

**PSYCHOLOGICAL DISTRESS AND ITS RELATIONSHIP
TO BULLY/VICTIM PROBLEMS AMONG
CHILDREN AND EARLY ADOLESCENTS**

by

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ABSTRACT

Previous research has suggested that bullying may be considered the most prevalent form of violence among schoolchildren (Batsche & Knoff, 1993). Bullying and victimization is being increasingly recognized as a psychologically harmful aspect of childhood for significant percentages of children (Slee, 1995). The purpose of this study was to examine the prevalence, age/grade, and gender trends of bullying and bully-victimization among elementary-aged Canadian students. The second aim of the present study was to extend the investigation of the association between bullying and victimization and social-emotional health by examining depression, anxiety, and self-esteem among children involved in bully/victim problems.

Self-report measures were administered to 417 children (210 girls, 207 boys) ranging in age from 9 to 12 years. Measures included the Bully-Victim Inventory (BVI: Reynolds & Arndt, 1997), the Reynolds Child Depression Scale (RCDS: Reynolds, 1989), the Revised Manifest Anxiety Scale (RMAS: Reynolds & Richmond, 1985) and the Self-Esteem Inventory (SEI, Coopersmith, 1967).

Results revealed that 9.4% of the children acknowledged that they engaged in significant bullying and 18.9% reported being victims of bullying. As predicted, a higher percentage of elementary boys (13 %) as compared to girls (5.7%) were involved in the bullying of other children and a higher percentage of boys (23.7%) than girls (14.3%) were identified as victims. Girls were equally likely to become victims of bullies regardless if they were in lower (grades 4 and 5) or higher(grades 6 and 7) elementary grades. Tboys, on the other hand, were more likely to be victims of bullies when in lower as compared to higher

grades. The percentage of boys identified as bullies in lower (grades 4 and 5) as compared to higher grades (grades 6 and 7) was not significantly different. Consequently, it may be implied that, among elementary boys aged 8 to 12 years, bullying involvement may not be necessarily related to age. Findings from multiple regression analyses indicated that anxiety and depression were moderately related to victimization among boys and girls. This finding highlights the importance of assessing social-emotional factors such as level of anxiety and depression among youngsters identified as victims of bullying. The association between self-esteem and victimization for boys and for girls was not found to be significantly related to victimization. The results of this study lend support for the association between social-emotional factors and bullying behaviours among elementary-aged boys and girls. That is, multiple regression analyses revealed a moderate relationship between bullying behaviour and depression for girls but not for boys. However, anxiety and self-esteem were not significantly related to bullying among girls. Among boys, a significant although low relationship was found between self-esteem and bullying involvement.

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CHAPTER ONE

INTRODUCTION

‘Very well then, let’s roast him’, cried Flashman, and catches hold of Tom by the collar: one or two boys hesitate, but the rest join in. East seizes Tom’s arm and tries to pull him away, but is knocked back by one of the boys, and Tom is dragged along struggling...
(Thomas Hughes, Tom Brown’s Schooldays)
(1857)

Bullying and victimization among children and adolescents is recognized as a very old phenomenon (Olweus, 1991a). However, it has only been in recent years that a body of research literature has begun to emerge on the subject of bullying. Public and professional interest in the study of bully/victim problems among children has increased dramatically in the past decade as awareness has risen about the “considerable suffering bullying causes to individual students and the damaging effect it can have on the school atmosphere” (Sharp, 1995, p. 81). There is growing recognition and widespread concern among researchers, clinicians, educators and parents that bullying is a prevalent and often overlooked and underrated problem facing today’s children. Since 1985 an upsurge of interest in the study of bully/victim problems among children dramatically increased throughout the UK after the well-publicized suicide of 13-year-old Mark Perry who tragically ended his life by cycling into the path of an oncoming van after being continually bullied by a group of boys (Whitney, Nabuzoka, & Smith, 1992). To date, however, minimal research attention has focused on the nature and psychological impact of bully/victim problems among youth.

One of the obstacles in studying bullying is that this form of anti-social behaviour is generally kept well hidden from teachers, parents and other adults (Tattum, 1993). Research findings suggest that bullying commonly occurs away from adult supervision at times and

places such as on the way to and from school, on the playground or school field, or in the classroom and hallways at school (Blatchford, 1993; Olweus, 1991a; Sharp & Smith, 1991; Stephenson & Smith, 1989; Ziegler & Rosenstein-Manner, 1991). Because bullying is often a secretive activity it is suggested by Tattum (1993) that societal perceptions have developed that regard bullying as an inevitable part of childhood and adolescence which, if ignored, would go away on its own. Although many adults have witnessed, experienced, or encountered bullies in some form throughout their lives, current research suggests that many educators and parents underestimate the severity and incidence of bullying in childhood and the psychological damage caused both to victims and bullies (Besag, 1989; Tattum, 1993; Pepler, Craig, Ziegler, & Charach, 1994).

The Nature of Bullying

To determine the complex nature of bullying, it is critical to identify the factors and behaviours that constitute bully-victim interactions. In the past 30 years, the phenomena of bullying among children has been investigated from different perspectives, and as a result, Besag (1989) argues that research findings may be confounded by the terminology used to define bullying and victimization. Although difficulties have arisen in recent research investigations due to the lack of a universally accepted operational definition of bullying (Farrington, 1993), in general, researchers concur that bullying comprises several important aspects. Specifically, most researchers investigating bully/victim problems adopt the definition of bullying behaviour provided by Olweus (1991a) who states that

“A person is being bullied when he or she is exposed, repeatedly over time to negative actions on the part of one or more persons (p. 413)”.

Negative actions include either physically or verbally aggressive behaviors or psychological attack or intimidation behaviours intended to cause harm, fear, or distress to the victim.

Bullying may take the form of subtle social ostracism such as name calling; dirty looks; embarrassing, teasing, verbal attacks; threats of attacks; malicious gossip; exclusion; and extortion of money to more extreme forms involving severe physical abuse or even death threats (Garrity, Jens, Porter, Sager, & Short-Camilli, 1996; Tattum 1993).

Bullying behaviours constitute repeated actions or attacks which are often sustained over a prolonged period (Besag, 1989; Boulton & Underwood, 1992; Olweus, 1978). Bullying excludes fighting between children of equal strength or occurrences of random attacks against youngsters, as bullying behaviour is also characterized by a power differential with the more powerful person (bully) oppressing and intentionally inflicting hurt, injury, distress and discomfort upon the less powerful one (victim) (Batsche & Knoff, 1994; Besag, 1989; Olweus, 1991b; Pepler, Craig, Zeigler, & Charach, 1994; Slee, 1993; Smith & Thompson, 1989). Bullying also presumably occurs in the absence of provocation with the bully perceived as stronger than the victim (Hoover, Oliver, & Hazler, 1992; Smith, 1991). Researchers Connell and Farrington (1996) suggest that bullying behaviours overlap with aggression but are also distinguishable from aggression. For example, some forms of bullying (e.g., name calling) do not involve aggression and some types of aggression do not involve bullying (e.g., fighting between individuals of equal strength).

Research studies suggest that bullying can be carried out by one person or a group (Olweus, 1979;1984;1991a; Smith & Thompson, 1989). A distinction is frequently made in the research literature between indirect and direct bullying (Pepler et al., 1994). Direct bullying may be characterized by open or overt attacks on the victim such as direct physical

violence in the form of pushing, shoving, hitting, stealing or threatening with a weapon. In contrast, indirect bullying can be equally or in some cases more emotionally hurtful or psychologically damaging (Tattum, 1993). Indirect bullying is characterized by subtle or covert tactics, as this form of bullying may take the form of exclusion from the group, social isolation, teasing, taunting, gossiping, mocking, being set up to look foolish or giving the victim "dirty looks" (Olweus, 1994; Tattum, 1993; Besag, 1989).

Context of the Problem

A great deal of the empirical research examining the nature and extent of bullying behaviour in youngsters has emerged from Scandinavian countries (Olweus, 1978;1984; 1991a;1991b). Research studies have also been conducted in other countries, including England (e.g., Boulton & Underwood, 1992); Australia (e.g., Rigby & Slee, 1993); the United States (e.g., Perry, Kusel, & Perry, 1988); and Canada (e.g., Pepler, Craig, Ziegler, & Charach, 1994; Ziegler, Charach, & Pepler, 1992). A general conclusion that may be drawn from these research findings is that bullying among children may be considered a frequent and normative behaviour in a number of countries and cultural contexts.

Olweus (1991b) suggests that bullying behaviours in youngsters has taken on more aggressive or overt violent forms and occur more frequently than a decade ago in Norway. Recent investigations into what Tattum (1993) has called "the most malicious and malevolent form of anti-social behaviour practiced in our schools" (p. 3) suggests that, in an international context, 1 in 5 schoolchildren will be exposed to some form of bullying during their school years (Batsche & Knoff, 1994).

The incidence of bully/victim problems reported in current studies and the research literature reveal several general trends. For example, there appear to be distinct gender

differences in the frequency of victimization and bullying among children. Research suggests that boys are involved in bullying others and being bullied significantly more than girls (Boulton & Underwood, 1992). Others suggest that up to twice as many boys than girls are victims of bullying or bully other children (Roland, 1989; Lowenstein, 1978). Conversely, findings from recent research investigations indicate that boys and girls are subjected to victimization to the same extent (Whitney & Smith, 1993; Ziegler & Rosenstein-Manner, 1991). In regard to age trends, research reveals that the incidence of bully/victim problems tend to decrease with age (Byrne, 1994). For example, in an extensive study involving over 130,000 students between 8 and 16 years, Olweus (1991a), demonstrated that age influenced the extent to which youngsters reported victimization by peers as 12% of 8 to 12 year olds compared to 4% of 13 to 16 year olds revealed being bullied “now and then or more frequently”. With regard to age differences among 8 to 12 year old children, results from research studies do not indicate significant differences as the frequency of bully/victim problems across this age group is similar (Olweus, 1991a,1993; O’Moore & Hillery, 1989). Another disturbing aspect of bully/victim problems among children is the stability of this pattern (Olweus, 1978;1979). Research findings suggest that victims are targets of both indirect and direct bullying behaviour for a considerable period of time because this problem tends to be persistent (Roland, 1989; Slee, 1995; Stephensen & Smith, 1989). Others have suggested that many children are faced with this distressing and extremely stressful problem for months and sometimes years on end because this problem does not tend to go away on its own (Besag, 1989).

Because of escalating violence in our schools and communities, interpersonal aggression in the form of bullying has also become an increasing topic of concern among the

media, parents, students and educators. This may stem, in part, from the growing perception in our society that aggressive behaviour among children and adolescents has become more confrontative and violent (Day, Golench, MacDougall, & Beals-Gonzalez, 1995). As a result, for the many children who experience being bullied by other children, this distressing, social situation can have very serious consequences. Recent research examining the relationship between anxiety and children caught in the bully/victim cycle of violence suggests that 29.4% of boys and 31.8% of girls in grades 3 to 7 feel "unsafe from bullying at school" and are often "too scared to ask for help" if bullied at school (Slee, 1994). As Olweus (1993) points out, the repeated victimization experience may lead to permanent anxiety, insecurity, low self-esteem, and low self-confidence in significant numbers of youngsters affected by this complex and enduring problem.

In a recent overview of the bullying literature, Batsche and Knoff (1994) suggest that "bullying may be the most prevalent form of violence in the schools and the form that is likely to affect the greatest number of students" (p. 166). Clearly, there is a growing sense of urgency to explore the nature and extent of bully/victim experiences in our schools.

Examining the nature and the implications of bullying behaviour is particularly important, as information about the prevalence, and risk factors associated with the bully-victim cycle of violence may help guide educators, parents and health professionals develop appropriate and successful interventions for youngsters who experience bullying problems during childhood.

It is generally accepted that the school system plays a crucial role in identifying children who have social, emotional, behavioural and academic problems that may require special assistance (Sandford, Offord, Boyle, Peace, & Racine, 1992). Unfortunately, however, another disturbing aspect of bully/victim problems is the finding that both parents

and teachers tend to underestimate the frequency of bullying behaviour among children and adolescents (Olweus, 1993). Many victimized children do not feel that teachers respond adequately to bullying problems among students (Hoover, Oliver, & Hazler, 1992) and, as a result, may not feel supported. According to a study by Boulton and Underwood (1992), bully/victims problems are not receiving sufficient attention in the schools as only approximately one-third of elementary students in the UK reported that teachers "almost always" try to stop bullying at school. Another disturbing aspect of this problem is that bully/victim problems are often kept hidden from parents and teachers as many victimized youngsters refrain from sharing their painful secret (Hoover et al., 1992; Stephensen & Smith 1989).

Justification of the Study

The phenomenon of bullying is a serious problem which can no longer be ignored. Research findings suggest that bullying behaviour may be viewed as an identifiable subtype of aggressive behaviour (Slee, 1993; Dodge & Coie, 1987) that may have serious behavioural and emotional consequences and may predict problems of violence later in life (Farrington, 1993; Pepler et al., 1994). In an attempt to deal with the pervasive problem of bullying, clinicians and researchers are beginning to examine the nature of bully/victim problems and outcomes that result from victimization and aggression. To date, research findings demonstrate that children who are repeatedly exposed to peer victimization are at risk for poor social-psychological adjustment (Bigbee & Grotper, 1995; Vargo, 1995), poor psychological well-being (Slee, 1995) and future internalizing and externalizing problems (Boivin, Poulin, & Vitro, 1994). Not surprisingly, most children who report being bullied in frequent aversive forms (such as physical assaults; pushing, punching, kicking, or extortion of money) are at risk

for subsequent problems such as increases in self-reported depressive symptoms and social anxiety (Craig, 1998; Olweus, 1993; Parker & Asher, 1987; Slee, 1995; Vernberg, Abwender, Ewell, & Beery, 1992).

Research with elementary school children also indicates that victimized children are often rejected by their peers (Perry, et al., 1988) and self-esteem and self-concept is lower in frequently victimized children (Callaghan & Joseph, 1995; Slee & Rigby, 1993a; Neary & Joseph, 1994). Although research studies have identified children's peer relations as playing a crucial role in the development of adaptive and maladaptive behaviors (Pepler & Craig, 1995; Parker & Asher, 1987), to date, few studies exist in which investigators have focused on the behavioural and emotional correlates that are associated or contribute to the complex problem of bullying and victimization. While a vast amount of research has been conducted on interpersonal aggression in childhood and adolescence, minimal conclusive evidence has been obtained from research investigating the nature, impact, and psychological factors which may be associated with bully or victim experiences in childhood even though research indicates that many youngsters find the bullying experience to be emotionally troublesome and distressing (Hoover et al., 1992).

From a review of the relevant literature, relatively little research attention has been devoted to examining the psychological or emotional well-being of children involved in the bully/victim cycle of violence especially with regard to the coexistence of internalizing problems such as depression and anxiety. To date, however, research evidence is fairly conclusive that children who are exposed to distressing victimization experiences and/or repeatedly bully other children, are at risk for negative social, emotional and behavioural outcomes.

Comorbidity of Externalizing and Internalizing Problems in Childhood

For the most part, it has only been in recent years that researchers have begun to recognize the coexistence of depressive disorders with other forms of emotional and behavioural problems (e.g., aggression, phobic behaviour) in childhood (Anderson & McGee, 1994). There has been an increased recognition in the literature of the co-occurrence of overt, externalizing problem behaviours such as disruptiveness, antisocial tendencies and aggression with depressive disorders in youngsters. In a review of recent epidemiological studies of childhood and adolescent depressive disorders, Fleming and Offord (1990) reported that externalizing disorders such as conduct problems could be found in the presence of depressive symptomatology in significant numbers of children and adolescents. In a similar vein, Capaldi (1991) examined differences in the overall adjustment of boys who present both depressive symptoms and conduct problems compared to boys who present conduct problems only and found that boys with conduct problems and depressed mood demonstrate the poorest adjustment. More specifically, results of this study suggest that boys with both conduct problems and depressive symptoms were more at-risk for failing to develop competent academic skills and peer relations. Panak and Garber (1992) have found that increases in self-reported depressive symptoms in elementary schoolchildren were associated with increases in aggression, but this relation was mediated, in part, by perceived increases in peer rejection. Although bullying behaviours and conduct problems among children differ with regard to the form, intensity, and severity of the exhibited problem behaviours, commonalties may exist between conduct problems and bullying in childhood. Aggressive behaviours and involvement in overt, externalizing, and disruptive problem behaviours predominantly directed towards

others, appear to be common behavioural tendencies exhibited among children with conduct disorders or among children involved in bullying.

Other researchers such as Achenbach and McConaughty (1992) have suggested that children who experience behavioural and emotional problems that are externalizing in nature such as conduct problems, antisocial behavioural tendencies or aggression often exhibit a wide range of behavioural characteristics and symptoms that are internalizing in nature such as feelings of worthlessness, feeling frequently anxious or fearful, lacking confidence or wanting to withdraw socially from others. Depressive symptoms such as dysphoric mood (feeling irritable, unhappy, sad or blue), feeling hopeless, crying frequently, and feeling fatigued, uninterested or unmotivated may co-exist in youngsters who have externalizing disorders (Reynolds, 1992; Reynolds & Johnston, 1994). In a recent chapter on the nature and study of depression in children and adolescents, Reynolds and Johnston (1994) conclude that "the current state of our understanding of depression in children and adolescents suggests that depression in young people, as in adults, is a relatively common mental health problem that often presents itself along with other forms of psychopathology (p. 11)".

Bully/Victim Experiences and Internalizing Problems

While there is empirical support for the association between being victimized and later adjustment problems (Parker & Asher, 1987), a smaller literature relates symptoms of depression with bullying, aggressive tendencies or victimization experiences in childhood (Slee, 1994). What has been generally overlooked in the study of bullying behaviour is the psychological impact and possibly damaging emotional effect that this stressful and complex problem has on today's youth. Because the development of anxiety and depressive disorders in school-aged children may be associated with undesirable life events, such as repeated

victimization (Goodyer, 1990), the childhood problem of bullying and bullying others may have widespread consequences.

Current research findings from Slee and Rigby (1993a;1993b), Slee (1994) and Rigby and Slee (1993) suggest poorer outcomes in terms of psychological well-being (e.g., low self-esteem, low self worth, feeling sad, anxious) is associated with youngsters who are both repeatedly victimized or exhibit the tendency to bully other children. While few research studies have explored the relationship between depressive symptom presentation and the tendency to bully others or be victimized by others (Callaghan & Joseph, 1995; Neary & Joseph, 1994; Slee, 1995), results of research to date indicates a moderate relationship between depression and bullying and victimization. Given the prevalence and nature of this highly stressful, and distressing problem facing considerable numbers of youngsters worldwide, further research investigations on this aspect of childhood is both timely and critical. This study, will address these aforementioned research needs in an attempt to further clarify the extent and nature of bullying and victimization among Canadian schoolchildren and to explore the association of psychological health issues and well-being. Literature relevant to the investigation of these research needs is reviewed in the following chapter.

CHAPTER TWO

LITERATURE REVIEW

This review of the literature is divided into four sections. The first section is a review of the research that has investigated the prevalence of bullying in school-aged youngsters. The second section provides a review of the research examining gender and general age trends in the classification approach of subtyping the two categories of victim and bully. The third section is a review of research that addresses the characteristics and consequences that are related to the tendency to be victimized and the tendency to bully. Finally, the fourth section reviews research pertaining directly to the relationship between psychological distress in the form of depression and anxiety among children and adolescents who experience bully-victim problems.

Prevalence of Bullying Behaviour in Children and Adolescents

In the past decade, many empirical studies have been conducted on the topic of bullying and victimization among children and adolescents. Given recent research findings, one conclusion which may be drawn is that bullying is a complex and prevalent problem as considerable numbers of children are involved in bullying behaviour either as bullies or victims (Connell & Farrington, 1996; Olweus, 1991a; Perry, et al., 1988). Research studies, for example, suggest that the prevalence of victimization in school-aged youngsters ranges from 6% to 23%, and 3% to 16% of youngsters engage in bullying other children (Boulton & Underwood, 1992; Olweus 19991a; Stephensen & Smith, 1989; O'Moore & Hillery, 1989; Roland, 1989; Smith, 1991; Slee, 1995).

In the last two decades, the majority of research studies on bullying behaviour among schoolchildren have been conducted in Scandinavian countries (Olweus, 1978;1991a;1993), with a growing body of research on bully/victim problems emerging from many other countries (Tattum, 1993). Although research conducted by Dan Olweus (1994) in Sweden and Norway suggests that the prevalence rates of bully/victim problems in one country cannot be generalized to another, overall, research on bullying indicates that the extent of these problems in childhood and adolescence is enduring and distressingly high in a number of different countries (Boulton & Smith, 1994).

Scandinavian countries

In the early 1970's, Dan Olweus (1978) was one of the first researchers to systematically examine aggression and violence in Scandinavian elementary and secondary schools and to draw attention to bully-victim problems during childhood and adolescence. For example, the intent of one of Olweus's preliminary research investigations initiated in the early 1970's was to assess the frequency of bullying and victimization among Swedish boys in grades 6, 7 and 8 (Olweus, 1994). Structured interviews were conducted with the children's teachers in order to identify the children who were exposed to aggression from others ("whipping boys"/victims), and the children who often oppress or harass other children (bullies). Strict criteria defining "a bully" or "a pronounced whipping boy" was provided to the teachers by the researchers. Analyses of teacher ratings revealed that in a cohort of 516 youngsters in grade 6, 10.1% of the boys were identified as victims and 11.2% were identified as bullies, in the group of children in grade 7 ($n=295$), 10.5% of the boys were identified as victims and 10.1% were identified as bullies and in the group of 215 children in grade 8, 12.5% of the boys were identified as victims and 7.5% were identified as bullies. In addition,

data obtained in this study revealed that 7.4% to 13% of youngsters were identified as both victims of bullying and children who bully others.

Similar findings were reported in a nationwide longitudinal study examining the nature and extent of bully/victim problems among children that was launched in Norway schools in 1983. At the request of the Norwegian Ministry of Education, Olweus conducted large scale studies in both Norway and Sweden in order to address the extent of bullying in schools. Sadly, at this time, the impetus for research and a nationwide campaign against bullying grew out of grave concern as the suicides of three young boys (aged 10 -14), conducted in a one week period, were “in all probability as a consequence of severe bullying by peers (p. 2)” (Olweus, 1993).

