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Parent-Child Communication and Adolescents' Problem-Solving Strategies in
Hypothetical Bullying Situations

by

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Abstract

The current study investigated: (a) the types of solutions that students and parents generate in response to hypothetical bullying situations; (b) the effectiveness of the solutions generated; and (c) the effectiveness of strategies when taking into consideration parent-child communication. Two-hundred and twenty-five junior high school students and their parents were required to read four short scripts involving hypothetical bullying dilemmas related to physical, verbal, relational, and cyber bullying, and generate as many solutions as possible to solve each bullying situation. Additionally, participants filled out a parent-child communication questionnaire assessing communication between students and parents. Results revealed that the most common type of solutions provided by both students and parents were help-seeking strategies. Students provided significantly more assertive solutions than parents. However, 41% of students offered at least one aggressive solution to solve bullying situations. The overall effectiveness rating of solutions for students and parents did not significantly differ, but fell slightly below effective. These results suggest that parents may not be equipped to effectively support their children in dealing with bullying situations. Furthermore, students report using strategies that may worsen the situation. Although communication in the family appeared to play a role in the effectiveness of solutions generated, more parental education on bullying and solving bullying dilemmas is needed. Educational recommendations and future research steps will be discussed.

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Table of Contents

Introduction.....	1
Literature Review.....	4
Definition.....	4
Types of Bullying.....	4
Prevalence.....	6
Origins of Bullying.....	8
Ecological Theory.....	8
Social Learning Theory.....	10
Attachment Theory.....	11
Parent-Child Relationships.....	13
Parent-Communication.....	14
Parental Involvement.....	16
Knowledge.....	16
Strategies.....	18
Purpose of the Study and Hypotheses.....	21
Research Methods.....	23
Participants.....	23
Measures.....	23
Hypothetical Situations Task.....	23
Parent-Child Communication Scale.....	26
Procedure.....	28
Results.....	29

Parent Solutions to Hypothetical Bullying Situations.....	29
Student Solutions to Hypothetical Bullying Situations.....	30
Differences Between Parent and Student Solutions.....	32
Group Differences.....	34
Situation Differences.....	35
Interaction Effects.....	36
Effectiveness of Solutions.....	45
Parent-Child Communication and Effectiveness of Solutions.....	47
Discussion.....	51
Parent and Student Solutions.....	51
Parent and Student Solution Differences.....	54
Solution Effectiveness.....	57
Parent-Child Communication and Solution Effectiveness.....	59
Limitations.....	60
Future Research.....	61
Conclusions.....	63
References.....	64
Appendix A: Information Letter.....	77
Appendix B: Consent Forms.....	79
Appendix C: Measures.....	81

List of Tables

Table 1: Descriptive Statistics for Frequency of Type of Solutions to Hypothetical Bullying Situations.....	31
Table 2: Parent and Student Differences in the Frequency of Solutions Reported across all Bullying Situations.....	33
Table 3: Summary of Multivariate Analysis of Variance.....	39
Table 4: Descriptive Statistics for Parent and Student Effectiveness Ratings across Hypothetical Bullying Situations.....	46
Table 5: Differences in Effectiveness of Parent Solutions between High and Low Communication Groups.....	49
Table 6: Differences in Effectiveness of Student Solutions between High and Low Communication Groups.....	50

List of Figures

Figure 1: Situation x Group Interaction for Aggressive Solutions Reported.....	40
Figure 2: Situation x Group Interaction for Non-Confrontational Solutions Reported.....	41
Figure 3: Situation x Group Interaction for Passive Solutions Reported.....	42
Figure 4: Situation x Group Interaction for Help-Seeking Solutions Reported....	43
Figure 5: Situation x Group Interaction for Assertive Solutions Reported.....	44

Introduction

Bullying in schools is a pressing social issue that has become a major concern in professional, research, and public domains. Peer bullying is widespread among school age children with rates of bullying reaching nearly 50% in some studies (Fekkes, Pijpers, & Verloove-Vanhorick, 2005). Canadian studies have reported rates of adolescent involvement in bullying ranging from 25% to 50% (Craig & McCuaig-Edge, 2008; Leenaars & Rinaldi, 2010; Pepler, Craig, Connolly, Yulie, McMaster, & Jiang, 2006). Furthermore, bullying appears to be most prevalent during the transition period of primary to secondary school, or early adolescence (Eslea & Rees, 2001; Fitzpatrick & Bussey, 2011; Pellegrini & Long, 2002).

A wide range of adverse consequences of bullying have been documented (e.g., Bond, Carlin, Thomas, Rubin & Patton, 2001; Hodges & Perry, 1999; Kumpulainen, Räsänen, & Puura, 2001; Rigby, 2003). Bullying has been found to be significantly related to low levels of psychological well-being, poor social adjustment, high levels of psychological distress and physical health problems (Bond et al., 2003; Hodges & Perry, 1999; Kumpulainen et al., 2001; Rigby, 2003). These effects can be short-lived or can endure for longer periods of time (Hugh-Jones & Smith, 1999). Victims of bullying have a higher risk of experiencing issues with psychological well-being such as general unhappiness and low self-esteem (Hawker & Boulton, 2000; Rigby, 2003). Victims of bullying who exhibit poor social adjustment may demonstrate an aversion to their social environments, try to avoid school or work situations, and experience feelings of

loneliness or isolation (Nansel et al., 2004; Rigby, 2003). The comparatively higher levels of psychological distress experienced by victims of bullying involve more serious concerns such as anxiety, depression, or suicidal ideation (Fitzpatrick & Bussey, 2011; Rigby, 2003). Victims of bullying report more physical symptoms such as headaches and stomach aches than their non-victimized peers (Due et al., 2005; Williams, Chambers, Logan, & Robinson, 1996). Additionally, victims of bullying may suffer from psychosomatic symptoms such as sleep disturbance, wetting the bed, and other health problems (Due et al., 2005; Nansel et al., 2004; Williams et al., 1996).

The high prevalence rates of bullying involvement and the adverse consequences of victimization all highlight the need for further research in this area. In particular, research to date emphasizes the importance of parental involvement in prevention and intervention practices surrounding bullying (Fekkes et al., 2005; Smith & Mryon-Wilson, 1998; Whitney & Smith, 1993). According to some researchers (e.g., Fekkes et al., 2005; Whitney & Smith, 1993) children are more likely to reveal their victimization to a parent than to a teacher. In many instances parents are seen as primary supports to children in dealing with bullying situations. What we do not know, however, is whether or not parents are equipped to provide the best support they can.

The present study investigated: (a) the types of solutions that parents and students generate in response to given hypothetical bullying situations; (b) the differences in the types of solutions parents and students generate; (c) the effectiveness of the solutions generated; and (d) the effectiveness of strategies

when taking into consideration communication between students and parents. If we are relying on parents to provide effective solutions and advice to children who are bullied, then we need to know what solutions they are providing, and whether or not these solutions are effective.

Literature Review

Definition

Multiple definitions of bullying have been proposed over the past few decades, however, the definition that has gained significant recognition and acceptance was developed by Olweus (1993) (Smith & Brain, 2000). According to this definition: “A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students” (Olweus, 1993. p. 9). The three main characteristics of bullying, as identified by Olweus (1993), include intentional aggressiveness, recurrence over time, and an imbalance of power. Intentional aggressiveness implies that the harm carried out by the individual or group of individuals against the victim is deliberate. Recurrence over time suggests that bullying is not a single act of aggression, but persists over a prolonged period of time. The final key characteristic of bullying as indicated by Olweus (1993) implies that there is an actual or perceived power differential between bullies and victims. That is, victims are often unable to defend themselves on their own (Olweus, 1993; Smith, 2000) and have little influence on the behaviours of bullies (Hawker & Boulton, 2000; Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999). In contrast, bullies hold great influence over the physical and mental well-being of victims (Hawker & Boulton, 2000; Kaltiala-Heino et al., 1999).

Types of Bullying

Bullying has been subdivided into many types by various researchers. One of the main distinctions made by researchers is direct and indirect bullying. Direct

bullying involves face-to-face aggression in which the victim is directly attacked by the bully. Direct bullying may include physical aggression, such as hitting and pushing, or verbal bullying, such as name-calling or gossiping (Hokoda, Lu, & Angeles, 2006). Indirect bullying causes distress without confrontation and may include spreading malicious rumors, ignoring, isolation, or exclusion (Craig, Pepler, & Blais, 2007; Crick & Grotpeter, 1995; Hokoda et al., 2006).

Both direct and indirect bullying have been further broken down by researchers into subtypes based on specific behaviours. One subtype of direct bullying identified in the literature is physical bullying and it involves aggression that includes hitting, pushing, tripping, verbally threatening with physical harm, or taking and damaging belongings (Craig, et al, 2007; Hart, Newell, & Olsen, 2003). Additionally, Craig and colleagues (2007) highlight verbal bullying as another subtype of direct bullying and indicates that this type includes threats, insults, or put-downs. However, this type of bullying can easily turn to cyber-bullying when these threats and insults are spread throughout the internet or cell-phones and combined with demeaning messages (Craig et al., 2007).

Unlike direct bullying that involves direct confrontation with the victim, indirect bullying is more subtle and harder for teachers and parents to detect (Arora, 1996; Casey-Cannon, Hayward, & Gowen, 2001; van der Wal, de Wit, & Hirasing, 2003). Relational bullying refers to behaviours that intentionally harm a victim's self-esteem and social standing (Bauman, & Del Rio, 2006; Crick, 1996; Galen & Underwood, 1997). These behaviours may include social exclusion,

malicious gossip, slanderous rumours, glaring, or rolling eyes, (Craig et al., 2007; Crick & Grotpeter, 1995; Hart et al., 2003; Underwood, Galen, & Paquette, 2001).

Prevalence

Prevalence rates of bullying vary widely across age and gender, and these rates differ based on bullying type. Furthermore, varying rates of bullying and victimization are reported based on definitions provided. For example, research demonstrates that students who are provided with a definition of bullying tend to report less victimization than students who are not given a definition (Vaillancourt et al., 2008). Additionally, this study revealed that when provided with a definition of bullying, boys report bullying others more often than when not provided with a definition. This effect was not seen with girls. These findings may help to explain the wide variation in prevalence rates reported by students across studies.

Studies investigating overall prevalence rates of bullying vary greatly. According to Canadian research, 25% to 50% of adolescents are involved in bullying every year (Craig & McCuaig-Edge, 2008; Leenaars & Rinaldi, 2010; Pepler et al., 2006). When looking at bullying rates based on age, research indicates that bullying behaviours are most frequent during the transition period of primary to secondary school, or early adolescence, and then decline in frequency (Eslea & Rees, 2001; Fitzpatrick & Bussey, 2011; Pellegrini & Long, 2002). Eslea and Rees (2001) surveyed over four hundred individuals between the ages of 18 and 55 to investigate their memories of bullying. They discovered that bullying was most frequent between the ages of 11 and 13 years. A study by

Fitzpatrick and Bussey (2011) investigated social aggression behaviours in early adolescence and found similar results. Social bullying behaviours were found to peak around Grade 8 and then drop as students transitioned into Grade 9.

Pellegrini and Long (2002) offer an explanation for this behaviour. They suggest that bullying initially increases as students make the transition from primary to secondary school because they are trying to find their place of dominance in a new peer group. Once this dominance is established, bullying decreases in frequency.

When looking at prevalence of bullying based on gender, research suggests that overall; there are no differences in the amount of bullying reported by males and females (Coyne, Archer, & Eslea, 2006; Eslea & Rees, 2001). There are, however, differences in the types of bullying experienced by males and females. Fitzpatrick and Bussey (2011), for example, found that adolescent females more than males, report frequent social victimization. Similarly, in another study, girls reported more gossiping than their male counterparts, and males reported more hitting (Coyne et al, 2006). In general, research suggests that females experience more indirect or relational bullying, whereas males generally report physical bullying (Carbone-Lopez, Esbensen, & Brick, 2010; Pateraki & Houndoumadi, 2001; Pepler, Smith, & Rigby, 2004).

Researchers have investigated overall prevalence rates of bullying, as well as frequency of specific types of bullying. When looking at the different types of bullying behaviours, Pateraki and Houndoumadi (2001) found that the most common type of bullying behaviour reported by victims is direct, verbal

aggression (e.g., ‘called me names/made fun of me’). These findings were further supported by research from Pepler and colleagues (2004). Bullies, however, were more likely to report direct, physical aggression, such as hitting, kicking, and pushing (Pateraki & Houndoumadi, 2001). In contrast with these findings, a more recent study by Carbone-Lopez, Esbensen, and Brick, (2010), found that victims reported more experiences of indirect forms of bullying than direct.

Origins of Bullying

Ecological theory.

