3.746	2	.154	1.216	2	.544	.082	2	.960
Perpetrator	.002	1	.966	.662	1	.416	4.645	1	.031*
Main character	.802	2	.670	5.692	2	.058	1.495	2	.474
Other characters	2.241	2	.326	12.75	2	.002*	7.307	2	.026*

Note: \*denotes significant at the .05 level

Upon examining the results of all the comparisons it was found that with the exception of the character depiction of others, all analyses could be collapsed across the

independent variables. As both grade and group differences were found for this analysis, it was necessary to perform a 3X2X2 chi-square.

### **Overall Aggressive Rating**

Recall that an overall categorical aggressive rating was assigned to the stories based on the tabulated frequency counts for extreme and less extreme aggressive t-units. Stories containing predominantly extreme statements were assigned a rating of extreme, stories containing predominantly less extreme statements were assigned a rating of less extreme, and stories containing relatively equal amounts of extreme and less extreme t-units were assigned a mixed rating. Table 3.6 provides a description of the scoring criteria. An interrater reliability check was conducted on the overall rating of the problem stories. The two raters agreed on .95 of the assigned ratings.

No significant gender, or group differences were found in the overall rating of aggression in the stories (See Table 4.7). Significant grade differences were found (chi-square(2)=6.678, p=0.035). More grade seven stories were given an overall rating of extreme than grade four stories, which in contrast were given more ratings of less extreme than grade seven stories. Table 4.8 presents the cell frequencies for the overall aggressive rating and grade level.

Table 4.8

Cell Frequencies for Overall Aggressive Rating and Grade

Overall Rating	Grade		Total
	4	7	
Extreme aggression	1 (3.7%)	7 (25.9%)	8 (14.8%)
Less extreme aggression	22 (81.5%)	14 (51.9%)	36 (66.7%)
Mixed amounts	4 (14.8%)	6 (22.2%)	10 (18.5%)
Total	27 (100%)	27 (100%)	54 (100%)

### **Type of Aggression**

This analysis considered the various types of aggression including whether or not the aggression was: (1) proactive or reactive (Shields & Cicchetti, 1998); (2) overt or covert (Grotper & Crick, 1996; and (3) committed alone or in a group (Pepler, Craig, & Roberts, 1998). Proactive aggression refers to aggression that is calculated or methodical, generally used in an attempt to gain resources. Reactive aggression characterizes emotional aggression typically motivated by a need to protect one's self from anticipated harm. Stories were assigned a rating of either proactive or reactive. An interrater reliability check was conducted on the story rating of proactive or reactive for 30% of the stories, randomly selected. The two raters agreed on .95 of the assigned ratings. No significant gender, grade or group effects were found in terms of whether the aggression was proactive or reactive (See Table 4.7).

Stories were also assigned a rating of overt aggression, covert aggression or both. Overt aggression refers to physical or observable aggression such as punching or hitting, whereas relational or covert aggression is primarily aimed at damaging relationships such as rumors). An interrater reliability check was conducted on the rating of overt and covert aggression for 30% of the stories, randomly selected. The two raters demonstrated 100% agreement. No significant gender, grade, or group differences were found in terms of the overtness of the aggression (See Table 4.7)

Finally in terms of the type of aggression, the stories were assigned a rating of either solitary aggression where the aggressive act was committed primarily by one character, or group aggression where the aggressive act was committed either by more

than one person, or was “cheered on” by a group of people. An interrater reliability check was conducted on the rating of the stories as solitary or group aggression for 30% of the stories, randomly selected. The two raters agreed on .95 of the assigned ratings. The results indicated no significant gender, grade, or group differences in terms of whether the aggression was committed alone or in a group (See Table 4.7).

### **Perpetrator of Aggression**

Stories were rated according to whether or not the main character was the primary perpetrator of the aggression. An interrater reliability check revealed that the two raters agreed on 100% of the assigned ratings for 30% of the stories, randomly selected. No significant gender or grade differences were found (See Table 4.7). Significant differences were found between the aggressive and non-aggressive groups (chi-square(1)=4.645, p=.031). Table 4.9 presents the cell frequencies for the perpetrator and group analysis. The non-aggressive group wrote more stories in which the perpetrator was the main character compared to the aggressive group.

Table 4.9

Cell Frequencies for Perpetrator of Aggression and Group

Perpetrator of Aggression	Group		Total
	Non-aggressive	Aggressive	
Main character	21 (65.6%)	7 (35%)	28 (53.8%)
Other character	11 (34.4%)	13 (65%)	24 (46.2%)
Total	32 (100%)	20 (100%)	52

### **Character Depiction**

Recall that the main, peer, and adult characters in the story were assigned a rating of positive, negative, or both, based on the rating criterion defined in Chapter III (Table 3.7). Positive characters were identified based on their helpfulness, adaptiveness, and friendliness. Negative characters were identified based on their aggressiveness, hurtfulness, and unhelpfulness. An interrater reliability check was conducted on the character depiction of the main, peer and adult characters for 30% of the stories, randomly selected. The two raters agreed .95 on the main character depiction and .90 on the character depictions of adults and peers. No significant differences were found in the main character depiction for gender, or group (See Table 4.7). Grade differences in the main character depiction, while not significant, were approaching significance (chi-square(2)=5.692, p=.058). The cell frequencies are presented in Table 4.10. However, due to the small sample size, three cells have a lower than the expected frequency count, making the chi-square unstable. However, as this is an exploratory study, the results are presented.

Table 4.10

Cell Frequencies for Main Character Depiction and Grade

Main Character Depiction	Grade		Total
	4	7	
Positive	44 (93.6%)	35 (81.4%)	79 (87.8%)
Negative	1 (2.1%)	7 (16.3%)	8 (8.9%)
Mixed	2 (4.3%)	1 (2.3%)	3 (3.3%)
Total	47 (100%)	43 (100%)	90 (100%)

Due to the small number of stories that included peers and adults, these categories were combined and a new heading of other characters was used for the analysis. This change affected few of the stories as the majority of the stories contained only a peer or an adult but not both. However, in the case where both an adult and a peer were in the story, the ratings were combined in the following manner: if both the peer and adult were rated positively, then the rating for other characters was positive. If both the peer and the adult were rated negative, then the rating for other characters was negative. If one of the adult or peer was rated as positive and the other as negative, the rating for other characters was mixed. In the case where one of either the peer or the adult was given a rating of mixed and the other a rating of positive or negative, then the rating for other characters was mixed. For the other character depiction, no significant gender differences were found (See Table 4.7). Significant grade and group differences were found, see Table 4.7 where for the analysis of the other character and grade,  $\chi^2(2)=12.75$ ,  $p=.002$ , and for the analysis of other character and group,  $\chi^2(2)=7.307$ ,  $p=.026$ . Table 4.11 reports the cell frequencies for the other characters depiction. The chi-square indicated that there were significant group differences between the aggressive and non-aggressive group within the grade seven sample ( $\chi^2(2)=14.067$ ,  $p=.001$ ). The aggressive group contained more instances of negative character depiction of others than the non-aggressive group, and the non-aggressive group contained more instances of positive and mixed characters than the aggressive group. No group differences were evident for the grade four sample ( $\chi^2(2)=.708$ ,  $p=.702$ ).

Table 4.11

## Cell Frequencies for Other Character Depiction and Group and Grade

	Other Character Depiction	Group		Total
		Non-aggressive	Aggressive	
Grade 4	Positive	21 (70%)	10 (62.5%)	31 (67%)
	Negative	3 (10%)	3 (18.8%)	6 (13%)
	Mixed	6 (20%)	3 (18.8%)	9 (20%)
	Total	30 (100%)	16 (100%)	46 (100%)
Grade 7	Positive	12 (43%)	1 (7%)	13 (31%)
	Negative	2 (7%)	8 (57%)	10 (24%)
	Mixed	14 (50%)	5 (36%)	19 (45%)
	Total	28 (100%)	14 (100%)	75 (100%)

**Frequency of Aggression and Conflict**

Recall that frequencies for the number of extreme t-units, the number of less extreme t-units and the total number of aggressive t-units (number of extreme t-units + number of less-extreme t-units) exhibiting aggression or conflict were tabulated. (See Table 3.6 for the scoring criteria). As the stories were variable in length, percentages of extreme, less extreme, and total aggressive t-units were also calculated. T-tests and analysis of variance were used to determine grade, gender, or group differences using both raw score and percentage calculations. An interrater reliability check was conducted on the t-unit analysis. The two raters agreed on .96 of the assigned t-units for 30% of the stories, randomly selected.

In order to test whether it was feasible to collapse the data across the independent variables, t-tests were performed for all pair-wise comparisons for the following variables: the raw score number of extreme t-units; the raw score number of less extreme

t-units, the percentage of extreme units; the percentage of less extreme units; total number of aggressive t-units (raw extreme t-units + raw less extreme t-units), and the percentage of the total number of aggressive t-units. The results are presented in Table 4.12. The alpha rate was not conserved and as such results were considered significant at the 0.05 level, which increases the likelihood that a Type I error (false positives) will be committed. The researcher chose not to conserve the alpha level as this study was designed as an hypothesis generating study. As it is exploratory in nature, these results are not being interpreted as the final results, rather, we are attempting to uncover possibilities for future research. If we used a more stringent criterion, such as .001, we may miss something that is there (false negative). The results indicated that with the exception of the percentage of extreme t-units, all analyses were found to be collapsible across the independent variables.

Table 4.12

## Results of t-tests by Group, Gender and Grade

Analysis	Gender			Grade			Group		
	t-value	Df	P	t-value	df	P	t-value	Df	P
Number of extreme	-1.919	92	.069	-2.031	92	.045*	-1.070	92	.288
Number of less extreme	.020	92	.984	-.862	92	.391	-2.806	45.9	.007*
% extreme	-2.232	58	.029*	-2.480	51.4	.016*	-.807	92	.422
% less extreme	-.122	92	.903	1.050	91	.297	-2.452	45.8	.018*
% total	-1.141	92	.257	-.438	92	.662	-2.376	48.6	.022*
Raw score frequency of aggression	-1.369	92	.174	-1.870	55.7	.067	-1.994	39.3	.053

**Number of Extreme T-units.** No significant differences were found between the aggressive and non-aggressive groups or for gender (See Table 4.12). Significant grade differences were found ( $t(92)=-2.031$ ,  $p=0.045$ ). The means for the number of extreme t-units are presented in Table 4.13. More instances of extreme aggression occurred in the grade seven stories than in the grade four stories.