In a nationwide study conducted in Norway, data was gathered in 715 primary and junior high schools from over 130,000 students in grades 2 to 9. All participants between the ages of 8 and 16 years anonymously completed Olweus's self-report questionnaire (Bully/Victim Questionnaire, 1989), designed to assess the extent and nature of bully/victim problems among school-aged children. Results of this large scale study, as outlined in Table 1, revealed that 16% of the students acknowledged that they were involved in bully/victim problems as bullies or victims “now and then” or more frequently (“about once a week” to “several times a week”); 9% of these children were identified as victims, and 7% reported that they bullied other children regularly (Olweus, 1984;1991a). More specifically, results indicate that an average of 11.6% of students in primary grades (grades 2 - 6) reported being bullied “now or then” or more frequently, whereas approximately 5.4% of students in junior high school (grades 7-9) reported being bullied at this rate. In terms of bullying others, 7.4% of children in primary grades 2 through 6 reported that they engaged in this behaviour “now and

then” or “more often”, whereas 7% of students in grades 7, 8 and 9 bully others “now and then” or “more often”.

Table 1. Overview of Scandinavian Studies on Bullying and Victimization

Author	Sample	Measures	Prevalence of Bullies and Victims
Olweus (1978)	1026 boys	Teacher Interviews	<u>Grade 6:</u> 10.1% victims; 11.2% bullies <u>Grade 7:</u> 10.5% victims; 10.1% bullies <u>Grade 8:</u> 12.5% victims; 7.5% bullies <u>Note:</u> Prevalence defined as occurring “now or then” or more often.
Olweus (1984)	130, 000 boys and girls	Bully/Victim Questionnaire (Olweus, 1989)	<u>Total Sample:</u> (Grades 2-9): 9% victims; 7% bullies <u>Grades 2-6:</u> 11.6% victims; 7.4% bullies <u>Grades 7-9:</u> 5.4% victims; 7% bullies <u>Note:</u> Prevalence defined as occurring “now or then” or more often.
Olweus (1991a)	2,500 boys and girls	Bully/Victim Questionnaire (Olweus, 1989)	<u>Total Sample:</u> (Grades 4-7). 3% severely bullied 2% severely bullied other children <u>Note:</u> Prevalence defined as occurring “once a week” or more frequently.

Based on the combined results of Olweus’s nationwide study in Norway schools and findings from research conducted in three Swedish communities of over 17,000 students (grades 3-9), incidence rates suggest that one child out of seven is involved in the bully/victim cycle of violence (Olweus, 1991a). In addition, the results of a longitudinal study conducted in Bergen, Norway from 1983-1985 (1991a;1994), reveals that the incidence of more serious bullying or extreme peer victimization involves 1 student out of 20. In this longitudinal study,

more serious bully/victim problems were defined as “occurring about once a week” or more frequently. The method of data collection was Olweus’s self-report questionnaire (1989). Data was collected over a 2-year period from 2,500 students originally in grades 4 through 7. Results indicate that 3% of students were bullied “about once a week” or “more frequently”, and 2 % bullied other children at this rate. As a result, ratings reveal that 5% of students in Norwegian schools were involved in severe bullying problems (Olweus, 1993,1994). Clearly, findings from research conducted in Norway and Sweden indicate that bullying in the schools occurs frequently and bully/victim problems appear to be a common occurrence in the lives of many children (O’Moore & Hillery, 1989).

England and Ireland

Studies determining the prevalence of bullying have also been conducted in England and Ireland (Please refer to Table 2). O’Moore and Hillery (1989), in a community-based study of 783 children aged 7 to 13 years, administered a 14-item self-report questionnaire used in Norwegian studies by Roland (1989) to determine the incidence, nature and effects of bullying and being bullied in Dublin schools. These authors found that 8% of children reported that they were seriously bullied (“once a week” or “more often”), 2.5% bullied others this frequently, 43.3% of children bully others occasionally, and 54.9% of the children reported that they had been occasionally bullied (“once or twice” or “sometimes”). In addition, a bully/victim group was identified as 42.8% of the children who were bullied occasionally, reported that they also bullied others occasionally whereas 3.3% of this group bullied others frequently. In order to further explore the nature of bullying among youngsters, 329 children who were identified as victims of bullying were questioned about the type of bullying experienced. Findings revealed that 68.7% were repeatedly teased, 64.7% indicated

that they were being picked on, and 66.6% were physically attacked (e.g., being hit and kicked). Additionally, a common form of psychological bullying experienced by 45.6% of the children in this sample was social ostracism, exclusion from peers, and rejection. Frequent rejection defined as "being refused to play or join in activities once a week or more often" was experienced by 5.6% of the victimized children.

Another recent Irish study conducted by Byrne in 1994, examined the extent and nature of bullying in primary and secondary students. In this study, 1,302 children were identified in three groups: the bullies, the victims or the control group (neither bullies nor victims). Group identification was based on teacher assessment, peer ratings and class self-report questionnaires. Findings of this study revealed that the overall rate of bullying and victimization is 10.43%, similar to prevalence rates reported by Olweus (1978). Specifically, 5.37% of the youngsters in primary and secondary schools were identified as bullies whereas 5.1% were identified as victims. It is important to note, however, that the generalizability of these findings are somewhat limited due to methodological difficulties. The author reports prevalence rates based on a methodology combining self-report, peer rating and teacher report data, but fails to define the criteria used to identify the three groups (bully, victim, control). As a result, the estimated prevalence rates reported in this study are somewhat difficult to interpret. In addition, information on the reliability or consistency of agreement between ratings made by the teachers, the peer group and the students themselves was not included.

Data obtained in England suggests that bullying is also a common and serious problem for English school children. For example, in a study assessing the extent of bullying problems among children in primary and junior schools, Stephensen and Smith (1989) administered a questionnaire to 49 teachers in order to assess the extent and nature of bullying behaviour

among 1,078 final year primary school children in grade 6 (10-12 years). Teacher ratings revealed that 23% of the children were involved in bully/victim problems either as bullies or as victims. Specifically, 7% of the youngsters were identified as victims, 10% were identified as bullies and 6% identified as both bullies and victims. The authors also reported gender differences in the frequency of bully/victim problems as significantly more boys than girls were identified as being involved in bullying. Ratings reveal that 68% of the children rated as bullies, 63% of the victims and 65% of the children rated as both victims and bullies were boys.

Similar prevalence rates were found by Boulton and Underwood (1992) in a sample of 296 children (142 girls, 154 boys) from three middle schools in Yorkshire, UK. These authors administered a modified version of Olweus's self-report questionnaire and found that 14.8% of older children (mean age = 11.5 years) and 26.3% of younger children (mean age 8.5 years from one school and 9.5 years from two schools) in this sample revealed that they are bullied "sometimes" or "more often" at school. Nearly 1 child in 5 (17.1%) indicated that they bully others "sometimes" or more often. In the group of children identified as victims, 57.9% reported that the form bullying takes is hitting and/or kicking, whereas, 9.7% reported that they had been bullied in some other way such as having their hair pulled or being sworn at.

Self-report questionnaire data from a large-scale study ($n = 6,758$) conducted by Whitney and Smith (1993) also reveals that a disturbing high level of bullying occurs among junior/middle and secondary school students. In the group of 2,623 youngsters between the ages of 8 and 11 years, 27% were bullied "sometimes" (more than twice during the term) and 10% were bullied "once or several times a week". Secondary students, aged 11 to 16 years, were bullied less frequently as 10% reported they were bullied "sometimes" and 4% were

bullied at least once a week. Youngsters in this sample were also asked about the most common types of bullying experienced and ratings reveal that 50% of junior and 62% of secondary students were repeatedly called nasty names. Being physically assaulted, being threatened, or having malicious rumours or gossip spread about one were the next most frequent types of bullying experienced by both junior and secondary students.

Similarly, Yates and Smith (1989) found that in a sample of 234 secondary students between 13 to 15 years, 22% reported that they had been bullied "now and then" (or more often) and 10% reported being bullied "once a week" (or more often). In this study, approximately 1 student in 8 reported bullying other students at least "now and then" and 1 in 25 students reported doing so at least "once a week". Similar prevalence rates are reported by Whitney, Nabuzoka and Smith (1992). Ahmad and Smith (1990) assessed the extent and frequency of bullying behaviour in over 2, 000 middle and secondary students by a self-report measure based closely on Olweus's (1989) Bully/Victim Questionnaire. Results revealed that 17% of the students had been moderately bullied ("sometimes" or "now and then") and severely bullied ("once a week") and 6% bullied other children at this rate. Likewise, findings from a study conducted by Arora and Thompson (1987) indicated that in response to questions on the frequency and nature of being bullied, 12 to 24% of youngsters 12, 13 or 14 years old reported that someone either tried to kick, hurt, or threaten them once or more than once during the previous week. Other research in England suggests an incidence of up to 1 in 5 children are subjected to bullying, and up to 1 in 10 children bully others (Sharp & Smith, 1991; Smith, 1991; Smith & Thompson, 1989; Whitney & Smith, 1993).

Table 2. Overview of Studies conducted in England and Ireland

Author	Sample size	Ages or Grades	Measure	Victims	Bullies
O'Moore & Hillery (1989)	787 m = 285 f = 498	7-13 years	Self-report questionnaire	<p><u>Total Sample:</u> 8% seriously bullied (occurring "once a week" or "more often")</p> <p>12.5% male victims 5.6% female victims</p> <p><u>Total Sample:</u> 54.9% occasionally bullied (occurring "once or twice" or "sometimes")</p> <p>59.1% male victims 52.6% female victims</p>	<p>2.5% seriously bullied others</p> <p>43.3% bullied others occasionally</p>
Stephensen & Smith (1989)	1,078	10-12 years	Teacher ratings	6% victims	10% bullies 6% bully/victims
Boulton & Underwood (1992)	296 m = 154 f = 142	Mean ages: 8.5 to 11.5 years	Bully/Victim Questionnaire (Olweus, 1989)	14.8% to 26.3% victims	17.1% bully others "sometimes or more often"
Whitney & Smith (1993)	6,758 m = 3,433 f = 3,325	Primary/Middle grades (N = 2,623)	Self-report questionnaire	<p><u>Primary/Middle Grades:</u> 27% victims</p> <p>38% male victims & 37% female victims bullied "sometimes" or more frequently.</p>	Not reported
		Secondary grades (N = 4,135)		<p><u>Secondary Grades:</u> 10% victims</p> <p>17% male victims & 13% female victims bullied "sometimes"</p>	
Yates & Smith (1989)	234	13-15 years	Self-report questionnaire	<p>22% bullied "now and then or more often"</p> <p>10% bullied "once a week or more often"</p>	<p>2.1% bullied others "now and then"</p> <p>> 1% bullied "once a week or more"</p>
Ahmad & Smith (1990)	2,000	Middle grades Secondary grades	Modified version Bully/Victim Questionnaire (Olweus, 1989)	17% victims (Moderately or Severely bullied)	6% bullies

Australia

A number of studies examining the extent and nature of bullying have been conducted in Australia (Rigby & Slee, 1991; Slee, 1994; Slee, 1995; Slee & Rigby, 1993a). Rigby and Slee (1991) administered a self-report questionnaire to assess the extent of victimization among 685 students from Adelaide between 6 and 16 years of age. Similar to results found in previous research, overall estimates revealed that 1 child in 10 experienced being bullied by other children in the following four specific ways: being called nasty names, picked on, hit or pushed around, or being made fun of. These authors estimated that the prevalence of bullying occurring "pretty often" or "very often" was at least 8% and as high as 17%. Results also revealed that the extent of victimization differed with respect to age and gender. Analyses indicated that boys reported being bullied more often than girls and children in the 8 to 11 year age group compared to youngsters in the 12 to 16 age group reported being bullied most. Similarly, research findings by Slee (1993) indicate that the overall prevalence of bullying occurring "everyday" or "1-2 days a week" among 631 children in grades 5-7 ranges from 4% to 19% across three primary schools.

In a recent investigation by Slee (1994), a 16-item self-report questionnaire was administered to 353 children in order to examine the tendency to bully others, the tendency to be victimized, and the tendency to be prosocial. As many as 25.7% in a sample of primary school children between 8 and 13 years were bullied "once a week" or "more often". Similarly, the extent of the bully/victim cycle of violence was examined in a sample of 1,050 Australian children aged 8 to 13 and on average, 23.8% of the youngsters reported being "bullied once a week or more often". In addition, 8.7% to 17.6% of the victims reported that

the most recent episode of bullying they had been involved in lasted more than 6 months.

These findings are also consistent with research conducted by Slee and Rigby (1993b).

Canada

To date, research indicates that bullying is also a pervasive problem in Canadian schoolchildren (Pepler, et al., 1994). The most comprehensive study addressing the phenomena of bullying in Canada was conducted by Zeigler and Rosenstein-Manner (1991) in Toronto for the Toronto Board of Education. In this study, the method of data collection was a self-report measure based closely on the Bully/Victim Questionnaire (Olweus, 1989). Results revealed that an astonishing 20 percent of the youngsters ($n=211$) in grades 4 to 8 (ages 9-14) reported being bullied occasionally ("now and then", or "weekly or more often"), 8% or 17 children reported being bullied on a very frequent basis (daily, in most cases) and 1 out of 7 children admitted to bullying others more than once or twice in the current school term. By examining the frequency of bully/victim problems in this Canadian context, Zeigler and Rosenstein-Manner (1991) conclude that bullying affects the lives of thousands of elementary school children in Toronto. "If 1 in 12 children experiences bullying on a neardaily basis, the number of children affected is about 2,200 in grades 4 to 8 alone (p. 35)".

Additionally, in order to explore the extent of awareness about bullying among youngsters, the children's parents and teachers in Zeigler and Rosenstein-Manner's (1991) study were asked about the frequency and severity of bully/victim problems. Interestingly, there was an underestimation of bully/victim problems by both parents and teachers as 14 percent of parents (compared to 20% of self-reported victims of bullying) reported that their child had been bullied "now and then" or "weekly or more often". In terms of teacher ratings,

7% of teachers reported that they did not know how many students in their class had been bullied at “least once a week in the school this term”.

Further evidence for the prevalence of bully-victims problems in Canadian youth comes from a community-based study conducted by Bentley and Li (1995). These authors examined the extent of bullying among elementary school children and also investigated bullies and victims’ beliefs about aggression. Three hundred and seventy-nine elementary school students in grades 4 to 6 (age range 8-12 years) participated in this study and 23.1% of boys and 20% of girls reported having been bullied “sometimes” or more often at school on a modified version of Olweus’s Bully/Victim Questionnaire (1989). With regard to students who bully others, 11.6% of the participants identified themselves as bullying other students at school “sometimes” or more often. Data gathered also indicates that the three most common form of bullying reported by both victims and “other students” (defined as students who had only been bullied once or twice) was being called nasty names, being physically hurt or having rumors spread about them.

United States

Perry, et al. (1988) conducted a study with children in grades 3 through 5 in order examine the extent of peer victimization in the form of direct physical and verbal abuse in American youngsters. Children were asked to name classmates who engage in physical and verbal victimization and to respond to a 4-point self-report scale asking if they had been bullied by peers (“I get picked on by other kids”, “I get pushed by other kids”, and “I get called names by other kids”). Teachers were also asked to nominate children who bully other students. Results indicated that 10% of children in this sample were severely victimized by peers and verbal victimization was significantly more frequent than physical victimization. In

contrast, results of a large scale study conducted in the U.S. by Franklin (1989) revealed that peer aggression among junior and secondary high school students can take extreme physical and violent forms. Although the extent of verbal and psychological bullying was not explored in this study, findings reveal that among 11, 000 students, almost 50% of the boys and more than 25% of the girls reported that they were involved in a fist fight or a fight involving weapons in the previous year. Additionally, 14% of the youngsters had been robbed, 13% had been assaulted on a bus, and more than 25% of these children had been threatened.

In a more recent investigation, Hoover, Oliver, and Hazler (1992) conducted a retrospective study assessing the extent of bullying among 207 students who resided in three midwest states (Minnesota, South Dakota, Ohio). Ratings reveal that overall, 76.8% of students, aged 12 to 18, reported being bullied at some time during their school years.

Definitions of Bullying

Although the majority of researchers conducting studies on the topic of bullying and victimization in childhood concur with the key elements of Roland's (1989) definition that:

“Bullying is longstanding violence, physical or psychological, conducted by an individual or a group directed against an individual who is not able to defend himself/herself in the actual situation (p. 16).”

the concept of bullying behaviour may be distinguished and defined in subtly different ways.

For example, Bjorkqvist, Ekman, and Lagerspetz (1982) suggest that bullying is a special case of aggression that is social in nature and Tattum (1993) concludes that “bullying is the willful, conscious desire to hurt another and put her/him under stress (p. 8)”. Another widely accepted and adapted definition of bullying in the research literature is provided by Olweus (1994) who defined bullying as:

“repeated, negative exposure to actions over time, including hitting, kicking, threatening, locking inside a room, saying nasty and unpleasant things, and teasing by one or more other students. There has to be an imbalance in physical or psychological strength between the bully and the victim since fights or quarrels between the people approximately the same strength were not counted as bullying (p. 1173)”.

In a recent overview of the literature on bullying, Besag (1989) proposes that there are four important factors to consider when defining bullying:

- 1) “bullying may be verbal, physical or psychological
- 2) it is necessarily a repetitive attack which cause distress not only at the time of each attack, but also by the threat of future attacks
- 3) bullying involves an imbalance of strength by those in a position of power
- 4) it causes distress and makes others feel inferior as there is a deliberate intention to hurt the victim (p. 4)”.

For the purposes of the present study, bullying includes many important factors which must be considered. Bullying often involves violence. Bullying may be physical, psychological, or verbal and may be conducted in an indirect or direct manner. Bullying is often longstanding, it constitutes a repeated action and is conducted by those in position of power against those who are powerless and helpless to resist (Tattum, 1989; Besag, 1989; Roland, 1989; Olweus, 1991a). Bullying is when individuals “use power in a willful manner

with the aim of hurting another individual repeatedly (p. 8)" (Garrity, Jens, Porter, Sager, & Short-Camilli, 1996).

For the purposes of this study, "victim" refers to the recipient of bullying behaviours exhibited by other children and "bully" refers to children who engage in bullying behaviours. The comprehensive definition of bullying adopted for the purposes of the present research study is predominantly based on the "bullying" operational definition used in research studies conducted by Ahmad, Whitney, and Smith (1989).

Assessment and Evaluation of Bullying among Elementary School Children

Three major assessment methods have been used to explore the nature and extent of bullying among children and early adolescents. These methods include teacher ratings, peer nomination and peer ratings, and self-report questionnaires. As previously noted, the majority of empirical studies on bullying and victimization rely on self-report questionnaires to identify the prevalence and nature of this serious problem among children, however, there is a scarcity of studies which address psychometric issues. In addition, although minimal information is available in the literature and research studies on the psychometric aspects of the instruments used to assess bullying and victimization, to date, research indicates that the anonymous self-report method is a valid assessment method to determine the prevalence of bullying among children (Ahmad & Smith, 1990; Smith, 1991).

Research suggests that the self-report method is both a valid and reliable assessment method to use with children exhibiting internalizing problems such as depression (Shain, Naylor, & Alessi, 1990) and it appears to be a viable and suitable method in the identification of children at risk for a number of outcomes, such as suicide and suicidal behaviours (Reynolds, 1993; Reynolds & Mazza, 1994). Moreover, as anonymous self-report allows the

opportunity for youngsters to relate experiences from their perspective, it would appear that they have the most comprehensive knowledge about their feelings and behaviours (Offer & Schonert-Reichl, 1992). Thus, the self-report method was selected in the present study for determining the extent of bully/victim problems among children and exploring internalizing factors (e.g., feelings, thought, behaviours) which may be associated with the bullying and victimization experience.

Researchers who study bullying behaviour among children strongly suggest that it is important to recognize that the means of assessing bully/victim problems is an important one, given the sensitivity of this serious and distressing issue (Whitney & Smith, 1993). As a result, there is growing concern in the current research literature about the lack of sufficient information concerning psychometric issues, in particular, reliability and validity data (Farrington, 1993). Although empirical evidence supports the finding that bullying is surprisingly common among youngsters considering that as many as 1 child in 5 will be exposed to bully/victim problems at some time during their schooling (Batsche & Knoff, 1994; Whitney & Smith, 1993), the terminology specific to the description and identification of bullying and victimization does vary, to some extent, across research studies (Byrne, 1994; Tattum, 1989; Slee, 1994; Slee & Rigby, 1993a; Olweus, 1991a). The lack of an operational criteria to define the phenomena of bullying may also be considered somewhat problematic. Researchers, Besag (1989) and O'Moore and Hillery (1989) conclude that methodological differences (e.g., assessment techniques, sample sizes, terminology differences in defining "bullying" and victimization") across research studies on bully/victim problems among youth make comparisons of results and conclusions on the generalizability of findings difficult to obtain.

In summary, the prevalence of bully/victim problems in school-aged youngsters as reported in the research literature is dependent on how bullying behaviour and victimization is operationally defined as well as the measures used to validly and reliably identify this phenomenon. Thus, the selection of assessment measures to identify children at risk for bullying and victimization is a critical issue when conducting research in this domain. Unfortunately, much of the previous research on the subject of bullying is fraught with measurement (e.g., reliability and validity of measures are seldom reported) and design problems. In response to these problems, the present study will address these issues in the forthcoming Methods section (Chapter 4).

Research on Bullying and Victimization Among Youth

Stability of Bully/Victim Problems in Childhood

Research findings on bullying behaviour as investigated in many studies mentioned this far indicate that bully/victim problems tend to be persistent (Stephensen & Smith, 1989), and often sustained over a long period of time (Besag, 1989; Boulton & Underwood, 1992; Perry et al., 1988). In a review on the literature on bullying, Besag (1989) contends that bullying is frequently handed on from class to class and children often experience being bullied, from year to year. Olweus (1978) found that teacher and peer ratings of students who were identified as either bullies or victims were consistent over a 1 year period. In a recent overview of research findings conducted by Olweus (1993), Olweus concludes that "students who are bullied at a certain period of time also tend to be bullied several years later (p. 27)".

