

Behind the Hurt: Children's Underlying Emotions and Desires and their Reported Use of
Relationally as Compared to Physically Aggressive Strategies

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by

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Children's Emotions and Desires and Aggression

Abstract

The purpose of this study was to understand underlying emotions and desires associated with the use of relationally and physically aggressive behaviour in children ages 10-13 years. Two measures of aggression assessed reported use of relationally and physically aggressive behaviour within the peer group and within same-sex best friendships. Reports of aggressive strategies were predicted based on self-reports of jealousy, angry rejection sensitivity, and motivation for peer-perceived popularity. Jealousy predicted reported use of relationally aggressive behaviour in the friendship whereas the desire for popularity and being female predicted reported use of relationally aggressive behaviour with peers. These results are compared to results for physical aggression and prosocial behaviour. This research contributes to the field of aggression by identifying underlying feelings and desires that may motivate children to use aggressive strategies so that researchers and practitioners who work with children may be able to better assist them in developing healthy relationships.

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Children's Emotions and Desires and Aggression

Dedication

For Opa, who lives on within us, in the ways we live, laugh and love. And for my new niece or nephew (I can't wait until you get here).

Children's Emotions and Desires and Aggression

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Behind the Hurt: Children's Underlying Emotions and Desires and their Reported Use of
Relationally as Compared to Physically Aggressive Strategies

The media has captured society's shock at the recent teen suicides and murders that have been blamed on bullying. There have been numerous recent school shootings where a history of bullying and ostracization has been cited as a motivating factor in the attackers' behaviour (Leary, Kowalski, Smith, & Phillips, 2003). A recent and prominent Canadian example of a series of bullying episodes that culminated in a tragic result is that of Dawn-Marie Wesley, a 14-year old girl who committed suicide and cited social bullying by her peers as the reason for doing so in her accompanying suicide letter (Flahive & Glazier, 2004). Similarly, Canadian Reena Virk was murdered by a group of peers she thought to be her friends and who have since alleged that Virk spread rumours about them and stole one of the girls' boyfriends (Godfrey, 2005). In contrast to aggressive behaviours that are directed at harming an individual's physical self these particular methods of bullying and ostracization hurt the individual by causing harm to the social relationships of the targeted person. This form of aggression is referred to as either relational aggression (Crick, 1995) or social aggression (Underwood, 2003).

Media portrayals of social and relational aggression have not been limited to news reports depicting these horrific outcomes. In fact, popular culture has sensationalized the phenomenon of social and relational aggression in films almost entirely dedicated to the behaviour such as *Mean Girls* (Michaels, 2004), *Odd Girl Out* (McLoughlin, 2005) and *Thirteen* (Hardwicke & Reed, 2003) as well as television shows such as *Popular* (Murphy & Matthews, 1999) and *Gossip Girl* (Schwartz, Savage, Levy & Morgenstein, 2007), and an upcoming reality television series entitled *Queen Bees*, where the show's

byline is “This time, the *mean girls* get stung” (Rowley, 2008). The popularity of these depictions of ‘girl culture’ (Flahive & Glazier, 2004) indicates that socially and relationally aggressive behaviours are as well known to young people as they are to researchers in this field.

Despite the sensational focus popular culture has taken on social and relational aggression and the important identification of the serious harm caused by this form of behaviour, much of the information available relating to these behaviours is not grounded in developmental theory and it is not substantiated by research evidence. In fact, Crick cautions that much of the popular press on relational aggression may be quite inaccurate (personal communication, June 2006). For example, the popular press inaccurately portrays girls as the sole perpetrators of relational aggression (see Card, Stucky, Sawalani, & Little, 2008), and depicts highly relationally aggressive individuals as clustering together in groups and aggressing outwards towards non-group members (see Spence, 2002). While the purpose of the present research is not to counter these particular inaccuracies, it is to better understand the underlying motivations for using relational aggression. The aim of this research is to make a contribution to building the knowledge base of the field of relational aggression so that we can better understand and deal with this behaviour within the larger cultural context of North America.