Table 4.13

Means and Standard Deviations for Number of Extreme T-units and Grade

	N	Mean	Standard Deviation
Grade 4	51	0.2157	0.7018
Grade 7	43	1.2093	3.4126

**Number of Less Extreme T-units.** No significant gender or grade differences were found (See Table 4.12). Significant group differences were found for the number of less extreme t-units ( $t(92)=-2.806, p=0.007$ ). The cell means and standard deviations for the groups are presented in Table 4.14. The aggressive group had more instances of less extreme t-units in their stories as compared to the non-aggressive group.

Table 4.14

Means and Standard Deviations for Number of Less Extreme T-units and Group

	N	Mean	Standard Deviation
Non-aggressive	61	.9508	1.2573
Aggressive	33	2.0303	2.0076

**Percentage of Extreme T-units.** The percentage of the extreme t-units was calculated by dividing the raw frequency score for the number of extreme t-units by the total number of t-units and multiplying by 100. No significant group differences were found (See Table 4.12). Significant gender differences and grade differences were found. An ANOVA was performed to test for the main effects and any interaction effects between gender and group. The results are presented in Table 4.15. Significant main effects for gender ( $F(1)=5.63, p=0.020$ ) and grade ( $F(1)=7.32, p=0.008$ ) were found. No interaction effect ( $F(1)=1.39, p=0.241$ ) was observed. Findings indicated that girls have a lower percentage of extreme units in their stories as compared to boys and that grade

four stories have a lower percentage of extreme t-units in their stories as compared to the grade seven stories. The cell means are presented in Table 4.16.

Table 4.15

## ANOVA of Percentage of Extreme T-units and Gender and Grade

Source of Variation	SS	Df	MS	F	Sig F
Within Cells	2269.35	90	25.22		
Grade	184.66	1	184.66	7.32	.008*
Gender	142	1	142	5.63	.020*
GradeXGender	35.07	1	35.07	1.39	.241

Table 4.16

## Means and Standard Deviations for the Percentage of Extreme T-units and Gender and Grade

		N	Mean	Standard Deviation
Grade 4	Girls	24	.167	0.016
	Boys	27	1.41	3.386
Grade 7	Girls	21	1.756	2.847
	Boys	22	5.153	9.213

**Percentage of Less Extreme Aggression.** The percentage of less extreme aggression was calculated in the same way as the percentage of extreme aggression. The raw score frequency counts of less extreme aggression were divided by the total number of t-units and multiplied by 100. The results indicated no significant differences across gender, or grade (See Table 4.12). Significant group differences were found for the percentage of less extreme t-units ( $t(45.8)=-2.452, p=0.018$ ), with the aggressive group ( $M=9.794\%$ ,  $sd=10.76\%$ ) having a percentage almost twice that of the non-aggressive group ( $M=4.74\%$ ,  $sd=7.722\%$ ).

**Total Number of Aggressive T-units.** The total frequency of the aggression (number extreme t-units+ number less extreme t-units) indicated no significant differences between gender, grade, or group (See Table 4.12). While the group differences were not significant, they were approaching significance ( $t(39.3)=-1.994$ ,  $p=.053$ ) with the aggressive group ( $M=3.06$ ,  $sd=4.46$ ) writing more than twice as many extreme t-units as the non-aggressive group ( $M=1.42$ ,  $sd=2.02$ ).

**Percentage of Total Number of Aggressive T-units.** The percentage of the total raw score of aggression revealed no significant gender or grade differences (See Table 4.12). Significant differences were found between the aggressive and non-aggressive groups ( $t(48.6)=-2.376$ ,  $p=0.022$ ). Results indicated that the aggressive group had a greater percentage of aggressive t-units in their stories ( $M=12.5\%$ ,  $sd=12.9\%$ ) than the non-aggressive group ( $M=0.6\%$ ,  $sd=0.8\%$ )

### **Conflict Story**

The conflict story was investigated using the same six analyses completed for the problem story. Chi-square tests were completed for the analyses of the a) overall amount of aggression; b) the type of aggression; c) perpetrator; and d) character depiction. The t-test was used to test for differences for the frequency of aggressive t-units. As the sample size was small, all separate chi-square comparisons were completed to assess whether the analysis could be collapsed across groups. The results of the chi-square analyses are presented in Table 4.17. Upon examining the results of all the comparisons it was found that all analyses except the amount of aggression, and the type of aggression could be collapsed across the groups.

Table 4.17

## Results of Chi-square Analyses of Aggressive Trends by Gender, Grade and Group

Analysis	Gender			Grade			Group		
	Chi-square	Df	P	Chi-square	Df	P	Chi-square	Df	P
Amount of Aggression	8.575	2	.014*	7.435	2	.024*	1.02	2	.6
Type of Aggression									
Proactive/Reactive	.072	1	.788	.440	1	.507	1.391	1	.28
Solitary/Group	.064	1	.817	.701	1	.402	.118	1	.731
Over/Covert	16.095	2	.000*	7.614	2	.022*	1.751	2	.417
Perpetrator of Aggression									
Main character	5.388	2	.068	2.693	2	.26	3.596	2	.166
Other characters	2.977	2	.226	2.056	2	.358	2.238	2	.327

**Overall Aggressive Rating**

The categorical rating system of extreme, less extreme, or mixed was assigned in the same manner as for Problem story. See Table 3.6 for a summary of the scoring criteria. An interrater reliability check revealed a .96 concordance of the rating of overall aggression for 30% of the stories, randomly selected.

No significant differences between the aggressive and non-aggressive groups were found (See Table 4.17). Significant gender (chi-square(2)=8.575,  $p=0.014$ ) and grade (chi-square(2)=7.035,  $p=0.025$ ) differences were found. Cell frequencies are presented in Table 4.18. Caution must be taken when interpreting these particular results, as the chi-square is not stable. Due to small sample size, the expected frequency (5) is not met for several cells. In the grade four stories, more boys' stories were rated as extreme than girls' stories. In the grade seven stories, more boys' stories were rated as mixed aggression as compared to the girls' stories.

Table 4.18

## Cell Frequencies for Overall Aggressive Rating and Grade and Gender

Grade	Amount of Aggression	Gender		Total
		Female	Male	
4	Extreme aggression	1 (4.5%)	5 (21.7%)	6 (13.3%)
	Less extreme aggression	19 (86.4%)	15 (65.2%)	34 (75.6%)
	Mixed amounts	2 (9.1%)	3 (13.3%)	5 (11.1%)
	Total	22 (100%)	23 (100%)	45 (100%)
7	Extreme aggression	5 (35.7%)	3 (17.6%)	8 (25.8%)
	Less extreme aggression	9 (64.3%)	5 (29.4%)	14 (45.2%)
	Mixed amounts		9 (52.9%)	9 (29%)
	Total	14 (100%)	17 (199%)	31 (199%)

**Type of Aggression**

The type of aggression was characterized in three ways: (1) whether the aggression was proactive or reactive; (2) whether the aggression was overt or covert; (3) whether the aggression occurred alone or in a group context.

Stories were assigned a rating of either proactive or reactive. In interrater reliability check was conducted on the rating of proactive and reactive aggression. The two raters agreed on .95 of the assigned ratings for 30% of the stories, randomly selected. No significant gender, grade, or group differences were found (See Table 4.17).

Stories were also rated as to whether the aggression was overt, relational or both. An interrater reliability check revealed 100% agreement between the two raters for 30% of the stories, randomly selected. No significant differences were found between the aggressive and non-aggressive groups (See Table 4.15). Significant gender (chi-

square(1)=16.095,  $p=0.000$ ), and grade (chi-square(1)=7.614,  $p=0.022$ ) differences were found. The cell frequencies are presented in Table 4.19. Caution must be taken in interpreting these results as four cells have less than the expected frequency of 5. The results indicated that in grade four, more boys wrote about overt aggression than girls, and more girls wrote about relational aggression than boys. In grade seven, more boys wrote about overt aggression than girls, but no differences were evident in the relational aggression.

Stories were finally rated as to whether the aggression occurred in a solitary or group context. An interrater reliability check was conducted on the rating of the aggression as solitary or group for 30% of the stories, randomly selected. The two raters agreed on .95 of the assigned ratings. The results indicated no significant gender, grade, or group differences (See Table 4.17).

Table 4.19

Cell Frequencies for Type of Aggression and Gender and Grade

Grade	Type of Aggression	Gender		Total
		Female	Male	
4	Overt	7 (33.3%)	21 (84%)	28 (60.9%)
	Relational	13 (61.9%)	1 (4%)	14 (30.4%)
	Both	1 (4.8%)	3 (12%)	4 (8.7%)
	Total	21 (100%)	25 (100%)	46 (100%)
7	Overt	7 (58.3%)	12 (75%)	19 (67.9%)
	Relational	1 (8.3%)	1 (6.3%)	2 (7.1%)
	Both	4 (33.3%)	3 (18.8%)	7 (25%)
Total	12 (100%)	16 (100%)	28 (100%)	

### **Perpetrator of Aggression**

Stories were assigned a rating as to whether or not the main character was the primary perpetrator of the aggression. An interrater reliability check was conducted on the rating of who the perpetrator was for 30% of the stories, randomly selected. The two raters agreed on 100% of the assigned ratings. No significant gender, grade, or group differences were found (See Table 4.17).

### **Character Depiction**

Recall that the main, peer, and adult characters in the story were assigned a rating of positive, negative, or both, based on the rating criterion defined in Chapter III (Table 3.7). An interrater reliability check was conducted on the ratings of character depiction for the main, peer and adult characters for 30% of the stories, randomly selected. The two raters agreed on .95 of the main character depictions, .93 on the depictions of the peer characters, and .95 on the depictions of the adult characters. No significant differences were found in the main character depiction for gender, grade, or group.

As in the problem story, the peer and adult character depiction categories were combined in the same manner due to the low numbers. For the depiction of others, no gender, grade, or group differences were found.

### **Frequency of Aggression and Conflict**

The frequency counts and percentages were calculated in the same fashion as they were for problem story. T-tests and analysis of variance were used to determine any gender, grade, or group differences. Again, the alpha rate was not conserved and results were declared significant at the .05 level. As this was an exploratory study, chose to increase the chance of committing a Type I error, rather than be conservative and risk

committing a Type II error. An interrater reliability check was conducted on the t-unit analysis for 30% of the stories, randomly selected. The two raters agreed on .97 of the assigned ratings.