In one investigation conducted by Lagerspetz, Bjorqvist, Berts, and King (1982), the stability of bullying behaviour among youngsters was examined in a sample of 434 schoolchildren between the ages of 12-16. A group of children identified as bullies and a

group of children identified as victims were selected by peer ratings. Results revealed a 93% incidence rate of bullying behaviour over a 1 year period. Likewise, the persistence of bullying among schoolchildren as reported by 49 primary teachers on a sample of 1, 078 students suggests that 89% of identified bullies and 72% of identified victims are involved in bully/victim problems either as bullies or victims throughout the entire school year (Stephensen & Smith, 1989).

In a recent study of bullying behaviour among 1,050 schoolchildren between 8 and 13 years (Slee, 1995), self-report ratings revealed that 8.7% to 17.6% of the victims in this sample reported that the most recent episode of bullying they had been involved in lasted more than 6 months. Additionally, an alarming aspect of these research findings is that 1 in 4 victims of bullying (24.9%) are regularly bullied over a period of "a few months" to "more than six months". Similarly, in a sample of 353 school children between 8 and 13 years, as many as 25.7% report being bullied "once a week" or "more often" and self-report ratings reveal that the duration of bullying episodes lasted a "few months" to "more than six months" for 27.6% of the youngsters identified as victims (Slee, 1993). Similar findings are supported in research conducted by Slee and Rigby (1993b).

Whereas research findings examining the extent of bullying reveal that victimization rates by bullying are alarmingly high among school-aged youngsters, another disturbing aspect of bully/victim problems is the finding that bullying is frequently an on-going aspect of life. As a result, this prevalent problem can make many children's lives miserable for months and sometimes years on end. To date, empirical investigations examining the extent and nature of bullying behaviour among youth indicate that as many as 1 in 5 students suffer frequent and longstanding victimization (Smith & Thompson, 1989). It may be argued that it is reasonable

to conclude that bullying is a prevalent, significant and pervasive issue (Whitney & Smith, 1993) facing many children, parents and educators which can have potentially serious long-term effects if not successfully dealt with.

Bullying Among Boys and Girls: Gender Differences

Several studies demonstrate marked gender differences in the prevalence and nature of bully/victim problems among children and adolescents. Researchers have found that boys report significantly more victimization by physical bullying, whereas girls report more frequent experience of being psychologically bullied by means of tactics such as taunting, exclusion and ridicule (Roland 1989; Hoover, Oliver, & Hazler, 1992; Siann, Callaghan, Glisso, Lockhart, & Lawson, 1994; Rigby & Slee, 1991). Zeigler and Rosenstein-Manner (1991) examined the extent of bullying among youngsters and found that boys are more likely to experience frequent bullying (occurring weekly or more often) compared to girls. Other research studies on bully/victim problems indicate that the general trend is for boys to report being bullied and bullying others considerably more than girls (Boulton & Underwood, 1992; Olweus, 1994; Rigby & Slee, 1991; Smith & Thompson, 1989; Batsche & Knoff, 1994). For example, Olweus (1984) suggests that almost twice as many victims of bullying are boys and bullies are three times more likely to be boys than girls.

While it is generally the case that recent research investigations support the finding that there are significant gender differences in victimization rates, researchers have also identified that girls and boys are equally likely to be bullied (Bentley & Li, 1995; Whitney & Smith, 1993; Smith, 1991). In a recent study of over 6,758 students in junior/middle and secondary school (Whitney & Smith, 1993), self-report ratings of the overall extent of bullying in youngsters between 7 and 11 years suggest that girls tend to be bullied only slightly less than

boys as 37% of girls and 38% of boys report being victimized “sometimes” or “at least once a week” this term. Gender differences in the frequency of being bullied are slightly more pronounced among youngsters in this sample aged 12 to 18 years as results indicate that 13% of girls and 17% of boys report victimization occurring “sometimes” or more frequently. Findings also reveal that boys are bullied almost entirely by boys, whereas girls report being bullied by both boys and girls.

A recent investigation of gender differences in the relationship of bullying among youth conducted by Boulton and Underwood (1992) found that 65.4% of victimized children ($n=143$) reported that the bullying they experienced was conducted only by boys, 19.6% of this sample reported that they were bullied both by boys and girls, whereas 15% indicated that bullying was perpetrated by girls. Similarly, results of a study conducted by Olweus (1993) reveal that 60% of bullied girls (grades 5-7) reported that they had been bullied primarily by boys and more than 80% of bullied boys were bullied predominantly by either one or several boys. On the other hand, only 15-20% of the victims reported that they were bullied by both boys and girls. Similar findings have been reported by Whitney, Nabuzoka, and Smith (1992), who discovered that in a large sample of students ($n=6,758$) boys were bullied predominantly by boys whereas girls were bullied by either girls or boys. Recent research findings by Olweus (1991a) support the conclusion that “boys carry out a large part of the bullying in which girls were subjected” (p. 420).

In a research investigation conducted by O'Moore and Hillery (1989), children ranging in age from 7 to 13 years were asked to complete a self-report questionnaire in order to provide information on being bullied and bullying. Overall, these researchers found that more boys than girls reported being involved in bully-victim problems. In terms of being bullied by

others, 12.5% of boys as compared to 5.6% of girls were frequently bullied whereas 59.1% of boys compared to 52.6% of girls were occasionally bullied. In terms of bullying others "at some time in the past", 19.5% more boys than girls reported engaging in bullying others. When participants were questioned about bullying others "this term", again significantly more boys than girls were involved in this behaviour as 38.5% of boys bullied others compared to 23.6% of girls. Similarly, in a recent study on the extent of bullying in Canadian schoolchildren, Bentley and Li (1995) found that significantly more boys ($n=33$) than girls ($n=6$) identified themselves as bullying others frequently (once a week or more).

Lagerspetz, Bjorkqvist, Berts, and King (1982) investigated the incidence of being bullied and bullying in schoolchildren on the basis of peer ratings. Findings reveal that 13.7% of boys but only 5.4% of girls were involved in bullying. Subsequently, further support for gender differences associated with bully/victim problems can be found in research by Stephensen and Smith (1989). Although this study did not specifically examine the role of gender differences in bullying behaviour among final year primary school children (roughly aged 7 or 8 years), findings indicate that boys were reported as being significantly more involved than girls in bullying and being bullied as rated by teachers. Specifically, 68% of the bullies were boys, the victims were more often boys (63%) and the youngsters identified as both bullies and victims were more often boys (65%). Results from a recent study (Byrne, 1994) on the incidence of bully/victims problems among 1,302 primary and secondary students indicate that 74.28% of the bullies in this sample were boys and 25.72% were girls. Based on teacher and peer ratings, 59.7% of the children identified as victims of bullying were boys and 40.3% were girls (Byrne, 1994).

Types of Bullying

Although the majority of studies on bullying among youth have not examined differences in types of bullying across genders, boys tend to bully in an open and direct way using physical aggression, or threats, whereas girls' bullying tends to take the form of social isolation, spreading nasty rumours, verbal abuse or intentional exclusion from the peer group (Lagerspetz, Bjorkqvist, & Peltonen, 1988; Smith & Thompson, 1989; Besag, 1989; Rigby & Slee, 1991; Olweus, 1991a; Olweus, 1994). While research strongly suggests that boys are often victims of direct bullying in the form of hitting, punching and kicking and girls are more likely to be subjected to indirect bullying such as verbal abuse and social ostracism (Cairns, Cairns, Neckerman, Ferguson, & Garipey, 1989; Perry et al., 1988; Whitney & Smith, 1993), other researchers have found that boys and girls are exposed to roughly equivalent levels of physical bullying and verbal or psychological bullying (O'Moore & Hillery, 1989; Ziegler & Rosenstein-Manner, 1991).

According to Bjorkqvist, Lagerspetz, and Kaukiainen (1992), gender differences are less pronounced in research examining the extent of indirect bullying or psychological bullying which is characterized by teasing, alienation, character defamation, spreading rumours and ostracism. Based on the study of over 7,000 primary and secondary students aged 8, 11 and 15, these researchers found that, overall, indirect aggression rather than direct physical aggression is more typical among girls than boys. However, findings also demonstrate that boys and girls are equally likely to use direct-verbal aggression (e.g., name calling, trying to make the other look stupid) and indirect aggression (e.g., gossiping, suggesting shunning another) to similar extents when 8 years old. Additionally, in a study exploring gender differences in the use of indirect or direct forms of aggressive behaviour among 11 and 12 year

old children, Lagerspetz et al. (1988) reported that verbally-based, indirect methods of aggression such as being called names or having a child say "Let's not be with him or her" did not differ significantly between boys and girls.

Age Trends

In regard to age trends in the frequency of bully/victim problems among children, research findings generally support that the percentage of youngsters reporting instances of being victimized by other children tend to decrease with age and grade (Batsche & Knoff, 1994; Bently & Li, 1995; Pepler & Slaby, 1994; O'Moore & Hillery, 1989; Roland, 1989). Zeigler and Rosenstein-Manner (1991) found results consistent with previous research and report there is a general decline in the frequency of bullying among a sample of 211 students in Toronto schools. These authors found that in a sample of 43 children identified as victims of bullying, 40% were 9 year olds, 30% were age 10 years, 21% were 11 years, 30% were 12 year olds, 8% were 13 years and 5% of the victimized youngsters were 14 year olds. Significant age differences were found in this pattern of victimization supporting the finding that bullying appears more frequently in younger children. Significant age differences in the frequency of bullying behaviour among youngsters is also reported in research by Rigby and Slee (1991). These authors examined age trends in 4 interval age groups (8 to 9 years, 10 to 11 years, 12 to 13 years, and 14 to 15 years) and found that 8 to 9 years olds tended to be bullied significantly more frequently than other age groups. In contrast with these findings, a study conducted by Perry et al., (1988) did not find significant age differences in the prevalence of victimization among 165 children between 8 and 12 years old.

Another important issue related to age trends in patterns of victimization is that bullying is frequently perpetrated by older students or same-age peers. Research by Boulton and Underwood (1992) reveals that in a sample of 296 youngsters, 41% of younger aged children (8 to 9 years old) reported being bullied by older students (12 years and older) whereas 77% of older students reported being bullied by same-age students. Similar findings are supported in research conducted by Olweus (1991a) who reported that in a survey of 83,330 students in grades 2 to 9, more than 50% of the younger victims (ages 8 and 9 years) reported being bullied by students in higher grades. Whitney and Smith (1993) reported that in a large-scale survey of over 6,000 students, 36% of identified victims ($n=1,508$) in junior/middle schools reported that bullying was carried out by students who were older than them and 55% of the victims reported that the bully was in the victim's own class. Relatively speaking, research suggests that the younger students in a school-setting seem to be most at risk for victimization by older children whereas among older aged students, perpetrators of bullying are typically same-age peers (Batsche & Knoff, 1994; Boulton & Underwood, 1992).

Summary Statement

As can be seen from the studies mentioned this far, several aspects of bully/victim problems among children have been investigated in recent years. Research confirms that substantial numbers of children and pre-adolescents are subjected to and partake in bullying behaviour. Recent research investigations estimate that as many as 15% to 38% of all children will be subjected to some form of bullying throughout their childhood (Besag, 1989). Additionally, 5 to 10% per cent of youngsters will suffer from severe bullying (Perry et al., 1988) and approximately the same percentage of youngsters will bully others (Roland, 1989). Sadly, it is evident that a general conclusion that can be drawn from the research literature is

that bullying is a pervasive problem which may have a severe affect on the lives of many children. Unfortunately, for considerable numbers of children, bully/victim experiences have become a very serious and often terrifying problem which, all too often, are kept hidden from parents, teachers and other professionals who may be able to help relieve this disturbing aspect of life that our children are facing.

Social-Emotional Factors Related to Bullying and Victimization Problems Among Children

Comparatively few studies have been carried out to examine the consequences and emotional impact of being the victim of a bullying situation. Researchers in this area have noted that victims tend to be unpopular and rejected by their peers, tend to have low self-esteem, and poor social skills (Farrington, 1993). Research by Olweus (1991b), Perry et al. (1988), and Stephensen and Smith (1989) suggest that victims appear to be socially ineffective, generally unpopular with their peers, insecure, lonely and abandoned at school, anxious, and lack in self-confidence. Research by Perry et al. (1988) identified victims as having fewer friends and less peer support and for being at risk for peer rejection.

In a review of the literature on bullying, Besag (1989) remarked that, children who personally experience bullying "may be suffering from a sense of degradation, humiliation and shame, in addition to intense anger and fear"(p. 53). As well, because many victimized children prefer to keep their distress to themselves, it is understandable that a bullied child may feel isolated, lonely, and helpless to control the threatening situation that surrounds them (Tattum, 1993). As a result, for many children who experience the emotional turmoil of being the victim of a bullying situation, Besag (1989) suggests that "a gradual but pervasive erosion of self-esteem takes place"(p. 53).

Self Esteem and Self Concept

With regard to the psychological well-being factors of self esteem and self concept, only five studies to date have attempted to explore these factors and the relationship to bully-victim problems in youth. Although scant, research investigations demonstrate the relationship between low self-esteem and the tendency to be victimized by other children. The relationship between bullying others and self-esteem remains unclear and it is this relationship that continues to warrant further examination.

O'Moore and Hillery (1991) conducted a study on the incidence of bullying and victimization among 783 children (285 boys and 498 girls) between 7 and 13 years and also examined the relationship between self-esteem and bully/victim problems. The extent of bullying and victimization was measured by a self-report questionnaire and self-esteem was assessed by the Piers-Harris Self-Esteem Scale. Findings revealed that bullied children (victims) had significantly lower self-esteem ($F=11.22$, $p<.001$) than children who had never been bullied. In addition, bullies had significantly lower self-esteem ($F=11.20$, $p<.001$) than children not involved in bullying other children. In contrast with earlier research on bullying and victimization as related to self-concept and self-esteem, results of this research study indicate that bullies share with victims feelings of low self-worth and inadequacy (O'Moore & Hillery, 1991).

In general, research findings contradict the relationship between the tendency to bully and low self-esteem, and instead suggest that youngsters who bully have positive self worth or self esteem. Research by Olweus (1978) found that youngsters who bully generally have a positive attitude about themselves. Olweus (1991a) asserts that research findings support the conclusion that as a group, youngsters who bully have average feelings of anxiety and

insecurity and do not suffer from unusually low self-esteem as they are generally no different from other children in this regard.

Empirical investigations examining the self-esteem of youngsters involved in bully-victim problems have also been conducted by Rigby and Slee (1993). Specifically, these researchers conducted a study aimed at examining the relationship of psychological well-being defined in terms of self-esteem, levels of happiness and liking for school associated with the experience of bullying others or being victimized by other children. Their sample included 1,162 students between the ages of 12 to 18. Findings from this study indicated that youngsters who bully others do not have significantly lower self-esteem than "normals" as measured by Rosenberg's Self-Esteem Scale. On the other hand, a significant but low negative relationship was found between the tendency to be victimized and self-esteem ($r = -.22$, $p < .001$).

Extending this research, the relationship of bully/victim behaviour to self-esteem was also supported in a study conducted by Slee and Rigby (1993a). These researchers recently addressed the hypothesis that the tendency to be victimized would be associated with introversion and low self-esteem. Their results revealed that in a school-based sample of 214 elementary boys ranging in age from 7 to 13 years, youngsters identified as bullies could not be differentiated in terms of self-esteem from boys considered victims or boys considered non-victims and non-bullies ("normals"). However, findings revealed that victims had significantly lower scores on the Coopersmith Self-Esteem Inventory than not involved children ("normals") as determined by post hoc Scheffe tests ($p < .05$).

In addition to exploring the relationship between self-esteem and bullying or victimization experiences, over the past three years, research conducted by Neary and Joseph

(1994) and Callaghan and Joseph (1995) has focused on the association between peer victimization, self-worth, perceptions of competence, and depressive symptomatology. Callaghan and Joseph (1995) found that among 120 schoolchildren (63 boys and 57 girls) between 10 and 12 years, peer victimization was moderately associated with negative social acceptance ($r = -.49, p < .001$) and low self-worth ($r = -.55, p < .001$). In addition, depression was moderately related ($r = 0.47, p < .001$) to peer victimization. Similar results are reported in research conducted by Neary and Joseph (1994) in a sample of 60 elementary schoolgirls.

Depression

Given the nature of the bullying and victimization experience, it would seem that bullying creates harm, negative consequences and distress to both victims and bullies and has negative consequences on the mental health of children involved in these situations (Connell & Farrington, 1996). In a review of the literature, Besag (1989) documents research conducted by Elliott (1986) who carried out a large-scale study on abuse involving 4,000 children. On the basis of structured interviews with these at-risk children, Elliott found that 38% of the youngsters indicated they had been bullied by other children "badly enough to describe the experience terrifying" (p. 11).

Research conducted by Lewis, Gottesman and Gurstein (1979), over two decades ago, suggests that emotional reactions to a crisis often constitute lowered self-esteem, depression and lower achievement and learning. As a result, boys and girls may manifest divergent patterns of symptoms or behaviours when reacting and coping with distressing experiences or crisis in childhood, such as bullying.

With regard to the association of psychological distress in terms of depression and the experience of being victimized by other children or bullying other children, much less is known. While researchers such as Dumas, Neese, Prinz, and Blechman (1996) suggest that aggressive tendencies, depressive symptoms, and peer rejection overlap and are associated in middle childhood, research about the extent of the coexistence of these relationships is lacking in the literature. Although research has established that depressed youngsters often present with aggressive behaviour problems (Puig-Antich, 1982), the study of the relationship between aggressive behaviour in the form of bullying tendencies and the association to increased levels of depressive symptomatology warrants further investigation. As well, the study of gender differences and the relationship between bully/victim problems and psychological distress in the form of depressive symptomatology warrants further exploration. As Sroufe and Rutter (1984) suggest, the manifestation of depressive symptoms in childhood are often exhibited in different ways for boys and girls. On the one hand, young boys often exhibit an externalizing pattern of characteristics associated with conduct and disturbances problems (e.g., bullying, aggressive tendencies, stealing) and, on the other hand, depression in girls is associated with an internalizing pattern of symptom expression such as passivity and turning inward. Given the nature of bully/victim experiences, it would seem that bullying may create negative consequences and distress to both victims and bullies and these youngsters may share certain cognitive, emotional, and behavioural difficulties which may put them at risk for negative mental health outcomes.

Although in a recent study conducted by Sharp (1995), the relation between depressive symptom presentation and youngsters experiences of bullying was not specifically examined, this study offers rich insight into the psychological well-being and detrimental effects of

bullying on emotional and physical health. In this study, the effects of bullying on the personal well-being of 723 students ranging in age from 13 to 16 years was examined. Students completed self-report questionnaires on recent experiences of bullying and the perceived stressfulness of their experience(s). Findings revealed that 43% of students ($n=311$) reported being bullied. The most prevalent form of bullying was name calling and physical aggression. In terms of students perceived stressfulness of the bullying experienced, 34% of the students reported that bullying was “stressful” and 11% reported that being bullied was “highly stressful”. Although significant gender differences were not found in the kinds of bullying students found stressful, overall, boys reported verbal and indirect bullying to be most stressful and girls found direct/physical bullying to be most stressful. Findings also reveal that a disturbing number of students reported negative and detrimental effects as a result of bullying which clearly impacts psychological health and learning. For example, 44% of bullied students reported that they felt irritable, 35% reported that they felt panicky or nervous at school, 32% experienced recurring memories of the bullying incident(s), 29% reported impaired concentration, and 22% of the students reported actually feeling physically ill, as a result of being bullied. Clearly, given research findings, there is cause for concern as the emotional and psychological well-being of significant numbers of youngsters may be in jeopardy.

Although researchers such as Reynolds (1992) suggest that “depression in youngsters may be one of the most overlooked and undertreated psychological disorders of childhood and adolescence (p. 158),” to date, few studies have implicated a relationship between bully/victim problems and depressive symptoms among school-aged children (Slee, 1995). While other research (Callaghan & Joseph, 1995; Neary & Joseph, 1994; Sharp, 1995) has implied that

dysphoric mood and depressive symptoms are common among children who experience repeated victimization, further studies have failed to adequately explore the extent of this relationship.

Slee (1995) examined the extent of depressive symptoms among 353 Australian elementary schoolchildren (mean age = 10.3 years). All participants were administered the Depression Self Rating Scale (DSRS) which is an 18-item self-report questionnaire designed to assess depression in children aged 7 to 13 years. Items are rated on a three point scale ranging from "never" to "most of the time" and higher scores represent higher levels of depression. The cut off score of 11 is used to distinguish depressed from non-depressed children (Slee, 1995). Findings from this study indicate that the tendency to be victimized was moderately associated with depression for boys ($r = .48, p < .001$) and girls ($r = .53, p < .001$) whereas the relationship between the tendency to bully and depression among boys ($r = .36, p < .001$) and girls ($r = .36, p < .01$) were lower. Boys and girls who bully other children also reported significantly greater unhappiness and dislike for school. Research findings by Neary and Joseph (1994) reveal that among 60 elementary girls between 10 and 12 years, higher scores on the Peer Victimization Scale were related to higher scores on the 18-item self-report Birleson depression questionnaire ($r = 0.60, p < .001$). Similarly, Callaghan and Joseph (1995) found that higher scores on the Peer Victimization Scale were associated with higher scores on the Birleson depression questionnaire ($r = 0.47, p < .001$) among 120 elementary students between 10 and 12 years old.

An important issue that has only been given minimal attention in the research literature is the role of gender differences as related to levels of depressive symptom presentation among victimized children and among children who bully others. In general, research studies

investigating gender differences in the prevalence of depressive symptoms among children and early adolescents yield contradictory findings. Researchers, Cohen et al., (1993), found that the prevalence of depressive disorder is comparable among boys and girls in middle childhood (ages 10 to 13 years), however, Rutter (1986) suggests that the prevalence of depressive symptoms are slightly higher among boys than girls during childhood. Several research studies have also found that the prevalence of depressive disorder among early adolescent girls (13 and 14 years old) is significantly higher than for same-aged adolescent boys (Cohen et al., 1993; Brooks-Gunn, 1991). The present study sought to expand previous research studies by examining the nature of gender differences and depressive symptoms among children by specifically exploring the role of bullying and victimization experiences as related to levels of depressive symptomatology exhibited among girls and boys.