One of the main theories identified by this study as useful in conceptualizing the origins of bullying is ecological theory. According to Bronfenbrenner (1979): “The ecology of human development involves the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded.”(p. 21). Bronfenbrenner (2005) outlined the many ecological levels, or systems, through which child development takes place. Bronfenbrenner (2005) suggested that children are at the core of these systems and may be directly affected by their immediate surroundings, or may be indirectly affected through the interactions between systems. These systems include the microsystem, mesosystem, exosystem, macrosystem, and the chronosystem, and can be used to better conceptualize bullying across multiple settings.

Bronfenbrenner (2005) identified the microsystem as the child's immediate environment in which they are in direct contact. The microsystem includes the child's roles and interpersonal relations in settings such as home, school, or neighborhood. The mesosystem involves the interrelation between two or more microsystems. The interrelation between the home and school microsystems is an example of a mesosystem. The exosystem includes environments that do not directly include the developing child, but may still affect the child (e.g., parent's work-life). The next system which encompasses the previously described systems is the macrosystem. The macrosystem involves the underlying beliefs and ideologies of a culture or subculture. This system determines how children are socialized which will play a role in their attitudes and behaviours towards bullying. The final system that includes each of these systems is the chronosystem. This system involves historical contexts that may influence each of the other systems, and ultimately an individual's development. These contexts may include generational effects (e.g., "baby boomer" generation), or other environmental changes that have occurred over time. According to ecological theory, factors from each of these systems and their interrelations contribute to bullying and victimization.

For the present study, the primary ecological system of interest is the microsystem. That is, the current study emphasizes the importance of adolescents' interactions in the home environment in their development. The following sections will highlight the role that the home microsystem plays in the social development of adolescents.

Social learning theory.

Social learning theory can be conceptualized as existing within ecological systems theory and can be used to further understand bullying behaviours in children. Social learning theory suggests that children's social development is shaped by parents and significant adults in their lives (Yawkey & Johnson, 1988) and emphasizes the importance of modeling, role-playing, and reinforcement in child development (Lee, 2009). Much of children's learning is the result of active imitation or modeling of other people's behaviour (e.g., Berns, 1997; Rigby, 1993; Turner & Hamner, 1994). Based on this theory, bullying would be seen as a learned behaviour, or response pattern that has been shaped by modeling and reinforcement by parents. For example, parents who implement authoritarian styles may punish their children's aggressive behaviours with aggression (e.g., spanking). Using aggression to punish aggression provides a model for children to imitate (Berndt, 1992; Berns, 1997). These children may model their parents' behaviours and use aggression during interactions with their peers. Research has shown that authoritarian parenting styles are related to aggressive behaviour in children and negative coping strategies (Fabes, Leonard, Kupanoff, & Martin, 2001; Jones, Eisenberg, Fabes, & MacKinnon, 2002; Stansbury & Zimmermann, 1999).

Early family socialization experiences are significant in the development of children and help to shape children's strategies when interacting with peers (Crockenberg & Lourie, 1996; Wilson, Parry, Nettelbeck, & Bell, 2003). Researchers investigating bully and victim behaviours over the long-term suggest

that bullies and victims learn maladaptive conflict resolution strategies from their parents and use these tactics when interacting with their peers (Crockenberg & Lourie, 1996; Schwartz, Dodge, Pettit, & Bates, 1997). Research conducted by Schwartz and colleagues (1997) examined the early home environments of boys who were later identified as being bullies or victims. Bullies were found to have observed adult aggression and marital conflict in the home. Furthermore, Crockenberg and Lourie (1996) found that parents' behaviour when their children were two predicted their children's behaviour at six years of age. These findings provide more evidence to support the role that parents play in shaping bullying behaviour in their children.

Attachment theory.

In addition to parental behaviour impacting children's development, the parent-child relationship is also crucial in facilitating the development of children. Bowlby's theory of attachment can be used to help explain the role that parent-child relationships play in the development of children. This theory is based on the premise that young infants have a strong need to attach to caregivers and in turn, have caregivers reciprocate the attachment (Bowlby, 1982, 1989). Bowlby indicated that the need to attach to caregivers is a survival mechanism since an infant's welfare depends on others. As the infant develops, they form generalized representations of attachment based on their experiences with primary caregivers (Bowlby, 1988). These representations help to form a set of expectations about social-emotional interactions that the developing individual brings to each new relationship. Attachment theory suggests that the security children experience in

their relationships with their parents allows them to develop expectations about future interpersonal relationships.

The theory of attachment is useful when trying to conceptualize bullying behaviour in children. Numerous studies investigating attachment in parent-child relationships have found a link between the quality of attachment with parents and both patterns of interaction with peers and number of friendships (Bowlby, 1982; Clark & Ladd, 2000; Lamb & Nash, 1989; Schneider, Atkinson, & Tardif, 2001). These findings are further supported by research from Veríssimo and colleagues (2011). Researchers investigated the relation between security of parent-child relationships and number of reciprocated friendships and found that the security of the father-child relationship was significantly related to number of friendships (Veríssimo, Santos, Vaughn, Torres, Monteiro, & Santos, 2011). Furthermore, studies show that children who exhibit insecure attachment to their mothers are at risk for poorer socio-emotional development (Thompson, 2008). The quality of mother-child attachment has been repeatedly shown to be associated with aggressive behaviour in children (Buyse, Verschueren, & Doumen, 2011; Cohn, 1990; DeMulder, Denham, Schmidt, & Mitchell, 2000; Dodge, Coie, & Lynam, 2006; Turner, 1991). These findings lend support to the influence of parental attachment and the implications that poor attachment can have for a child's future interactions with others. Attachment theory is useful in understanding bullying behaviour in children and can help guide research in the area.

Parent-Child relationships

Based on the theories outlined above, it becomes apparent that several family factors are important in the consideration of bullying behaviour in children. The primary factor relevant to the present study and pivotal in the consideration of bullying behaviour in children is the parent-child relationship. The importance of the parent-child relationship is supported in both attachment and social learning theory (Lee, 2009). Research demonstrates that parents who are able to create warm and involved relationships with their children without being intrusive facilitate a family climate that protects children from developing externalizing problems and associating with deviant friends (Soenens, Vansteenkiste, Luyckx, & Goossens, 2006; Yu & Gamble, 2009). In a study by Lee (2009), children who reported having better parent-child relationships, according to the “Scales assessing relationships with parents” developed by Rigby (1993) were found to be less likely to be subjected to peer pressure. The authors also concluded that better parent-child relationships allowed children to develop and perform more positive behaviours than bullying towards their classmates. Research by Baldry and Farrington (2005) revealed that having highly supportive parents was associated with lower levels of victimization. Overall, researchers suggest that warm and positive parent-child relationships serve as protective factors against bullying for children which in turn facilitates balanced peer relationships (Baldry, & Farrington, 2005; Bynner, 2001; Lamb & Nash, 1989; Menna & Landy, 2001). These findings further support the importance of parent-child relationships and their influence on children’s interaction with others.

Multiple studies have shown adolescents who develop poor relationships with their parents are at risk of developing maladaptive behaviours (Bynner, 2001; Lamb & Nash, 1989; Menna & Landy, 2001). In particular, it is noted that poor parent-child relationships and family conflict are two risk factors for developing aggressive and bullying behaviours (Bynner, 2001; Lamb & Nash, 1989; Menna & Landy, 2001). Research by Yu and Gamble (2009) investigated the role of maternal warmth and power assertion in the development of aggression and social competence in adolescents. In this study, mothers and their children responded to various scales measuring these components and results revealed that more power assertion in mother-adolescent relationships led to increased adolescent aggression in sibling and peer relationships. Poor parent-child relationships predicted more adolescent aggression in both sibling and peer relationships, whereas warmth in the relationship contributed positively to perceptions of social competence. The authors concluded that mother-adolescent relationships play a critical role in the development of aggressive behaviour and perceptions of social competence in adolescents.

Parent-child communication.

An important component of the parent-child relationship is communication. Parent-child communication is a factor that influences child behaviour and is associated with attachment theory. The way parents and their children communicate is pivotal in defining roles, boundaries, disciplinary strategies, and relationships (Lee, 2009). Communication in the parent-child relationship also influences child behaviour. In a study conducted by Lee (2009)

investigating parent-child communication, children who had better communication (i.e. clear and direct) with their parents were found to be less influenced by their peers than children who had poorer communication. Furthermore, children from families with better communication were found to exhibit more positive behaviours towards their classmates, as opposed to more bullying behaviour. In contrast, children who have poor communication patterns with their parents in which they feel rejected and unsupported are at higher risk of developing behaviour problems (Barnes & Olson, 1985; Noller & Fitzpatrick, 1993). Bullying behaviour is more likely to occur in children who come from family climates in which communication is limited and ineffective (Lee, 2009; Rigby, 1993; Spriggs, Iannotti, Nansel, & Haynie, 2007).

Although better communication between children and parents appears to be a positive influence on behaviour, communication surrounding the topic of bullying is sometimes limited in the family. Extensive research suggests that parents are often unaware of their child's bullying or victimization experiences (Borg 1998; Fekkes et al., 2005; Hunter, Boyle, & Warden, 2004; Rigby & Barnes, 2002; Smith, 2000). In a survey by Fekkes et al. (2005), nearly half of parents were found to be unaware of their children being bullied. Further research suggests that only a minority of children who are bullied actually tell their parents (Borg, 1998; Hunter et al., 2004). Because so few children disclose their victimization to their parents, and even fewer talk to their teachers about bullying (Fekkes, Pijpers, & Verloove-Vanhorick, , 2005; Whitney & Smith, 1993), it is

not surprising that these children are inadequately supported and protected when it comes to bullying (Matsunaga, 2009).

Parental Involvement

When trying to understand bullying behaviour in children and developing methods of intervention and prevention, researchers suggest that parental involvement is an important factor to be considered (Fekkes et al., 2005; Smith & Mryon-Wilson, 1998; Whitney & Smith, 1993). Although many children do not report bullying behaviour to their parents, research suggests that they talk more to their parents than their teachers about being bullied (Fekkes et al., 2005; Whitney & Smith, 1993). If this is the case, then it is necessary to ensure that parents have an accurate knowledge base surrounding bullying and effective strategies to provide to their children in bullying situations.

Knowledge.

Research investigating parent knowledge of bullying is limited, however, some studies have been conducted investigating parent definitions of bullying. In a study conducted by Smorti, Menesini, and Smith (2003), parents from five different countries were asked to view cartoon images depicting various scenes and select words from a list that described what was happening. Cluster analysis revealed that the cartoons formed six clusters that were characterized by the following behaviours: nonaggression, fighting, severe physical aggression, verbal aggression, exclusion, and severe exclusion. When asked if any of the cartoon clusters constituted bullying, parents mainly identified the pictures depicting physical bullying as being representative of bullying. These findings suggest that

parental definitions of bullying are narrow, including mainly physical bullying, and are exclusive of other forms of bullying. Furthermore, this research demonstrates that parents are not always able to recognize bullying in all of its forms.

Research by Williams (2008) that investigated parental attitudes towards bullying also found a lack of awareness of the various forms of bullying. Parents who had initially responded that their child had not been a victim of bullying later responded that their child had been verbally bullied. The researcher concluded that when asked about bullying and victimization on a global level, some parents do not think of verbal bullying unless specifically prompted.

In addition, research has shown that parents respond differently to bullying situations depending on their perceptions of the type of bullying their children experience (Waasdorp, Bradshaw, & Duong, 2011). Waasdorp and colleagues (2011) found that parents were more inclined to seek help from the school when their children were exposed to more direct forms of bullying as opposed to indirect forms. The authors concluded that parents likely perceive direct forms of bullying (e.g., physical aggression, verbal threats) as more serious than indirect forms (e.g., ignoring, spreading rumors) and seek help from the school in the case of the more serious form. These findings are concerning since indirect forms of aggression have been shown to have serious effects for victims (Crick, Casas, & Nelson, 2002) and should be taken as seriously as direct forms. Parents' knowledge in this area and resulting actions may prove to be ineffective when

their children are victims of indirect bullying and therefore need to be educated in this area.

Overall, findings from these studies raise important questions regarding parent knowledge on the topic of bullying. If parents have a lack of awareness of the various forms of bullying, then they may miss signs of their children's victimization. In addition to questions regarding parental knowledge on the topic, questions surrounding parent advice in bullying situations arise. When children reveal to their parents experiences of victimization, do parents know what to do? If parents struggle with definitions of bullying, then this may translate into the specific advice and strategies that they provide to their children to cope with these situations.

Strategies.

Research has demonstrated that children are hesitant to report being bullied (Borg, 1998; Hunter et al., 2004). On their own, children implement a wide range of strategies for dealing with bullying; however, they are not always effective. Craig and colleagues (2007) investigated youth strategies for coping with bullying and found that a significant portion of youth indicated that they did nothing to stop the bullying. Youth who did respond to bullying dilemmas responded in varying ways. Girls, for example, used relational strategies such as telling someone to solve bullying dilemmas whereas boys were more likely to use confrontational strategies such as physical aggression or revenge. Research by Mahady-Wilton, Craig, and Pepler (2000) found similar results that suggest boys are more likely to use ineffective strategies to stop bullying. Some research

demonstrates that, with age, avoidance strategies, (e.g., ignoring, doing nothing) become more popular (Craig et al., 2007). In contrast, research by Camodeca and Goossens (2005) found that younger children were more likely to use strategies such as nonchalance and older children were more likely to use strategies such as retaliation.