Due to the small sample, conducting a three-way ANOVA was not deemed feasible. Therefore, in order to determine if groupings could be collapsed, t-tests were performed for all comparison groups for the following variables: the raw score number of extreme t-units; the raw score number of less extreme t-units, the proportion of extreme units; the proportion of less extreme units; total number of aggressive t-units (raw extreme t-units + raw less extreme t-units), and the proportion of the total number of aggressive t-units. The results are presented in Table 4.20. T-tests confirmed that all analyses were found to be collapsible across independent variables.

**Number of Extreme T-units.** As in the problem story analysis, the stories were divided into t-units, and then each t-unit was give a rating of either extreme aggression, less extreme aggression, or lacking. No significant differences were found across the aggressive and non-aggressive groups, or for grade (See Table 4.20). Significant gender differences were found ( $t(82)=-2.142, p=0.035$ ). Boys ( $M=0.653, sd=1.07$ ) were found to have significantly more extreme aggression t-units in their stories as compared to girls ( $M=0.26, sd=0.68$ ).

Table 4.20

Results of T-tests by Group, Gender and Grade

Analysis	Gender			Grade			Group		
	t-value	Df	P	t-value	df	P	t-value	Df	P
Number of extreme	-2.142	82	.035*	.346	93	.730	-9.89	93	.325
Number of less extreme	.163	93	.871	.698	93	.487	-1.714	93	.090
Total (extreme + less)	-1.091	93	.278	.387	93	.700	-2.062	93	.042*
% extreme	-1.986	81.6	.050*	.407	78.5	.685	-.314	93	.754
% less extreme	.648	82.8	.519	2.074	93	.041*	-1.577	93	.118
% total	-8.52	93	.396	2.068	93	.041*	-1.591	93	.115

**Number of Less Extreme T-units.** No significant differences were found across gender, grade, or group (See Table 4.20).

**Percentage of Extreme T-units.** The percentage of the extreme t-units was calculated by dividing the raw frequency score for the number of extreme units by the total number of t-units and multiplying by 100. No significant grade or group differences were found (See Table 4.20). Significant gender differences ( $t(81.6)=-1.986, p=0.050$ ) were found. Results indicated that the boys' stories ( $M=11.98\%$ ,  $sd=21.4\%$ ) contained a greater percentage of extreme t-units than the girls' stories ( $M=4.73\%$ ,  $sd=13.5\%$ ).

**Percentage of Less Extreme Aggression.** The percentage of less extreme aggression was calculated in the same manner as the percentage of extreme aggression using the raw score frequency counts of less extreme aggression. The results indicated no significant differences across gender, or group. Significant grade differences were found for the percentage of less extreme t-units ( $t(45.8)=2.074, p=0.041$ ), with the grade four participants ( $M=26.66\%$ ,  $sd=22.42\%$ ) having a larger percentage of less extreme aggressive t-units in their stories than the grade seven participants ( $M=17.66\%$ ,  $sd=19.2\%$ ).

**Total Number of Aggressive T-units.** The overall frequency of the aggression (raw score extreme+raw score less extreme) indicated no significant differences between gender or grade (See Table 4.20). Significant group differences were found ( $t(93)=-2.062, p=0.042$ ). The results indicated that the aggressive groups' stories contained significantly more aggressive t-units ( $M=2.26, sd=1.83$ ) than the non-aggressive group ( $M=1.59, sd=1.33$ ).

**Percentage of Total Number Aggressive T-units.** The percentage of the total raw score of aggression is the final analysis. No significant gender, or group differences were found (See Table 4.20). Significant grade differences were found ( $t(93)=2.068=0.041$ ). The results indicated that the grade four stories ( $M=35.8\%$ ,  $sd=26.6\%$ ) contained a significantly larger percentage of aggressive t-units than the grade seven stories ( $M=25.33\%$ ,  $sd=21.4\%$ ).

### **Summary of Analyses of Aggression**

Six analyses were completed evaluating the 1) overall amount of aggression; 2) the reason for the aggression; 3) isolation of aggression; 4) type of aggression; 5) who the perpetrator was; and 6) character depiction. As well, frequency tabulations were calculated for the number and proportions of aggressive statements in terms of extreme t-units, less extreme t-units, and the total number of aggressive t-units. Results indicated within the problem story, significant grade differences for the amount of aggression. Within the conflict story, significant differences were found across grade and gender. No significant difference for either problem or conflict story were found within the reason and isolation analyses. Significant gender and grade differences were found for the type of aggression within the conflict story only. For the perpetrator of the aggression, significant group differences were found in the problem story. No differences were noted in the conflict story. Grade and group trends were noted within the character depiction of others for the problem story.

Significant grade differences were found for the number of extreme statements in the problem story. In the conflict story, gender differences were found for the number of extreme statements. Group differences were noted for the problem story in terms of the

number of less extreme statements. For the proportion of extreme statements, gender and grade differences were found in the problem story. In the conflict story, gender differences emerged. In the proportion of less extreme statements, group differences emerged in the problem story. In the conflict story, grade differences emerged. For the frequency of aggressive statements, group differences emerged from the conflict story, no differences emerged from the problem story. For the proportion of the frequency of aggressive statements, group differences emerged within the problem story. In the conflict story, grade differences emerged.

### **Summary**

#### **Topic Analysis**

This analysis explored the topics of the problem stories. The findings indicate that all participants wrote primarily on topics related to the Social Self, followed by topics related to Hostility and Harm. Although statistical analyses could not be completed due to the relatively small sample size, trends in potential differences among the independent variables were noted. More similarities than differences were found across the independent variables. Trends in gender and group (aggressive and non-aggressive) were not found in the topic categories. Developmental trends between the grade four and grade seven participants emerged in the Health and Drugs, School and Future, and Personal Self categories.

#### **Thematic Analysis**

The problem and conflict stories were examined in terms of the themes they presented. Friendship Is Transient and Supporting Relationships Are Helpful and Important emerged as the most common thematic categories across the problem and

conflict tasks. Violence works, and violence is wrong, were also common thematic categories to both tasks. Although statistical analyses were not feasible due to a relatively small sample size and the number of thematic categories, gender, grade and group trends were noted in the data.

More similarities than differences emerged between the genders, grades, and groups for the thematic categories. In the problem stories, most thematic categories were written about by both genders, both grades, and both groups, with the exception of the Paranormal category suggesting that the themes of the participants' stories were consistent across the independent variables. Trends in gender differences were evident in the Evils of Drugs, Smoking and Alcohol, the Paranormal and the Aggression and Illegal Activities Work, They're Acceptable categories. As well, group differences were evident in the Helping Yourself and Self-Advocacy Leads to Positive Results, Aggression and Illegal Activities Work, They're Acceptable, the Evils of Drugs, Smoking and Alcohol and the Life Will Work Out thematic categories. Trends toward developmental differences were also found in terms of the thematic categories. In the problem story, developmental trends were noted in the Friendship Is Transient, Helping Yourself, Self-Advocacy Leads to Positive Results, Life Will Work Out, Evils of Drugs, Smoking, and Alcohol, Peer Acceptance Is Important, and Aggression and Illegal Activities Are Wrong thematic categories. In the thematic categories of the conflict story, few trends were noted. Trends in gender and grade differences were noted in the Friendship Is Transient thematic category.

### **Aggressive Trends Analysis**

The aggressive trends analysis examined the amounts of aggression, the type of aggression, the perpetrator of the aggression and the depiction of characters in both the conflict and problem stories. Tests of statistical significance were completed for these analyses. Significant gender, grade and group differences were found on different analyses. However, no consistent pattern across task was found. All results and their implications will be discussed further in Chapter V.

## **Chapter V**

### **DISCUSSION**

This exploratory study analyzed the content, and thematic similarities and differences of aggressive and non-aggressive children's narratives, across grade 4 and grade 7, and males with females. Two tasks were utilized: the problem story task, and the conflict story task. Those stories containing aggression were further analyzed as to the amounts of aggression, the types of aggression, the perpetrator of the aggression, and the depictions of the story characters. The research questions were based on previous literature regarding the development of narrative thought and aggression in children.

In this chapter, the results of the study are discussed. The general findings of the content and thematic analyses are discussed first with reference to the narrative literature. Specific results relating to the content analysis of the problem story are then discussed, followed by the results of the thematic analyses. Finally the analyses of the aggressive trends are discussed. Limitations of the study, directions of future research and practical implications of this research are also considered.

#### **Introduction**

The purpose of this study was to explore the similarities and differences in the narratives of aggressive and non-aggressive children, across gender, and across grades four and seven. Through exploring the narratives of children, we are able to get a glimpse of how children are making sense of human action and interpreting the events within their social worlds (Bruner, 1986,1990; Polkinghorne, 1988). In evaluating the content of children's stories, and exploring the themes of their stories, researcher's can gain unique insight into the similarities and differences across gender, grade and group.

thus coming to understand the manner in which children make meaning of their social and personal experiences (Robinson & Hawpe, 1986). Furthermore, children's narratives offer insight into their developing sense of self (Polkinghorne, 1988). Through narrative, children are creating a life story that integrates their experiences into a unified whole. Thus their stories begin to enable us to see how children are constructing this unified sense of self that is coherent with their beliefs, values, and knowledge of their social world.

In general, the topics of the problem stories were predominantly similar across gender, grade and group. Boys and girls, and aggressive and non-aggressive children were found to write problem stories similar in content. Only potential trends toward developmental differences were found in the Health and Drugs topical category, the School and Future topical category, and the Personal Self topical category. Thus, it appears that boys and girls and aggressive and non-aggressive children are predominantly concerned about the same issues. The trends resulting from the qualitative analysis revealed that, with the exception of the Health and Drugs topical category, grade fours are concerned about the same issues as grade sevens, although to a different degree.

In the thematic analyses of the problem and conflict stories, more similarities than differences were noted for the thematic analysis across gender, grade, and group. As stories are dependent upon the perspectives, beliefs, and values of the storyteller (Robinson & Hawpe, 1986), it is of interest that few differences were found in the thematic analysis of the conflict story. Thus, it appears in terms of recounting true events, it appears that boys and girls, grades four and seven, and aggressive and non-aggressive groups write about similar themes. In the problem story, a number of trends

in potential differences across the gender, grade and aggressive and non-aggressive groups in the thematic categories were found. This is of particular interest as the participants' stories reflected similar content. Thus, although boys and girls, grade fours and sevens, and aggressive and non-aggressive participants are writing about similar topics, the message they are conveying, the way in which they are interpreting events and assigning meaning to their stories is different. As stories provide the means by which future events are understood and interpreted (Polkinghorne, 1988), they offer insight into how children are viewing the world. It is important to understand both the similarities and differences in how children are interpreting events in their lives, and how the sum of their experiences are being integrated into a whole.