Even within the research literature the terms for this form of aggression are often misunderstood (Archer & Coyne, 2005). This misunderstanding may, at least in part, stem from the fact that in the research literature there are three terms that are being used to describe the more covert, socially manipulative form of aggression: 1) social aggression (Galen & Underwood, 1997), 2) relational aggression (Crick, 1995), and 3)

indirect aggression (Feshbach, 1969). Indirect aggression was the first term to be used in describing behaviours that are aggressive in nature and intent, but more covert and manipulative. The early work of Feshbach (1969) and Lagerspetz, Björkqvist, and Peltonen (1988) on “indirect aggression” provided a foundation for the research on relational and social aggression that followed. Indirect aggression is defined as “a type of behavior in which the perpetrator attempts to inflict pain in such a manner that he or she makes it seem as though there is no intention to hurt at all” (Björkqvist, Lagerspetz & Kaukiainen, 1992, p. 118).

Following the research on indirect aggression with its focus on the intention of the behaviour, Crick and Grotpeter (1995) were the first to coin the term “relational aggression” with its focus on the relationship as the vehicle of harm. They first explored this through their study of preadolescent girls’ reputations among peers for engaging in hurtful manipulation of, or damage (or threat of damage) to, peer relationships. The results of this study provided evidence that relational aggression is a distinct form of aggression and, perhaps most importantly, this study aided in moving away from the stereotype that girls were not aggressive. Their use of the term relational aggression was chosen because of the connotation calling these behaviours “indirect” unavoidably has. What is especially clear in this field of research is that the aggressive behaviours used by individuals that are more emotional, social and relational in nature are not always indirect. In fact, often these behaviours can be quite direct.

Another term used in the literature is social aggression (Galen & Underwood, 1997). Social aggression is defined as a means of inflicting harm by damaging a person’s self-esteem, social status or both, and can be exemplified by behaviours such as

spreading rumours, malicious gossip, social exclusion, verbal rejection and non-verbal body language such as eye-rolling and hair flipping (Galen & Underwood, 1997; Underwood, 2003). Social aggression is a broader more encompassing construct that includes the behaviours identified as relational aggression by Crick (1995). Relational aggression is defined as behaviours intended to harm others through hurtful manipulation of, or damage (or threat of damage) to, peer relationships (Crick, Werner, Casas, O'Brien, Nelson, Grotpeter, & Markon, 1999). It is typically expressed within a friendship or social group such that the relationship is manipulated in order to cause harm. These two constructs have faced criticism over the years for their overlap and have been deemed essentially the same by some (see Archer & Coyne, 2005 for a review), because they share the common goal of harming others through damage to an individual's social environment. It is important to note, however, that both Underwood and Crick differentiate social aggression from relational aggression (Underwood, 2003; Geiger, Zimmer-Gembeck & Crick, 2003). Both social and relational aggression are seen to share aggressive behavior that includes non-verbal aggressive actions such as the "evil eye" and giving the "cold shoulder," but a differentiation is made where social aggression includes aggressive behaviour where the relationship is not the vehicle of harm such as spreading rumours about a person who the aggressor has no relationship with whereas relational aggression does not (Underwood, 2003; Geiger, Zimmer-Gembeck & Crick, 2003).

In the current investigation, the narrower concept of relational aggression as defined and measured by Crick (1995) will be the focus because of its relationship-based nature. Where a relationship exists or there is a desire to establish or maintain a

relationship, feelings and emotions are of paramount importance. Thus, the focus of the present study is on the relationship between children's experienced emotions and attitudes (in particular jealousy and anger when friendships are threatened, fear of peer rejection and desire for popularity) and their reported use of aggressive behaviours, both relational and physical, in the friendship context as well as in the larger peer group context. Prosocial behaviour is also assessed in both contexts.