According to the literature, the most ideal strategies to employ when dealing with bullying situations are socially skilled assertive solutions (Camodeca & Goossens, 2005; Laird et al., 1994; Mize & Pettit, 1997). Although these solutions are the most ideal, help-seeking solutions that involve seeking the aid of another (e.g., adult or peer), have been shown to be related to resolution of the bullying problem (Kochenderfer-Ladd, 2004). Because there is a power imbalance between bullies and victims, researchers explain that involving others in solving the dilemma may re-establish the balance (Camodeca, Goossens, Schuengel, & Meerum Terwogt, 2003; Craig et al., 2007).

Altogether, these results suggest that children do not always employ the most effective strategies when dealing with bullying situations. Therefore, the role of adults in supporting children in these situations is vital. Research that demonstrates the preference of children to report their victimization to their parents before their teachers (e.g., Fekkes et al., 2005, Whitney & Smith, 1993) places even more emphasis on the parent's role in supporting children. If parents are approached first in these situations, then it is imperative for parents to provide appropriate support to their children. That is, parents are relied upon to know what to do in these situations and provide their victimized children with effective and

appropriate strategies to deal with bullying situations. Research investigating parent strategies and advice given to children in bullying dilemmas is, however, limited.

Research in this area has demonstrated that children who receive more explicit advice and positive solutions to peer dilemmas from their parents exhibit more social competence (Laird et al., 1994; Mize & Pettit, 1997). Laird and colleagues (1994) found that parents who provide action-oriented and skillful strategies and help their children find positive solutions for dealing with peer difficulties have children who are rated by their teachers as more socially competent.

The advice parents give, however, has been shown to be linked to whether children are victims or bullies. In a study by Stevens, De Bourdeaudhuij, and Van Oost (2002), parents were asked to provide strategies to their children in hypothetical conflict situations. Parents of children who were victims showed more avoidance strategies than parents of children who were bullies. These findings are best explained by social learning theory which suggests that children develop learned behaviours as a result of active imitation or modeling of other people's behaviour (e.g., Berns, 1997; Rigby, 1993; Turner & Hamner, 1994). Parents who exhibit passive behaviours such as avoidance will reinforce this type of behaviour in their children. Social learning theory is further supported by research by Stevens et al. (2002) who found a link between child response patterns and parent response patterns, suggesting that certain styles of responding may be modeled and reinforced in the home.

Purpose of the Study and Hypotheses

Since very few research studies have investigated the ways in which parents talk to their children about bullying and the advice they give to their victimized children, one of the primary purposes of this study was to determine what types of solutions to hypothetical bullying situations parents provide to their young adolescents and what types of solutions students come up with on their own. Past research suggests that children are reluctant to reveal their victimization to adults (Borg, 1998; Hunter et al., 2004), but when they do, they are more likely to talk to their parents than their teachers (Fekkes et al., 2005, Whitney & Smith, 1993). If children are willing to talk to their parents first about their victimization, then it is imperative that parents have the knowledge and skills necessary to deal effectively with the situation. This study intended to examine the types of strategies and advice that parents would provide to their children in given hypothetical bullying situations. Because the research literature is lacking in this area, this question is exploratory in nature and no hypotheses have been proposed.

The second purpose of this study was to determine if adolescent and parent solutions to hypothetical bullying situations differ. It is hypothesized that response patterns of adolescents and parents will not differ since extensive research has shown that the much of children's learning is the result of active imitation or modeling of other people's behaviour (Berns, 1997; Rigby, 1993; Turner & Hamner, 1994). Furthermore, research by Stevens et al. (2002) provides evidence for a relationship between child and parent styles of responding to peer dilemmas.

Another objective of the current study was to determine the effectiveness of the solutions that parents provide to their children in hypothetical bullying situations. Additionally, this study intended to investigate the effectiveness of student solutions to hypothetical bullying scenarios. Research in this area is insufficient, and for this reason, no hypotheses have been proposed.

The final purpose of this study was to determine if there is a difference in the effectiveness of parent and student strategies when taking the amount of communication between parents and students into account. It is hypothesized that more communication will be associated with adolescents exhibiting more effective strategies in hypothetical bullying situations. This is hypothesized since parent-child communication has been shown to influence child behaviour. In particular, research by Lee (2009) demonstrated that more parent-child communication was associated with children being less influenced by peer pressure and exhibiting more positive behaviours in the classroom than children from families with less communication. Children from families with less communication are at increased risk of developing maladaptive behaviours (Barnes & Olson, 1985; Noller & Fitzpatrick, 1993). Based on research demonstrating that positive parent-child communication is associated with greater social competence, it is assumed that this social competence will translate into more effective solutions to hypothetical bullying situations.

Research Methods

Participants

Two hundred twenty-five junior high school students (grades 7 and 8) and one of their parents participated in this study. The students were recruited from seven different schools in both public and separate school boards in the greater Edmonton area. Of the 225 students whose parents agreed to participate, 125 were from grade 7 and 100 were from grade 8 (135 females and 90 males; $M = 12.74$ years). Participants were predominantly from middle SES families of Caucasian descent. The ethnicity breakdown of the sample is as follows: Caucasian (86.7%), Asian-Canadian (8.4%), East Indian-Canadian (3.1%), and Latino-Canadian (1.8%).

Measures

Hypothetical situations task. A hypothetical situations task based on the work of Caplan et al. (1986) was used to assess both students' and parents' abilities to generate alternative solutions to hypothetical bullying problems. Four short scripts about peer interactions involving bullying were developed. Students were instructed to imagine themselves as the story protagonist, and parents were instructed to imagine themselves as the parent of the story protagonist. The scripts used varied in theme and were related to well-known problems experienced by adolescents. The themes included problems related to physical, social/verbal, relational, and cyber bullying.

The physical bullying situation was as follows: *You are in the classroom and you have handed in a worksheet at the teacher's desk. On the way back to*

your own desk, a student sticks his foot out to trip you, and pokes you with his pencil. This student has bothered you before and whenever this student gets the chance, you are pushed or tripped or bothered. In the verbal bullying situation, students were asked to read the following: *When you walk down the hallways during the breaks, a group of students give you “looks” and call you names. These students have been making negative comments about you and try to make you feel bad whenever they get the chance.* The relational bullying situation was as follows: *Your teacher has just told the class to divide into groups for a group project activity. You approach two students who tell you that you can’t join their group. While you are close enough to hear them talking, you hear them making rude comments about you.* And finally, the cyber bullying situation was as follows: *Some students from your school have posted messages on an internet site about you. They are spreading rumors about you and calling you names.*

For each of the situations, students were asked what they would do if this was happening to them and to think of and list as many solutions as they can. Parents were asked to imagine this happening to their child and to indicate how they would discuss this situation with their child and what they would do if this was happening to their child.

The solutions generated by students and parents were coded as aggressive, passive, help-seeking, non-confrontational, or assertive. Aggressive solutions included actions such as direct physical assault on the person (e.g., hitting, pushing), third party physical assault on the person, verbal assaults, and object-oriented aggression (e.g., snatching, taking something). Passive strategies

included solutions in which the victim sacrificed his/her own rights and permitted the bully to achieve their goals (e.g., cry, forget about it, walk away, don't do anything). Help-seeking solutions involved the victim getting someone else to solve the problem (e.g., getting the person in trouble with an adult, seeking advice from an adult, or getting help from peers). Non-confrontational solutions involved solutions that allowed the victim to meet their own needs immediately or later and avoid confrontation with the bully (e.g., ignoring, actively pursuing own needs through avoiding, walking away, moving to another seat). Finally, assertive solutions involved statements or questions used to assert the student's own rights, requests for change in the bully's behaviour, non-violent threats or warnings, and questions inquiring about the bully's motives or perceptions. Additionally, assertive solutions included higher-order solutions that involved meeting own needs while also considering the other person's feelings and needs. Examples of these solutions included sharing, socially skilled requests, and socially skilled assertions.

Parent and student solutions were then coded for effectiveness. To do this, each solution generated within a bullying situation was given an effectiveness rating and an overall average effectiveness score was obtained for each bullying situation. Each solution was rated from 1-4 on an effectiveness scale. An effectiveness score of 1 (Very Ineffective) indicated that a solution may or may not help the child achieve his/her goal, had a high probability of negative effects, and was not socially skilled. A score of 2 (Ineffective) indicated that a solution may or may not help the child achieve his/her goal, had some likelihood of

negative effects, and was not socially skilled. An effectiveness rating of 3 (Effective) indicated that a solution would help the child achieve his/her goal, was not likely to cause negative effects, and displayed some social skills. Finally, an effectiveness rating of 4 (Very Effective) indicated that a solution had a high probability of helping the child reach his/her goal, considered the feelings and needs of the other party, and was very socially skilled.

Inter-rater reliability was established on the coding schemes by having a research assistant code 20% of the participant responses that were randomly selected. The percent agreement for student solutions across each of the hypothetical bullying situations ranged from 89% to 96% (mean = 94%) and for parents solutions ranged from 95% to 100% (mean = 98%). The percent agreement for effectiveness across all of the solutions was 92%. Overall, rater agreement for this study was considered to be very good.

Parent-Child Communication Scale (PCCS). The PCCS (McCarty et al., 2003) was used to measure perceptions of communication within the parent-child relationship. The child version of the PCCS was used to assess children's perceptions of their parents' openness to communication. The parent version was used to assess parents' perceptions of their openness to communication and their children's communication skills. Both versions of the PCCS were adapted by the Conduct Problems Prevention Group (see McCarty & McMahon, 2003) from the Revised Parent-Adolescent Communication Form used in the Pittsburgh Youth Study (See Loeber, Farrington, Stouthamer-Loeber, & Van Kamman, 1998). The child version of the PCCS involves a 10-item measure assessing children's

perceptions of their parents' openness to communication on a 5-point scale ranging from 1 = "almost never" to 5 = "almost always". Two subscales comprise this scale: parent communication and child communication. For the purposes of this study, only the child communication subscale was used which included five of the questions. Some of the questions comprising this subscale include: *Does your parent try to understand what you think? Do you discuss problems with your parent?* The reliability of the child communication subscale, as reported by McCarty and Doyle (2001) was $\alpha = .81$. With the present sample, two of the questions did not have good internal consistency with the other items comprising the child communication subscale and these were dropped. The resulting reliability coefficient for this subscale was $\alpha = .89$.

The parent version of the PCCS involved a 20-item measure that also consisted of a 5-point scale ranging from "almost never" to "almost always". This PCCS – parent version is comprised of four subscales: parent communication, parent restricted topics, child/empathy listening, and child emotional expression. For the purposes of this study, only the parent communication subscale was used. Questions from this subscale measured the parent's perceptions of their communication with their child and how open they are to communication (e.g., *Are you very satisfied with how you and your child talk together? Do you encourage your child to think about things and talk about them so that he/she can establish his/her own opinion?*). The reliability for the parent communication subscale was $\alpha = .78$, as reported by McCarty and Doyle (2001). The reliability coefficient for the present sample was $\alpha = .72$.

Procedure

After ethics approval was received, a research assistant visited classes at each of the seven schools chosen. An information letter outlining the study and its procedures (see Appendix A) and a consent form (see Appendix B) were provided for students to take home for their parent(s) to sign. Parents were given the option to participate in the study with their child, or to allow their child to participate in the study independently. Students who obtained parental consent to participate in the study were then followed up by the research assistant and asked to complete anonymous, self-report questionnaires in the classroom or library. Those students who did not receive permission, or chose not to participate in the study were provided with reading material on bullying while their classmates completed the questionnaires.

Self-report questionnaires were also provided to students to take home to their parents who agreed to participate in the study. Parents were responsible for filling out the forms and mailing them back to the research team using prepaid envelopes. A \$25 bookstore gift card was given to each family who completed both student and parent questionnaires as a token of appreciation for participating in the study.

Results

In this chapter, the results from the present study are presented. These results include descriptive statistics for each of the measures as well as the outcomes of a series of independent t-tests and a 2 x 4 multivariate analysis of variance with follow-up analyses.

Parent Solutions to Hypothetical Bullying Situations

Parent solutions for each hypothetical bullying situation were coded as one of five types: aggressive, passive, help-seeking, non-confrontational, and assertive. Descriptive statistics (see Table 1) revealed that out of all of the solutions provided by parents across all hypothetical bullying situations, nearly half of the solutions were help-seeking type solutions (48.5%), followed by non-confrontational (28%) and assertive (22%) solutions. Passive solutions made up 0.8% of the solutions and aggressive solutions were the least common representing 0.7% of all solutions provided by parents.