### **Topical Analysis**

Research has suggested that the experiences of adolescents can best be understood if we allow the adolescents themselves to choose what to express. In listening to the adolescent voice, rather than predetermining what is important to adolescents, as is the case in much of the research which utilized set tasks or surveys, we are better able to understand the experiences of adolescents (Compas et al., 1985). Furthermore, through narrative, we are able to get a glimpse into how youth organize their social world (Bruner, 1986; Polkinghorne, 1988). In this study, it was posited that adolescents, when given free reign over what they could write in a problem story, would write about issues that were of direct concern to them. Through their narratives we would be able to catch a glimpse of how they organize and interpret their experiences (Bruner, 1986, 1990).

A modified version of Violato and Holden's (1988) four-factor model of adolescent concerns was used as a template to explore the topics of the participants'

stories. A fifth category of Hostility and Harm was included, based on previous research that found when adolescents wrote about their concerns, they wrote about issues concerning hostility and harm (Bates, 1997). In Violato and Holden's (1988) original model, adolescents were most concerned about Health and Drugs, followed by School and Future, Personal Self, and Social Self. Bates (1997) found a similar pattern with the exception that Hostility and Harm was the category written about the most.

The results of the current study found support for the five categories, with adolescents most frequently writing about the Social Self, followed by Hostility and Harm and the Personal Self, and finally about Health and Drugs, and School and Future. This order is somewhat different from the findings of Bates (1997), possibly reflecting the age range in the current study. As the sample included grade four students who are on the border of adolescence, it is likely that younger adolescents are most concerned with their developing social selves as peer groups and peer acceptance begin to take precedence in their lives (Loeber & Hay, 1997). Although pressures toward peer conformity increase during adolescence, during middle childhood, children are becoming increasingly involved in their social relationships. As adolescents get older, they are more likely to become more concerned with Hostility and Harm as they gain social awareness and have more exposure to the mass media (Bates, 1997).

Although statistical analyses were not completed due to the relatively small sample size when divided among the independent variables (gender, grade, and group), possible trends were noted in terms of the topics of the stories. Trends were identified when greater than a one-third difference existed between the percentage of the stories written between genders, grades, or groups.

### **Gender Trends**

No trends in potential gender differences were found in terms of the story topics. It appears as though both boys and girls write about and, it is suggested, are concerned about similar types of issues.

### **Grade Trends**

Trends toward potential grade differences were found for the Health and Drugs, School and Future, and Personal Self topic categories. Grade seven participants wrote more about issues concerning Health and Drugs, than did grade four participants. This finding supports previous research that suggested that pressures to experiment with alcohol, drugs and smoking typically occurs during junior high school and high school years (Gfellner & Hundleby, 1994). Furthermore, adolescents are more likely to progress in their use of cigarettes, alcohol, or drugs as they age (Fleming, Leventhal, Glynn, and Ershler, 1989). As grade four students are on the border between childhood and adolescence, in comparison to the grade seven participants, it is less likely that they have been exposed to decisions around smoking, drinking and using drugs as compared to the grade seven participants.

Grade four participants wrote more stories concerning School and Future, and Personal Self. The grade four stories contained many references to school performance, family issues, and friendship. During the later years of childhood and the beginning years of adolescence, identity is rapidly developing, and much of children's identity is linked to their sense of self in terms of their school performance and personal relationships (Santrock, 1996). Research has suggested that children who perform poorly in school and who have difficulty in peer relationships may concurrently experience low

self-esteem (Rosenberg, Schooler, Schoenback, & Rosenberg, 1995). In grade four, children are continuing to experience pressure in performing well academically and are still learning how to handle those pressures. Furthermore, their friendships are continuing to grow in importance and thus they are still concerned about navigating relationships in their social world (Fox, 1997). Thus, as their skills are still developing, it is likely that these topical categories are particularly salient to them.

### **Group Trends**

No group trends were found across the story topic categories. It appears as though the aggressive and non-aggressive groups are concerned about the same issues.

### **Thematic Analysis**

Beyond knowing what topics adolescents write about, it is useful to explore the underlying messages or themes of the stories they write in order to gain a better understanding of how they view the world. To this end, the meaning or the theme of the story can be delineated providing us with further information as to how adolescents organize the events and experiences of their lives.

### **Thematic Categories**

Both the problem and conflict stories were analyzed for the predominant themes. Common themes were then grouped into categories to summarize the data. Although unique thematic categories emerged from each of the problem and conflict stories, there was some overlap between the two tasks. The thematic categories common to both tasks were Friendship Is Transient, Supportive Relationships Are Helpful and Important, Aggression and Illegal Activities Work; They're Acceptable, and Aggression and Illegal Activities Are Wrong. In both tasks, Friendship Is Transient and Supportive

Relationships Are Helpful and Important were the two thematic categories written about most. Both adult and peer relationships were included as supportive relationships. During the middle school years and early adolescence, children's social worlds are very important (Santrock, 1996). In middle childhood, and early adolescence, friendships are increasing in meaningfulness and in importance. It is through friendships that the child is gaining a new found sense of self. Thus, supportive relationships are both helpful and important.

The finding that participants wrote most frequently about Friendship Is Transient supports previous research that suggested that the friendships of Canadian children are typically unstable. The peer relationships of children have been found to change quite quickly and dramatically (Schneider, Fonzi, Tani, & Tomada, 1997). The thematic categories of Friendship Is Transient and Supportive Relationships Are Helpful And Important appear to conflict in that children are describing their peer relationships as both important and valuable, as well as transient. During middle childhood and early adolescence, peer relationships are playing an increased role in the development of the child's sense of self. Peer groups provide the reference point by which children can make social comparisons (Santrock, 1996). Thus, even when a peer relationship breaks down, children are able to acknowledge the importance of having peers and may seek out new relationships or attempt to re-unite the old friendship.

Children, by the time they are about eight years old, are able to identify that they can feel two things at once (Santrock, 1996). That is, they can be happy and they can be sad at the same time. Similarly, children can recognize the importance that their peer relationships have within their lives, but are also able to identify that these same peer

relationships are often fraught with separations, arguments, and re-unifications. Children are able to feel both happy in their relationships but also wary of the possibility of the friendship ending.

The thematic categories, Aggression and Illegal Activities Work, They're Acceptable, and Aggression and Illegal Activities Are Wrong were also common across both tasks. A probable explanation of this finding is related to the nature of the task instructions. Participants were asked to write about problems and conflicts of children about their own ages, and how the conflicts were resolved. Often times, the problems and conflicts were resolved through the use of some form of aggression. As a result, these thematic categories arose from the stories depending on how the child chose to resolve the problems, and their interpretations of the acceptability of the chosen action.

Aside from having thematic categories in common, each task also had thematic categories that were unique to the task. The thematic categories present in the problem story but not in the conflict story were the Evils Of Drugs, Smoking And Alcohol; Helping Yourself And Self-Advocacy Leads To Positive Results; Life Will Work Out, Peer Acceptance Is Important; and The Paranormal. Thematic categories unique to the conflict story were Adults Can't Always Help; Fair Play Is Important; People Aren't Always What They Seem; and Conflicts Can Be Resolved Through Positive Acts. A reason for the differences in the thematic categories between the two tasks is most likely a result of the task instructions. In the conflict story, participants were asked to write a true story about a conflict that had occurred at or near the school, substantially limiting the scope of the participants' stories. The emergence of such categories as the Fair Play Is Important, Adults Aren't Always Able to Help, and Conflicts Can Be Resolved

through Positive Acts were somewhat dictated by the nature of the task. As the participants had to write about a real conflict, because the setting was imposed on them, the themes that emerged arose from typical conflicts one would expect to occur at school. For instance, a number of stories dealt with making fair teams at recess or during gym class resulting in the thematic category of the Importance of Fair Play. In the problem story, very few limits were placed on what the participants could write about, thus, it allowed the freedom to write about the paranormal, or the dangers of using drugs. As well, because the task was not limited to a conflict, the participants could write about any type of problem including personal or social issues.

Although statistical analyses were not completed due to the relatively small sample size when divided amongst the independent variables (gender, grade, and group), some possible trends in the independent variables were noted in both the problem and conflict stories. Trends were identified when greater than a one-third difference existed between the percentages of stories written between genders, grades, and groups. Within the Problem Story trends in gender, grade and group were identified for a number of thematic categories. However, for the conflict story, only gender and grade trends were noted for the Friendship Is Transient thematic category.

### **Gender Trends**

**Across Tasks**. No gender trends were common across the two tasks. However, gender trends were evident in both the problem and conflict stories and they will be discussed.

**Problem Story.** For the majority of the thematic categories, no trends in gender differences were noted. These results suggest that in general, both boys and girls are sending similar types of messages to the reader.

Trends in gender differences were noted for the Paranormal thematic category with boys tending to write more stories within the Paranormal thematic category than girls. These findings may reflect different socialization patterns among girls and boys. For example, traditionally boys play with construction toys, action figures, and fantasy video games that encourage fantasy-type play involving the paranormal (e.g. aliens), whereas girls play with dolls, and play house (Etaugh, Liss, 1992; Idle, Wood, Desmarais, 1993). Although girls' play involves fantasy as well, the fantasy is typically directed towards relational type fantasy, for example a prince and princess getting married, whereas boys' fantasy play typically is more action oriented and involves issues such as aliens (Idle, Wood, Desmarais, 1993). Furthermore, Linn and Hyde (1984) found that boys tend to write about science and technical affairs, such as aliens and science fiction, whereas girls tend to write about aesthetics, such as close friendships, which may account for these differences.