Research findings examining psycho-social health issues and bully/victim problems among children also reveal that victimized children suffer poor psychological well-being in terms of less happiness at school (Slee, 1995; Slee & Rigby, 1993a). In a survey conducted by Branwhite (1994) with secondary students, retrospective data suggest that students report "there were cognitive and emotional sequelae deriving from the adverse behaviour of their peers (p. 65)". Panak and Garber (1992) suggest that increases in aggression over a 1-year period is significantly associated with increases in self-reported depressive symptoms. Findings reveal that this association between increased aggression and increased depressive symptoms was mediated, to some extent, by students' perceived rejection from same-age peers. The participants in this study were 521 elementary school children in grades 3, 4 and 5 residing in the US. In a study comprising nearly 300 elementary students, Boulton and Underwood (1992) report that victims who are bullied "sometimes" or "several times a week"

were most likely to report feeling unhappy and lonely at school and to report having fewer friends. According to results by Byrne (1994), youngsters identified as victims and bullies demonstrate diverse psychological factors and behaviour characteristics. For example, compared to bullies, victims were found to be less forthcoming, more withdrawn, and more depressed. Results from structured interviews conducted with children identified as bullies ($n = 70$) or victims ($n = 67$) reveal that name calling and intimidation (indirect bullying) was the most common form of bullying experienced by these youngsters. The author reports that many children indicated that indirect or psychological bullying was often more hurtful than physical forms of bullying.

Feelings of misery and depression which cause suffering for many children and adolescents are often not detected by parents, teachers and other adults (Donnelly, 1995). The common symptom expression of depression in children includes dysphoric mood (feeling sad or blue), anhedonia, lowered self-esteem, increased worry or increased anxiousness, crying spells, tearfulness, problems in sleeping or eating, and inability to interact appropriately with peers (Reynolds, 1989; 1990). Given that depression among children and adolescents is not expressed as one symptom, but exhibited as a group of symptoms (Reynolds, 1992), it is difficult for adults to identify at-risk youth, such as children involved in bullying and victimization experiences. Thus, the present study sought to explore the role of depressive symptom presentation as related to children's involvement in bully/victim problems.

Depression and Anxiety Disorders

Compas and Hammen (1996) report that one of the most frequent coexisting diagnoses in children and adolescents with depressive disorders is an anxiety disorder. Depressive disorders and anxiety disorders in childhood are conceptualized as "a class of disorders that are

considered inner-directed, in which core symptoms are associated with overcontrolled behaviours (p. 1)” (Reynolds, 1992). Research studies have reported that 40% to 75% of children and adolescents with depressive disorders also exhibit significant anxiety-related symptoms (e.g., worry, temper tantrums, over-sensitivity, social withdrawal or avoidance) and anxiety disorders (Kovacs, 1990; Kovacs, Gatsonis, Paulauskas & Richards, 1989; Rohde, Lewinsohn & Seeley, 1991).

Children faced with repeated victimization or bullying have been described by researchers such as Olweus (1994) to be more likely to suffer from low-esteem and low self-worth and increased symptoms of anxiety as adults. Vernber, Abwender, Ewell, and Beery (1992) and Parker and Asher (1987) report that frequent aversive exchanges with adolescent peers have been associated to increases over time in self-reported depressive symptoms and social anxiety, and to decreases in a sense of social acceptance. Victims of bullying also report being afraid to go to school because of the fear of being victimized (Reid, 1989), or feeling panicky or nervous in school (Sharp, 1995). While research implies the association between anxiety symptomatology and bully/victim problems, a scant number of studies (Slee, 1994; Craig, 1998) have empirically investigated the relationship between anxiety and bully/victim experiences.

Research findings from Craig (1998) reveal that among 546 children in grades 5 through 8, children identified as victims reported significantly higher anxiety than comparison children and bullies. Slee (1994) examined the anxiety experienced by children involved in bully/victim problems by focusing on the nature and extent of social anxiety and fear among 353 primary aged schoolchildren. In order to identify “some of the anxiety provoking outcomes of being bullied (p. 102)”, Slee (1994) provided students with a series of questions

related to children's perceptions of safety at school. Ratings from 317 students revealed that 9.4% stayed away from school in order to avoid being bullied whereas 28.9% reported they had "thought" about staying away from school for fear of being bullied by other children. In order to examine the manifestation of anxiety symptoms in children regularly bullied by peers, social-evaluative anxiety was assessed among 114 victimized students (grades 4-7). Student ratings on the Social Anxiety Scale for Children (SASC) revealed that the tendency to be victimized was significantly associated with social evaluative anxiety (e.g., "I worry about doing something new in front of other kids") ($r = .47, p < .01$) and fear of negative evaluation ($r = .35, p < .01$). In this study, social-evaluative anxiety was not examined in children exhibiting the tendency to bully others. Although this study yielded important findings on the anxiety provoking nature of victimization experiences among children, research could be further enhanced by exploring a more broad range of the anxiety symptoms exhibited in childhood among both victimized children and children who bully others (bullies). Because the manifestation of childhood anxiety symptomatology as it relates to bullying and victimization experiences is clearly an under researched area, the present study sought to further explore the relationship between bullying and victimization and anxiety among children.

Summary

Although there is emerging recognition that bullying and victimization among children is a very serious, pervasive and complex problem facing our schools and Canadian society, further research attention is needed in order to increase awareness of the pervasiveness of this problem. Because the bullying experience may impact or be symptomatic of the presentation of depressive symptoms and the related psychological factors of self-esteem and anxiety in

children and early adolescents, the aim of this study was to further our understanding of the extent that youngsters in our schools may be in need of appropriate psychological service. Because considerable numbers of youngsters may be affected by this, all too common aspect of life at school, it may be necessary to be better equipped to offer support and preventative strategies to those youngsters at greater risk for the involvement in the bully/victim cycle of violence.

CHAPTER THREE

STATEMENT OF THE PROBLEM

The magnitude of bully/victim problems as shown in the research literature is extensive in many countries. Research studies conducted in Canada, although sparse, also confirm the frequency of this problem among children is extensive. Research evidence indicates that almost 1 in 5 children are at risk for victimization by other children, as a result, bullying may be considered the most prevalent form of violence among school-aged youth and the form of violence that is likely to affect the greatest number of students (Batsche & Knoff, 1994). Although research shows that bullying among school children is a complex problem, few studies have been undertaken to explore the extent of the problem in Canadian schools and determine the impact and nature of bully/victim problems among elementary school children.

Purpose of the Study

The purpose of this study was twofold. First, the purpose of this investigation was to examine the prevalence, age/grade and gender trends in bullying/victim problems among a sample of British Columbia school children in grades 4-7. Information about the extent to which to bully/victim problems exist among Canadian children attending elementary school in the British Columbia has not been empirically documented. Further, as discussed in the review, there have been few research investigations on the problem of bullying and victimization among Canadian elementary- aged children. Thus, there was a need to expand upon previous findings and further examine the extent and nature of the problem in a Canadian context.

The exploration of psychological well-being or psychological distress has seldom been examined among children involved in bullying and/or experiencing victimization by other children. Thus, in order to understand more adequately the role of internalizing problems among children involved in bully/victim problems, the second major purpose of the present study was to expand the literature by examining the relationship between children's bullying involvement and victimization experiences and the presentation of depressive and anxiety symptoms.

To date, few research investigations, have explored whether bullies and victims endorse depressive symptoms to a greater extent than non-involved children (Callaghan & Joseph, 1995; Neary & Joseph, 1994; Slee, 1995). Findings from the present investigation will lead to a greater understanding of the psychological impact and emotional distress facing children caught in this often long-standing cycle of violence. Although there is empirical support for the association of bully/victim problems with depressed mood and anxiety during childhood (Slee, 1994), further research investigations examining the scope of this problem among youth is critical. Knowledge gained from research examining the psychological well-being and distress associated with bully/victim problems may enhance our understanding and help guide parents and educators to appropriately identify and assist children at-risk for this highly stressful and disturbing aspect of childhood.

Another relevant aim of this study is to explore psychological well-being in terms of the association of self-concept or self-worth and self-reported victimization and bullying experiences. To date, minimal research attention has focused on the relationship between self worth and depressive symptomatology among bullied children (Callaghan & Joseph, 1995; Neary & Joseph, 1994).

On the basis of the research literature reviewed, the focus of the present investigation was to:

- 1) document the prevalence of bullying and victimization experiences among a sample of British Columbia school children in primary grades (4-7), and to examine age/grade and gender differences in the proportion of students involved these experiences;
- (2) investigate bullying behaviours and victimization experiences in childhood as related to psychological well-being and adjustment as assessed by self-reported level of anxiety, self-esteem, and level of depressive symptom presentation, and to examine differences in these relationships among girls and boys.

Research Hypotheses:

Assuming that the extent of bullying behaviours and victimization among school-aged children in grades 4 through 7 was reliably and validly assessed by the self-report measure designed for the purpose of this study, the following 4 research hypotheses and 6 research questions provided the focus of the present study:

Age and Gender Trends and Bully/Victim Problems

- 1) It is expected that there will be a greater proportion of boys who report being bullied than girls.
- 2) It is expected that there will be a greater proportion of boys who report bullying others than girls.
- 3) It is expected that there will be a greater proportion of girls who report being bullied in lower grades (grades 4 and 5) than in higher grades (grades 6 and 7).
- 4) It is expected that there will be a greater proportion of boys who report being bullied in lower grades (grades 4 and 5) than in higher grades (grades 6 and 7).

Related Research Questions:

A) Are there significant differences in the proportion of boys who report bullying others in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5)?

B) Are there significant differences in the proportion of girls who report bullying others in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5)?

Rationale: Predicated on research evidence in the literature, findings reveal that, compared to girls, boys report being bullied and bullying other children considerably more frequently (Boulton & Underwood, 1992; Olweus, 1994; Rigby & Slee, 1991). Research conducted by Roland (1989) and Hoover et al. (1992) reveal that boys report being victims of physical bullying to a greater extent than girls. Zeigler and Rosenstein-Manner (1991) found that boys are more likely to experience frequent bullying (occurring “weekly” or more often) than girls. Contradictory research findings, however, demonstrate that boys and girls are equally likely to be bullied (Smith, 1991; Bentley & Li, 1995; Whitney & Smith, 1993). Because stronger evidence in the research literature suggests that boys are victimized by bullying more than girls, it is expected that there will be gender differences among bullied students.

In terms of age or grade differences, research findings reveal that the frequency of self-report victimization experiences among younger children (e.g., grades 3, 4) is higher than among children in older elementary grades (e.g., grades 7, 8) (Boulton & Underwood, 1992; O’Moore & Hillery, 1989; Ziegler & Rosenstein-Manner, 1991). As a result, research findings, to date, suggest that children in younger grades may be at greater risk for being bullied than older children and rates of victimization decreases as children progress through elementary school years. Similar results are expected in the present research investigation. Although research conducted by Boulton and Underwood (1992) reveals that the frequency of

“occasionally” bullying others among younger children (8 and 9 years old) and older children (11 and 12 years old) is comparable, this study seeks to further examine age differences among children who engage in bullying behaviour.

Social-Emotional Factors Related to Bully/Victim Problems

The following four research questions will be investigated in the present study in order to examine the role of psychological well-being as related to bully/victim experiences in childhood.

Being Bullied

- C) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bully-victimization among girls?
- D) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bully-victimization among boys?

Bullying

- E) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bullying among girls?
- F) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bullying among boys?

Rationale: To date, research supports the finding that victims of bullying exhibit higher levels of depressive symptomatology than children who bully others (bullies) or children not involved in bully/victim problems (Slee, 1995). In addition, Slee’s (1995) study supports the hypothesis that there is a significant relationship between depression and the tendency to bully other

children. Evidence also exists in the literature demonstrating that the association between low self worth and high depressive symptoms are related to victimization experiences among children (Callaghan & Joseph, 1995; Neary & Joseph, 1994). Research by Rigby and Slee (1993), and Slee and Rigby (1993a) suggest that the tendency to be repeatedly victimized by other children is negatively related to self-esteem among girls and boys. In terms of the relationship between the tendency to bully and low self-esteem, O'Moore and Hillery (1991) found that bullies share with victims feelings of low self-worth.

Research studies indicate that the tendency to be victimized is significantly associated with social evaluative anxiety (e.g., "I worry about doing something new in front of other kids") and fear of negative evaluation (Slee, 1994). To date, there is little published research focusing on the role of anxiety related symptomatology and bullying or victimization experiences among elementary school-aged boys and girls. In particular, research investigations have not considered the link between the broad range of anxiety related symptoms among children and bullying or victimization problems experienced in childhood. Because the relationship between the tendency to bully other children and the presentation of generalized anxiety symptoms has not been systematically studied, the present investigation seeks to expand research by exploring the relationship between levels of anxiety exhibited among children who bully others (bullies) as well as further explore the role of anxiety symptoms among victimized children.

Although levels of depressive symptomatology, anxiety symptomatology, and self-esteem have been investigated among children involved in bully/victim problems, to date, researchers have not examined the extent and importance of the relationship between these social-emotional outcomes and bullying or victimization experiences in childhood. As a result,

this study seeks to expand existing research by examining if the social-emotional factors which include self-esteem, levels of depressive symptoms, and levels of anxiety symptoms are significantly related to the tendency to bully or the tendency to be bullied by other children. Support for a relationship between this set of outcomes and bullying or victimization experiences among girls and boys will be examined in order to broaden understanding of the psychological well-being of children involved in bully/victim problems. Further, in order to meaningfully compare the unique role of each of the three psychological factors of depression, anxiety and self-esteem as related to bullying and victimization experiences, multiple regression analyses were conducted in order to address the preceding four research questions.

CHAPTER FOUR

METHODOLOGY

Participants

A total of 417 children (210 females, 217 males) enrolled in the fourth ($n = 96$), fifth ($n = 111$), sixth ($n = 105$) and seventh grades ($n = 105$) participated in the study. Students were recruited from two public elementary schools in Surrey, British Columbia and one public elementary school in Delta, British Columbia. All three participating schools were selected from suburban middle-class neighborhoods in the Lower Mainland of British Columbia. The mean age of the participants was 10.52 ($SD = 1.14$), with a minimum age of 8 and a maximum age of 13. Females ($M = 10.51$, $SD = 1.10$) and males ($M = 10.53$, $SD = 1.18$) did not differ with regard to age, $t(415) = -.11$, $p = ns$. There were no significant gender differences among the grade composition of the sample $\chi^2(3, N = 417) = 2.82$, $p = ns$. In terms of ethnic composition, 81% of the sample was Caucasian, 8% Indo-Pakistani, 3% Asian, and 6% of other racial origin. A small proportion of participants (2%) did not report their ethnic background. As reported by classroom teachers, all participants were fluent in English. Descriptive characteristics of the total sample are summarized in Table 3.

Procedure

Principals at School 1, School 2 and School 3 were asked for their willingness to participate in this study. A meeting was scheduled with each principal to discuss the purposes of the study, review the research questionnaire to be administered to their students, and to outline administration procedures for data collection. In addition, the researcher attended a staff meeting at each of the three participating schools as well as a monthly Parent Association Council (PAC) meeting at School 3 in order to outline the general purposes of the study, to

Table 3
Demographic Characteristics of the Sample.

Characteristics	School Groups			Total Sample
	School 1 <u>N</u>	School 2 <u>N</u>	School 3 <u>N</u>	<u>N</u>
Student Total	152	130	135	417
Females	73	73	64	210
Males	79	57	71	207
Grade 4	38	25	33	96
Females	16	13	14	43
Males	22	12	19	53
Grade 5	48	26	37	111
Females	24	15	22	61
Males	24	11	15	50
Grade 6	22	45	38	105
Females	12	27	17	56
Males	10	18	21	49
Grade 7	44	34	27	105
Females	21	18	11	50
Males	23	16	16	55
Age				
Mean	10.34	10.65	10.53	10.52
SD	1.19	1.11	1.11	1.14

explain that participation in this study was voluntary, and to insure that all students participating in this study were guaranteed anonymity.

Parental consent forms were distributed to all students in grades 4, 5, 6, and 7 at each participating school. Of a possible sample of 614 students in the 4th, 5th, 6th and 7th grades, 476 (78%) consent forms were returned and 421 (69%) students were granted parental consent to participate. Response rates across the three participating schools ranged from 62% to 73%. There were 154 (73%) students out of 211 students at School 1, 132 (62%) students out of 213 students at School 2, and 135 (71%) students out of 190 students at School 3 that were granted permission to participated in the study. There were 23 (11%) students out of 211 students at School 1, 17 (8%) students out of 213 students at School 2, and 15 (8%) students out of 190 students at School 3 that were not granted permission to participated in the study. The protocols of 4 participants were excluded from the sample due to questionable responses on questionnaire items or missing responses to questionnaire items. As a result, the final sample size consisted of 417 students.

On the day of data collection, each participant received a package containing a student consent form and a series of self-report measures that were distributed by the researcher. Standard administration instructions were provided to all students. The researcher briefly outlined the purpose of the study, emphasized the importance of genuine responses and working through the questionnaire items at their own pace, and insured students that their responses on all the questionnaires will remain confidential. Students were then reminded not to put their names on the forms, that their participation in this research study was strictly voluntary and they may decline to participate at any time. Students were asked to read the instructions (written at a grade 2 reading level) and answer all questions on each of the five

self-report questionnaires. These measures are described in detail in the proceeding section. The first questionnaire in the package of measures administered to students was designed to elicit demographic information (see Appendix A). Students then completed the Bully-Victim Inventory (BVI; Reynolds & Arndt, 1997) (see Appendix B), a self-report questionnaire designed to assess the extent and nature of bully/victim problems among children, followed by the Reynolds Child Depression Scale (Reynolds, 1989) (see Appendix C), the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) (see Appendix D) and the Coopersmith Self-Esteem Inventory (CSEI; Coopersmith, 1967) (see Appendix E).

The administration time was approximately 50 minutes for students in grades 4 and 5. The administration time was approximately 40 minutes for students in grades 6 and 7. The study was conducted during the winter (December-February), with all data collected within a 8-week period.

Measures

Demographic Information Form (see Appendix A). The demographic questionnaire consisted of items that elicited information regarding gender, grade, age and ethnic background.

Bully/Victimization Assessment

In a recent review of the literature, Farrington (1993) reports that self-report questionnaires are the principal method in studies assessing bullying and victimization experiences in childhood. Although different assessment methods such as teacher ratings, interviews and peer nominations have been used to measure bully/victim problems among children, research evidence from a study conducted by Rigby and Slee (1991) supports the finding that although teachers recognize bullying as a problem in the schools, teachers

underestimate the extent of bullying occurring in the schools. Similarly, results of studies conducted by O'Moore and Hillery (1991) and Pepler, Craig, Ziegler, and Charach (1994) reveal that parents and teachers underestimate the severity and prevalence of bully/victim problems among children.

For the purpose of the present study, bully-victimized children and children who bully others were identified by self-report method. Because anonymous self-report questionnaires allows the opportunity for individuals to relate experiences from their perspective, and it would appear that they have the most comprehensive knowledge about their experiences, feelings and behaviours (Offer & Schonert-Reichl, 1992), this procedure may provide the most reliable and credible assessment of the bully/victim experience.

Although the self-report Bully/Victim Questionnaire developed by Dan Olweus (1991a) or an adapted version of this self-report measure has been used in recent research studies in Canada (Ziegler & Rosenstein-Manner, 1991; Ziegler et al., 1992; Bently & Li, 1995) and England (Boulton & Underwood, 1992; Ahmad & Smith, 1990) limited information is available on the psychometric properties of this scale. In particular, validity and reliability issues have not been addressed as information on the reliability, internal consistency and content, construct, convergent, and discriminant validity of the scale is, at best, scant. Taken together, these critical issues call into question the effectiveness of this measure (Farrington, 1993).

The Bully-Victim Inventory (Appendix B). The Bully-Victim Inventory (BVI; Reynolds & Arndt, 1997), developed for this study, is a self-report questionnaire designed to assess the extent and nature of bullying behaviour and bully-victimization experiences among

children and early adolescents. The BVI items were written to assess specific events and various aspects of bully/victim experiences.

The Bully-Victim Inventory is a 44-item measure that provides scores on Bullying and Bully-Victimization scales. Each scale consists of 22 items. Every item is rated on a four-point scale ranging from "never" to "five or more times a week" which indicates how frequently participants are subjected to (e.g., "I was pushed around by other kids in school") or engage in the behaviours and experiences described (e.g., "I teased or called other kids names") within a 1 month time period. An item is given a score of 1 if the participant endorses "never", 2 for "once or twice", 3 for "three or four times", and 4 for "five or more times". The possible range of scores is from 22 to 88 on both scales.

The initial development of the BVI was based on the current thesis sample with additional data gathered to support the validity of this measure. The BVI Bullying (BVI-B) scale demonstrated an internal consistency (Coefficient alpha) reliability of .92, with item-total scale correlations ranging from .47 to .69. The BVI Victimization scale (BVI-V) coefficient alpha reliability was .94, with an item-total scale correlation range from .36 to .74. The correlation between the BVI-B and the BVI-V was .23 ($p < .01$). As evidence for validity, the BVI-B demonstrated a correlation of .60 with youngsters' reported number of trips to the principal's office over the past year due to being in trouble. The BVI-V scale demonstrated a correlation coefficient of .07 ($p = ns$) with youngsters' reported trips to the principal's office over the past year due to being in trouble. The BVI-V scale also demonstrated a moderate correlation with self-reported popularity ($r = .34$, $p = .01$) with higher bully-victimization scale scores associated with lower levels of popularity. The relationship between the BVI-B scale and popularity was not significant ($r = -.06$, $p = ns$). Based on the frequency distribution

of scores for the present sample ($N = 417$), the authors recommend cutoff scores of 36 and above, on the Bullying scale, and 48 and above, on the Victimization scale to indicate youngsters who may be characterized as “bullies” and “victims”, respectively.