A frequency was derived for each of the parents' solution types, which allowed for the calculation of the percentage of parents that provided at least one solution from each type (also in Table 1). At least one help-seeking solution was provided to children by 100% of parents responding to hypothetical bullying situations. Approximately 81% of parents suggested at least one non-confrontational solution, and 70% of parents provided at least one assertive solution to their children. Six percent and 4% of parents provided at least one passive solution or one aggressive solution, respectively.

Student Solutions to Hypothetical Bullying Situations

Student solutions for each hypothetical bullying situation were coded as one of the following: aggressive, passive, help-seeking, non-confrontational, or assertive. Descriptive statistics revealed that overall, the most common type of solutions used across all of the scenarios were help-seeking (36%). The next most common types of solutions reported by students were assertive (29%) and non-confrontational (20%). Aggressive solutions comprised approximately 11% of all solutions provided by students, and lastly, passive solutions made up nearly 4% of the total solutions.

As with the parent data, a frequency was derived for each of the students' solution types which allowed for the calculation of the percentage of students that reported at least one solution from each type. Approximately 97% of students came up with at least one help-seeking solution across all of the bullying scenarios. At least one assertive solution was provided by 87% of students, followed by 80% of students who reported at least one non-confrontational solution. Nearly half of students reported at least one aggressive solution (41%) and finally, 27% of students provided at least one passive solution.

Table 1

Descriptive Statistics for Frequency of Type of Solutions to Hypothetical Bullying Situations

	Percentage reporting at least one solution	Percentage of total solutions reported
<i>Parents</i>		
Aggressive	4	0.7
Passive	6	0.8
Help-seeking	100	48.5
Non-confrontational	81	28
Assertive	70	22
<i>Students</i>		
Aggressive	41	11
Passive	27	4
Help-seeking	97	36
Non-confrontational	80	20
Assertive	87	20

Differences between Parent and Student Solutions

To determine if differences existed in the frequency of solutions reported by parents and students across the five types of solutions, a series of independent t-tests were conducted (see Table 2). In order to protect against Type I error, a more stringent alpha level was set using the Bonferroni correction. Therefore, results were considered to be statistically significant at the .01 level. Results revealed a significant difference in the number of aggressive solutions reported by parents and students with students reporting significantly more aggressive solutions across all of the scenarios combined than parents, $t_{(1, 230)} = 7.75, p < .01, d = .76$. Students also reported significantly more passive solutions than parents across all of the scenarios combined, $t_{(1, 261)} = 5.11, p < .01, d = .51$. A significant difference was also found in the number of assertive solutions reported with students providing significantly more assertive solutions than their parents, $t_{(1,399)} = 7.28, p < .01, d = .72$. Students and parents did not differ significantly on their reporting of help-seeking solutions, $t_{(1, 383)} = .89, ns, d = .09$, or non-confrontational solutions, $t_{(1,410)} = -.27, ns, d = .03$.

Table 2

Parent and Student Differences in the Frequency of Solutions Reported across all Bullying Situations

Solution Type	Group	Mean (SD)	t
Aggressive	Students	1.24 (2.12)	7.75 ^{**}
	Parents	.06 (.31)	
Passive	Students	.43 (.94)	5.11 ^{**}
	Parents	.07 (.27)	
Help-seeking	Students	4.04 (1.85)	.89
	Parents	3.90 (1.22)	
Non-confrontational	Students	2.21 (1.90)	-.27
	Parents	2.26 (1.71)	
Assertive	Students	3.22 (2.31)	7.28 ^{**}
	Parents	1.75 (1.68)	

Note: ^{*} $p < .05$, ^{**} $p < .01$

A 2 x 4 multivariate analysis of variance (MANOVA) was conducted to determine whether solutions varied by group and type of bullying situation (see Table 3). Group was the between-subjects variable and included parents and students. Type of hypothetical situation was the within-subjects variable and included the four types of situations: physical bullying, verbal bullying, relational bullying, and cyber bullying. The types of solutions generated by students and parents were the dependent variables. Results were considered statistically significant when tests of between- and within-subjects effects were significant at the .05 level.

Results of the MANOVA revealed that there was an overall between-subjects effect that was significant, $F_{(5, 1699)} = 69.27, p < .001$. In addition, there was an overall significant within-subjects effect, $F_{(15, 4690.6)} = 16.70, p < .001$, as well as an overall significant group by situation interaction effect, $F_{(15, 4690.6)} = 2.59, p < .01$. The following will provide an in-depth look at these effects as well as the results of post-hoc analyses when applicable.

Group differences.

Table 3 presents parent and student differences in generating solutions to hypothetical bullying situations. First, a significant difference was found between the number of aggressive solutions reported by parents and students, $F_{(1, 1703)} = 155.43, p < .01$. In particular, students generated significantly more aggressive solutions than parents. Students were also found to generate significantly more passive solutions than parents, $F_{(1, 1703)} = 34.31, p < .01$, as well as significantly more assertive solutions than parents, $F_{(1, 1703)} = 175.12, p < .01$. No significant

differences were found in the number of help-seeking, $F_{(1, 1703)} = 1.85$, *ns*, or non-confrontational, $F_{(1, 1703)} = .15$, *ns*, solutions reported.

Situation differences

Table 3 also presents within-subject effects revealed in the analyses. Significant differences were found between the number of aggressive solutions reported across each of the hypothetical bullying situations, $F_{(3, 1703)} = 7.42$, $p < .01$. Subsequent post-hoc analysis, using Tukey's HSD criterion, revealed where these differences occurred. Specifically, participants generated significantly more aggressive solutions for the physical bullying situation ($M = .25$, $SD = .68$) than both the relational bullying situation ($M = .11$, $SD = .41$) and the cyber bullying situation, ($M = .12$, $SD = .40$), $p < .01$.

When examining help-seeking solutions generated by participants, a significant within-subjects effect was revealed, $F_{(3, 1703)} = 17.96$, $p < .01$. That is, there were differences in the amount of help-seeking solutions generated depending on the situation. Post-hoc analyses using Tukey's HSD criterion to compare every possible pair of situations, revealed significantly more help-seeking strategies generated for physical bullying ($M = 1.08$, $SD = .55$), verbal bullying ($M = 1.05$, $SD = .61$), and cyber bullying ($M = 1.01$, $SD = .49$) situations as compared to relational bullying ($M = .83$, $SD = .60$), $p < .01$.

As can be seen in Table 3, there was a significant within-subjects effect with participants responding with non-confrontational solutions differently depending on the situation, $F_{(3, 1703)} = 37.91$, $p < .01$. Upon further examination, it was revealed that participants responded with significantly more non-

confrontational solutions to verbal bullying situations ($M = .68$, $SD = .72$) than either physical ($M = .43$, $SD = .71$) or cyber ($M = .35$, $SD = .55$) bullying situations, $p < .01$. Further, more non-confrontational solutions were generated in response to relational bullying situations ($M = .77$, $SD = .73$) in comparison to both physical and cyber bullying situations, $p < .01$.

A significant within-subjects effect was revealed with regards to the number of assertive solutions reported by participants, $F_{(3, 1703)} = 20.53$, $p < .01$. Participants responded with assertive solutions differently depending on the situation, and subsequent post-hoc analyses using Tukey's HSD criterion were conducted to determine where these differences occurred. Participants were found to generate significantly more assertive solutions to physical bullying situations ($M = .81$, $SD = .95$) than verbal ($M = .52$, $SD = .69$), relational ($M = .53$, $SD = .73$), and cyber ($M = .46$, $SD = .71$) bullying situations, $p < .01$.

With regards to the number of passive solutions generated by students and parents, Table 3 shows that a significant within-subjects effect was found, $F_{(3, 1703)} = 2.81$, $p < .05$. Post-hoc analyses involving Tukey's HSD criterion revealed that participants generated significantly more passive solutions in response to verbal bullying scenarios ($M = .08$, $SD = .29$) when compared to cyber bullying ($M = .02$, $SD = .15$), $p < .01$. No other comparisons differed significantly.

Interaction effects

Results from the MANOVA revealed some significant interactions. In particular, a significant group x situation interaction was found in the amount of aggressive solutions generated by participants, $F_{(3, 1703)} = 4.50$, $p < .01$. Figure 1

allows for the examination of this interaction. Parents generated consistent numbers of aggressive solutions across each of the four situations. Students, however, responded with aggressive solutions differently depending on the scenario. They generated the most aggressive solutions for the physical bullying scenario, and the fewest for the relational bullying scenario.

The second significant group x situation interaction found involved the number of non-confrontational solutions generated by participants, $F_{(3, 1703)} = 4.04, p < .01$. Figure 2 displays non-confrontational solutions reported by participants across each of the four situations. Although participants responded similarly by generating the most non-confrontational solutions for relational bullying situations and the least for cyber bullying situations, their response patterns were different for the physical and verbal bullying scenarios.

Unlike aggressive and non-confrontational solutions, no significant group x situation interaction effect was found for passive solutions, $F_{(3, 1703)} = 2.09, ns$. Figure 3 provides a visual of the results of this analysis. Students consistently generated more passive solutions than parents, however, this number decreased for cyber bullying situations.

Similarly, no interaction effect was found for help-seeking solutions, $F_{(3, 1703)} = 2.03, ns$. Figure 4 allows for an examination of participant responses for help-seeking solutions across each of the four situations. Both students and parents generated similar patterns of responding across each of the situations. Both groups of participants exhibited a decline in help-seeking solutions for relational bullying situations.

Finally, no group x situation interaction effect was found for the number of assertive solutions generated by participants, $F_{(3, 1703)} = .82, ns$. Both students and parents demonstrated a similar pattern of responding across each of the situations. Figure 5 demonstrates this pattern and reveals that students consistently generated more assertive solutions for each situation.

Table 3

Summary of Multivariate Analysis of Variance

Source	Solutions	<i>df</i>	F	η^2
Group	Aggressive	1	155.43 ^{**}	.084
	Passive	1	34.31 ^{**}	.020
	Help-seeking	1	1.85	.001
	Non-Confrontational	1	.15	.000
	Assertive	1	175.12 ^{**}	.093
Situation	Aggressive	3	7.42 ^{**}	.013
	Passive	3	2.81 [*]	.005
	Help-seeking	3	17.96 ^{**}	.031
	Non-Confrontational	3	37.91 ^{**}	.063
	Assertive	3	20.53 ^{**}	.035
Group x Situation	Aggressive	3	4.50 ^{**}	.008
	Passive	3	2.09	.004
	Help-seeking	3	2.03	.004
	Non-Confrontational	3	4.04 ^{**}	.007
	Assertive	3	.82	.001

Note: ^{*} $p < .05$, ^{**} $p < .01$

Figure 1.

Situation x Group Interaction for Aggressive Solutions Reported

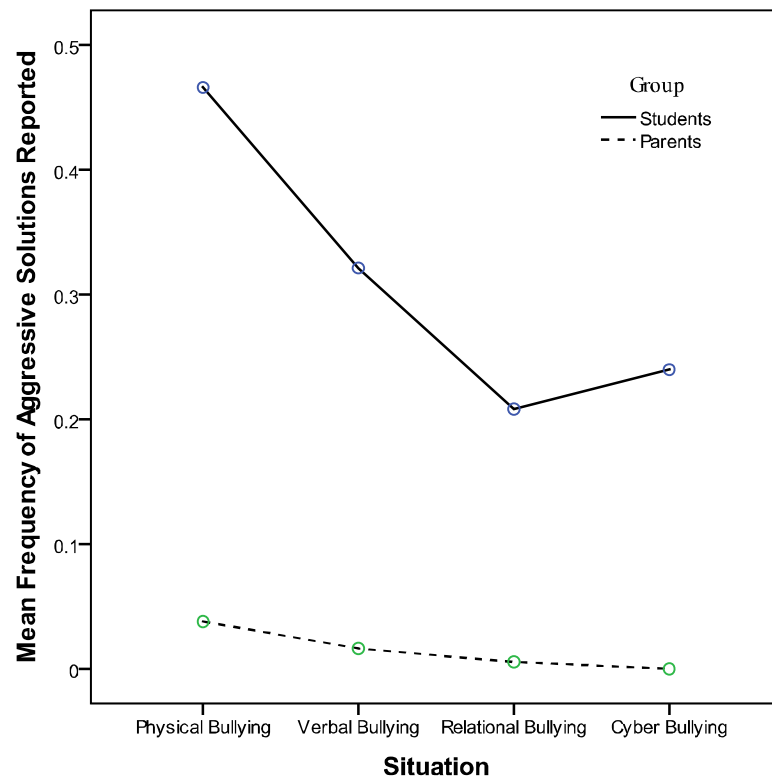


Figure 2.