Girls were found to write more stories about the Evils of Drugs, Smoking and Alcohol than boys. Among new smokers, adolescent girls are still among the fastest growing group (CAAWS, 2000), and use of alcohol is increasing among adolescent girls (Santrock, 1996). Research has shown that when girls are asked to identify peers most likely to smoke, they typically identify "popular" girls who have high self-esteem and self confidence (Michell & Amos, 1997). Peer pressure to fit in with these types of girls may lead young females to begin smoking, or to worry about its effects. Michell and

Amos (1997) suggested that boys are probably less vulnerable to this type of peer pressure. Whereas girls' peer relations typically involve joining together in terms of talking, boys' peer relations are still focused on sport and fitness. Boys of high social status are typically those involved on a sports team and playing at a high caliber. As such, boys may be less vulnerable to peer pressures about smoking as a high social status is associated more with achievement in sport (Michell & Amos, 1997). Although this research provides an explanation about why smoking, alcohol, and drugs might be of more concern to girls, it does not explain why these activities have been portrayed negatively. A possible explanation relates to socialization factors. Adolescents in our culture are bombarded by messages that drugs, alcohol, and smoking are bad behaviours. Furthermore, it is possible that the cultural messages directed towards girls are different than for boys. For example, based on personal anecdotal evidence, excessive drinking is often deemed to be more acceptable for a male, than for a female. Furthermore, girls tend to give the socially desirable response in their stories. Thus, based on the cultural messages, the socially desirable response is that these activities are evil.

Gender trends were also noted for the Aggression and Illegal Activities Work, They're Acceptable thematic category with more boys than girls writing stories within this category. Traditionally boys have been viewed as more aggressive, and concurrently aggression in males is typically viewed as more acceptable than aggression in females (Grotmeter & Crick, 1996). A possible explanation of these findings is that the environment supports aggression in boys and, thus males are more likely to view the aggression as successful in obtaining desired goals. As well, media portrayed violence more often depicts males as the aggressors (Dietz, 1996). Thus, boys are bombarded

with cultural messages that aggression is acceptable for males. In contrast, for females, even though aggression may yield a desired outcome, the social consequences of that aggression outweigh the benefits of obtaining the goal, thus they may be less likely to view aggression as acceptable.

**Conflict Story.** Again, although a discussion of gender trends will follow, in the conflict story, there were few gender trends within the thematic categories. This indicates that both genders are making meaning of events in similar ways.

Gender trends were noted for the Friendship Is Transient thematic category with girls out performing boys in the percent of stories written within this thematic category. In the boys' stories, friendship breakdown was associated with physical fights, and tended to resolve itself by the end of the story, suggesting the characters were once again friends. However, in the girls' stories, friendship transience was usually a result of relational aggression (Grotper & Crick, 1996), and typically did not resolve itself by the end of the story. It appears as though boys may resolve their arguments more quickly than girls possibly because of the type of aggression that was perpetrated, that is, whether the aggression was overt or relational in nature. Furthermore, Grotper and Crick (1996) found that boys' friendships are typically united through overt aggression. Overtly aggressive boys tend to form relationships with other overtly aggressive boys. The overt aggression is not typically expressed within the friendship, but rather, the friends then seek out others to victimize. In girl's friendships, relational aggression is generally accompanied with high levels of jealousy. These high levels of jealousy typically lead to higher amounts of relational aggression between the friends, which serves to separate the friendship. Relational aggression appears to be more prone to within friendship fighting

whereas overt aggression appears to be more related to outside friendship fighting. More research is needed to better understand the gender trends in the Friendship Is Transient thematic category.

### **Grade Trends**

**Across Tasks.** Trends in grade differences were indicated in the Friendship Is Transient thematic category for both the conflict and problem stories with grade fours writing more stories in this category than grade seven participants. This finding supports previous research that has found that peer relationships increase in stability as children age (Santrock, 1996). As well, peer relationships tend to increase in intimacy as children age, which is probably reflective of the increasing strength of the peer bonds (Schneider et al., 1997). The psychological importance of friends also increases during adolescence. Adolescent friendships are typically involve greater amounts of empathy, perspective taking, and appropriate self-disclosure (Santrock, 1996). As such, it is likely that adolescents have invested more time into their friendships and are somewhat more motivated to maintain these friendships.

**Problem Story.** More trends in grade differences were noted in the problem story as compared to both gender and group (aggressive and non-aggressive) differences. This finding suggests that developmental changes between grade four and seven account for changes in meaning making more than both gender and group trends.

More grade four than grade seven participants wrote problem stories within the Helping Yourself and Self-Advocacy Leads to Positive Results and the Life Will Work Out thematic categories. As these two categories can be accounted for by similar reasons, they will be discussed together. As we posit that children write about issues that

are of interest and concern, it is likely that helping one's self is a particularly salient issue to the grade four participants as compared with the grade seven participants. During the middle school years, children are rapidly developing their social and cognitive skills and their understandings of their emotional states. Children at this developmental stage are also gaining independence from their parents. They are beginning to have some freedom to make decisions about different aspects of their lives, and are gaining a sense of their own autonomy. They are learning they can exert control over their environments. Through these gains, they are able to develop a sense of what they can accomplish. As their independence is still somewhat limited in scope, it is likely that they do achieve great success when they are faced with some challenge. Children at this stage of development are developing a lot of skills, but have not yet begun to face to trials of adolescence. Similarly, in terms of the Life Will Work Out thematic category, children in grade four are faced with relatively few decisions to make autonomously as compared with adolescents at grade seven. It is likely that their optimistic outlook reflects the fact that they have not yet had to deal with a situation that was not solvable. It is possible that the grade seven participants have developed a more realistic world view in which not every problem has a solution (Santrock, 1996)

Grade trends were also evident in the Peer Acceptance Is Important thematic category with more grade seven participants' stories reflecting this category than grade fours' stories. During early adolescence there is an increase in the psychological importance of friends, and an increase in the intimacy of those friendships (Schneider et al., 1997). Adolescents increasingly define themselves and differentiate themselves in accordance with their peers. Demands for conformity with peers are also particularly

strong during early adolescence. As such, the importance of fitting in may increase with age.

Grade trends were also evident in the **Aggression and Illegal Activities Are Wrong** thematic category with more grade seven participants writing within this category as compared to the grade four participants. Research has suggested that as children are socialized within a culture that values a non-violent approach to conflict resolution, their skills at using positive conflict resolution strategies improve with age (Dodge, 1991). Thus, we would expect that the grade seven stories would reflect themes related to the thematic category that **Aggression and Illegal Activities Are Wrong**. The grade seven participants have been exposed to the culture to a greater extent and thus should embrace those cultural views to a greater extent as compared to the grade four participants.

Finally, grade trends were noted for the **Evils Of Drugs, Smoking, and Alcohol** thematic category with the grade seven participants writing more stories within this theme than the grade four participants. As adolescents in grade seven are more likely to have been exposed to issues about drugs, smoking and alcohol than grade four students, it is likely that this increased exposure led to these findings.

**Conflict Story**. Besides the **Friendship Is Transient** thematic category, which was common to both the problem and conflict story tasks, no other trends in grade differences were found. This finding suggests that given a task to describe a real conflict situation, grade fours and grade sevens tended to attribute largely similar meaning to the situations.

## **Group Trends**

**Across Tasks.** No group trends were evident in the thematic categories across both tasks. However, group differences were evident in the problem stories and will be discussed in that section.

**Problem Story.** In the problem story the non-aggressive group wrote more stories about Helping Yourself and Self-Advocacy Leads to Positive Results than did the aggressive group. One possible explanation of these findings comes from research that has suggested aggressive children typically demonstrate an external locus of control and decreased self-efficacy as compared to non-aggressive youths (Ollendick, 1996). These results suggest that aggressive children may not believe they have the power to effect change in their environments or their situations.

Group trends were also found in the Aggression and Illegal Activities Work They're Acceptable thematic category with the aggressive group writing a greater percentage of stories in this thematic category as compared to the non-aggressive group. This finding is consistent with previous research that suggested that aggressive youth tend to utilize aggressive tactics when attempting to navigate social situations (Coie & Dodge, 1993; Dodge, 1991). Rather than utilizing prosocial strategies, aggressive youth resort to dominance in order to attain desired resources. Although the aggressive tactics appear to work for the aggressive youth in gaining resources, the end result is a decrease in peer relationships. It has been posited that aggressive youth typically lack the ability to consider beyond the immediate effects of their actions (Dodge, 1991). Although threatening Johnny to give you some candy may result in the desired outcome of having

candy, aggressive youths demonstrate a decreased capacity to consider long term results, like Johnny no longer wants to play with you.

**Conflict Story.** No group trends were noted in the conflict story. A possible explanation for the lack of group trends in the conflict story is related to the nature of the task. Participants were asked to write a story about a real conflict in which they had participated, heard about, or witnessed. As such, the stories chosen by the aggressive and non-aggressive groups were remarkably similar.

### **Summary**

Although trends have been identified in terms of the differences across gender, grade and group, these are only trends and need to be followed up with future research. As this research is exploratory in nature, identifying differences in thematic categories that may or may not be present is useful to provide direction for follow up. At this point, it was deemed more important to identify false positives rather than run the risk failing to identify possible differences for future study.

### **Aggressive Trends Analysis**

The stories that contained aggression were further analyzed in order to better understand the nature of the aggression being portrayed. The stories were analyzed in terms of: 1) an overall rating of aggression (Extreme, Less Extreme, or Mixed); 2) the type of aggression (proactive/reactive; solitary or group; overt/covert); 3) the perpetrator of the aggression (main character or other); 4) character depiction (main and other); 5) frequency of aggression (number and percentage of extreme t-units, number and percentage of less extreme t-units, and number and percentage of aggressive t-units). Chi-square, t-tests, and ANOVAs were completed in this section to test for differences

across the independent variables: gender, grade, and group. In what follows, each of the analyses will be discussed relative to the study's predictions.

### **Overall Rating of Aggression**

It was predicted that grade seven participants would write more stories rated as Extremely Aggressive as compared to grade four participants. Although previous research has suggested that while aggression tends to decrease with age, extremely aggressive acts have been found to increase during adolescence moving along a continuum from acts such as pushing, to extreme forms of aggression such as use of a weapon (Loeber & Hay, 1997). The prediction was supported in the problem story where more grade seven stories were coded as Extremely Aggressive and more grade four stories were rated as Less Extreme. The findings for the conflict story also supported the prediction, as the stories of the grade seven participants were coded as Extremely Aggressive more frequently than those of grade four participants. Specifically, the grade seven stories contained more instances of gang related violence, and the use of dangerous weapons such as knives and guns, whereas the aggression in the grade four stories generally depicted pushing or shoving others. The increase in the extreme nature of the aggression in the grade seven participants' stories suggests a move along the aggression continuum of aggressive acts. Although the specific sequence of aggressive acts on the continuum is not fully understood, children who persist in aggressive behaviour into their adolescence typically increase in the severity of their aggressive acts (McMahon & Wells, 1998).