The Reynolds Child Depression Scale (Appendix C) The Reynolds Child Depression Scale (RCDS; Reynolds, 1989) is a 30 item self-report measure designed to assess the extent to which children between the ages of 8 and 13 years exhibit depressive symptomatology. Given the brevity and ease of administration of this measure, the RCDS can be administered individually or in a group. Test items on this scale (e.g., “I feel upset about things”) are rated in terms of reference to the frequency of their occurrence over the 2 week period prior to the assessment. A four-point Likert scale ranging from “almost never” to “most of the time” is used.

Norms are based on over 1,600 children in the US and demographic information is reported in detail in the manual along with extensive data on reliability and validity aspects of this measure. The author reports excellent internal consistency for the standardization sample as .90 (Reynolds, 1992). In addition, numerous studies have provided information on the reliability and validity of this measure as reported in the manual. For example, Reynolds and Graves (1989) found a test-retest reliability coefficient of .85 for the RCDS among a sample of 220 children in grades 3 through 6. The test-retest interval was a 4 week period. In terms of validity data, the author indicates that the RCDS correlates highly with other self-report and depression interview measures administered to children (Reynolds, 1989). Numerous studies supporting the content validity and discriminant validity are reported in the manual. Support for the validity of the RCDS is also supported in the factor analysis of the item correlations which demonstrate a consistent, stable and interpretable pattern.

Revised Children's Manifest Anxiety Scale (Appendix D). The Revised Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) is a self-report measure designed to assess symptoms of anxiety in children and adolescents between 6 and 19 years of age. All items are responded to using a "yes" or "no" format as the child determines if each item is self-descriptive or not self-descriptive. The Total Anxiety score is the sum of the "yes" responses for all 28 items.

Internal consistencies of .83 and .85 for the Total Anxiety score were obtained for the standardization sample. Adequate test-retest reliability of .68 for the Total Anxiety score is reported by C.R. Reynolds (1981) with a test-retest interval of 9 months. Satisfactory convergent validity has been reported by the authors as correlation coefficients range from .65 to .85 (Reynolds & Richmond, 1985).

Self-Esteem Inventory (Appendix E) The Self Esteem Inventory (SEI; Coopersmith, 1967) is a self-report inventory measuring self-esteem among youngsters ages 8 to 15 years. The SEI Form B (Coopersmith, 1975) consists of 25 items each of which the participants indicate if the statements are "like me" or "unlike me". This measure is scored such that higher scores are indicative of positive self-concept and personal worth. Self-esteem as operationally defined and measured by the SEI "refers to the evaluation a person makes and customarily maintains with regard to him-or herself: Self-esteem expresses an attitude of approval or disapproval and indicates the extent to which a person believes him-or herself capable, significant, successful, and worthy (p. 4-5)" (Coopersmith, 1967).

Data Analysis

Gender and Age/Grade Trends in Bullying and Victimization Experiences Among Children

To examine gender differences in the proportion of students classified as victims versus nonvictims, as assessed by the Bully/Victim Inventory (Reynolds & Arndt, 1997), a chi-square, as a test of the independence of two variables, was conducted (refer to research hypothesis 1, p. 50). To examine gender differences in the proportion of students classified as bullies versus nonbullies, a chi-square test was conducted (refer to research hypothesis 2, p. 50). To examine if there are age/grade differences in the proportion of students (either male or female) classified as victims or nonvictims, a chi-square analysis was conducted with Group Status (e.g., victims or nonvictims) and Grade (4 and 5 grades constitute younger students, 6 and 7 grades constitute older students) representing the variables for comparison (refer to research hypothesis 3 and 4, p. 50). To examine if there were grade differences in the proportion of students classified as bullies or nonbullies (either male or female), a chi-square analysis was conducted with Group Status (e.g. bullies or nonbullies) and Grade (4 and 5 grades constitute younger students, 6 and 7 grades constitute older students) representing the variables for comparison (refer to research questions A and B, p. 51).

Social-Emotional Factors Related to Bully/Victim Problems

To explore the relationship of depressive symptoms, anxiety symptoms and self-esteem among boys and girls involved in bullying and victimization experiences, results were analyzed by conducting both zero-order correlations and multiple regression analyses. The relationship between this set of social-emotional outcomes (levels of depressive or anxiety symptoms, self-esteem) and bullying involvement or victimization experienced among students was analyzed

separately for boys and girls. As a result, simultaneous multiple regression analyses were conducted in order to address research questions C, D, E and F (refer to p. 52). The unique contribution of each of the three measures of psychological well being (depression, anxiety, self-esteem), which serve as independent variables, were examined by comparing the standardized Beta (β) coefficient with self-reported victimization (dependent variable) for both boys and girls. Similarly, the unique contribution of each of the three measures of psychological well being (depression, anxiety, self-esteem), which serve as independent variables, were examined by comparing the standardized Beta (β) coefficient with self-reported bullying (dependent variable) for both boys and girls. Thus, this standardized regression coefficient provided an estimate of the relationship of each of the three variables with scores on both the Victimization subscale and Bullying subscale of the BVI.

CHAPTER FIVE

RESULTS

This chapter has been organized according to the specific hypotheses and research questions proposed in Chapter 3. The first section addresses the extent of bully/victim involvement across the sample of elementary school children surveyed and reports the distribution of means and standard deviations on the Bully/Victim Inventory (BVI), by gender and age. The second section addresses the research questions and hypotheses which pertain to the evaluation of gender and age differences among students involved in bully/victim experiences. The third section addresses the research questions which pertain to the evaluation of social-emotional outcomes among boys and girls involved in bullying and/or victimization experiences. For the purpose of clarification, each of the four hypotheses and specific research questions explored during the course of this study have been reiterated followed by the analytical procedures employed and the statistical results found.

Descriptive Characteristics of Sample

Extent of Bully/Victim Problems

Means and standard deviations for the Bully/Victim Inventory (BVI) for boys and girls by grade are presented in Table 4. For the total sample, the scores on the Bully subscale ranged from 22 to 85. The scores on the Victimization subscale ranged from 22 to 84. Figure 1 presents a visual display of mean Bully subscale scores (as measured by the BVI) by grade and gender. Similarly, Figure 2 presents mean Victimization subscale scores by grade and gender. As can be seen in Figure 1, mean Bully subscale scores, for boys and girls, increased in a linear fashion with grade. As depicted in Figure 2, mean Victimization subscale

scores for males decreased in a linear fashion with grade. For girls, the trend in Victimization scores across grades was asymptotic.

Table 4
Means and Standard Deviations of Ratings on the
Bully Victim Inventory (BVI) for Grade and Gender

Variable		Grade				Total
		4	5	6	7	
<u>Bully Subscale</u>						
Total	<u>M</u>	26.08	26.83	27.10	30.64	27.68
	<u>SD</u>	5.92	6.12	7.74	9.83	7.75
Male	<u>M</u>	27.25	28.86	28.69	31.87	29.21
	<u>SD</u>	6.62	6.68	10.15	11.42	9.10
Female	<u>M</u>	24.64	25.16	25.70	29.28	26.18
	<u>SD</u>	4.59	5.09	4.38	7.58	5.77
<u>Victim Subscale</u>						
Total	<u>M</u>	39.05	36.48	35.60	33.29	36.05
	<u>SD</u>	13.20	12.70	12.71	11.63	12.68
Male	<u>M</u>	41.55	39.12	36.18	34.95	37.94
	<u>SD</u>	12.32	14.89	12.56	12.48	13.25
Female	<u>M</u>	35.98	34.31	35.09	31.46	34.18
	<u>SD</u>	13.74	10.19	12.93	10.45	11.83

Figure 1: Mean Bully Subscale Scores by Grade and Gender

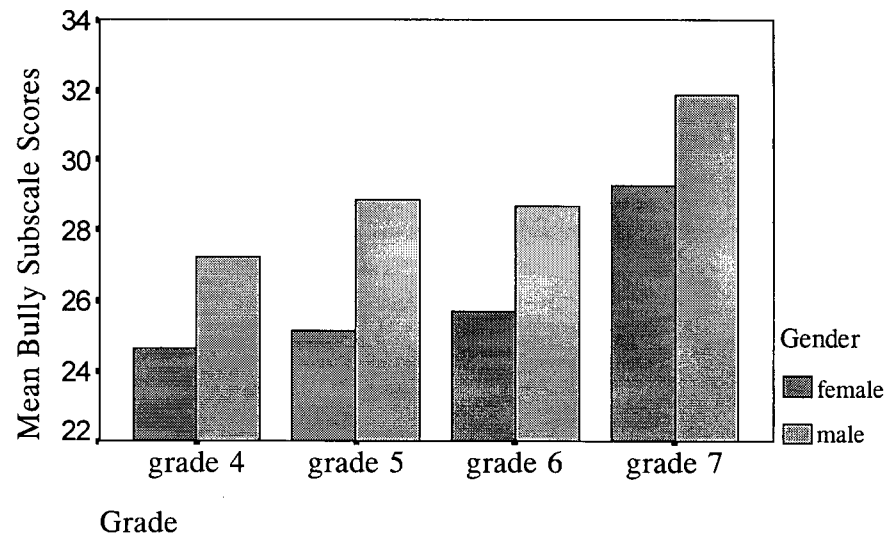
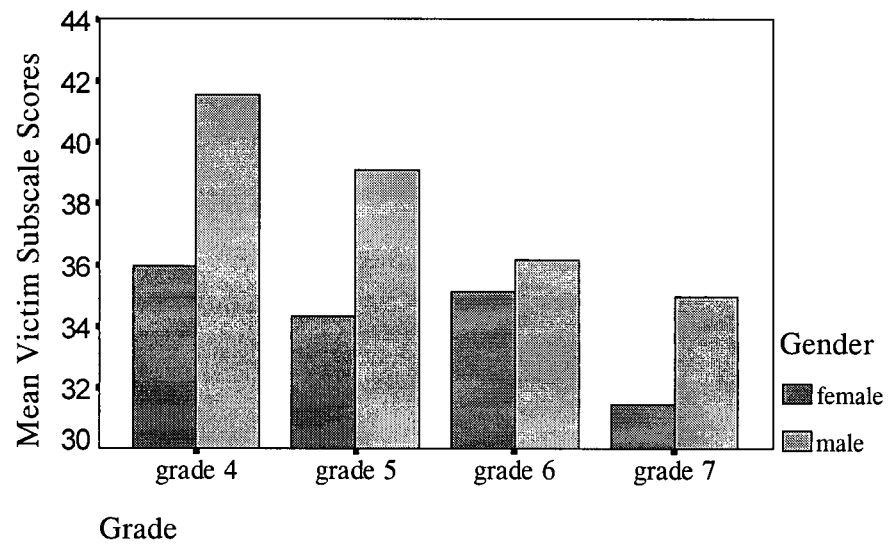


Figure 2: Mean Victim Subscale Scores by Grade and Gender



Two one-way Analyses of Variance (ANOVA) and post hoc analyses using the Scheffe test were computed in order to examine mean differences in ratings on the Bully subscale and on the Victimization subscale of the BVI across the three surveyed elementary schools. As can be seen in Table 5, results of the ANOVA on the Bully subscale scores of the BVI indicated no significant differences across the three elementary schools, $F(2, 414) = .59, p = ns$. Likewise, no significant differences were found on Victimization subscale scores across the three schools, $F(2, 414) = .63, p = ns$. This finding indicates that student's involvement in bullying behaviour or student's exposure to victimization experiences were similar across schools.

Based on cut-off scores as established on the BVI, a total of 9.4% ($n=39$) children identified themselves as bullies in the present study. For the subsample of youngsters identified as bullies, 69% ($n=27$) of the bullies were boys and 31% ($n=12$) were girls. Children's responses on the BVI, revealed a total of 18.9% of the students identified themselves as victims ($n=79$). For the subsample of youngsters identified as victims, 62% ($n=49$) of the victims were boys and 38% ($n=30$) of the victims were girls.

Table 5
Comparisons of BVI Mean Scores Across Schools

BVI Scale	School 1		School 2		School 3		<u>F</u>	p <
	M	SD	M	SD	M	SD		
Bully	27.23	6.23	27.65	8.40	28.22	8.63	.586	ns
Victimization	36.69	14.12	35.04	11.11	36.30	12.41	.628	ns

Gender Differences in Bullying Involvement and Victimization Experiences

Victims

1. Hypothesis. There will be a greater proportion of boys who report being bullied than girls.

A chi-square test was calculated to test the difference in proportion between boys and girls identified as victims, on the Victimization subscale of the BVI. Results of the analysis revealed significant gender differences among students identified as victims of bullying, $\chi^2 (1, N = 417) = 5.98, p < .01$. The hypothesis was supported. Table 6 presents a summary of the overall number of students identified as victims and bullies by gender. As can be seen, a greater proportion of the students classified as victims were boys (23.7%) in comparison to 14.3% of the identified victims who were girls.

Bullies

2. Hypothesis. There will be a greater proportion of boys who report bullying others than girls.

In order to examine whether there was a gender difference in the proportion of students classified as bullies from the total sample, a chi-square test was calculated. Results of the analysis indicated a significant gender difference in the proportion of students classified as bullies, as measured by the Bully subscale of the BVI, $\chi^2 (1, N = 417) = 6.61, p < .01$. The hypothesis was supported. As Table 6 results reveal, the total proportion of males identified as bullies (13.0 %) in this sample was significantly greater than the proportion of females (5.7%) identified as bullies.

Table 6
Number and Proportion of Victims and Bullies by Gender

		Boys (n=207)	Girls (n=210)	Total Sample (n=417)
Group				
Victim	n	49	30	79
	%	23.7	14.3	18.94
Bully	n	27	12	39
	%	13.0	5.7	9.34

Age Differences in Bullying Involvement and Victimization Experiences

Victims

3. Hypothesis. There will be a greater proportion of girls who report being bullied in lower grades (grades 4 and 5) than in higher grades (grades 6 and 7).

A chi-square analysis was conducted to examine grade differences in the proportion of female students classified as victims versus nonvictims. Chi-square analysis revealed that a significant grade difference was not found in the proportion of females identified as victims in lower grades (grades 4 and 5) in comparison to the proportion of females identified as victims in higher grades (grades 6 and 7), $\chi^2 (1, N = 210) = .317, p = ns$. It is interesting to note that the proportion of female victims in lower grades and higher grades was almost identical. Specifically, analyses conducted separately for the female sample revealed that 14.4% ($n=15$) of females victims were in grades 4 and 5, and 14.2% ($n=15$) of female victims were in grades 6 and 7 (refer to Table 7).

4. Hypothesis. There will be a greater proportion of boys who report being bullied in lower grades (grades 4 and 5) than in higher grades (grades 6 and 7).

A chi-square analysis was conducted to examine grade differences in the proportion of male students classified as victims versus nonvictims. The results of the chi-square analysis indicated a significantly greater proportion of boys identified as victims in lower grades compared to the proportion of boys identified as victims in higher grades, $\chi^2 (1, N = 207) = 4.68, p < .05$. Table 7 presents the number and proportion of identified victims for gender and grade. As can be seen, 30.1% of the identified male victims were found in the lower

grades (grades 4 and 5) whereas 17.3% of male victims were found in the higher grades (grades 6 and 7). The hypothesis presented was supported. Consistent with findings from previous research (Rigby & Slee, 1991) these results indicate that a higher proportion of male victims of bullying may be found in grades 4 and 5 than in grades 6 and 7.

Table 7
Number and Proportion of Bully-Victims by Grade and Gender

		Group		n
		Victim	NonVictim	
Grade 4				
Females	$\frac{n}{\%}$	8 18.60	35 81.40	43
Males	$\frac{n}{\%}$	18 33.96	35 66.04	53
Grade 5				
Females	$\frac{n}{\%}$	7 11.48	54 88.52	61
Males	$\frac{n}{\%}$	13 26.0	37 74.0	50
Grade 6				
Females	$\frac{n}{\%}$	9 16.07	47 83.93	56
Males	$\frac{n}{\%}$	9 18.37	40 81.63	49
Grade 7				
Females	$\frac{n}{\%}$	6 12.0	44 88.0	50
Males	$\frac{n}{\%}$	9 16.36	46 83.63	55
Lower Grades^a				
Females	$\frac{n}{\%}$	15 14.42	89 85.58	104
Males	$\frac{n}{\%}$	31 30.10	72 69.90	103
Higher Grades^b				
Females	$\frac{n}{\%}$	15 14.15	91 85.85	106
Males	$\frac{n}{\%}$	18 17.31	86 82.69	104

Note. ^aThe summation of values from grades 4 and 5 represent the lower grade values. ^bThe summation of values from grades 6 and 7 represent the higher grade values.

Bullies

5. Are there significant differences in the proportion of boys who report bullying others in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5)?

A chi-square analysis was conducted in order to determine if there are grade differences in the proportion of male students identified as bullies. For the purpose of this analysis, grades 4 and 5 constituted the lower grade group and grades 6 and 7 constituted the higher grade group. Results of the analysis did not reveal significant differences in the proportion of male bullies identified in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5), $\chi^2 (1, N = 207) = 2.01, p = ns$. As can be seen in Table 8, findings suggest that the proportion of boys identified as being seriously involved in bullying was not significantly different in lower and higher grades. Results indicate that 9.7% of boys ($n = 10$) identified as bullies were in grades 4 and 5 whereas 16.3% of boys ($n = 17$) in grades 6 and 7 boys identified themselves as bullies.

6. Are there significant differences in the proportion of girls who report bullying others in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5).

A chi-square analysis was conducted in order to determine if there are grade differences in the proportion of female students identified as bullies. Results of the analysis revealed that the proportion of female bullies identified in higher grades (grades 6 and 7) than in lower grades (grades 4 and 5) approached but did not reach significance, $\chi^2 (1, N = 210) = 3.06, p < ns$. Specifically, the general trend found was a lower proportion of female bullies (2.9%) identified in grades 4 and 5 as compared to 8.5% of female bullies identified in grades 6 and 7.

Table 8
Number and Proportion of Bullies by Grade and Gender

		Group		
		Bully	NonBully	<u>n</u>
Grade 4				
Females	<u>n</u>	2	41	43
	<u>%</u>	4.65	95.35	
Males	<u>n</u>	5	48	53
	<u>%</u>	9.40	90.60	
Grade 5				
Females	<u>n</u>	1	60	61
	<u>%</u>	1.64	98.36	
Males	<u>n</u>	5	45	50
	<u>%</u>	10.00	90.00	
Grade 6				
Females	<u>n</u>	3	53	56
	<u>%</u>	5.36	94.64	
Males	<u>n</u>	5	44	49
	<u>%</u>	10.20	89.80	
Grade 7				
Females	<u>n</u>	6	44	50
	<u>%</u>	12.00	88.00	
Males	<u>n</u>	12	43	55
	<u>%</u>	21.82	78.18	
Lower Grades^a				
Females	<u>n</u>	3	101	104
	<u>%</u>	2.88	97.12	
Males	<u>n</u>	10	93	103
	<u>%</u>	9.71	90.29	
Higher Grades^b				
Females	<u>n</u>	9	97	106
	<u>%</u>	8.49	91.51	
Males	<u>n</u>	17	87	104
	<u>%</u>	16.35	83.65	

Note. ^aThe summation of values from grades 4 and 5 represent the lower grade values. ^bThe summation of values from grades 6 and 7 represent the higher grade values.

Social-Emotional Factors Related to Bully/Victim Problems

Victims

7) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bully-victimization among girls?

Pearson product-moment correlations were calculated in order to determine the relationship between being bullied among girls (as measured by the Victimization subscale of the BVI) and the RCDS, RCMAS and the CSEI. Among girls, moderate correlations were found between the total score on the Victimization subscale and both the total score on the RCDS ($r(208) = .59, p < .001$) and the RCMAS ($r(208) = .60, p < .001$). A moderate negative relationship was found between female students' total score on the Victimization subscale and their overall level of self-esteem ($r(208) = -.42, p < .001$) as measured by the CSEI.

A simultaneous multiple regression analysis was conducted to examine the extent to which depressive symptoms, anxiety, and self-esteem are related to bully-victimization among girls. The results of the analysis indicated that altogether these three variables accounted for 40% ($R^2 = .398$) of the variability in female students' Victimization scores on the BVI, $F(3, 206) = 45.42, p = .0001$. As shown in Table 10, the results of the multiple regression revealed that student's depression scores, as measured by the RCDS, significantly related ($\beta = .36, p < .001$) to Victimization scores among girls. Similarly, anxiety scores, as measured on the RCMAS, were significantly related ($\beta = .40, p < .001$) to Victimization scores among

girls. Lastly, self-report self-esteem ratings among girls was not significantly related ($\beta = .14$, $p = ns$) to Victimization scores.

8) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and bully-victimization among boys?

Pearson product-moment correlations were calculated in order to determine the relationship between being bullied among boys (as measured by the Victimization subscale of the BVI) and the RCDS, RCMAS, and the CSEI. As shown in Table 10, for boys, moderate significant relationships were found between Victimization scores and both the the RCDS ($r(205) = .53$, $p < .001$) and the RCMAS ($r(205) = .52$, $p < .001$). A moderate negative relationship was found between boys' scores on the Victimization scale and the CSEI ($r(205) = -.44$, $p < .001$).

A simultaneous multiple regression analysis was conducted to examine the extent to which levels of depressive symptoms, anxiety, and self-esteem are related to bully-victimization among boys. The results of the analysis indicated that altogether these three variables accounted for 32% ($R^2 = .315$) of the variability in male students' Victimization scores on the BVI, $F(3, 203) = 31.13$, $p = .0001$. As shown in Table 10, the results of the multiple regression revealed that student's depression scores, as measured by the RCDS, were significantly related ($\beta = .34$, $p < .001$) to Victimization scores among males. Similarly, anxiety scores, as measured on the RCMAS, were significantly related ($\beta = .30$, $p < .001$) to Victimization scores among males. Lastly, among boys, self-esteem, as measured by the CSEI, was not significantly related ($\beta = .03$, $p = ns$) to Victimization scores.