Situation x Group Interaction for Non-Confrontational Solutions Reported

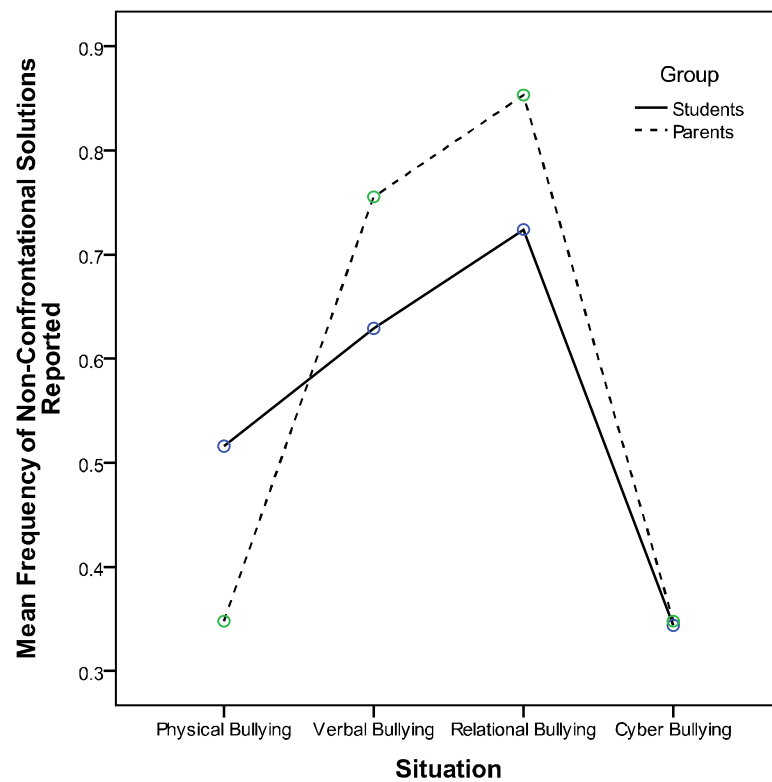


Figure 3.

Situation x Group Interaction for Passive Solutions Reported

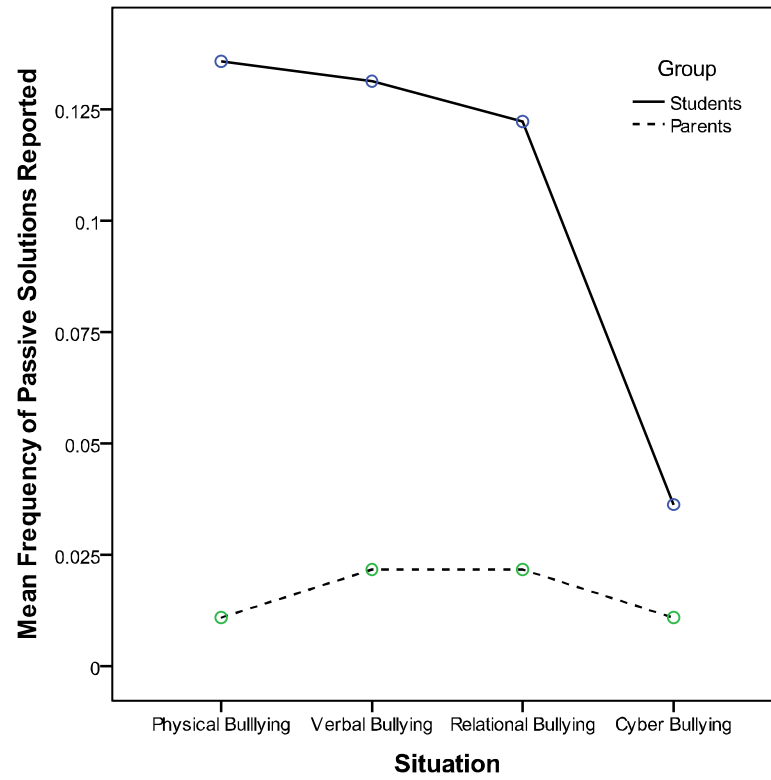


Figure 4.

Situation x Group Interaction for Help-Seeking Solutions Reported

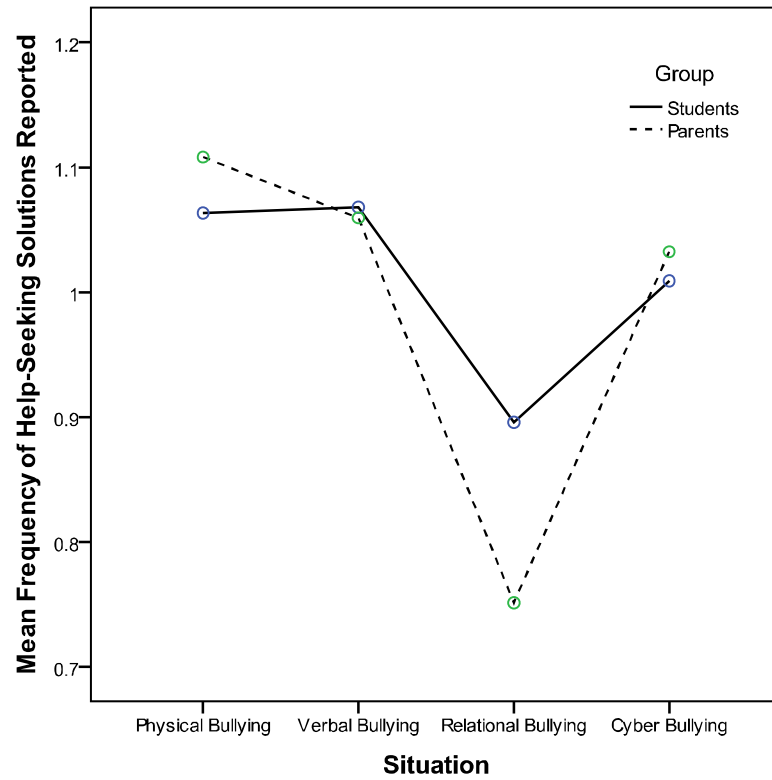
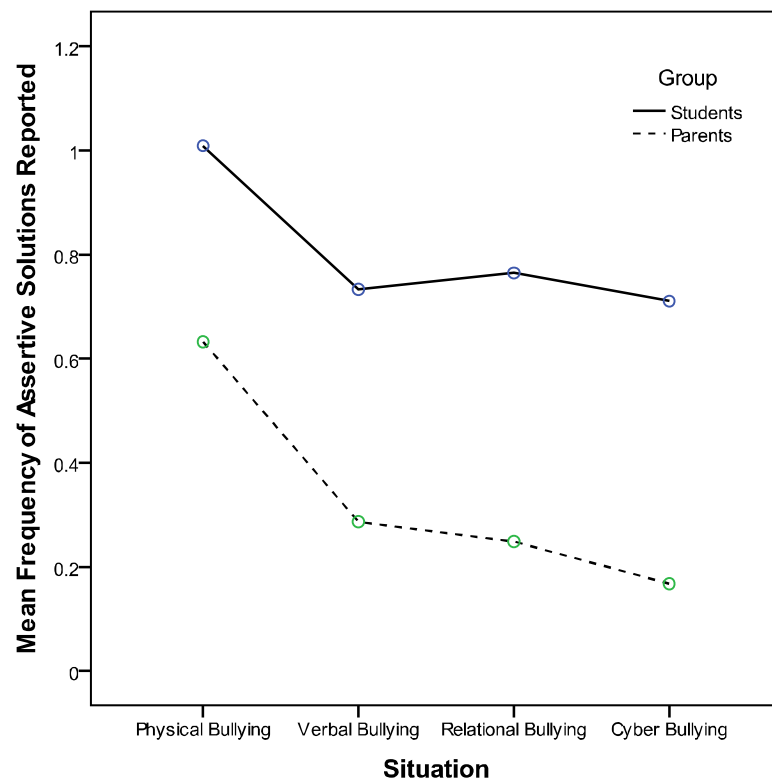


Figure 5.

Situation x Group Interaction for Assertive Solutions Reported



Effectiveness of Solutions

To determine the effectiveness of both parent and student solutions to hypothetical bullying situations, solutions were rated as Very Ineffective, Ineffective, Effective, or Very Effective (Caplan et al., 1986). These ratings were given a value of 1, 2, 3, and 4 respectively. The mean effectiveness rating of solutions was taken across each of the four situations and Table 4 presents descriptive statistics for effectiveness of both parent and student solutions. Parents' solutions across all of the situations ranged between ineffective and effective. Parents provided the most effective solutions for relational bullying scenarios ($M = 2.55$) and provided the least effective solutions for cyber bullying scenarios ($M = 2.33$). As with parents, students provided the most effective solutions to relational bullying scenarios ($M = 2.53$) and the least effective solutions to cyber bullying scenarios ($M = 2.34$). The mean effectiveness of student solutions fell between ineffective and effective for each of the hypothetical situations.

Table 4

*Descriptive Statistics for Parent and Student Effectiveness Ratings across
Hypothetical Bullying Situations*

	<u>Parents</u>			<u>Students</u>		
	Mean	SD	n	Mean	SD	n
<i>Bullying Situation</i>						
Physical Bullying	2.44	.43	215	2.41	.48	224
Verbal Bullying	2.49	.44	215	2.46	.40	223
Relational Bullying	2.55	.58	209	2.53	.43	224
Cyber Bullying	2.33	.43	209	2.34	.46	221

Parent-Child Communication and Effectiveness of Solutions

The Parent-Child Communication Scale, parent and child reports, were used to assess communication between parents and students. Scores of parent-child dyads on each of the measures were averaged and then a median split was used to separate groups of dyads into high and low communication groups. Using a median split, parent-student dyads were separated into high and low communication groups. A series of *t-tests* were conducted to determine if there was a difference in the effectiveness of parent and student strategies when taking into consideration the communication between parents and students. In order to protect against Type 1 error, a more stringent alpha was set at .0125 using the Bonferroni correction. Table 5 contains the results of the analysis for the effectiveness of parent solutions when separated into high and low communication groups. As can be seen in the table, no significant differences in the effectiveness of solutions across each situation were found between high and low communication groups.

Table 6 presents the results of the *t-tests* for student solution effectiveness. As can be seen in the table, there was a significant difference in effectiveness of solutions between high and low communication groups for the physical bullying situation, $t_{(213)} = -2.53$, $p < .0125$, $d = .36$. Specifically, the solutions of students in the high communication group were significantly more effective than the solutions of students in the low communication group. Similarly, there was a significant difference in the effectiveness of solutions generated for the cyber bullying situation, $t_{(210)} = -2.37$, $p < .0125$, $d = .33$. Again, students in the high

communication group generated solutions that were significantly more effective than the solutions of students in the low communication group. In both the verbal bullying and relational bullying situations, no significant differences were found in the effectiveness of solutions generated between high and low communication groups.

Table 5

Differences in Effectiveness of Parent Solutions between High and Low

Communication Groups

Situation	Communication	Mean (SD)	<i>t(df)</i>
Physical Bullying	Low	2.48 (.42)	1.12 (206)
	High	2.42 (.38)	
Verbal Bullying	Low	2.50 (.37)	-.07 (206)
	High	2.50 (.45)	
Relational Bullying	Low	2.59 (.55)	.35 (200)
	High	2.56 (.51)	
Cyber Bullying	Low	2.38 (.43)	1.48 (200)
	High	2.30 (.36)	

Note: * $p < .0125$

Table 6

*Differences in Effectiveness of Student Solutions between High and Low**Communication Groups*

Situation	Communication	Mean (SD)	<i>t(df)</i>
Physical Bullying	Low	2.32 (.49)	-2.53* (213)
	High	2.49 (.46)	
Verbal Bullying	Low	2.43 (.42)	-1.20 (212)
	High	2.50 (.40)	
Relational Bullying	Low	2.53 (.46)	-.19 (213)
	High	2.54 (.39)	
Cyber Bullying	Low	2.27 (.50)	-2.37* (210)
	High	2.42 (.42)	

Note: * $p < .0125$

Discussion

The current study examined the types of solutions that students and parents generate in response to given hypothetical bullying situations as well as the effectiveness of these solutions. In addition, the current study investigated the effectiveness of these strategies when taking into consideration communication between students and parents. The following Discussion will review the results of this study and provide an interpretation in relation to past and present research. In addition, limitations of the current study, future directions for research, and implications of the research findings will be highlighted.

Parent and Student Solutions

One of the aims of this study was to determine what types of solutions to hypothetical bullying situations parents provide to their young adolescents and what types of solutions students come up with on their own. Past research (e.g., Berns, 1997; Bowlby, 1982; Buyse et al., 2011; Crockenberg & Lourie, 1996; Lee, 2009; Wilso et al., 2003) have demonstrated the importance of parent support and involvement, but few studies have looked at the quality of type of solutions parents come up with in response to bullying problems. For this reason, this question was exploratory in nature and no hypotheses were proposed.