Aggressive behaviours are often perceived of as being problematic and are often qualified as maladaptive in developmental literature (Crick & Dodge, 1996). An entire volume dedicated to the "bright side to bad behaviour" (Hawley, Little, & Rodin, 2007) is an exploration of research and theory that the authors and editors suggest is support for the adaptive function of aggression (e.g., protective aggression that serves to protect the self or offspring from perceived threats, competitive aggression that serves to secure resources [Pellegrini, 2007] and to secure social dominance and relationships in a society that forces individuals, especially girls, to do so [Sippola, Paget, & Buchanan, 2007]). Although these functions are adaptive per se, they function most often at the expense of others. Further, in some ways, they function at the expense of the individual using the behaviours. What follows is a review of the ways in which relationally and physically aggressive behaviour can be perilous.

Relational aggression and maladjustment

To date, there has been a substantial amount of research conducted on relational aggression to explore how it is experienced and its potential harmfulness. For children who are relationally aggressive, a host of adjustment problems are correlated with their behaviour: social anxiety (Craig, 1998), peer rejection (Crick & Grotpeter, 1995; Crick,

1996; Werner & Crick, 1999; Crick & Bigbee, 1998), internalizing difficulties such as loneliness (Crick, & Grotpeter, 1995; Crick, 1997; Crick & Bigbee, 1998), depression (Crick & Grotpeter, 1995; van der Wal, et al., 2003), isolation (Crick & Grotpeter, 1995), teacher-perceived maladjustment (Crick, 1997; Murray-Close, Ostrov, & Crick, 2007), and externalizing difficulties such as delinquency (Crick, 1997), antisocial behaviour (Werner & Crick, 1999), and symptoms of oppositional defiant disorder and conduct disorder (Prinstein, Boergers, & Vernberg, 2001). For young adults who are relationally aggressive, as nominated by their peers, the comorbid problems become particularly serious: somatic difficulties, affective instability, identity problems, negative relationships, self-harm behaviour, and eating disordered behaviour (Crick, Ostrov & Werner, 2006). Meanwhile, for children who are victimized by relational aggression, a host of similar adjustment problems are correlated with the experience(s): peer rejection, internalizing difficulties, peer relationship problems, and low peer acceptance (Crick, Casas, & Ku, 1999), social anxiety (Craig, 1998), social avoidance, loneliness, psychological distress, and self-restraint issues (Crick & Nelson, 2002). From qualitative studies of the effects of indirect aggression on girls, researchers have found that being the target of this form of aggression leads to anxiety, loss of self-esteem and depression, and suicidal ideation (Owens, Slee & Shute, 2000, van der Wal et al., 2003). A meta-analytic result related to indirect aggression and maladjustment reported that indirect aggression is strongly and uniquely related to internalizing problems (defined by clinical or subclinical levels of depression and anxiety; Card, Stucky, Sawalani, & Little, 2008). These serious consequences illustrate the need for intervention programs that curb, deal with proactively, and overcome this potentially destructive behaviour. The success of these

types of programs is only possible when much is known about the subject at hand.

Although the body of literature in the field of relational aggression is growing, there is much yet to be learned, especially about the role of emotions in predicting the use of this form of aggression. In contrast to relationally aggressive behaviours, much research has been conducted historically examining the role of physical aggression, especially with regard to maladjustment. This research will be reviewed in the section that follows.

Physical aggression and maladjustment

Children who engage in physically aggressive behaviours experience adjustment difficulties as well. In their meta-analysis, Card and colleagues (2008) concluded that there was a strong and unique relation between many maladjustment indices and direct (physical, verbal, and overt) aggression. They concluded that direct aggression was strongly and uniquely related to emotional dysregulation, conduct problems, low peer acceptance (i.e., not being nominated as 'liked' by peers), and peer rejection (i.e., being disliked by peers). These authors also found that gender did not moderate the finding that aggression ("direct" or "indirect") is related to maladjustment. The authors conclude that the theory put forth by Crick (1997), that when individuals engage in gender 'non-normative' forms of aggressive behaviour (e.g., girls engage in physical aggression) they are more likely to experience maladjustment in some way, does not hold. A more extensive review of gender and aggression follows this section.