Table 9
Means and Standard Deviations of RCDS, RCMAS and CSEI
Scores for Males and Females

Scale	Males		Females	
	M	SD	M	SD
RCDS	51.16	11.60	52.43	12.92
RCMAS	8.56	6.13	9.85	6.68
CSEI	17.38	5.11	16.54	5.53

Table 10
Simultaneous Multiple Regression Analyses of Depression, Anxiety
and Self-Esteem on BVI Victimization Scores

Variable	r^a	β	t-test	Signif. Level
Females (n=210)				
RCDS	.59*	.36	3.78	p < .001
RCMAS	.60*	.40	4.34	p < .001
CSEI	-.42*	.14	1.66	p = ns
Males (n=207)				
RCDS	.53*	.34	3.56	p < .001
RCMAS	.52*	.30	3.11	p < .01
CSEI	-.44*	.03	.34	p = ns

* p < .01

Note: ^a Product-moment correlations between RCDS, RCMAS, CSEI, and Bully-Victimization scores on the BVI.

The t value and significance level presented is associated with the Beta coefficient.

Bullies

9) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and the tendency to bully among girls?

Pearson product-moment correlations were calculated in order to determine the relationship between the tendency to bully others among girls (as measured by the Bully subscale of the BVI) and the RCDS, RCMAS, and CSEI. As shown in Table 11, for females, significant correlations were found between Bully subscale scores and the RCDS ($r(208) = .29$, $p < .01$) and the RCMAS ($r(208) = .23$, $p < .01$). A negative correlation was found between females' Bully scores on the BVI and the CSEI ($r(208) = -.17$, $p < .01$).

A simultaneous multiple regression analysis was conducted to examine the extent to which levels of depressive, anxiety and self-esteem are related to the tendency to bully others among girls. The results of the analysis indicated that altogether these three variables accounted for 8.6% ($R^2 = .086$) of the variability in female students' Bully scores on the BVI, $F(3, 203) = 6.46$, $p < .001$. As shown in Table 11, the results of the multiple regression revealed that depression scores, as measured by the RCDS, did significantly relate ($\beta = .32$, $p < .01$) to Bully scores among girls. However, anxiety scores were not found to significantly relate ($\beta = .04$, $p = ns$) to Bullying scores among girls. Similarly, girls' self-esteem, as measured by the CSEI, did not significantly relate ($\beta = .09$, $p = ns$) to Bullying scores on the BVI.

10) What is the relationship between the social-emotional outcomes of depressive symptomatology, anxiety symptomatology, and self-esteem and the tendency to bully among boys?

Pearson product-moment correlations were calculated to determine the relationship between the tendency to bully others among boys (as measured by the Bully subscale of the BVI) and the RCDS, RCMAS, and the CSEI. As presented in Table 11; for males, significant relationships were not found between Bully scores on the BVI and the RCDS ($r(205) = .08$, $p = ns$), the RCMAS ($r(205) = .07$, $p = ns$) and the CSEI ($r(205) = .02$, $p = ns$).

A simultaneous multiple regression analysis was conducted to examine the extent to which levels of depressive symptoms, anxiety and self-esteem are related to bullying behaviour among boys. The results of the analysis indicated that altogether these three variables only accounted for of 2.4% ($R^2 = .024$) of the variability in male students' Bully scores which did not reach significance, $F(3, 203) = 1.68$, $p = ns$. As shown in Table 11, the results of the multiple regression revealed that depression scores, as measured by the RCDS, did not significantly relate ($\beta = .16$, $p = ns$) to Bully scores among boys. Similarly, anxiety, as measured by the RCMAS, did not significantly relate ($\beta = .12$, $p = ns$) to Bully subscale scores among boys. Overall level of self-esteem, as measured by the CSEI, did significantly relate ($\beta = .22$, $p = .05$) to Bully subscale scores among boys.

Table 11
Simultaneous Multiple Regression Analyses of Depression, Anxiety
and Self-Esteem on BVI Bully Scores

Variable	r^a	β	t Value	Signif. Level
Females (n=210)				
RCDS	.29*	.32	2.66	p < .01
RCMAS	.23*	.04	.387	p = ns
CSEI	-.17*	.09	.864	p = ns
Males (n=207)				
RCDS	.08	.16	1.40	p = ns
RCMAS	.07	.12	1.07	p = ns
CSEI	.02	.22	1.93	p = .05

*p < .01

Note: ^a Product-moment correlations between RCDS, RCMAS, CSEI, and Bully scores on the BVI.
The t value and significance level presented is associated with the Beta coefficient.

CHAPTER SIX

DISCUSSION

The purpose of this chapter is to discuss the results of this study. In the first section of this chapter, results pertaining to the extent and nature of bully-victimization and bullying behaviour among elementary school children in the Lower Mainland of British Columbia will be discussed. Gender and grade differences specific to the research hypotheses and research questions will then be addressed. The second section of the discussion will focus on social-emotional outcomes as related to children's involvement in bully/victim experiences. Finally, this chapter will summarize and integrate the findings and conclude with the limitations of this study, as well as implications for practice and future research.

Prevalence of Bullying and Bully-Victimization Among Elementary School Children

The results of this study provide evidence that bullying potentially affects a very large number of school-age children and, as a result, appears to be a surprisingly common aspect of childhood experience. In the present sample of 400 British Columbia elementary children aged 9 to 12 years, 9.4% acknowledged that they engage in significant bullying of other children and 18.9% report being victims of bullying. While these estimates may be considered high relative to some research findings examining the prevalence of bully/victim problems among children (e.g., Olweus, 1984; 1991a; 1993; Byrne, 1994), the prevalence rates of bullying and bully-victimization found in this study are comparable with findings from previous investigations conducted in Canada, Ireland and England (O'Moore & Hillery, 1989; Yates & Smith, 1989; Boulton & Underwood, 1992; Bentley & Li, 1995).

In a Toronto sample of 211 children, Ziegler and Rosenstein-Manner (1991) found that 20% of youngsters in grades 4 to 8 reported being bullied with some regularity ("more than occasionally"). Bentley and Li (1995) found that 21.3% of elementary students in Calgary reported being bullied "sometimes" or more often and 11.6% identified themselves as bullying other students "sometimes" or more often. Whitney and Smith (1993) also reported that a disturbing high level of bullying and bully-victimization occurs among English junior/middle school students: 27% of students were bullied "sometimes" and 10% were victims of severe bullying. Similarly, Ahmad and Smith (1990) reported that 17% of students were victims of bullying and 6% of students reported bullying others. The prevalence rates reported in the present study are comparable to the most recent research exploring the problem of bullying and victimization among upper elementary-aged children. Although Olweus's research conducted in the 1970's and 1980's revealed that one in seven children in Norway report being victims of bullying (Olweus, 1993), results presented in this study lend further support for the conclusion that approximately one in five children are being bullied or victimized with regularity (Smith, 1991; Sharp & Smith, 1991; Whitney & Smith, 1993). Current findings show considerable continuity with earlier studies which have documented the prevalence of bullying behaviour among elementary school children (Yates & Smith, 1989; Smith, 1991; Boulton & Underwood, 1992; Bentley & Li, 1995). The results of this study also demonstrate that up to one in ten upper elementary-aged children are involved in the severe bullying of others.

Given present findings, it seems reasonable to say that the phenomenon of bullying among elementary schoolchildren is a pervasive problem with approximately 1 in 5 children in this study regularly exposed to bullying episodes and approximately 1 in 10 children identified as bullies who oppress, harass, intimidate, or frequently abuse other children. Given the

prevalence of bullying and victimization among children, it is important to recognize that bullying is a significant, and likely negative, aspect of childhood experience. The growing recognition of high rates of childhood bullying and victimization challenges understanding of the scope of childhood violence. Sensitivity to this problem has heightened in the past decade as researchers have become increasingly aware of the impact of childhood adversity, such as bullying and victimization, and its consequences for mental health (Coyne & Downey, 1991). One important direction of this study was to document the extent of bullying and victimization among Canadian elementary schoolchildren. As mentioned above, the prevalence of bullying and victimization in the present investigation are congruent with earlier studies (e.g., Ahmad & Smith, 1991) and provides further evidence that bullying episodes are relatively common experiences for children. Given the body of research documenting the extent to which bullying incidents occur among children, it would seem that exposure and involvement in bullying behaviour is likely to affect and have potentially negative consequences for both the bully and the victim (Farrington, 1993). The results of the present investigation provide some evidence that internalizing problems are relevant to bullying and victimization. These findings and their implications will be discussed in greater detail in the following sections.

Gender Trends and Bully/Victim Problems

Bullying Among Boys and Girls

Previous investigations of gender differences in the prevalence of bullying among children have found that the general trend is for boys to report bullying other children considerably more than girls (Lagerspetz et al., 1982; O'Moore & Hillery, 1989; Boulton & Underwood, 1992; Stephensen & Smith, 1989; Byrne, 1994). Consistent with expectation, results of this study demonstrated that more boys (13.0%) than girls (5.7%) reported that they

engage in bullying other children with some regularity. These results are in accord with the findings from other researchers who have examined gender differences among Canadian elementary students involved in bullying other children (Bentley & Li, 1995). Bentley and Li (1995) assessed bullying behaviour in 379 elementary students in grades 4 through 6 and found a much greater percentage of boys (9.2%) than girls (2%) who reported bullying other students with regularity ("once a week" or "several times a week").

Researchers have typically found that the prevalence rates of bullying behaviour are higher among boys than girls (e.g., Boulton & Underwood, 1992). Interestingly, research conducted with children diagnosed with conduct disorder shows a similar pattern. That is, conduct disordered behaviour is characterized by key features such as physical and verbal aggression, lying, stealing, and violation of the social norms of others (Quay, 1986), which captures a larger range of harmful behaviours than is characteristic of childhood bullying. More importantly for the context of this study is the finding that conduct disorder is more prevalent among boys than girls in the general population (e.g., Costello, 1989). It is important to recognize when examining the results from studies of bullying that bullying is not an isolated behaviour. Because it may be argued that bullying is a component of aggression, the larger syndrome of antisocial behaviour, and externalizing problems in childhood (Farrington, 1993) results from studies of aggression, antisocial behaviour and externalizing problems in children (e.g., White et al., 1990) may inform attempts to explain the apparent differences in male and female bullying behaviour. Consideration should be given to how the research investigations on bullying behaviour relates to the child psychopathology literature. The research findings on children's aggressive behaviour that have direct implications for

understanding bullying patterns among boys and girls will be discussed in the following section.

The results of this study lend support to previous research that has found gender differences in children's involvement in bullying. That is, boys are more significantly involved than girls in repeatedly exhibiting aggressive, psychological, and/or physical behaviours intended to cause distress to a less dominant individual (the victim) (Olweus, 1991a). This finding may be explained, in part, by research evidence demonstrating that boys are more likely to be attracted to aggressive interactions than girls (Serbin, Marchessault, McAffer, Peters, & Schwartzman, 1993) and are more likely to engage in forms of play that may lead to bullying behaviour (Craig & Pepler, 1995; Smith & Boulton, 1990). It may be inferred from the research that different aspects of the group context influences the onset of bullying for boys and for girls because several social processes may incite children to join in bullying episodes (Craig & Pepler, 1995). Derived from social learning theory, modelling is a social process that may contribute to children's involvement in bullying. For example, children are more likely to imitate bullying behaviours if bullies are positively reinforced for their behaviour or if they witness peers and/or adults successfully triumph over their victims by using bullying tactics (Bandura, 1973). If one assumes that social learning experiences influence behaviour, children's involvement in bullying interactions may be increased or inhibited depending on environmental circumstances. Craig and Pepler (1995) in their study of peer processes in bullying and victimization report that "boys are more likely to be actively involved in bullying, participating in a joint game with the bully and observing the bullying than girls" (pg. 91). Thus, males who may be more inclined than girls to imitate bullying behaviours and get caught up in the arousal associated from this display of dominance (Dodge,

Price, Coie, & Christopoulos, 1990; Craig & Pepler, 1995) may also be more likely to be exposed to socialization circumstances which provides them reinforcement and encouragement from others such as peers to "bully". The possibility that these factors directly influence and exacerbate children's involvement in bully/victim interactions seems reasonable.

Another issue that has frequently been documented in the literature is that males are more aggressive than females and the type of aggressive behaviour displayed by males and females differs substantially (Bjorkqvist et al., 1992). Researchers have found female bullying to be qualitatively different than male bullying (Roland, 1989; Oliver & Hazler, 1992, Rigby & Slee, 1991). In the late 1970's, Olweus (1978) claimed that boys are more direct, more violent and more destructive in their bullying: using physical aggression and threat. On the other hand, girls were found to favour the more indirect modes of exclusion and malicious gossip. Although differences in the type of bullying boys and girls engage in was not directly examined in the present study, as reported above, other researchers have found gender differences in the form bullying takes (e.g., Byrne, 1994). Rigby and Slee (1991) argue that because physical bullying occurs much more often among boys than girls, the imbalance of strength and size is likely to affect boys more. Further, it is entirely possible that sex differences may not be found with regard to the prevalence of bullying behaviour among children if the extent to which boys' physical bullying is directly compared to the prevalence of girls' psychological bullying. Such information may assist in understanding gender difference in the incidence of bullying behaviour.

Victimization Among Boys and Girls

In the present study, it was hypothesized that more boys than girls would report being victims of bullying. Consistent with expectation, the results of this study revealed that significantly more boys (23.7%) reported being victims of bullying than girls (14.3%). Although findings from this study suggest a significant gender difference with respect to students' exposure to bully-victimization, it is worth noting that the figures show boys and girls as being at risk for and recipients of indirect (e.g., psychological) and direct bullying (e.g., physical) throughout their elementary school years.

Previous research has generally found that significantly more boys than girls are victims of bullying (Olweus, 1978; 1984; O'Moore & Hillery, 1989; Zeigler & Rosenstein-Manner, 1991). Olweus (1984) reported from his numerous studies on bullying behaviour that almost twice as many victims of bullying are boys. Similarly, O'Moore and Hillery (1989) reported that 12.5% of boys compared to 5.6% of girls were frequently bullied. Although other researchers have found that both genders are victims of bullying to a similar extent (Bentley & Li, 1995), the present findings support the notion that among elementary school children, boys become victims of bullying more often than girls. It is important to note, however, that this finding must be considered with caution. While more boys than girls were identified as victims in the current study, this does not diminish the importance of identifying and targeting for intervention both boys and girls who struggle with their difficulties as victims which often extend over at least a year, and often as many as 2 to 3 years (Lane, 1989).

Any attempt to understand children's bullying behaviour must involve explanations that focus on why boys are more often victims of bullying than girls. One plausible explanation for the higher prevalence of victimization among elementary boys as compared to girls is related to

the higher prevalence of bullying behaviour among boys than girls (Boulton & Underwood, 1992). Given research findings that indicate male victims tend to suffer from bullying delivered primarily by boys (e.g., O'Moore & Hillery, 1989), it is reasonable to suggest that higher bullying rates among boys would support a greater likelihood that victimization rates would also be higher among boys as compared to girls.

Several other studies have focused on gender differences and the nature of bullying experiences during childhood. As mentioned above, examination of children's involvement in bullying episodes as victim reveals that the majority of boys are bullied by other boys (Olweus, 1984;1991a; Whitney, Nabuzoka, & Smith, 1992). Researchers have also reported that during bullying episodes, male bullies are three to four times more likely to inflict physical assaults than female bullies (e.g., Eron, Huesmann, Dubow, Romanoff, & Yarnel, 1987). As well, boys are more likely to be targeted for and recipients of physical bullying than girls (Perry, et al., 1988). Given these factors, the general trend in the research literature reveals that boys are bullied primarily by boys through physical means and are more likely to be bullied than girls. While no firm conclusions can be drawn from the research evidence to explain the higher incidence of victimization among boys, it has also been demonstrated in a number of studies that boys and girls engage in different forms of bullying (e.g., Byrne, 1994). Thus, it is entirely possible that factors such as socialization differences contribute to the higher levels of bullying experienced by boys than girls. For a male whose socialization experiences has encouraged the use of physical and/or aggressive behaviour, this context may operate to support a greater likelihood for involvement in bullying and victimization episodes as compared to girls.

It may also be possible that differences in the ways girls and boys respond to stressful life events such as bullying may impact the extent to which both boys and girls are bullied. It can be argued that being exposed to bullying and victimization in childhood may be an example of acute stress. Further, the way an individual develops coping skills to deal with such stress experiences is believed to have implications for future difficulties (Lane, 1989). Examination of children's subsequent reactions when exposed to a bullying episode reveals that males are more likely to fight back whereas girls are more likely to walk away after being bullied (Kochenderfer & Ladd, 1997). It may be that if boys, regardless of age and stature, are more likely than girls to rely on retaliation after being bullied this behaviour pattern may contribute to the reoccurrence of bullying experiences. As suggested in Kochenderfer and Ladd's (1997) recent study, boys who had the tendency to fight back after a bullying episode stood a greater chance of being the target of future bullying episodes.

A challenge for future research will be to further examine the factors which account for the discrepancy between sex and the extent of bully-victimization experiences among children. There may be several ways to interpret the higher rate of victimization among boys than girls and some initial attempts have been made in the research literature to explore the factors which underlie or contribute to victimization and bullying behaviour. The possibility that sex differences in victimization rates may be related to factors such as boys' and girls' socializational and educational influences (Askew, 1989), children's attitudes toward aggression (Rigby & Slee, 1993), children's genetic and personality characteristics (Farrington, 1993), and differences in peer socialization processes (Salmivalli et al., 1996; Craig & Pepler, 1995) have been considered. A more thorough discussion of the peer

socialization processes which could operate to encourage boys and girls to engage in the bullying of other children will be discussed in the following section.

Conclusions about Gender Differences and Bullying and Victimization

Much research on sex differences and bullying in childhood has been conducted over the past decade. Bullying among girls is not a new phenomena and recently has been explored by researchers interested in girls use of indirect aggression (Lagerspetz et al., 1988; Bjorkqvist, 1992). Many researchers have distinguished between physical and psychological bullying and have found that girls primarily bully others through psychological means such as name calling and exclusion (e.g., Stephensen & Smith, 1989; Smith & Thompson, 1989). This study provides evidence that bullying behaviour is not strictly a male phenomena. Up to one in eighteen girls in this study were identified as being involved in the significant bullying of other children. This study's findings provide support for previous research on gender differences as it was the case that more boys (up to one in ten) than girls in the present study were identified as being seriously involved in bullying.

An important purpose for understanding bullying behaviours among boys and girls is the direct implication for intervention and remediation of this complex childhood problem. The tendency to think of bullying as a "normal" aspect of childhood and the failure to recognize that bullying may leave children vulnerable to mental health (e.g., depression) and future behavioural difficulties (e.g., conduct problems) has been underrepresented in the research literature. Farrington (1993) contents that there is some continuity between bullying and later delinquency and crime, particularly violent crime. Knowledge of the presence of bullying behaviour among children may be critical in understanding the onset of conduct problems, aggression and acts of violence among youth. Olweus (1991a) reports that bullies

may be characterized as having aggressive behaviour profiles as they move from early childhood to adolescence, a factor which puts them at risk for later maladjustment. Follow-up studies conducted by Olweus (1991a) found that 60% of male bullies identified in Grades 6 through 9 had at least one conviction by the time they were 24 years and 35% to 40% had three or more convictions.

The finding that males in this study were more likely to be actively involved in bullying is important because researchers have also identified aggressive children as being at considerable risk for subsequent academic and adjustment difficulties (Perry, et al., 1988) such as repeated school failure, dropping out of school, and delinquency (e.g., Reid, 1989). Accordingly, it would appear that children, particularly boys, possibly due to their more active and frequent involvement in bullying episodes than girls, may be more likely to develop later social, behavioural, and academic difficulties. For this reason, research examining the role of bullying behaviour and the possible continuity between childhood and adolescent psychopathology cannot be overlooked. Taken together, these findings emphasize the need to understand the factors which may be associated with children's involvement in bullying episodes particularly the roles, behaviours, and levels of bullying boys and girls engage in. Further examination of these factors may assist in documenting the relationships and circumstances that encourage the development of male and female bullies.

Bully/Victim Problems and Grade Trends

Female Victims

It was expected that more female victims would be identified in lower grades (grades 4 and 5) in comparison to higher grades (grades 6 and 7). Results of previous studies have found that the percentage of children reporting victimization by bullying has tended to decrease with

increasing age and grade (e.g., O'Moore & Hillery, 1989; Olweus, 1994; Batsche & Knoff, 1994; Pepler & Slaby, 1994). Specifically, Olweus found, in his research of 40,940 elementary school children in grades 2 through 9, that 11.5% of female victims were identified in grade 4, 8.9% were in grade 5, 5.5% were in grade 6, and 3.3% of female victims were in grade 7. Accordingly, regardless of gender it was the youngest children in this comprehensive study of elementary students who were more often identified as victims of bullies than older students.

Results from the present study revealed that the percentage of females who identified themselves as victims in lower and higher grades were similar. The finding that the percentage of female victims was not significantly higher in grades 4 and 5 as compared to grades 6 and 7 runs counter to the general pattern evidenced in the research literature. Consequently, it may be implied that, among elementary girls, vulnerability to bullying episodes may not be necessarily related to age. This finding was surprising because one would expect the percentage of students who are bullied to decrease with age and grade given the results of previous research. A closer examination of the literature, however, does reveal that researchers who have assessed the extent of bully problems throughout the elementary grades (e.g., grades 3 through 7) have rarely conducted a direct analysis of gender differences.

One may hypothesize that a difference between the percentage of female victims in lower grades versus higher grades was not significant in this study due, in part, to social relationship patterns among girls. The literature on peer relations yields information about the stability of children's social and aggressive behaviours which may be related to research findings on bullying problems among girls. Elementary-aged girls are more often exposed to indirect bullying in the form of social isolation, teasing, malicious gossip, and exclusion from

the peer group (e.g., Olweus, 1994). Perhaps it is the case that, during the elementary years, the utilization of these indirect aggressive strategies (a form of social manipulation) serves to exclude a small minority of children from friendship groups (Lagerspetz et al., 1988) which also aids in categorizing these girls as potential victims. It has been commonly documented that victims feel abandoned at school, are more anxious, insecure, and lonely than students in general (Olweus, 1978; 1984; 1994). Research reveals that social exclusion and victimization does not subside but is sustained over a long period of time such as throughout children's entire elementary school years (Perry, et al., 1988; Boulton & Underwood, 1992).