The second prediction was that the aggressive group would write more stories that were coded as Extreme compared to the non-aggressive group. This prediction was not

supported as no significant differences were found between the aggressive and non-aggressive groups. A possible explanation is the nature of the task. In the problem and conflict stories, participants were asked to write about problems and conflicts and as such, the task instructions may have necessitated the inclusion of some form of hostility or conflict. Howard (1994) found that boys diagnosed with Conduct Disorder or Oppositional Defiant Disorder only differed in the amount of aggression in their stories from a comparison group on the Thematic Apperception Test, but not on the problem story. It appears that when a task is open-ended, that aggressive children do differ from their non-aggressive peers, however, on a task that requires participants to write about problems and conflicts, they do not differ. It is possible that the nature of the task, that is writing a problem story, implies some level of conflict or aggression, thus explaining the lack of results on the problem story.

The third prediction was that more boys than girls would write stories rated as Extreme, as boys have traditionally been considered to be more aggressive than girls (Loeber & Hay, 1997). In the problem story, this prediction was supported with more boys' stories being coded as Extremely Aggressive as compared to girls' stories. In the conflict story, an interaction was found between gender and grade. In the grade four stories, more boys' stories than girls' stories were coded as Extreme, whereas in the grade seven stories, more girls' stories were coded as Extreme than boys' stories. Thus, for the conflict story, the prediction was supported in the grade four stories, but not in the grade seven stories. A possible explanation is that the grade seven girls' stories typically depicted aggression that was witnessed between boys. As boys' were found to exhibit more extreme forms of aggression this finding then can be understood within that

framework. Future research is needed in order to ascertain what, if any, gender differences do exist, and to what they can be attributed.

### **Type of Aggression**

**Proactive or Reactive.** It was predicted that group differences would exist with the aggressive group writing more about proactive aggression than the non-aggressive group, as aggressive children tend to use aggression in order to obtain desired goals (Fraser, 1996). If children are writing about their social experiences then we would expect aggressive children to write about proactive aggression more so than non-aggressive children as it is typically the child identified as aggressive who is instigating the aggression. The findings of the current study, however, revealed no significant differences were found between the aggressive and non-aggressive groups on either task regarding the extent to which proactive and reactive aggression were described. As aggressive children are often labeled as the instigators of the aggression, it is of interest that in their storytelling, they did not differ from the non-aggressive group. A possible explanation for the lack of difference between the aggressive and non-aggressive groups relates to the way in which the participants wrote their stories. Often times the authors appeared to omit the antecedents to the situation that they described. Thus, the researcher may not have been aware of the complete scenario. Furthermore, the participants did not fully develop the characters within their stories-a phenomenon typical of the writing of youngsters in this age range (Genereaux, 1998). As such, we are left with scantily developed actors within the stories. Whereas in a long story or novel, the character is more fully developed and we can gain insight into their motivations, in these short narratives, the motivations behind the actions of the characters was often unknown. The

current study relied solely on the information presented in the stories to determine whether or not the aggression was proactive or reactive. It would be informative to explore this area further, asking children about the circumstances that had transpired prior to the acts of aggression and their interpretations of whether or not the aggression was proactive or reactive. Differences between the aggressive and non-aggressive groups may surface if the author's perception of the reason for the aggression was considered.

**Solitary or Group Aggression.** It was predicted that grade differences would be found in terms of whether the aggression was perpetrated in a group or alone as gang related violence tends to increase with age (Loeber & Hay, 1997). No differences in group or gender were predicted. The analysis revealed no significant differences between groups in this sample for either task, thus the prediction was not supported. Again, it is possible that differences were not found as the stories often did not contain enough detail regarding whether or not the aggression occurred in isolation or in a group context. It is possible that differences may surface if the participants were asked about the events occurring prior to their story, and whether or not they perceived the aggression as occurring in a group or solitary context.

**Overt or Relational Aggression.** It was predicted that significant gender differences would exist in the stories as to whether the aggression was overt, relational or both. Research has suggested that girls use more relational aggression than boys and boys use more overt aggression than girls (Grotmeter & Crick, 1996). It was also predicted that more overt aggression would be found in the grade four stories than in the grade seven stories as typically physical aggression tends to decrease with age (Loeber &

Hay, 1997). No differences between the aggressive and non-aggressive groups were predicted.

An interaction between gender and grade was found in the conflict stories. In the grade four stories, more boys than girls wrote about overt aggression and conversely more girls than boys wrote about relational aggression. This finding supports the prediction of gender differences. However, no significant differences between gender were found in the grade seven sample. Furthermore, the grade seven girls' stories showed evidence of an increase in overt aggression. These findings are most likely a product of the instructions for the conflict story task. As participants were asked to write a story about a true event it is possible that participants were more likely to choose conflicts in which the aggression was overt and thus more obvious. It is also possible that overt aggression is particularly salient to children as it is more obvious.

Another possible explanation is that from the child's perspective there may not be differences in the use of overt or relational aggression. As a result, both boys and girls may have been more likely to write stories about overt aggression. It may be that adults do view real differences between genders and grades but the children do not perceive it that way. More research is needed to understand how children perceive aggression in their worlds.

No significant differences were found in the problem story for gender, grade, or group. Thus, given freedom to write about any type of problem, gender, grade and groups do not differ in their descriptions of overt or relational aggression.

### **Perpetrator of Aggression**

It was predicted that group differences would be found with the aggressive group writing more often about the main character as the perpetrator. As children tend to write about their experiences (Polkinghorne, 1988), and more often it is the aggressive child who is the perpetrator of aggression, it was predicted that the aggressive group would write more stories where the main character was the perpetrator as compared with the non-aggressive group. The results did not support this prediction as it was found in the problem story that more non-aggressive children wrote about the main character as the perpetrator, whereas more aggressive children wrote about a perpetrator who was not the main character. One possible explanation of this finding is that aggressive children often attribute aggressive and hostile intents to others in their environments (Dodge, 1991). Thus, aggressive children may be more likely to view others as being aggressive. Another possible explanation is that the aggressive children have been found to experience a heightened sense of awareness to potential harm (Cicchetti & Shields, 1995). Such tendencies are also characteristic of people who have been abused (Carlson, 1993). Although information regarding past abuse was not collected, future research should attempt to establish the background of the participants, as it is possible that past experiences may have influenced the findings of the current study. No significant differences were found in the conflict story.

### **Character Depiction**

It was predicted that the aggressive group would depict the story characters more negatively than the non-aggressive group as previous research has suggested that typically aggressive children depict characters more negatively than non-aggressive

children (Howard, 1994; McKeough, et al., 1994) and leave their characters in problematic situations (Yule, 1985). No significant gender or group differences were found in either the problem or conflict story in regards to the depiction of the main character. Grade differences in the depiction of the main character approached significance in the problem story with the grade seven participants more often than the grade four participants portraying the main character as negative. A probable explanation for this findings relates to the topics of the problem stories. In the problem stories, the grade seven participants wrote more stories about smoking, drinking, and drugs. Typically the main characters within these stories were rates negatively as they engaged in such deviant behaviors, thus accounting for the difference between the grade seven and grade four stories.

Group differences were predicted for the way in which other story characters were depicted as again, aggressive children have been found to present more negative type characters in their stories (Howard, 1994; McKeough, et al., 1994). A significant interaction was found between group and grade in the problem story for the depictions of other story characters. In the grade four stories, no group differences were found in terms of the other character depiction. In the grade seven stories, the aggressive group more often portrayed the other characters in a negative fashion as compared to the non-aggressive group, whereas the non-aggressive group portrayed the other characters more positively than did the aggressive group. These findings may indicate that aggressive children tend to view others as confrontational, demanding, and hurtful and non-aggressive children tend to view others as more helpful, nice, and caring than the aggressive group. These findings are consistent with previous research (Howard, 1994;

McKeough et al., 1994; Yule, 1985) which found that boys diagnosed with conduct disorder or Oppositional defiant disorder identified other characters more negatively as compared to a sample of normal boys.

No significant differences were found in the conflict story in terms of the other character depiction. As participants were writing about true events, it is likely that the lack of findings is related to the nature of the task.

### **Frequency of Aggression**

The frequency of aggression was calculated by tabulating the number of t-units in the stories that indicated extreme aggression, and those that indicated less extreme aggression. The total number of aggressive t-units (extreme + less extreme) were also tabulated. Extreme aggression included physical acts such as stabbing and shooting, threatening words, such as “I could have killed him”, and aggressive thoughts such as “I thought about beating him up”. Less extreme aggression included physical acts such as chasing, and pushing, verbal expressions such as teasing or insults, and less aggressive thoughts such as “I wished I had pushed him back”. Both the raw score counts of the total number of aggressive t-units, the number of aggressive t-units rated as extreme, and the number of t-units rated as less extreme and the corresponding percentages were calculated. For clarity, only the results of the percentages will be discussed. As the stories varied in length, the raw score counts are somewhat dependent on that variability. The raw scores will be reported in the footnotes.

Gender differences were predicted in the amounts of extreme aggression and in the total amounts of aggressive t-units in the stories. It was predicted that the boys' stories would contain more extreme t-units and more total aggressive t-units

(extreme+less) than the girls' stories, as boys tend to be more aggressive, and use more extreme aggression as compared to girls (Coie & Dodge, 1997). In terms of the percent of t-units coded as extreme aggression, the prediction that boys will evidence more extreme aggression was supported in both the problem and conflict stories.<sup>1</sup> The findings revealed no support for the prediction of gender differences in the total amount of aggression, in either the percentage scores or the raw scores. Thus, the findings suggest that boys are more inclined to include extremely aggressive descriptions in their stories, however, they do not seem to include more overall instances of aggression as compared to girls. The finding that the boys' stories included more extreme aggression may be a result of the coding system. Overt aggression, while included in the definition of less extreme aggression, also occurred in the definition of extreme aggression, whereas relational aggression only occurred in the definition of less extreme aggression. As overt aggression has been found to be more characteristic of boys, and relational aggression more characteristic of girls (Grotperter & Crick, 1996), it is likely that this finding is reflecting the current coding scheme. Although in general, relational aggression is viewed as less extreme than many forms of overt aggression, its effects can be just as devastating, or even more so (Grotperter & Crick, 1996). These findings suggest that both boys and girls write about aggression with similar frequency in their stories.