When reviewing solutions from the parent group, the most common type of solutions provided by parents were help-seeking strategies, and these comprised nearly half of all solutions generated. Help-seeking strategies involved telling someone else about the problem or seeking advice from others on how to best solve the situation. These results are consistent with research by Waasdorp and colleagues (2011) who found that parents were inclined to seek help from

school in dealing with bullying dilemmas, especially when their children were exposed to direct forms of bullying. Just over a quarter of the strategies generated by parents were non-confrontational strategies. These strategies involved ignoring the situation while still meeting one's needs later. Assertive strategies comprised just under a quarter of all of the strategies generated by parents. Assertive strategies involved a series of possible solutions such as: asserting one's own rights; requesting the bully to change or stop their behaviour; seeking information from the bully; or attempting to use socially skilled requests or assertions. Parent strategies rarely included passive or aggressive solutions.

Overall, these findings suggest that on average parents most frequently rely on encouraging their children to seek help from an adult in situations involving bullying. Some researchers suggest that help-seeking strategies, such as telling a teacher, are not positive or negative (Mize & Pettit, 1997). Other researchers posit that it is important for children to involve others in solving bullying dilemmas since there is a power imbalance between bullies and victims, and an adult or a peer may help to re-establish the balance (Camodeca et al., 2003; Craig et al., 2007). Additionally, seeking advice has been shown to be related to resolution of the bullying problem (Kochenderfer-Ladd, 2004). In this case, parents seem to be relying on their children's teachers to deal with these situations, and for this reason, it is imperative that teachers are equipped with the tools necessary to deal with bullying in their classrooms. Parents, however, are also in need of education on how to best support their children in bullying situations since researchers suggest that the most effective strategies in bullying

situations are prosocial assertive responses (Camodeca & Goossens, 2005; Laird et al., 1994; Mize & Pettit, 1997). Parent education programs can use this information to teach parents how to improve their techniques when helping their children cope with bullying conflicts.

Strategies for hypothetical bullying situations of the student group were reviewed, and like the parent group, help-seeking strategies were the most common type of solution generated. Just over a third of the strategies generated by students were help-seeking strategies. Other studies have found similar results with children most often choosing to seek help as a response to bullying (Camodeca et al., 2003; Cowie, 2000; Craig et al., 2007). The current study found the second most common types of solutions generated by students, comprising nearly a third of solutions, were assertive strategies. The least common strategies generated by students were aggressive and passive strategies, although aggressive strategies made up just over a tenth of all solutions.

Upon further examination, it was revealed that over 40% of all students in this study generated at least one aggressive solution. This is concerning since studies have shown that responding with aggressive solutions to bullying can lead to adverse consequences, such as prolonged bullying (Kochenderfer-Ladd, 2004; Mahady-Wilton et al., 2000). These findings are consistent with research by Craig et al. (2007) who found that common strategies reported by males were confrontational in nature and involved physical aggression or revenge. These findings are also consistent with research by Camodeca and Goossens (2005) who

revealed that older children were more likely to use aggressive strategies such as retaliation.

Parent and Student Solution Differences

The present study hypothesized that no significant differences would be found between adolescent and parent solutions to hypothetical bullying situations. The results of this study did not confirm this prediction. When looking at the types of solutions generated across all of the hypothetical bullying situations, adolescents on average generated significantly more aggressive, passive, and assertive solutions than parents. There were no significant differences in the number of non-confrontational and help-seeking solutions generated by students and parents.

Parent and student responses to hypothetical bullying situations were further examined to determine if there were any within-subjects effects across situations (i.e. physical, verbal, relational, cyber bullying), or any group (i.e. students and parents) by situation interactions.

When reviewing aggressive solutions, it became apparent that participants did not always respond with aggressive solutions similarly across bullying situations. This suggests that context is an important consideration for groups when responding to bullying situations. These findings highlight the necessity of educating both parents and students on the various forms of bullying and the appropriate ways to respond to each. Further, providing parents and students with strategies that will generalize across the various types of bullying is necessary.

Upon further examination of the results, it was revealed that participants generated significantly more aggressive solutions for the physical bullying situation than either the relational or the cyber bullying situation. Further, a significant interaction effect was revealed. On average parents were shown to respond with aggressive solutions consistently across each of the four situations. Students as a group, however, responded with aggressive solutions differently depending on the situation. For example, students generated the most aggressive solutions for the physical bullying scenario, and the fewest for the relational bullying scenario.

Although the groups of students and parents did not differ significantly in the amount of help-seeking solutions generated, there were significant differences in the number of help-seeking solutions generated across situations as well as a significant group by situation interaction. Specifically, participants generated significantly fewer help-seeking strategies in response to relational bullying situations than any other situation (i.e. physical, verbal, and cyber bullying). Unlike aggressive solutions, no interaction effect was found for help-seeking solutions. Both students and parents generated similar patterns of responding across each of the situations. Participants responded with the most help-seeking solutions to physical and verbal bullying situations and the least to relational bullying situations.

Again, these findings suggest that context is an important consideration to individuals when responding to bullying situations. Participants did not necessarily use the same strategies for all situations. They did, however, seek help

from others in response to physical and verbal bullying scenarios. It is possible that parents and students are unsure of how to cope with these situations and thus seek the aid of another. It may also mean that participants consider physical and verbal bullying to be more serious forms of bullying than relational or cyber bullying, and thus feel the need to involve others (i.e. teacher, school). Research by Waasdorp and colleagues (2011) found similar results with parents being more likely to seek help from the school when their children were exposed to more direct forms of bullying (e.g., physical aggression, verbal threats) than more indirect forms (e.g., ignoring, spreading rumors). Because parents and students are inclined to seek help in the case of physical and verbal bullying, educating them on their options of how to immediately respond to these scenarios would be beneficial.

Non-confrontational solutions were found to be generated differently by participants in response to bullying situations. Participants were more likely to respond with non-confrontational solutions to verbal and relational bullying situations as opposed to physical or cyber bullying situations. Although there were similarities in student and parents responses to bullying situations, a significant interaction effect was found. In particular, participants responded with the most non-confrontational solutions for relational bullying situations and the least for cyber bullying situations, however, their response patterns were different for the physical and verbal bullying scenarios. These findings reveal that parents and students respond with non-confrontational solutions the most to relational bullying situations. Although these solutions allow the student to meet their own

needs later, researchers suggest that more assertive solutions exhibiting social skills would be ideal (Camodeca & Goossens, 2005).

When reviewing assertive solutions across situations, significant differences were found. Participants responded with more assertive solutions in response to physical bullying situations than any of the other three situations. These findings may be explained by research suggesting that individuals are most familiar with physical bullying as opposed to other forms (Smorti et al., 2003) and perceive direct aggression as more serious than other types (Waasdorp et al., 2011). Because both groups of individuals are able to immediately identify physical aggression as bullying and perceive it as serious and wrong, it is possible that they are most prepared to effectively deal with this form of bullying as opposed to the other three forms.

When combined, participants were found to respond differently with passive solutions depending on the situation. Specifically, participants generated more passive solutions in response to verbal bullying situations than cyber bullying. This was the only significant difference in responding between the situations. No significant interaction effects were found. Students consistently reported more passive solutions than parents, however, this number declined in response to cyber bullying.

Solution Effectiveness

Another primary purpose of this study was to investigate the effectiveness of solutions parents and students generate in response to hypothetical bullying situations. Overall, parents' solutions fell just below effective. Although parents

responded most effectively to relational bullying situations, their solutions still fell just below effective. Parents were least effective at generating solutions to cyber bullying situations. These findings are not surprising since parents have been shown to have narrow definitions of what constitutes bullying (Smorti et al., 2003). Further, parents have been shown to struggle with identifying bullying in all of its forms when not prompted (Williams, 2008). If parents have a general lack of awareness of the various forms of bullying, then it is not likely that they will have a store of strategies to deal with these situations.

Similar to parents, the overall effectiveness of student solutions fell just below effective. Also similar to parents, students provided the most effective solutions to relational bullying scenarios, however, these solutions fell just below effective. Additionally, students were least effective at responding to cyber bullying scenarios. These findings are consistent with past research demonstrating students do not always know how to effectively respond to bullying situations (Craig et al., 2007; Mahady-Wilton, 2000).

Although parents and students alike are demonstrating some effective solutions, overall, it appears that both groups are unsure of how to most effectively cope with bullying dilemmas. At home, parents appear to be struggling with helping their children and providing them with effective solutions to solve their bullying conflicts. In school, students also appear to be having difficulty solving bullying problems when faced with them. Overall, these findings highlight the necessity of education both in the home and in schools. If we are relying on parents to help children when faced with bullying dilemmas, then they

need to be educated on the best methods of doing this. Additionally, students are also in need of skills to implement immediately when they are faced with bullying conflicts. Both groups would benefit from education on the various forms of bullying, methods of responding to each, and techniques that generalize to multiple forms of bullying.

Parent-Child Communication and Solution Effectiveness

The final purpose of this study was to determine if there was a difference in the effectiveness of student strategies when looking at high and low communication groups of student-parent dyads. The findings of this study partially supported the hypothesis that more positive communication will be associated with adolescents generating more effective strategies to hypothetical bullying situations (e.g., Barnes & Olson, 1985; Lee, 2009; Noller & Fitzpatrick, 1993). Students from the high communication group generated significantly more effective solutions to both the physical and cyber bullying scenarios than students in the low communication group. In both the verbal and relational bullying situations, however, no differences were found in the effectiveness of solutions generated between high and low communication groups.

Finding a significant difference between the communication groups in both the physical and cyber bullying situations suggests that better parent-child communication is related to students developing more effective strategies to solve bullying dilemmas. The results of this study are supported by research that demonstrates the influence of parent-child communication on child behaviour. Past studies have found that children with better parent-child communication were

less influenced by their peers (Lee, 2009) and exhibited more positive behaviours towards their classmates than children who had poorer parent-child communication (Barnes & Olson, 1985; Noller & Fitzpatrick, 1993; Rigby, 1993; Spriggs et al., 2007). The present study further highlights the importance of considering parent-child communication when addressing bullying problems. In addition to educating parents and students on effective methods of dealing with bullying conflicts, the current study supports the necessity of promoting healthy parent-child communication in families.

Limitations

The current study extends research in the area of bullying and provides insight into parent and student knowledge regarding how to effectively cope with bullying situations. Although there were many strengths to the present study, some limitations have been identified and should be addressed by future research.

First, because this study was cross-sectional in nature with all of the data collected at one point in time, causal inferences could not be made. Although a link between communication and solution effectiveness was established, it cannot be said that better communication between students and parents leads to more effective solutions. To address this limitation, future research should aim for longitudinal designs in which parent and student variables are assessed at different time periods over a longer duration.

The second limitation of the present study was the nature of participants who volunteered. The majority of participants in the study were from middle SES families and were almost entirely Caucasian. For this reason, study findings may

not be generalizable to other populations. Furthermore, this study included individuals who volunteered to participate, and it is possible that students who were bullied (or bully) may not have chosen to participate. It is possible that students who participated in the study were those who were infrequently exposed to bullying and did not feel threatened by the study. Future research in this area should include a more diverse sample of participants to assess bullying solutions and effectiveness across a wide range of cultures and socioeconomic statuses.

Finally, participants were asked to respond to four short scripts involving hypothetical bullying situations. Although these scenarios captured valuable information on the types of strategies respondents generate, at times, solutions were unclear or did not involve any sort of action. For example, one parent responded to a situation with *“I would let my child know something would be done to bring an end to this cyber-bullying”*. Additionally, in order to respond to these questions, participants needed to be literate and capable of expressing the solutions they generated in written form. This format may have restricted the answers provided by individuals who had reading or writing difficulties. Future research should include more in-depth and extended interviews so that when situations like these arise, parents can be prompted to elaborate on their solutions for clarification and given the opportunity to respond orally if desired.

Future Research

In addition to addressing the limitations outlined above, the current study highlights other potential areas of future research. One of the findings of the current study was a potential link between parent-child communication and

effectiveness of student solutions to bullying situations. In addition to conducting longitudinal research in this area, another recommended focus of future research is in discovering other factors associated with the effectiveness of parent and student solutions. For example, research by Craig et al. (2007) indicated a general lack of awareness in parents of the various forms of bullying. Future research in this area may determine if there is a link between knowledge of bullying and solution effectiveness.

Although the current study examined parent and student solutions to hypothetical bullying situations, it is unknown whether these solutions would actually be put into practice. A consideration for future research, therefore, is to examine the strategies actually implemented in real-life bullying situations and compare them to solutions generated in response to hypothetical bullying scenarios. These differences may provide insight into the factors associated with how parents and students respond to bullying and how effective these responses are.

The present study suggests that both parents and students respond to hypothetical bullying situations with solutions that are not entirely effective. A final consideration for future research is in determining methods of increasing solution effectiveness. These methods may come in the form of parent and student education surrounding bullying or even interventions to increase communication between parents and students. Further research that determines how to improve solution effectiveness is imperative since failure to respond appropriately to real-life bullying dilemmas may prove detrimental.