Consequently, it may be expected that, among girls, the rates of victimization during the elementary school years remain quite stable. As evidenced in Perry, Kusel and Perry's (1988) study, while physical abuse among children declines with age, verbal and psychological abuse remains high throughout ages 9 through 12 which is the form of abuse that girls most frequently experience. As a result, one would expect considerable continuity in the percentage of girls identified as victims at different grade levels. It is apparent that future research should consider differentiating between both grade and gender when assessing children's exposure to bullying. Longitudinal studies that yield information about the stability of exposure to bullying over time will be important to consider in order that firm conclusions may be reached about the relation between age and victimization rates among females during the elementary-school years.

Male Victims

Another hypothesis addressed in this study was in regards to grade differences in boys exposure to bully-victimization experiences. As expected, results revealed that more boys identified as victims of bullying were found in lower grades (grades 4 and 5) than in higher

grades (grades 6 and 7). Although these findings contrast the findings of Rigby & Slee's (1991) study which revealed an increase in the problem of bully-victimization among 12- to 13-year-old boys, compared with 10-to 11-year-olds boys, the present results are generally in agreement with prior research investigations (O'Moore & Hillery, 1989; Olweus, 1991a; 1993; Whitney & Smith, 1993). For example, Olweus (1993) reported a steady decline in the percentage of boys and girls in grades 2 to 9 who reported being bullied at school. The results of this study suggest a similar trend. Specifically, the data from the present study revealed that almost twice as many boys in grades 4 and 5 (30.1%) were victims of bullying than boys in grades 6 and 7 (17.3%). Thus, as boys mature, there appears to be a general decline in the percentage of boys who are exposed to bullying episodes.

It has been frequently documented that, among boys, victimization decreases significantly with age and grade (e.g., Batsche & Knoff, 1994). Because research demonstrates that a considerable amount of the bullying among boys is carried out by older students (e.g., Boulton & Underwood, 1992; Olweus, 1994; Garrity et al., 1994), it seems logical that younger boys who are usually physically weaker and more vulnerable than older students (Batsche & Knoff, 1994) are more likely to be the targets of bullying episodes. The type of bullying boys are more frequently exposed to is direct bullying characterized by physical, more violent, and open aggressive attacks on the victim (Byrne, 1994). Whitney, Nabuzoka, and Smith (1992) found that among a sample of 6,758 elementary-aged students 85% of male victims reported that they tended to be bullied mainly by boys. Given these factors, the number of male victims in lower grades may be expected to be higher than the incidence of male victims in higher grades because bullying incidents among males typically involves the victimization of younger students. Bullying is about control (Batsche & Knoff,

1994) and the use of aggression to achieve success and security (Perry et al., 1988). Olweus (1991a) reports that bullies are often characterized by a strong need to dominate others.

Because physically weaker children are more likely to be victims it may be argued that older boys, as a result of targeting these younger boys, are more likely to achieve the control and positive reinforcement (goal attainment) they seek. As victims grow older, however, it is probable that a certain proportion gradually develop strategies to help them escape being bullied (Olweus, 1994). Certainly, it is conceivable that victims may become less vulnerable to bullying episodes with increasing age, experience, social skills and physical strength or stature.

Male Bullies

With respect to bullying among boys, results from this study indicated that the proportion of boys involved in bullying when in higher as compared to lower grades was not significantly different. Specifically, it was found that 16.4% of boys in upper grades (grades 6 and 7) and 9.7% of boys in lower grades (grades 4 and 5) reported bullying other children with regularity. Closer examination of present data reveals, however, that the percentage of boys identified as bullies was consistent across grades 4 (9.4%), 5 (10%), and 6 (10.2%), whereas, a higher percentage (21.8%) of grade 7 boys were identified as bullies. In general, this finding is in accord with earlier research investigations that have found a higher number of boys who bully when in higher grades than lower grades (Boulton & Underwood, 1992; Olweus, 1991a; Bentley & Li, 1995). Researchers, Bentley and Li (1995) concluded in their study that bullies tended to be the older boys in grades 5 and 6 as compared to the younger students in grade 4. Similarly, it was reported by Olweus (1993), from his Bergen longitudinal study, that “a considerable part of the bullying was carried out by older students (p. 15)”. In consideration

of the findings of previous research and present results, it appears that, among boys, bullies are more likely to be older students. In this sample, male bullies tended to be grade 7 students whereas boys in grades 4, 5, and 6 were found to be involved in bullying to a similar extent.

Given the results of this study it becomes important to recognize that prevention and intervention efforts must be focused toward younger as well as older male students. Although much has been written about the tendency for older boys to be involved in bullying to a greater extent than younger boys (Garritty et al., 1996; Boulton & Underwood, 1992), the data presented here underlies the importance of recognizing that boys as young as 8-years old are regularly involved in the severe bullying of other students. It is worth noting that boys in grade 4 are likely to victimize younger children in grades 2 or 3 for example. Olweus (1991a) has found from research involving 42, 324 boys that the percentage of boys who are bullied decreases with higher grades and "it is the younger and weaker students who reported being most exposed (p. 417)" to bullying. As Olweus (1991a) contends, the younger the students are in the school environment, the more potential bullies they have above them. That is, as the results of the current study revealed, the oldest boys in the school are the students more likely to engage in bullying behaviour as compared to boys in lower grades (e.g. grade 4).

Female Bullies

The data from the present study indicates that the proportion of girls involved in the severe bullying of other children is fairly high. The findings of this study revealed that a greater percentage of female bullies were identified in grades 6 and 7 compared to grades 4 and 5. Although minimal research has been focused on an examination of age or grade differences in bullying behaviour among girls, some recent findings have demonstrated that the proportion of female bullies identified in elementary school is comparable at different grade

levels. Bentley and Li (1995) found that the number of girl bullies identified in their study was low and consistent across grades 4 to 6. Olweus (1993) reported that the percentage of girls in grades 4 through 7 who reported having bullied other students was quite similar across these grades. In contrast, the trend demonstrated in the present study differed from these findings: female bullies tended to be the older students in grades 6 and 7 (8.5%) as compared to grade 4 and 5 (2.9%). Perhaps more revealing is the finding that 50% of the female bullies identified were in grade 7 and 75% were in grades 6 and 7. The percentage of female bullies identified in grades 4, 5, and 6 was similar and is consistent with previous research (e.g., Bentley & Li, 1995).

While it should be noted that the grade difference reported between lower and upper grades was not significant, current findings revealed a trend that may suggest older girls in grade 7 are more likely to be identified as bullies. Given the relatively small sample of girls identified as seriously involved in the bullying of other students, caution is warranted in interpreting this finding regarding girls' bullying behaviour and grade differences. It is evident that further research is needed in order to clarify the relationship between age trends and bullying among girls as many earlier studies with small sample sizes have not addressed age/grade differences in bullying behaviour among girls. Against this background it is difficult to ascertain if indeed older girls in elementary grades are more likely than younger girls to be involved in bullying. In this study, while girls in upper grades (e.g., grade 7) appear, to some degree, to be more often involved in bullying than younger students (e.g., grade 4), it is a very preliminary finding.

While no firm conclusions can be drawn from the research evidence to suggest a significant discrepancy in bullying rates among younger as compared to older girls, older girls

more frequent involvement in bullying behaviour as compared to younger girls may be a reflection of differences in the social group dynamics of younger and older girls. Girls are found to favour more indirect forms of bullying such as verbal assaults, spreading rumours, and exclusion (e.g., Olweus, 1994; Rivers & Smith, 1994). With regard to the means used to carry out bullying, Olweus (1991a) found that there was a clear trend toward less use of physical bullying in the higher grades among elementary students. Although girls' level of indirect bullying behaviour has rarely been examined in regard to grade differences, perhaps as girls mature, female bullies are more likely to take part in indirect rather than direct forms of bullying. Bjorkqvist, Lagerspetz and Kaukiainen (1992) argued that the use of indirect forms of aggressive behaviour such as, for example, verbal and/or psychological forms of bullying is dependent upon maturation and manipulation of a fully developed social infrastructure. These authors found that by comparing girls aged 8, 11, and 15 years, girls as young as 8 years engaged in indirect forms of aggressive behaviours, while older girls were much more likely to use indirect methods as an alternative to direct forms of aggression. The use of indirect bullying behaviours appears to be more likely associated with girls (Olweus, 1994). It is also plausible that as girls mature social opportunities, the formation of cliques, and/or friendship groups may be related to girls' use and proficiency in employing indirect bullying tactics (eg., name calling, gossiping, spreading rumours). Indeed, while little is known about the nature and form of bullying behaviours among females which respect to age/grade differences, differences in the use of indirect and direct bullying strategies may be factors that contribute to our understanding of female bullying behaviour at different ages. Consideration of this and other possibilities may help in the understanding of bullying behaviour among elementary-aged girls.

Summary: Gender and Grade Differences in Bully/Victim Problems

This study found significant grade differences among boys in terms of bullying others and being bullied. Present findings demonstrated that boys both bully and become victims of bullying more often than girls. Elementary girls are equally likely to become victims of bullies regardless if they are in lower (grade 4 and 5) or higher (grade 6 and 7) grades. Boys, on the other hand, are more likely to be victims of bullying when in grades 4 or 5 compared to grades 6 or 7. Older girls, in grades 6 or 7, and younger girls in grades 4 or grade 5 appear to be involved in bullying to a similar extent. Approximately equal numbers of boys in grades 4, 5, and 6 are likely to bully others. Why did differences emerge with regard to boys and girls involvement and/or exposure to bullying when in different grades? While the intent of this study was to examine the prevalence and general trends in bullying involvement and bullying exposure among elementary-aged children, more research is undoubtedly needed on plausible relevant factors such as peer group dynamics, temperamental characteristics, family environments (e.g., parental and sibling relationships), parental disciplinary practices, children's exposure to violence, and social learning processes in order to understand more clearly the variables which may relate or influence children's involvement in bullying and/or exposure to victimization.

Social-Emotional Factors Related to Bully/Victim Problems

In recent years, researchers have raised the issue that the act of bullying, or the intentional infliction of hurt, injury, distress and discomfort upon someone less powerful (the victim) has disturbing consequences both for the bully and victim (Besag, 1989; Slee & Rigby, 1993; Farrington, 1993; Boivin, Poulin & Vitro, 1994). The social-emotional problems and long-term consequences related to bullying behaviours among children has been an

underresearched area (Olweus, 1991; Slee, 1994; Slee, 1995). One of the primary goals of this study was to examine the psychological well-being and emotional factors which may be associated with bully and victimization experiences in a sample of Canadian children. The present study extends previous work in this area by examining the association between bullying and victimization and depression, anxiety, and self-esteem for both males and females. These findings and their implications will be discussed in greater detail in the following sections.

Victimization

Depression

The findings from the multiple regression analysis revealed that some youngsters who are being bullied by other children may also be experiencing or at risk for developing depressive symptoms. Thus, current results provide some evidence to support the conclusion that depressive symptoms among children may be specifically related to children's exposure to bullying episodes. Given that the present results demonstrated that victimization and depression was moderately related for both girls and boys, one would hypothesize that the presence of depressive symptoms among children may be a function of victimization by childhood bullies.

Current findings are consistent with the results of recent studies that have explored victimized children's social and emotional adjustment (Bjorkqvist, Ekman, & Lagerspetz, 1982; Parker & Asher, 1987; Slee, 1995; Crick & Grotpeter, 1996). Although research examining the relationship between victimization and depression among children is based primarily on a handful of recent investigations (e.g., Neary & Joseph, 1994; Slee, 1995), earlier studies have revealed that, among boys and girls, depression and unhappiness at school were related to bullying and victimization (Slee, 1995). Findings from Slee's (1995) study are

congruent with present results in that victimization was found to be substantially related with depression for boys ($r = .48$, $p < .01$) and for girls ($r = .53$, $p < .001$) among a sample of Australian elementary school children. While research findings from Neary and Joseph (1994) are limited in light of the small sample used in this study, these authors found that higher self-reported victimization scores among elementary-aged girls were moderately correlated with increased levels of depression. In a similar study, Callaghan and Joseph (1995) found that, among 120 elementary students, there was a moderately strong correlation between self-reported scores and students' scores on a measure of peer victimization.

Given present findings and results from previous investigations, it seems reasonable to say that among elementary-aged youngsters who are victimized, some children experience impaired social-emotional functioning as they are likely to present with a variety of depressive symptoms. As Slee (1995) argues in his study which reveals results congruent with those of the present investigation, "depression is at the very least a concomitant of victimization (p. 61)" among boys and girls.

In a series of other studies, researchers have established that dysphoric mood and depressive symptoms are common among children who experience repeated bullying (Byrne, 1994; Austin & Joseph, 1996; Sharp, 1995). Because support for the relationship between depression and victimization has been demonstrated from results of previous research and current findings, there is some evidence to support a negative cyclical relationship occurs in the bullying process and the manifestation of social-psychological adjustment difficulties. It is plausible that if repeated bullying and victimization continues over a period of time, signs of depression are likely to manifest themselves among some children who are exposed to this stressful experience. If this is the case, it is speculated that victimization and bullying may be

associated with a inclining pattern of depressive symptoms. It may also be argued that if victims begin to view themselves as deserving of these attacks, this negative attributional bias may also contribute to the development of increased depressive symptoms.

With respect to the relationship between depression and victimization evidenced in this study, the learned helpless model may offer some explanation. According to the learned-helplessness model of depression (Abramson, Seligman & Teasdale, 1978), the causal attributions individuals make for negative life events and the degree of importance attached to these events contributes to the development of a sense of helplessness, hopelessness, and depressive symptoms. Consequently, if an individual adopts an explanatory style that is characterized by internal, stable, and global attributions for negative outcomes, they are at a greater risk, when exposed to negative life events, of developing depressive symptoms (Kaslow, Brown, & Mee, 1994). As a result, it may be argued that if children who are victimized have the tendency to perceive their situation as uncontrollable and not likely to change (stable), are likely to blame themselves or feel deserving of this negative occurrence (internal), and have the tendency to generalize across other situations they may be more prone than other children who have not been exposed to a negative life event such as bullying of developing depressive symptoms.

The question of why some victimized children demonstrate depressive symptoms whereas others do not may be an important consideration for future research. With respect to the relationship between depression and victimization, few authors have hypothesized what factors may influence the relationship evidenced in their studies. While the learned helpless model may offer some explanation on the relationship between depression and victimization such that victims who are more likely to attend to the negative events in their lives (e.g.,

bullying) to the exclusion of positive events (e.g., supportive sibling or familial relationships) may be more at risk for developing depressive symptoms, researchers to date have not examined the possible underlying influences which may contribute to a victims' vulnerability in developing symptoms of depression.

It is important to note that the results of this study cannot determine a causal-directional relationship between victimization and depression. Current findings can be best interpreted to support the conclusion that a number of victimized boys and girls do experience increased levels of depressive symptoms. While an understanding of the processes underlying the relation between victimization and depression is limited due to the lack of empirical data, as the author suggests, there may be a theoretical basis (e.g., learned-helpless model) for hypothesizing that the consequence or outcome of bullying and victimization may be the development of depressive symptoms in children. Consistent with evidence from Olweus's (1992) longitudinal study whereby children's exposure and non-exposure to peer victimization and subsequent adjustment difficulties from adolescence into young adulthood was examined, the relationship between exposure to bullying in childhood and later development of depression in adulthood was revealed. Olweus concluded that among a sample of males, who experienced repeated bullying throughout grades 6 to 9, depression and lower self-esteem in adulthood was related to these grade school victimization and bullying experiences. Although Olweus (1993) raised the issue that victimization in childhood may lead to the development of social-emotional difficulties (e.g., depression) for some children as they grow older, the question of whether precursors such as being bullied predicts or directly contributes to the development of depressive symptoms among children has rarely been explored in the literature. It may be argued that such research is necessary in order to further elucidate if differences in victimized

children's coping styles, social cognitive problem-solving ability, and attributional style are, for example, some of the influencing factors which contribute to the likelihood of victims developing depression. While further work is needed for refinement of the nature of the relationship between depression and victimization before clear interpretations can be made, as Rigby and Slee (1991) and Olweus (1993) have noted, the relationship between substantial feelings of misery and depression among bullied children provides insight into the possible effects of victimization experiences. In view of previous and present research findings, the need for further attention to the emotional and behavioural problems of children experiencing victimization is critical.

Anxiety

Previous researchers such as Olweus (1994) have emphasized the importance of examining the affective component among children involved in bully/victim problems. A related issue examined in the present study is whether depression as well as symptoms of anxiety may be associated with bullying and victimization. Besag (1989), in a review of the bullying literature, noted that children who are victims of bullying are often described as anxious individuals. Lagerspetz, Bjorkqvist, Berts and King (1982) found that victims of bullying are not more anxious than bullies or children not involved in bully/victim problems. On the other hand, anxiety and excessive worry may be related to victimization among children. Slee (1994) has shown that victimization among boys and girls was associated with anxiety symptoms such as worry, nervousness, feeling of distress, social avoidance, and fear of negative evaluation by peers. Slee (1994) argues that a possible explanation for the low to moderate relationships evidenced in his study is that the anxiety experienced by victimized children arises out of their social environment and concerns regarding peer evaluations. More

recent findings from Craig's study (1998) indicated that, among a sample of 546 elementary aged children in grades 5 through 8, children exposed to victimization were more likely to report elevated anxiety symptoms than other children. On the basis of a self-report measure of social anxiety, victims reported higher levels of anxiety symptoms than bullies and children not involved in bully/victim problems.

The results from the present study showed that anxiety and victimization was substantially positively related for boys ($\beta = .30$) and girls ($\beta = .40$). Previous research has generally found that self-reported victimization is associated with the presence of higher anxiety symptoms among children (Neary & Joseph, 1994; Craig, 1998). Although the strength of the relationship in the present study is considered moderate (Cohen & Cohen, 1983) for boys and for girls, findings suggest that children identified as victims are also likely to experience symptoms of anxiety. While the finding of a highly correlated association between anxiety and victimization was not demonstrated in the present study, the results of the regression analysis provide evidence that, among boys and girls, the presence of anxiety symptoms is substantially associated with children's exposure to bullying and victimization. Bernstein and Borchardt (1991) suggest that while the "cause of childhood anxiety disorders is still poorly understood, environmental stress appears to be associated with the manifestations of anxiety symptoms (p. 157)". With respect to bullying, it may be that the anxiety experienced by victims may be a result of the distressful nature of this experience.

Silverman, La Greca and Wassterin (1995) argue that the primary characteristic of anxiety is repeated exposure to a stimuli whereby an individual learns that there is a high probability of danger or harm. It seems plausible then that the development of anxiety symptoms (e.g., worry, fear, palpitations, pounding heart) may be the result of exposure to

victimization and bullying whereby the victim recognizes that the outcome of these attacks will likely be psychological and/or physical harm. Alternatively, other researchers have suggested that, based on results of research conducted with pre-school youngsters, anxious children may be more likely to be targeted for victimization by other children (Troy & Sroufe, 1987).

According to these authors, it is entirely plausible that if victims exhibit an anxious vulnerability this may make other children, such as bullies, view them as being more vulnerable to attack. If so, a negative cycle may be created in the development of the victimization and bullying process among children. It is speculated, then, that the cycle may look like this: (a) a child is targeted for bullying, (b) the resultant distress the victim exhibits may contribute to other children viewing the victim as an easy mark, (c) the victim's distress is exacerbated whereby he/she experiences heightened levels of anxiety as a result of the anticipation of a future bullying episode. It may also be the case that if children who are victimized also view themselves as deserving of this abuse, the victim's distress may also lead to the development of depression as discussed in the previous section.

The results of the present study suggest that for children who are exposed to bullying and victimization there appears to be an association with internalizing problems such as depression as well as anxiety. Given the correlational approach used, the results of this study did not provide evidence regarding the causal nature of the relationship between victimization and anxiety. Continued investigation may determine if exposure to bullying and victimization increases the likelihood that children will develop anxious symptoms or if anxious children are those who are more at risk for repeated victimization. Regardless if the causal linkage is from victimization to anxiety or from anxiety to victimization, the results of this study suggest that victimization among children is associated with the presence of generalized anxiety symptoms.

This is important when one considers that anxiety symptoms such as sleeping problems, somatic problems, and feelings of excessive worry or fear are reactions that may be likely to significantly interfere with children's social, emotional, and academic functioning.

Self-Esteem

In addition to exploring the relationship between depression and anxiety and victimization, this study also sought to explore the association between self-esteem and victimization. Interestingly, for boys and girls, victimization was found to be moderately associated with poor self-esteem. For the most part, these findings are in agreement with previous research. Callaghan & Joseph (1995) reported a negative relationship between victimization and global self-worth, scholastic competence, social acceptance, physical appearance and behavioural conduct with the pattern of association being very similar between boys and girls. Others have reported that peer-victimization is associated with lower self-worth among children between 8 to 11 years (Slee & Rigby, 1993a; Neary & Joseph, 1994; Austin & Joseph, 1996) and 12 to 16 years (Lagerspetz et al., 1982). Boulton and Smith (1994) contend that it is widely claimed that a consequence of being repeatedly bullied is low self esteem. In the majority of previous studies, reported correlation coefficients reflect a low to moderate negative relationship indicating that victimization by childhood bullies is associated with low levels of self esteem and self-worth. Results of present findings also reflect a moderately strong negative relationship for boys and for girls.

With regard to the relationship found in the present study between self-esteem and victimization, it is important to note that a different pattern emerges when the results of the multiple regression analyses are considered. When the assessed social-emotional factors of interest (e.g., depression, anxiety, self-esteem) were included in a regression analysis, which

allowed for statistical control of the relationship between these variables, boys' and girls' scores on the self-report measures of self-esteem and victimization were not found to be substantially related. One plausible explanation for the absence of a significant association between victimization and self-esteem may be the result of allowing for statistical control of the relationship between the social-emotional variables, self-esteem, depression, and anxiety and children's reported levels of victimization.

It is reasonable to suggest that this study provided new information on the association of self-esteem and victimization in that the saliency of the effects of self-esteem appears to decrease when social-psychological difficulties, depression and anxiety, are also considered. This finding may result because the variables depression and anxiety have greater explanatory power. Thus, while lower self esteem may be associated with victimization, a more complete understanding of the social-emotional difficulties of victims should also include consideration of the role of depression and anxiety. It is important to note, however, that given the findings of the present study, some victims may be viewed as children who do feel bad about themselves (e.g., low self-esteem).