It was predicted that the grade seven participants would include a greater frequency of extreme aggression in their stories as extreme forms of aggression tend to increase during adolescence (Loeber & Hay, 1997). It was also predicted that the grade four participants would write stories with a greater amount of less extreme aggression,

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<sup>1</sup> In terms of the raw frequencies of extreme aggression, support was found in the conflict story that boys exhibit more extreme forms of aggression. This prediction was not supported in the problem story.

and total aggressive t-units, as aggression tends to decrease as children develop (Loeber & Hay, 1997). Grade differences in support of the prediction for t-units of extreme aggression were found in the problem story with the grade seven participants writing more stories with extreme aggression than the grade four participants. Grade differences were not supported in the problem story for the percentage of less extreme, and the percentage of total aggressive t-units, however they were supported in the conflict story. Thus moderate support for these predictions were found, as only one of the two tasks found the predicted results.<sup>2</sup> These results suggest that developmental differences in the writing of extreme aggression exist.

Group differences were predicted with the aggressive group predicted to have more extreme t-units, more less extreme t-units, and more total number of aggressive t-units in their stories as compared to the non-aggressive group. These predictions were based on the findings that aggressive children tend to use more aggressive strategies as compared to non-aggressive children (Dodge, 1991; Fraser, 1996; McMahon & Wells, 1998). The predictions for group differences were supported in the problem story for the percentage of less extreme aggressive t-units, and the percentage of the total number of aggressive t-units. Support was not found for the prediction that the aggressive children would include more instances of extreme aggression, nor were the predictions supported in the conflict story.<sup>3</sup>

These results moderately support the prediction that the aggressive children would have more instances of aggression in their stories as support was only found in the

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<sup>2</sup> Grade differences were supported in the raw score frequencies of extreme aggression in the problem story.

<sup>3</sup> Group differences were found in the raw scores for the number of less extreme aggressive t-units in the problem story, and for the number of total aggressive t-units in the conflict story.

problem story task. Although support was not found in terms of the number of extreme t-units, these findings suggest that aggressive children are likely viewing the world from a more hostile and aggressive framework, as compared to their non-aggressive peers. In turn, this hostile bias towards the world influences their aggressive behaviour. As such, they are caught in a vicious circle where their aggressive behavior leads them to view the world as hostile and their view of the world as hostile leads them to act aggressively.

A possible explanation for the general lack of findings in both the conflict story and the problem story is the nature of the tasks. Participants were asked to write stories about conflicts and problems. Part of the nature of such stories is that they usually involve some form of aggression or conflict. Thus, we would expect some aggression or conflict to be present in most of the stories.

#### **Limitations and Delimitations of the Current Study**

A major limitation of the current study was the sample size. Due to the relatively small number of participants, it was not possible to conduct three way analyses which would have allowed further exploration of possible interactions among the independent variables: gender, grade, and group (aggressive and non-aggressive). Furthermore, some of the analyses were approaching significance and a larger sample size would have increased the statistical power of the tests. As well, for the content and thematic analyses, a larger sample size may have allowed me to use a test of statistical difference amongst the categories and independent variables. Further research, utilizing a larger sample size should be conducted to follow up on the results of this study.

A second limitation was that the sample was composed of volunteers, which might have resulted in a limited range of representation and hence limited generalizability

of the findings. Thus, these results can not be determined to be reflective of all boys and girls, all grade four and grade seven students, and all behaviourally aggressive and non-aggressive children. Rather, these results reflect the voices of the participants of this study.

A third limitation of this study is that the derived themes were not verified with the authors of the stories. Such co-construction of the meaning (Freeman & Coombs, 1991) would have allowed me to ensure that the meaning I assigned to the stories was accurate. Furthermore, the qualitative analyses lacked objectivity, in that the assigned themes and meanings are mine and are a result of my own personal and cultural values and beliefs. The analysis was conducted with this in mind but it would be impossible to suggest that all my values and beliefs could be bracketed to the extent where they did not affect the development of the themes. Although an interrater reliability check was conducted, future research should strive to consult with the authors of the stories about what they believe is the meaning or theme of their story. This would increase the validity of this analysis. Additionally the identified trends were only trends. The goal of this research was to generate hypotheses for future research, thus the trends are meant to be interpreted as possible starting points for future research.

A fourth limitation is related to the methodology used. Although proponents of the narrative methods do not suggest that findings can be generalized, in psychology, generalization is a common practice. Therefore, researchers who use this approach caution against generalizing from the findings (Reissman, 1993). Rather, these findings are representative of those that participated, and it is their voices that are reflected in the findings.

A fifth limitation of the current study was that the researcher was unable to control for intellectual ability or personal history of the participants. As evidence suggests that there are differences between children who have been maltreated and those who have not (Groves, 1996; Quinn et al., 1995; Shields & Cicchetti, 1998), knowledge in this area would have provided further differentiation of the groups. The researcher was also unable to control for the participants prior experiences with the tasks, or for the particular saliency of each task.

A sixth limitation was the CPBCC: Teacher's Version. This was the first time this checklist was used in its English form and teachers appeared to have some difficulty with answering a number of the questions, often choosing "unknown". As a result, much of the checklist data appeared as though it were missing. The majority of items that teachers were unable to answer reflected the inner states of the child, for example, "The student *likes* to fight". As a number of items had to be dropped from the checklist, it is possible that the two behavioural groups were not sufficiently delineated. Future research using the CPBCC should attempt to verify its validity by using a more established instrument in conjunction with the CPBCC.

A seventh limitation was that the alpha rate was not controlled in the Analyses of Aggressive trends. This most likely resulted in an inflated Type I error, in that a number of the differences noted may have simply occurred by chance. However, these results are not meant to be taken as the final word, but rather, this study attempted to generate hypotheses for future research. This was an exploratory study.

An eighth limitation was that the ethnic background was not involved in the analysis. Because of the cultural nature of the narrative construction and interpretation, ethnicity might well be a factor in the topic and themes of the stories.

### **Summary**

This exploratory study examined gender, grade (four and seven) and group (aggressive and non-aggressive) similarities and differences in children's problem and conflict stories. The study was predicated on the assertion that children's narrative meaning making provides us with valuable insights into how they are organizing and interpreting the event of their lives. The topics of the problem stories and the themes of both stories were explored. Analyses of the aggression within the stories were also completed.

It was found that all participants wrote primarily on the topic of the Social Self, and most frequently about themes of Friendship Transience and Supportive Relationships. These three categories deal primarily with peer relationships, which are a source of a child's developing sense of identity (Santrock, 1996; Violato & Holden, 1988). These categories were the focus of the stories regardless of gender, grade or group, suggesting that most participants dealt with such issues within their lives. Although the intent of the study was not to focus primarily on differences between the grade four and grade seven participants, the majority of the findings were developmental. The only trends evident in the topical analyses of the problem story were developmental in nature, suggesting that the changes between grade four and seven are more pronounced than both the gender and group differences of this analysis.

A similar pattern between the topic and thematic analysis was found with more similarities than differences emerging between the genders, grades, and groups. In the problem stories, most thematic categories were written about by both genders, both grades, and both groups, with the exception of the Paranormal category suggesting that the themes of the participants' stories were consistent across the independent variables. Gender and group differences were minimal for the problem story thematic categories. Trends in gender differences were evident in the Evils of Drugs, Smoking and Alcohol, the Paranormal and the Aggression and Illegal Activities Work, They're Acceptable categories. As well, group differences were evident in the Helping Yourself and Self-Advocacy Leads to Positive Results, Violence Works, the Evils of Drugs, Smoking and Alcohol and the Life Will Work Out categories. These trends suggest that there may be differences in the way the aggressive participants are interpreting the events in their lives. As no trends in group differences were evident in the topics, these results suggest that although the topics are similar, the meanings assigned to the topics are different across the groups.

Developmental differences were also found in terms of the themes of the stories. In six of the eight thematic categories for the problem story gender trends were evident. Again, this suggests that the way in which the grade seven participants view the world and are making sense of social events is different from the way the grade four participants are doing it and appear to out-weigh group and gender differences. In the current study, these results were interpreted in light of research which suggests that during adolescence, youth have increasing experiences with the social world in terms of their social awareness, and increasing realism (Santrock, 1996). Whereas the grade four

participants were writing stories with optimistic, positive endings, the grade seven participants wrote stories in which the problem was not always resolved, or a negative ending may have occurred.

Few differences were evident in the thematic categories of the conflict story. This outcome was thought to be as a result of the instructions for the task, that is, in the conflict story, participants were required to write a true story about a conflict that they had witnessed or taken part in. However, the lack of findings does suggest that in writing stories about real conflicts, regardless of gender, grade, or group, children report similar events. The current study did not attempt, however, an in-depth analysis of the participants' interpretations of the stories. It is possible that differences across gender, grade, and group may have become more pronounced with such an analysis.

Within the analyses of aggression, again there were more similarities than differences among the independent variables. The predictions for the group differences in the type of aggression were not found, suggesting that aggressive children are describing the aggressive acts in a similar fashion as their non-aggressive peers. Group differences were found in the analysis of the perpetrator of aggression, although not in the predicted direction, and in the amounts of less extreme aggressive t-units, and the total number of aggressive t-units. A clear explanation for the finding that the non-aggressive group more often wrote about the protagonist as the perpetrator, as compared to the non-aggressive group, is not evident. It may be that the way aggressive children view aggressors is different from the way their peers and adults do. Further study is needed to understand this difference.

Few gender differences were noted in terms of the analyses of aggression. These findings suggest that both boys and girls write stories about similar types, and with similar amounts of aggression.

Once again, although grade differences were not the primary focus of the current study, within the analyses of aggression, developmental differences were evident in the overall amounts of aggression, the character depictions, and the frequency of extreme and less extreme aggressive t-units. These results found support for the prediction that extreme aggression does increase during adolescence (Loeber & Hay, 1997; Ollendick, 1996). The aggression in the grade seven stories was increasing in its violent presentation, typically involving weapons. However, the grade four had a greater number of less aggressive t-units and in general, more aggressive t-units in their stories suggesting that indeed in adolescence, the general amounts of aggression do decrease. In the analysis of the character depictions, an interaction occurred between grade and group. In the grade four sample, no differences occurred between the groups, but in the grade seven sample, the aggressive group wrote more stories about negative characters. This finding may be a result of the progression of aggression and may reflect the realism of the grade seven participants in that not everything can work out, and not all people can be successful, and some people do have many negative qualities that are enduring. These differences again suggest the cognitive and social changes that children face in the period between grade four and seven.