Conclusions

Despite the limitations of the study and areas in need of further research outlined above, the current study provides new insight and adds to the literature in many ways. The present study revealed the various ways parents and students respond to bullying situations, how prepared parents are to help their children cope effectively with bullying, as well as the importance of parent-child communication. Parents and students were shown to exhibit less than ideal solutions when responding to bullying situations. Both groups demonstrated a tendency to seek aid from others which may stem from insufficient knowledge of the various forms of bullying. Of concern, however, was the inability of both groups to respond effectively to various bullying scenarios. Additionally, the current study illuminated the importance of parent-child communication by revealing that students with better communication with their parents demonstrated more effective solutions than students with poorer communication.

Overall, these findings highlight the absolute necessity of increasing parent and student knowledge on the various types of bullying and how to more effectively address bullying situations. Promoting healthier parent-child communication in families also appears to be a potential avenue of change for dealing more effectively with bullying. It is the aim of the present study to further the literature on bullying and equip professionals with the knowledge necessary to prepare families for the various bullying situations they may face and promote more effective methods of solving these difficult situations.

References

- Arora, C. M. J. (1996). Defining bullying: Towards a clearer general understanding and more effective intervention strategies. *School Psychology International*, 17, 317-329.
- Baldry, A. C., & Farrington, D. P. (2005). Protective factors as moderators of risk factors in adolescence bullying. *Social Psychology of Education*, 8, 263-284. DOI: 10.1007/s11218-005-5866-5
- Barnes, H. L., & Olson, D. H. (1985). Parent-adolescent communication and the circumplex model. *Child Development*, 56, 438-447.
- Bauman, S., & Del Rio, A. (2006). Preservice teachers' responses to bullying scenarios: Comparing physical, verbal, and relational bullying. *Journal of Educational Psychology*, 98, 219-231. DOI: 10.1037/0022-0663.98.1.219
- Berndt, T.J. (1992). *Child development*. Holt, Rinehart and Winston; New York.
- Berns, R. M. (1997). *Child, family, school, community – Socialization and support*. (4th ed.). Holt, Rinehart and Winston; New York.
- Bond, L., Carlin, J. B., Thomas, L., Rubin, K., & Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal*, 323, 480–484.
- Borg, M. G. (1998). The emotional reactions of school bullies and their victims. *Educational Psychology*, 18, 433-444.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *Journal of the American Orthopsychiatric Society*, 664-677.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*.

London: Routledge.

Bowlby, J. (1989). The role of attachment in personality development and psychopathology. In S. I. Greenspan & G. H. Pollock (Eds.), *The course of life: Vol. 1. Infancy* (pp. 229-270). Madison, CT: International Universities Press.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage.

Buyse, E., Verschueren, K., & Doumen, S. (2011). Preschoolers' attachment to mother and risk for adjustment problems in kindergarten: Can teachers make a difference? *Social Development*, 20, 34-50.

Bynner, J. (2001). Childhood risks and protective factors in social exclusion. *Children & Society*, 15, 285-301.

Camodeca, M., & Goossens, F. A. (2005). Children's opinions on effective strategies to cope with bullying: The importance of bullying role and perspective. *Educational Research*, 47, 93-105.

Camodeca, M., Goossens, F. A., Schuengel, C. & Meerum Terwogt, M. (2003). Links between social information processing in middle childhood and involvement in bullying. *Aggressive Behavior*, 29, 116-127.
doi:10.1080/0013188042000337587

Caplan, M., Weissberg, R. P., Bersoff, D. M., Ezekowitz, W., & Wells, M. L.

(1986). *The middle school alternative solutions test (AST) scoring manual*.

Unpublished manuscript, Yale University, Psychology Department, New Haven, CT.

- Carbone-Lopez, K., Esbensen, F., & Brick, B. T. (2010). Correlates and consequences of peer victimization: Gender differences in direct and indirect forms of bullying. *Youth Violence and Juvenile Justice*, 8, 332 - 350.
- Casey-Cannon, S., Hayward, C., & Gowen, C. (2001). Middle-school girls' reports of peer victimization: Concerns, consequences, and implications. *Professional School Counseling*, 5, 138-148.
- Clark, K. E., & Ladd, G. W. (2000). Connectedness and autonomy support in parent-child relationships: Links to children's socioemotional orientation and peer relationships. *Developmental Psychology*, 36, 485-498.
- Cohn, D. A. (1990). Child-mother attachment of six-year-olds and social competence at school. *Child Development*, 61, 152-162.
- Cowie, H. (2000) Bystanding or standing by: gender issues in coping with bullying in English schools, *Aggressive Behavior*, 26, 85-97.
- Coyne, S. M., Archer, J., & Eslea, M. (2006). "We're not friends anymore! Unless...": The frequency and harmfulness of indirect, relational, and social aggression. *Aggressive Behavior*, 32, 294-307.
- Craig, W., Pepler, D., & Blais, J. (2007). Responding to bullying: What works? *School Psychology International*, 28, 465-477.
- doi: 10.1177/0143034307084136

- Craig, W. M., & McCuaig Edge, H. (2008). Bullying and fighting. In W.F. Boyce, M.A. King, & J. Roche (Eds.), *Healthy Settings for Young People in Canada: Canadian Report from the HBSC 2006 Survey*, pp. 91-104. Ottawa, ON: Health Canada. Retrieved May 12, 2011 from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/yjc/pdf/youth-jeunes-eng.pdf>.
- Crick, N. R. (1996). The role of overt aggression, relational aggression, and prosocial behavior in the prediction of children's future social adjustment. *Child Development*, 67, 2317-2327.
- Crick, N. R., & Grotpeter, J.K. (1995). Relational aggression, gender and social-psychological adjustment. *Child Development*, 66, 710-722.
- Crick, N. R., Casas, J. F., & Nelson, D. A. (2002). Toward a more comprehensive understanding of peer maltreatment: Studies of relational victimization. *Current Directions in Psychological Science*, 11, 98-101.
- Crockenberg, S., & Lourie, A. (1996). Parents' conflict strategies with children and children's conflict strategies with peers. *Merrill-Palmer Quarterly*, 42, 495-518.
- DeMulder, E. K., Denham, S., Schmidt, M., & Mitchell, J. (2000). Q-sort assessment of attachment security during the preschool years: Links from home to school. *Developmental Psychology*, 36, 274-282.
- Dodge, K. A., Coie, J. D., & Lynam, D. (2006). Aggression and antisocial

- behavior in youth. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 3: Social, emotional and personality development*, 6th ed. (pp. 99-166). Hoboken, NJ: Wiley.
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P. & Currie, C. The Health Behaviour in School-Aged Children Bullying Working Group (2005) 'Bullying and Symptoms Among School-Aged Children: International Comparative Cross-Sectional Study in 28 Countries', *European Journal of Public Health* 15(2): 128–32.
- Eslea, M., & Rees, J. (2001). At what age are children most likely to be bullied at school? *Aggressive Behavior*, 27, 419-429.
- Fabes, R. A., Leonard, S. A., Kupanoff, K., & Martin, C. L. (2001). Parental coping with children's negative emotions: Relations with children's emotional and social responding. *Child Development*, 72, 907-920.
- Fekkes, M., Pijpers, F. I. M., & Verloove-Vanhorick, S. P. (2005). Bullying: Who does what, when and where? Involvement of children, teachers and parents in bullying behavior. *Health Education Research*, 20, 81-91.
- Fitzpatrick, S., & Bussey, K. (2011). The development of the Social Bullying Involvement Scales. *Aggressive Behavior*, 37, 177-192.
- Galen, B. R., & Underwood, K. (1997). A developmental investigation of social aggression among children. *Developmental Psychology*, 33, 589-600.
- Hart, C. H., Newell, L. D., Olsen, S. (2003). Parenting skills and social-

- communicative competence in childhood. In J.O. Green & b.R. Burleson (Eds.), *Handbook of communication and social interaction skills* (pp. 753-797). Mahwah, NJ: Erlbaum.
- Hawker, D. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology & Psychiatry*, 41, 441-455.
- Hodges, E. V., & Perry, D. G. (1999). Personal and interpersonal antecedents and consequences of victimization by peers. *Journal of Personality and Social Psychology*, 76, 677-685.
- Hokoda, A., Lu, H. H., & Angeles, M. (2006). School bullying in Taiwanese adolescents. *Journal of Emotional Abuse*, 6, 69-90.
- Hugh-Jones, S., & Smith, K. (1999). Self-reports of short- and long-term effects of bullying on children who stammer. *British Journal of Educational Psychology*, 69, 141-158.
- Hunter, S. C., Boyle, J. M. E., & Warden, D. (2004). Help seeking amongst child and adolescent victims of peer-aggression and bullying: The influence of school-stage, gender, victimisation, appraisal, and emotion. *British Journal of Educational Psychology*, 74, 375-390.
- Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: Relations to social and emotional functioning at school. *Merrill-Palmer Quarterly*, 48, 133-159.

- Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpela, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finnish adolescents: School survey. *British Medical Journal*, 319, 348-351.
- Kochenderfer-Ladd, B. (2004) 'Peer Victimization: The Role of Emotions in Adaptive and Maladaptive Coping'. *Social Development*, 13, 329-49.
- Kumpulainen, K., Räsänen, E., & Puura, K. (2001). Psychiatric disorders and the use of the mental health services among children involved in bullying. *Aggressive Behavior*, 27, 102-110.
- Laird, R. D., Pettit, G. S., Mize, J., Brown, E. G., & Lindsey, E. (1994). Mother-child conversations about peers: Contributions to competence. *Family Relations*, 43, 425-432.
- Lamb, M. E., & Nash, A. (1989). Infant-mother attachment, sociability, and peer competence. In *Peer relationships in child development* (T.J. Berndt & G.W. Ladd, eds). Wiley; New York.
- Lee, S. S. (2009). School, parents, and peer factors in relation to Hong Kong students' Bullying. *International Journal of Adolescence and Youth*, 15, 217-233.
- Leenaars, L., & Rinaldi, C. M. (2010). Male and female university students' experiences of indirect aggression. *Canadian Journal of School Psychology* 25, 131-148.
- Loeber, R. Farrington, D. P., Southamer-Loeber, M., & Van Kammen, W. B. (1998). *Antisocial behavior and mental health problems: Explanatory factors in childhood and adolescence*. Mahwah, NJ: Erlbaum.

- Mahady-Wilton, M., Craig, W. M., & Pepler, D. J. (2000). Emotional regulation and display in classroom bullying: Characteristic expressions of affect, coping Styles and relevant contextual factors. *Social Development*, 2, 226-44.
- Matsunaga, M. (2009). Parents don't (always) know their children have been bullied: Child-parent discrepancy on bullying and family-level profile of communication standards. *Human Communication Research*, 35, 221-247.
- McCarty, C. M., & Doyle, S. R. (2001). Parent-Child Communication (Child) (Fast Track Project Technical Report). Retrieved October 22, 2007 from <http://www.fasttrackproject.org/>
- McCarty, C. A., McMahon, R. J., & Conduct Problems Prevention Research Group. (2003). Mediators of the relation between maternal depressive symptoms and child internalizing and disruptive behavior disorders. *Journal of Family Psychology*, 17, 545-556.
- Menna, R., & Landy, S. (2001). Working with parents of aggressive preschoolers: An integrative approach to treatment. *Journal of Clinical Psychology*, 57, 257-269.
- Mize, J., & Pettit, G. S. (1997). Mothers' social coaching, mother-child relationship style and children's peer competence: Is the medium the message? *Child Development*, 68, 312-332.
- Nansel, T. R., Craig, W., Overpeck, M. D., Saluja, G., Ruan, W. J., & The Health Behaviour in School-Aged Children Bullying Analyses Working Group. (2004). Cross-national consistency in the relationship between bullying

- behaviors and psychosocial adjustment. *Archives of Pediatrics & Adolescent Medicine*, 158, 730-736.
- Noller, P., & Fitzpatrick, M. A. (1993). *Communication in family relationships*. Prentice Hall; Englewood Cliffs, NJ.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford, UK: Blackwell.
- Pateraki, L., & Houndoumadi A. (2001). Bullying among primary school children in Athens, Greece. *Educational Psychology*, 21, 167-175.
- Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology*, 20, 259-280.
- Pepler, D. J., Craig, W. M., Connolly, J. A., Yulie, A., McMaster, L., & Jiang, D. (2006). A developmental perspective on bullying. *Aggressive Behavior*, 32, 376-384.
- Pepler, D., Smith, P.K., & Rigby K. (2004). Implications for making interventions work effectively. In D. Pepler, P.K. Smith & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 307-323). Cambridge, UK: Cambridge University Press.
- Rigby, K. (1993). School children's perceptions of their families and parents as a function of peer relations. *Journal of Genetic Psychology*, 154, 501-513.
- Rigby, K. (2003). Consequences of bullying in schools. *Canadian Journal of Psychiatry*, 48, 583-590.