Bullies

A second purpose with regard to the exploration of social-emotional outcomes and bully/victim problems was to examine the relationship between depression, anxiety, and self-esteem and bullying behaviour for girls and boys. The associations found in the present study will be considered separately for girls and boys.

Females

With respect to females, the results of this study revealed a significant although low correlation between depression and self-reported bullying. The implication of present findings

is that bullying behaviour among girls may also correspond with a variety of depressive symptoms. The low association between bullying and depression evidenced in the present investigation is in accord with other research which has demonstrated that bullying and aggression are, to some extent, related with depressive symptoms among children (Weiss & Catron, 1994).

The findings of Slee's (1994) study reveals a low correlation was found between depression and the tendency to bully among a sample of 353 elementary school children for both girls and boys. The results reported in Slee's (1994) study are very similar to the association between bullying and depression found for girls in the present study. On the other hand, other researchers have reported an nonsignificant relationship between depression and bullying among girls. Austin and Joseph (1996) reported that higher scores on a measure of bullying behaviour were associated with higher depression scores for boys but not for girls.

Because this is a relatively new and underresearched area, it is difficult to offer explanation as to why female bullies in the present study reported experiencing depressive symptoms. One of the factors, however, which contribute to the development of depression among girls may be related to children's perceptions of social support. For example, Azar (1989) found that among depressed and nondepressed adolescents, depressed adolescents did perceive themselves as receiving less social support from peers. If children view themselves as rejected by their peers they may also be more unwilling or less able to develop or maintain supportive social relationships or friendships. Depression may be specifically related to bullying in that aggressive females, who may be likely to bully, may also report higher levels of perceived peer rejection. Panak and Garber's study (1992) found perceived rejection significantly contributed to the prediction of depressive symptoms among aggressive

elementary students in the third, fourth and fifth grades. It is possible that female bullies may be using aggressive strategies and inappropriate patterns of behaviour to cope with difficulties maintaining or developing supportive peer relationships which subsequently may contribute to the development of depressive symptoms.

Overall, the results of previous research and present findings provide evidence that there appears to be a low relationship between depression and bullying among girls. Thus, girls, as a result of their bullying involvement, may also be experiencing symptoms of depression. While current results suggest that girls involved in bullying to some degree also experience depression, directionality in terms of the development of this association was not a consideration of this study. In order to have a more thorough understanding of the nature of this relationship further work is needed to examine the predictive relationship between bullying and levels of depressive symptoms among girls.

Another implication of present findings is reflected in the association between self-esteem and anxiety and bullying among elementary girls. While the zero-order correlation coefficients found in this study indicated significant although very low correlations between bullying and anxiety and poor self esteem, anxiety and self esteem were not found to be significantly related to bullying among girls in the context of the results of the multiple regression analysis. The interpretation of this finding is that there is not a substantial relationship between anxiety and self-esteem and bullying among girls. In research conducted by Olweus, bullies were not found to be more anxious or insecure but were found to display the same tendencies as compared to children not involved in bullying (Olweus, 1984; 1991a, 1994). Findings from Craig (1998) indicate that among bullies, victims, bully/victims and comparison children, bullies were found to have significantly lower levels of anxiety than

victims and similar levels of anxiety than comparison children. Given the findings of previous research and present results, bullying does not appear to be significantly related to higher levels of anxiety symptoms for girls. While the results of this study suggest that bullying is not related to higher levels of anxiety or poor self-esteem for girls, the relationship between anxiety and the tendency to bully among girls has not been adequately explored.

Overall, in interpreting these results, it is important to consider the associations found between bullying and depression for girls. The finding in this study of a significant, although low, association between the existence of depressive symptoms and bullying behaviours among females may highlight the importance of assessing the emotional well-being of children who may be perceived as "bullies". For childhood bullies, there also remains the possibility that while they bully others they are also victimized by other children. In the case of girls, for example, it may be that the association between depression and bullying may be related to some degree by these girls' correspondent exposure to victimization. Future research might further explore the nature of this relationship as little is known about bully/victims and possible social-emotional difficulties. It is also interesting to note that because anxiety and self esteem does not appear to be related to the tendency to bully among girls we need to further understand the social processes which maintain or even exacerbate the aggressive interactions between bullies and victims.

Males

With respect to the relationship between depression, anxiety, and self-esteem and bullying behaviour among males, the findings of the present study revealed that bullying was not significantly related to depression or anxiety. With respect to depressive symptoms, these findings contrast the results of Slee's (1994) study confirming a significant but low relationship

between the tendency to bully and depression among a sample of 188 elementary-aged boys (mean age 10.3 years). Austin and Joseph (1996) found that, among males, the correlation between scores on the Birleson Depression Inventory and on a self-report Bullying-Behaviour Scale was significant although low. It is important to note, however, that these findings may be somewhat weaker as compared to the results of the present study because multiple regression analyses was not used to assess the relationship between social-emotional factors and bullying.

Minimal research attention has considered the relation between bullying others and depression among elementary-aged boys. Overall, as described above, previous investigations have found that males who engage in bullying may also experience symptoms of depression. Results of this study contrast previous findings which suggests that greater bullying involvement among boys is not necessarily associated with the presentation of depressive symptoms but rather is associated with self-esteem.

With respect to the relationship between anxiety and bullying, in the present sample, bullying was not associated with higher levels of anxiety for boys. Olweus (1994) has argued that bullies do not tend to be anxious individuals and the results of this study appear to support this conclusion. Although Craig (1998) reports that children involved in bullying others report similar levels of anxiety as compared to noninvolved children, gender differences were not examined in this study therefore it remains unclear if male bullies did rate themselves highly on anxiety. It may be argued that findings of this research extend current knowledge by demonstrating that elementary-aged boys who engage in bullying are not likely to experience heightened, generalized anxiety symptoms. While more research is undoubtedly needed to examine the association between anxiety and bullying and gender differences, markedly poorer

psychological well-being in terms of greater anxious symptoms does not appear to be associated with the tendency to bully for boys.

With respect to self-esteem, findings of this study do imply that self-esteem is an important factor to consider when the social-emotional variables depression, anxiety, and self-esteem are also evaluated among male bullies. The interpretation of the results from the multiple regression analysis is that, among boys, self-esteem is most strongly associated with bullying as compared to depression and anxiety which are not significantly related to male bullying. Prior research, however, reveals conflictual findings in terms of the relationship between self-esteem and bullying among males. O'Moore and Hillery (1991), using the Piers-Harris Self-Esteem Scale with 7- to 13- year old children, found that bullies had lower self-esteem than non-bullies. In Rigby and Slee's (1991) study, results did not indicate a substantial relationship between self-esteem and bullying. Indeed while some researchers claim that bullied children have low self-esteem, others suggest that bullies do not suffer from poor self-esteem (Olweus, 1984; 1994).

While some may argue that increased self-esteem is an outcome of bullying among boys (Olweus, 1994), given the multiple regression approach used in this study and the low relationship evidenced findings would not provide support for this conclusion. More research is needed to further explore the nature of the relationships evidenced in this study. The examination of possible group and gender differences (bullies, victims, bully/victims and comparison girls and boys) and the relationship to depression, anxiety, and self-esteem may provide further insight about the role of these social-emotional factors among children involved in bullying.

Summary: Social-Emotional Factors and Bullying and Victimization

The associations found in the current study added further evidence for the moderate relationship between victimization and depression and anxiety for girls and for boys. More importantly, present findings revealed the importance of considering the interrelationship between the social emotional variables depression, anxiety and self-esteem and bullying and victimization among children. Overall, given the relationships found, results seem to suggest that anxiety as well as depression should both be considered when assessing victimized children's social-emotional adjustment. Further, it is reasonable to suggest that this study provided new information on the relationship between self-esteem and victimization in that the saliency of the effects of self-esteem does not appear to be concomitant with victimization when other social-emotional factors (e.g., depression, anxiety) are evaluated.

Limitations of the Study

Although the results of the present investigation are informative and add to existing knowledge on bullying and victimization problems among children, it is important to note the limitations of this study. There may be methodological problems inherent in using a sample that comes primarily from one location, relying solely on children's self-report may be seen as somewhat problematic and, lastly, more data needs to be collected on the accuracy of the assessment measure (BVI) used to identify childhood bullies and victims.

In this study, schools were not randomly selected, as a result, all participants came from suburban middle-class neighborhoods. Further, specific information on the socioeconomic status of participants was not possible to obtain. Therefore, it may be argued that results are generalizable only to comparable samples of children attending schools in middle-class neighbourhoods. Although this study was conducted with three schools and the

prevalence rates of children's involvement in bully/victim problems were similar across schools, differences in social environments (e.g., children who are lower in socioeconomic status), family variables (e.g., children who come from single parent homes) and family relationships (e.g., low parental support) could have an influence on results. In this study, these related issues were not examined but are important questions for future research.

The prevalence rates reported in this study were derived solely from self-reports of bullying and bully-victimization. It is acknowledged that problems may arise with accuracy and recall when the self-report method is used with children particularly when they are asked to report involvement in aggressive behaviour (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992). While results of the present study revealed that children do admit to bullying other children, some researchers have argued that "bullies" are not always likely to be detected. It may be the case, for example, as Arora and Thompson (1987) have argued that youngsters are less likely to nominate themselves as bullies because they may not see their behaviour as being deviant in any way. Similarly, Bjorkqvist, Lagerspetz and Kaukiainen (1992) suggest that bullying may be underreported because it is socially undesirable and it may be unconscious. While it may be argued that some children who bully others on a regular basis may not have identified themselves through the self-report measurement method used in this study, present findings lend support for the conclusion that childhood bullying is a problem and bullies do self-report their aberrant behaviour. With regard to the issue of accurately identifying children involved in bully/victim problems, future studies may examine the relationship between children's bully/victim self-ratings and peer assessments. Data gathered from peers who may be witness to bullying episodes may provide additional evidence to support the reliability and validity of the self-report method when assessing bullying and bully-victimization among youngsters.

Implications for Future Research

The present findings demonstrated several revealing relationships with regard to children's involvement and/or exposure to bullying and victimization. Given the results of this study it seems reasonable to suggest that the phenomenon of bullying among elementary school-aged children is a pervasive problem.

An interesting aspect of bully/victim problems which requires further exploration is an examination of the form or type of bullying experienced by girls throughout lower and higher grades. Although researchers have argued that physical bullying is more characteristic of boys and psychological bullying is more characteristic of girls (Farrington, 1993), minimal research attention has focused on the extent of indirect (e.g., psychological) and direct (e.g., physical) victimization experienced by girls in grades 4 through 7. While researchers such as Bjorkqvist and colleagues (1992) have reported that the use of indirect bullying was consistent among their sample of girls aged 8, 11 and 15 years, future research is required in order to elucidate this dimension of bullying behaviour. Moreover, the assessment of indirect and direct bullying among younger and older female students may provide further validation of the generality of age/grade differences and bullying behaviour.

Given that present findings suggest a relationship between victimization and depression and anxiety among girls, as discussed in the proceeding sections, there appears to be a theoretical basis for hypothesizing that the consequence or outcome of bullying may be the development of depressive and anxiety symptoms in children. If this is true, future research needs to examine the effectiveness of strategies that practitioners provide to victimized children to circumvent the psychosocial and physical effects of this form of violence. Better yet, examining the role of variables such as children's attitudes toward aggression, temperament

and personality influences, peer socialization processes, and familial influences may help to reveal the factors which predict or contribute to the negative, often repeated nature of the bully/victim relationship.

Implications for School Psychologists

Given the disturbing nature and the seriousness of the phenomena, it is critical for parents, educators and other professionals such as school psychologists and counselors to consider issues of prevention and early intervention for children distressed by and/or engaging in these behaviours. Further, findings from this study suggest that social-emotional health issues must also be addressed with regard to boys and girls involvement and/or exposure to bullying behaviour. In particular, assessing elementary school children's bullying involvement and victimization exposure and subsequently screening for levels of depression, and anxiety are important, if not critical, considerations.

Secondly, in order to succeed in addressing bullying problems among youngsters, increased understanding about the severity of this problem must occur. School staff members and parents must be made aware of the extent of bullying problems in their schools and efforts must be made to tackle bullying, not overlook it. Research has shown that school-based interventions can reduce bullying (Pepler & Craig, 1995; Olweus, 1991a). While it is the case that many schools in British Columbia and other parts of Canada are currently developing or have adopted anti-bullying programs several factors should be considered before implementing programs designed to combat the problem of bullying among children. For example, once bullying is recognized as a problem, at the school and parent level, intervention may take the form of social skills training programs, emotional control strategies (Coie, Underwood & Lochman, 1991) and peer conflict-mediation programs (Pepler, et al., 1994) which have been

have been proven effective in the reduction of aggressive behaviour and bullying episodes among children (Coie, Underwood, & Lochman, 1991). With the active involvement of teachers, other adults in school, parents, and the children themselves, the potential to reduce violence in the form of bullying within our communities may be possible.

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Appendix A

STUDENT INFORMATION FORM

- Please complete the questions below and then answer the questions on the attached sheets.
- **THIS IS NOT A TEST.** There are no **RIGHT** or **WRONG** answers to these questions, we just want to know how you are feeling about yourself and things in general.
- Please answer ALL of the questions the **BEST THAT YOU CAN**.

YOUR ANSWERS WILL NOT BE SHOWN TO YOUR TEACHER OR ANYONE ELSE IN SCHOOL OR AT HOME.

Identification Letter/NumberCode: _____ Sex: Boy Girl

Grade: _____ Age: _____

How do you describe yourself in terms of cultural or ethnic heritage?

(Please check one). *If you are of mixed heritage, check "other" and explain in the space provided.*

- _____ White (Anglo, Caucasian, etc.)
- _____ Black (African, Haitian, Jamaican, etc.)
- _____ Aboriginal
- _____ Asian (Oriental, Chinese, Japanese, Korean, etc.)
- _____ Indo Canadian (East Indian, etc.)
- _____ Latin (Spanish, Mexican, South American, etc.)
- _____ Other (please describe in the space provided: _____)

How many older brothers and sisters do you have ? _____

How many younger brothers and sisters do you have ? _____

Do you think you are **(Please check one)**:

___ Big for my age. ___ Average for my age. ___ Small for my age.

Do you think you are **(Please circle one)**:

1	2	3
Very popular with other kids	Somewhat popular with other kids	Not very popular with other kids

In the past year, have you had to go to the principal's office because you got in trouble?
(Please check one)

No _____ Yes _____ If Yes, how many times? _____

Appendix B

EVENTS QUESTIONNAIRE

Listed below are some sentences about things that happen in school or outside of school. Please answer how often these things happen to you. There are no right or wrong answers. Put a X or ✓ in the circle that describes how often this has happened to you over the **PAST MONTH**.

<u>IN THE PAST MONTH:</u>	NEVER	ONCE OR TWICE	THREE OR FOUR TIMES	FIVE OR MORE TIMES
1. I was pushed around by other kids in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Other kids teased me or called me names in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. One or more kids hit me for no reason.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Some kids or kid broke something of mine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Some kids or kid said they would hurt me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I was afraid that other kids would hurt me .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Some kids or kid said they would hurt my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Other kids tried to pick a fight with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Other kids did things to make me upset or get me mad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Some kids or kid threw something at me to hurt me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I pushed around other kids in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I teased or call other kids names.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I hit other kids because I felt like it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I picked on younger kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I picked on kids my own age.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I threw something at other kids to hurt them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I made other kids do things for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I told my parents other kids were picking on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I hit my brother or sister.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I was with a group of kids that picked on other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Some kids took my books or papers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I talked on the telephone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Some kids or kid chased me and tried to hurt me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. My brother or sister picked on me or hit me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. A group of kids tried to beat me up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<u>IN THE PAST MONTH:</u>		NEVER	ONCE OR TWICE	THREE OR FOUR TIMES	FIVE OR MORE TIMES
26.	I took things away from other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	I started fights with other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	I called other kids names to hurt them or make them mad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	I broke things belonging to other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	I was with a group of kids that threw things at other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	I beat up someone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	I chased kids to scare them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	Some kids or kid chased me and tried to hurt me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	I got away with hitting kids in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	Some kid or kids were mean to me at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	Other kids did things to me that made me feel bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	I ran away from a kid or kids that tried to pick a fight with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	I made kids do things they did not want to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39.	Some kids or kid told me that they would hurt me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40.	I made fun of other kids to be mean to them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41.	I started a fight with a kid I knew I could beat up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42.	Some kids or kid hit or kicked me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43.	Some kids or kid spit on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44.	Some kids or kid took my lunch or money from me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45.	I took money away from other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46.	I told a teacher that other kids were picking on me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47.	I was with a group of kids that picked fights with other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48.	I took clothes or other belongings away from other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49.	I told someone that I or my friends would beat them up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix C

DIRECTIONS: Here are some sentences about how you may have been feeling for the past two weeks or so. Read each sentence and decide how often you feel this way. Decide if you feel this way: *Almost never*, *Sometimes*, *A lot of the time*, or *All the time*. Fill in the circle under the answer that best describes how you really feel. There are no right or wrong answers. Just choose the answer that tells how you have been feeling for the past two weeks.

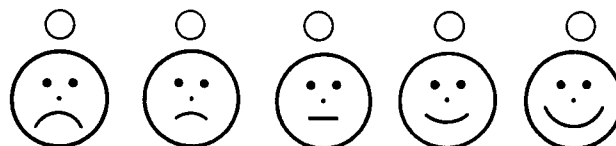
EXAMPLE

	Almost never	Sometimes	A lot of the time	All the time
I feel like watching TV.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Almost never	Sometimes	A lot of the time	All the time
1. I feel happy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I worry about school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I feel lonely.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I feel my parents don't like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I feel like hiding from people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I feel sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I feel like crying.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I feel that no one cares about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I feel like playing with other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I feel sick.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I feel loved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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	Almost never	Sometimes	A lot of the time	All the time
13. I feel like running away.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I feel like hurting myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I feel that other kids don't like me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I feel upset about things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I feel life is not fair.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I feel tired.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I feel I am bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I feel I am no good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I have trouble paying attention in class. ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I feel sorry for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I feel like talking to other kids.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I have trouble sleeping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. I feel like having fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. I feel worried.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I get stomach aches.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. I feel bored.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I feel like nothing I do helps anymore.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. Fill in the circle over the face that shows how you feel.				



Appendix D

DIRECTIONS:

Here are some statement about thoughts and feelings. Please read each statement carefully.
REMEMBER THERE ARE NO RIGHT AND WRONG ANSWERS. Just tell us what you think and feel.

- Circle the word "YES" if you think the statement is TRUE about you

OR

- Circle the word "NO" if you think the statement is NOT TRUE about you

1. I have trouble making up my mind.....	Yes	No
2. Often I have trouble getting my breath	Yes	No
3. I get mad easily	Yes	No
4. It is hard for me to get to sleep at night	Yes	No
5. Often I feel sick in my stomach	Yes	No
6. I am tired a lot	Yes	No
7. I have bad dreams	Yes	No
8. I wake up scared some of the time	Yes	No
9. I wiggle in my seat a lot.....	Yes	No
10. I get nervous when things do not go the right way for me	Yes	No
11. I worry a lot of the time	Yes	No
12. I worry about what my parents will say to me	Yes	No
13. I worry about what other people think about me	Yes	No
14. My feelings get hurt easily	Yes	No
15. I worry about what is going to happen	Yes	No
16. My feelings get hurt easily when I am fussed at	Yes	No
17. I worry when I go to bed at night	Yes	No
18. I am nervous	Yes	No
19. I often worry about something bad happening to me	Yes	No
20. I am afraid of a lot of things	Yes	No
21. Others seem to do things easier than I can	Yes	No
22. I feel that others do not like the way I do things	Yes	No
23. I feel alone even when there are people with me	Yes	No
24. My hands feel sweaty	Yes	No
25. Other people are happier than I	Yes	No
26. I feel someone will tell me I do things the wrong way	Yes	No
27. It's hard for me to keep my mind on school work	Yes	No
28. A lot of people are against me	Yes	No

Appendix E

DIRECTIONS:

Here are some statements about feelings. PLEASE REMEMBER THERE ARE NO RIGHT AND WRONG ANSWERS Just tell us what you think and feel.

- IF A STATEMENT DESCRIBES HOW YOU USUALLY FEEL, PUT A CIRCLE AROUND THE WORDS "Like Me".
OR

- IF A STATEMENT DOES NOT DESCRIBE HOW YOU USUALLY FEEL, CIRCLE THE WORDS "Unlike Me".

1. I often wish I were someone else	Like Me	Unlike Me
2. I find it very hard to talk in front of the class	Like Me	Unlike Me
3. There are lots of things about myself I'd change if I could	Like Me	Unlike Me
4. I can make up my mind without too much trouble	Like Me	Unlike Me
5. I'm a lot of fun to be with.....	Like Me	Unlike Me
6. I get upset easily at home.....	Like Me	Unlike Me
7. It takes me a long time to get used to anything new.	Like Me	Unlike Me
8. I'm popular with kids my own age.	Like Me	Unlike Me
9. My parents usually consider my feelings.	Like Me	Unlike Me
10. I give in very easily.	Like Me	Unlike Me
11. My parents expect too much of me.	Like Me	Unlike Me
12. It's pretty tough to be me.	Like Me	Unlike Me
13. Things are all mixed up in my life.	Like Me	Unlike Me
14. Kids usually follow my ideas.	Like Me	Unlike Me
15. I have a low opinion of myself.	Like Me	Unlike Me
16. There are many times when I'd like to leave home.	Like Me	Unlike Me
17. I often feel upset in school.	Like Me	Unlike Me
18. I'm not as nice looking as most people.	Like Me	Unlike Me
19. If I have something to say, I usually say it	Like Me	Unlike Me.
20. My parents understand me.	Like Me	Unlike Me
21. Most people are better liked than me	Like Me	Unlike Me.
22. I usually feel as if my parents are pushing me.	Like Me	Unlike Me
23. I often get discouraged at school.	Like Me	Unlike Me
24. Things usually don't bother me.....	Like Me	Unlike Me
25. I can't be depended on.	Like Me	Unlike Me

Appendix F