In conclusion, although gender and group differences were found for some of the analyses predominantly the findings were similar across these variables. It appears as though both boys and girls and both aggressive and non-aggressive children write about

similar topics, their stories share common themes, and the types of aggression they write about are similar. Developmental differences were evident throughout the analyses, suggesting that the trends can be interpreted in terms of the cognitive and social changes that occur between those grades, than gender or group differences. As a school-based sample of behaviourally aggressive children was used in this study, it is possible that the lack of findings is reflecting the developmental path of aggression. If a more behaviourally aggressive sample had been used, it is possible that more differences between the groups may have been evident.

### **Implications of the Current Study**

#### **Research Implications**

The current study opens many avenues for future research. In this study, the researcher attempted to delineate possible trends to generate possible research questions and predictions rather than establishing certain findings. Due to the exploratory nature of this study, and the aforementioned limitations of this research, the findings need to be verified. First, future research should attempt to verify the thematic categories delineated in this research to add additional validity to the findings. In addition future research regarding the thematic categories of the stories should attempt to validate the theme with the author of the story. In this manner, more information regarding the child's personal sense of their world view can be delineated. Few differences were evident in the thematic categories across the aggressive and non-aggressive groups. Future research could investigate the story themes of a clinical population. Through such analyses, we may gain insight into the progression of aggression from a non-aggressive to behaviourally aggressive to clinically diagnosed aggressive children.

The analyses of aggression present many opportunities for future research. Developmental differences were evident in the analysis of the depictions of characters. An interaction was found between the aggressive and non-aggressive group and grade in the analysis of the depiction of other story characters, with no group differences evident in the grade four sample but significant group differences, with the aggressive group characterizing the other characters more negatively than the non-aggressive group. Future research could further investigate this interaction examining at what age aggressive children begin to view others more negatively, as well as the potential reasons for that shift. This research may lead to increased knowledge regarding the developmental progression of aggression.

Significant differences between the aggressive and non-aggressive groups were also found in the amounts of aggression in the stories, but not in the types of aggression. Future research should attempt to delineate the possible reasons for this difference. Although we might hypothesize that it reflects a difference in world view, more research is needed to test such hypotheses. Furthermore, research is needed to understand how children perceive and characterize aggression. Perhaps their perceptions are different from adults. Although adults may perceive aggression in terms of whether or not the aggression was proactive or reactive, overt or covert, perhaps children are viewing aggression differently. Building on Dodge's (1991) work, more information on how aggressive children view their social world as compared to non-aggressive children is needed. Larger samples and a better understanding of how these children perceive aggression may reveal information regarding the differences in aggressive children's thinking.

Gender differences were found in both the thematic category of Friendship Is Transient and in the analysis of the type of aggression, specifically overt and relational aggression. Future research should investigate if a link exists between these two findings. Perhaps the expression of relational aggression is related to the increased expression of the transience of friendship among the female participants. It may be that the nature of aggression in friendships may impact how children view their friendships, and this in turn may be different across the genders. For instance, perhaps gender differences exist in terms of how overt and relational aggression are experienced within friendships.

### **Practical Implications**

This research was predicated on the view that adolescents write about issues, which are of concern to them, and the themes of their stories reflect their views of the world. As such, their narratives can provide us with a wealth of information regarding their personal selves and their views of others. Research has suggested that a narrative approach to assessment can provide much information about the developing child's world views that may not be accessible to practitioners through conventional assessment tools (Buchsbaum et al, 1992; McKeough et al., 1994; Salatas Waters, Rodrigues, & Ridgeway, 1998). The analyses of aggression found that the aggressive children were writing about an aggressive and hostile world, as the amount of aggression in their stories was greater than that in the non-aggressive children's stories. As our personal identities are not only shaped by our narratives, but also serve to shape the narrative we tell, it is likely that the identities of these children reflect a hostile and aggressive world view that shapes their hostile and aggressive narratives. By gaining more specific information

regarding how such a world view is affecting the child, practitioners can perhaps begin to develop better and more efficacious treatments for these children (McMahon & Wells, 1998; Weisz et al., 1990). Through narrative therapy, one can begin to re-author the narratives of one's life experiences (Freeman & Coombs, 1991). Through this re-writing process, identity can be re-shaped. By gaining further understanding of a child's world view, it is possible that interventions can be better directed towards the child's understandings.

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### **APPENDIX A: Teacher Consent Form**

I understand that students must have the permission of a parent or guardian in order to participate in the study conducted by Dr. McKeough entitled "Narrative Knowing: A Comparison of Behaviourally Aggressive and Non-aggressive Children". I understand that the results of this study will eventually be used in a comparison to an Italian sample.

I understand that I will rate each participant twice using the checklist provided by Dr. McKeough. I understand that these ratings will occur two weeks apart before the onset of the research activities. I understand that participants will work on 4 activities, three of which involve writing stories about "real life" events, and one of which is interpreting situations. I understand that participants will be seen in groups and that all activities will be written. I understand that all research activities will be conducted either by Dr. Anne McKeough or by a research assistant who is working under her supervision.

I understand that all activities will be carried out over the course of one month during the regular school periods at a time that is convenient to both students and me. I understand that the four activities will require a total of approximately 4 class periods of 55 minutes to complete. I understand that if I wish, I can use participants' written work as an alternative to some other similar class project which I have assigned. I understand that participation in the research will not produce risks greater than those experienced ordinarily in daily life.

I understand that participants may withdraw from the study at any time without penalty, if they so wish. I also understand that Dr. McKeough may end participants' involvement if it is thought to be in the best interests of the participants or the study as a whole.

I understand that every effort will be made to ensure that confidentiality is maintained. I understand that all data will be securely stored in Dr. McKeough's office at The University of Calgary and that data will be destroyed 3 years after completion of the analysis. I understand that the work students produce will be reported anonymously in academic presentations and reports. I understand that some of the students' work will be used by a graduate student for her Master's research. I understand that when written samples of student's work are presented, all identifying material will be removed.

I understand that I can contact Dr. McKeough at 220-5723 for further information about the study. I also understand that, if I have questions concerning the ethics review of this project or the way my students or I have been treated, I may contact Dr. Michael Pyryt (Chair, Faculty of Education Joint Ethics Review Committee) at 220-5626, or the office of the Vice President, Research at 220-3381.

I have been offered a copy of the research proposal and its details have been explained to my satisfaction.

I understand the involvement being requested of me in this study is completely voluntary and I agree to participate.

Date \_\_\_\_\_ Signature of Teacher \_\_\_\_\_

## **APPENDIX B: Parent Consent Forms**

I agree to permit my child \_\_\_\_\_ to take part in the study entitled "Narrative Knowing: A Comparison of Behaviorally Aggressive and Non-Aggressive Children" conducted by Dr. McKeough of The University of Calgary.

I understand that participation in this study requires my child's teacher to rate my child for both pro-social and problem behaviour. I understand that participation will require me to answer questions related to my job and education. I understand that this information will be used only to ensure that the two groups of participants (with and without problem behaviours) are similar in this regard. I understand that I will be asked questions concerning my ethnic background and first language, and that these questions are optional. I understand that the results of this study will be used as a comparison to an Italian sample.

I understand that my child will work on 4 activities, three of which involve writing stories about "real life" events, and one of which is interpreting situations. I understand that all of the tasks are written, that require my child to work independently.

I understand that all activities will be carried out over the course of one month during the regular school periods at a time that is convenient to both students and teachers, and that the 4 activities will require a total of approximately 4 class periods of 55 minutes to complete. I understand that all research activities will be conducted either by Dr. Anne McKeough or by a research assistant who is working under her supervision.

I understand that if teachers wish, they can use participants' written work as an alternative to some other similar class project which they assign. I understand that participation in the research will not produce risks greater than those experienced in daily life.

I understand that my daughter or son may withdraw from the study at any time without penalty, if he/she so wishes. I also understand that Dr. McKeough may end my son's or daughter's involvement if it is thought to be in the best interests of the participants or the study as a whole. I understand that not every volunteer will be chosen to participate and that this depends on meeting the criteria for pro-social and aggressive behaviour.

I understand that every effort will be made to ensure that confidentiality is maintained. I understand that all data will be securely stored in Dr. McKeough's office at The University of Calgary and that data will be destroyed after completion of the analysis. I understand that the work students produce will be reported anonymously in academic presentations and reports. I understand that some of the students' work will be used by a graduate student for her Master's research. When written samples of student's work are presented, all identifying material will be removed.

I understand that I can contact Dr. McKeough at 220-5723 for further information about the study. I also understand that, if I have questions concerning the ethics review of this project or the way my child or I have been treated, I may contact Dr. Michael Pyryt (Chair, Faculty of Education Joint Ethics Review Committee) at 220-5626, or the office of the Vice President, Research at 220-3381.

Date \_\_\_\_\_ Signature of Parent (Guardian) \_\_\_\_\_

### APPENDIX C: Parent/Guardian Information Sheet

1. The parent(s) and/or guardian(s) present in this home are \_\_\_\_\_  
(example: mother and father, single mother, single father, father and stepmother, etc.)
  
2. The occupation of the mother/guardian of this child is \_\_\_\_\_  
  
The occupation of the father/guardian of this child is \_\_\_\_\_
  
3. The education level currently held by the mother/guardian is:  
Please check ONE  
 a) university/college program completed  
 b) technical/trade school program completed  
 c) grade 12 completed  
 d) grade 9 completed  
 e) other (please specify) \_\_\_\_\_
  
4. The education level currently held by the father/guardian is:  
Please check ONE  
 a) university/college program completed  
 b) technical/trade school program completed  
 c) grade 12 completed  
 d) grade 9 completed  
 e) other (please specify) \_\_\_\_\_

**The following questions are optional.**

It is recognized that each different ethnic background may make special contributions to the way people develop their story telling skills. Therefore, in research studies like this one, it is helpful to have the following information:

5. The predominant ethnic background of the mother/guardian is \_\_\_\_\_  
(e.g. Chinese, First Nations, African, Scottish, etc.)
  
6. The predominant ethnic background of the father/guardian is \_\_\_\_\_  
(e.g. Chinese, First Nations, African, Scottish, etc.)
  
7. The predominant language spoken in the home is \_\_\_\_\_