- Rigby, K., & Barnes, A. (2002). To tell or not to tell: The victimised student's dilemma. *Youth Studies in Australia*, 21, 33-36.
- Schneider, B. H., Atkinson, L., & Tardif, C. (2001). Child-parent attachment and children's peer relations: A quantitative review. *Developmental Psychology*, 37, 86-100.
- Schwartz, D., Dodge, K., Pettit, G., & Bates, J. (1997). The early socialization of aggressive victims of bullying. *Child Development*, 68, 665-67
- Smith, P. K. (2000). Bullying: Don't suffer in silence - An anti-bullying pack for schools (2nd ed.). London: HMSO.
- Smith, P. K. & Myron-Wilson, R. (1998). Parenting and school bullying. *Clinical Child Psychology and Psychiatry*, 3, 405-417.
- Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behavior*, 26, 1-9.
- Smorti, A., Menesini, E., & Smith, P. (2003). Parents' definitions of children's bullying in a five-country comparison. *Journal of Cross-Cultural Psychology*, 34, 417-432.
- Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology*, 42, 305-318.
- Spriggs, A. L., Iannotti, R. J., Nansel, T. R., & Haynie, D. L. (2007). Adolescent

bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ethnicity. *Journal of Adolescent Health*, 41, 283-293.

Stansbury, K., & Zimmermann, L. K. (1999). Relations among language skills, maternal socialization of emotion regulation, and child behavior problems. *Child Psychiatry and Human Development*, 30, 121-142.

Stevens, V., De Bourdeaudhuij, I., & Van Oost, P. (2002). Relationship of the family environment to children's involvement in bully/victim problems at school. *Journal of Youth and Adolescence*, 31, 419-428.

Thompson, R. A. (2008). Early attachment and later development: Familiar questions, new answers. In J. Cassidy, & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications*, 2nd ed. (pp. 348-365). New York: Guilford.

Turner, P. (1991). Relations between attachment, gender, and behavior with peers in preschool. *Development*, 62, 1475-1488.

Turner, P.H., & Hamner, T.J. (1994). *Child development and early education: Infancy through preschool*. Allyn & Bacon; Boston.

Underwood, M.K., Galen, B.R., & Paquette, J.A. (2001). Top ten challenges for understanding gender and aggression in children: Why can't we all just get along? *Social Development*, 10, 248-266.

Vaillancourt, T., McDougall, P., Hymel, S., Krygsman, A., Miller, J., Stiver, K.,

- & Davis, C. (2008). Bullying: Are researchers and children/youth talking about the same thing? *International Journal of Behavioral Development*, 32, 486-495.
- van der Wal, M. F., de Wit, C. A. M., & Hirasing, R. A. (2003). Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics*, 111, 1312-1317.
- Veríssimo, M., Santos, A. J., Vaughn, B. E., Torres, N., Monteiro, L., & Santos, O. (2011). Quality of attachment to father and mother and number of reciprocal friends. *Early Child Development and Care*, 181, 27-38.
- Waasdorp, T. E., Bradshaw, C. P., & Duong, J. (2011). The link between parents' perceptions of the school and their responses to school bullying: Variation by child characteristics and the forms of victimization. *Journal of Educational Psychology*, 103, 324-335. DOI: 10.1037/a0022748
- Whitney, I., & Smith, P. K. (1993). A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, 35, 3-25.
- Williams, F. (2008). *Student and parent attitudes toward bullying in middle school* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database. (AAT 3322524).
- Williams, K., Chambers, M., Logan, S. and Robinson, D. (1996) 'Association of Common Health Symptoms with Bullying in Primary School Children', *British Medical Journal*, 313, 17-19.
- Wilson, C., Parry, L., Nettelbeck, T., & Bell, J. (2003). Conflict resolution tactics

and bullying: The influence of social learning. *Youth Violence and Juvenile Justice*, 1, 64-78.

Yawkey, T.D., & Johnson, J.E. (1988). *Integrative process and socialization: Early to middle childhood*. Lawrence Erlbaum; London.

Yu, J. J., & Gamble, W. C. (2009). Adolescent relations with their mothers, siblings, and peers: An exploration of the roles of maternal and adolescent self-criticism. *Journal of Clinical Child & Adolescent Psychology*, 38, 672-683. DOI: 10.1080/15374410903103528

APPENDIX A – INFORMATION LETTER

October, 2008

Dear Parent or Guardian:

I am a professor in the Department of Educational Psychology at the University of Alberta and am writing to ask for your participation in a study on how parents can make a difference in bullying prevention and intervention. I am looking for grades 7 and 8 students and one of their parents to participate. I will briefly explain the purpose of the study below.

I am interested in finding out about how much parents know about their children's involvement in bullying situations as bullies, victims, or bystanders and about how parents' and children's attitudes toward bullying affect children's involvement in bullying situations at school. I am also interested in examining how parenting influences the development of bullying or victimization behavior in adolescents. I am especially interested in how children and parents communicate with each other to solve physical, verbal, relational, and cyberbullying situations.

If you choose to participate in this study, you and your child will be asked to complete some questionnaires that assess both students' and parents' self-reports of bullying experiences (including cyberbullying), attitudes toward bullying, and parent-child communication practices. To assess adolescents' perceptions of parenting styles, children will complete a parenting style scale. To evaluate skills and knowledge in dealing with bullying situations, both parents and children will fill out open-ended problem solving tasks based on scenarios dealing with different types of bullying. You may provide permission for your child to participate in this study even if you do not wish to participate in the parent portion of the study.

A trained doctoral student will visit your child's class where your child will complete the student questionnaires. The estimated time for students to complete these measures will be broken down into two class periods. Your child's principal has granted permission for us to conduct research in your child's school.

The Research Ethics Board requires me to tell you how I will use and store the information I collect from you and your child. The information I collect will be analyzed by me, or a member of my research team. The data will be used by one of my doctoral students, for her PhD dissertation. No one else will have access to any information I collect. The information will be stored in a locked room and will be shredded once it is no longer being used. The results of this study for the group of families as a whole may be presented or discussed publicly or published. Your family and any information you provide will not be identifiable.

In my experience, families find participating in this type of study to be informative. It is an opportunity for moms and dads to learn more about their children and their social relationships at school. In order to reduce existing bully problems in and out of the school setting and to prevent the development of new problems, adults at school and at home must be aware of the extent of the problem. This school-based research that involves both students and parents will provide opportunities for teachers, administrators, parents and students to work together to identify issues and strategies for maintaining a safe and caring environment in the schools. Since participation is completely voluntary, you and your child may withdraw from the study at any time.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

Once the study is completed you will receive a summary of the general findings. One of my research assistants or I am available for one-on-one feedback sessions if you wish to have more detailed information.

Participating in this study may:

1. Lead to greater awareness of how much bullying is taking place at your child's school and on the Internet.
2. Increase parents' knowledge about their own and their child's strengths in the area of social problem solving, as well as identify areas that may require attention.
3. Provide an opportunity for adults (parents and school staff) to work together in counteracting bully problems

Having your family's participation in this project will help me gain a better understanding of the importance of parent-child relations in counteracting bullying problems. As a token of appreciation, families who have both children and one parent participate will receive a \$25 Chapters gift card. If you have any questions or concerns please do not hesitate to contact me at 492-7471 or email at crinaldi@ualberta.ca. Please complete the attached consent form and return it to your child's teacher.

I thank you for your time and consideration.

Sincerely,

Christina Rinaldi, PhD, RPsych

APPENDIX B - CONSENT FORMS

(Two copies: one to be kept by the participant, and one signed and returned to the researcher)

I _____, hereby
(print name of Mother/Father – please circle one)

☐ Consent

☐ Do not consent

to allow my child _____
(print name of child)

to participate in this study. I understand that participation involves the following activities:

- During class time, my child will complete questionnaires relating to bullying, parenting styles, parent-child communication practices, and social problem-solving strategies

I _____, hereby
(print name of Mother/Father – please circle one)

☐ Consent

☐ Do not consent

to participate in this study. I will complete questionnaires relating to bullying, parent-child communication practices and social problem-solving strategies.

I understand that

- My family may withdraw from the research at any time without penalty
- All information gathered will be treated confidentially and used for the sole purpose of research
- Any information that identifies my family will be destroyed upon completion of this research
- My family will not be identifiable in any documents resulting from this research

I also understand that the results of this research will be used only in the following cases:

- Presentations and written articles for other developmental researchers, educators, parents, and schools
- General feedback sessions with individual families.

Signature of Parent

Date signed

Please provide us with contact information in the event I need to contact you about your participation in this project.

Telephone number

email address

For further information concerning the completion of the form, please contact Christina Rinaldi, PhD, University of Alberta, Department of Educational Psychology, Edmonton, AB, T6G 2G5 at 780-492-7471.

APPENDIX C – MEASURES

Target Participants	Measure	Reference	Construct	# of Items	Reliability
Students	Parent-Child Communication Scale, Child Report	McCarty, McMahon, & Conduct Problems Prevention Research Group, 2003; McCarty & Doyle, 2001.	Children's perceptions of their parents' openness to communication based on 2 subscales: Parent Communication Child Communication	10	Child Communication $\alpha = .89$
Students	Revised Alternative Solutions Test	Caplan et al., 1986;	Child's ability to generate alternative solutions to hypothetical bullying problems	4	
Parents	Parent-Child Communication Scale, Parent Report	McCarty, McMahon & Conduct Problems Prevention Research Group, 2003; McCarty & Doyle, 2001	Parents' perceptions of their openness to communication and their children's communication skills based on 4 subscales: Parent Communication, Parent Restricted Topics, Child empathy/Listening, Child Emotional Expression	20	Parent Communication $\alpha = .71$
Parents	Revised Alternative Solutions Test	Caplan et al., 1986;	Parent's ability to generate alternative solutions to hypothetical bullying problems	4	

PCC-C

Please answer the following set of questions about the parents (or guardians) you live with. For each question, circle and choose one answer. Please indicate who you are thinking of when you answer these questions by filling in the blanks (e.g., both parents, mom, dad, grandma, other)

How often ...

1. Is your _____ a good listener?
Almost never Once in a While Sometimes Often Almost always
2. Can your _____ tell how you are feeling without asking you?
Almost never Once in a While Sometimes Often Almost always
3. Does your _____ try to understand what you think?
Almost never Once in a While Sometimes Often Almost always
4. Are there things that you do not discuss with your _____?
Almost never Once in a While Sometimes Often Almost always
5. Do you discuss problems with your _____?
Almost never Once in a While Sometimes Often Almost always
6. Does your _____ insult you when she/he is angry with you?
Almost never Once in a While Sometimes Often Almost always
7. Do you think that you can tell your _____ how you really feel about some things?
Almost never Once in a While Sometimes Often Almost always
8. Can you let your _____ know what is bothering you?
Almost never Once in a While Sometimes Often Almost always
9. Are there certain things which your _____ does not allow you discuss with her/him?
Almost never Once in a While Sometimes Often Almost always
10. Can you have your say even if your _____ disagrees with you?
Almost never Once in a While Sometimes Often Almost always

PCC-P

Please use your child's name in the blanks below. Circle one of the answers below each statement.

How often ...

- | | | | | | |
|---|--------------|-----------------|-----------|-------|---------------|
| 1. Can you discuss your beliefs with _____ without feeling restrained or embarrassed? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 2. Is _____ a good listener? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 1. Can _____ tell how you are feeling without asking you? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 2. Are you very satisfied with how you and _____ talk together? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 3. Does _____ try to understand your point of view? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 4. Are there things you avoid discussing with _____? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 5. Do you discuss child-related problems with _____? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 6. Does _____ insult you when he/she is angry with you? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 7. Do you think you can tell _____ how you really feel about some things? | Almost never | Once in a While | Sometimes | Often | Almost always |
| 8. Does _____ tell you about his/her personal problems? | Almost never | Once in a While | Sometimes | Often | Almost always |

9. Does _____ keep his/her feelings to him/herself rather than talk about them with you?
- Almost never Once in a While Sometimes Often Almost always
10. Does _____ hide being angry?
- Almost never Once in a While Sometimes Often Almost always
11. Do you encourage _____ to think about things and talk about them so that he/she can establish his/her own opinion?
- Almost never Once in a While Sometimes Often Almost always
12. If _____ is upset is it difficult to figure out what he/she is feeling?
- Almost never Once in a While Sometimes Often Almost always
13. Does _____ let things pile up without talking or dealing with them until they are more than you and he/she can handle?
- Almost never Once in a While Sometimes Often Almost always
14. Does _____ let you know what is bothering him/her?
- Almost never Once in a While Sometimes Often Almost always
15. Are there certain topics that you do not allow _____ to discuss with you?
- Almost never Once in a While Sometimes Often Almost always
16. Does _____ admit mistakes without trying to hide anything?
- Almost never Once in a While Sometimes Often Almost always
17. Can _____ have his/her say even if you disagree?
- Almost never Once in a While Sometimes Often Almost always
18. Do you and _____ come to a solution when you talk about a problem?
- Almost never Once in a While Sometimes Often Almost always