Given the array of maladjustment indices linked to the experience of being a target of relationally and physically aggressive behaviours, there has also been some research conducted on the prevention of physically (Botvin, Griffin, & Nichols, 2006; Hoffman, Cummings, & Leech, 2004) and, more recently, relationally, aggressive

behaviours. The research on the prevention of relationally aggressive behaviours is much more limited and to date has involved only girls (Cappella & Weinstein, 2006). The intervention focus in particular in the field of relational aggression has raised concerns for researchers and practitioners regarding the adequacy of our knowledge base to date. Indeed, researchers have cautioned of the possibility that not enough is known about the many facets of relational aggression and particularly the *motivations* for using such behaviour to effectively prevent and intervene with this behaviour (Geiger, Zimmer-Gembeck & Crick, 2003). A second concern that plagues this field of research is the study of gender in the use of relational aggression in that results from studies on gender and relational aggression are complex and multi-faceted (Archer, 2004; Card et al., 2008).

Gender and aggression

Gender and relational aggression.

The suggestion that there are gender differences in relational aggression is a source of contention for many researchers. Much of the published research in the field of relational aggression leads the reader to the conclusion that there may be gender differences in the form and frequency of aggression (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Crick, 1995; Crick, Casas, & Mosher, 1997; Crick & Grotpeter, 1995; Crick & Nelson, 2002; Ostrov & Keating, 2004), however, meta-analyses on the subject create a different picture of the behaviour. As the research in the field becomes more sophisticated, it has become clearer that the most interesting gender differences may not be in the mean level of use of relational aggression. Rather, the most interesting

differences may lie in the complexities of measuring the behaviour and the experience of being a target of relationally aggressive behaviours.

There has been much speculation about whether girls use relational aggression more than boys. Some researchers are able to substantiate such a hypothesis. For example, Crick, Bigbee, and Howes, (1996) report that in response to the feeling of anger, girls report they are most likely to be relationally aggressive whereas boys report they are most likely to be physically aggressive. Further, Crick and Grotpeter (1995) report gender differences when peer nominations of relational aggression and physical aggression are utilized. They find that girls are more likely to be nominated by peers as the relationally aggressive children in the class. It may be that when children conceptualize these behaviours they rely on the way they *believe* children should or do act rather than actual experiences of this behaviour. Particularly interesting are the findings by Crick and Nelson (2002) that girls are more relationally than physically victimized by their friends and boys are more physically than relationally victimized by their friends. Confirming these findings are those of Crick, Casas and Ku (1999) that girls are more relationally victimized than boys and boys are more physically victimized than girls. The most important gender difference in relational aggression may in fact be in the level of victimization received by girls versus boys, rather than the level of perpetration.

In contrast to the findings reported by Crick and colleagues, gender differences are not always found. For example, Card and colleagues (2008) conducted a large-scale meta-analytic review of 148 studies that examined what they labeled as “direct aggression” (studies that considered physical and verbal aggression) and “indirect aggression” (studies that considered social, relational, covert, and indirect aggression).

The studies they analyzed had a mean sample age of 8 years old. Results of their analyses of gender differences revealed that boys were significantly more directly aggressive (especially physically, but also verbally, aggressive) than girls and girls were significantly more indirectly aggressive than boys. However, the negligible size difference of this lead these authors to conclude that the gender difference in perpetration of indirect aggression is absent of meaning because of its small effect size and to conclude that, contrary to popular belief, indirect aggression is not an inherently female behaviour. They argue that while boys utilize direct aggression more often, indirect aggression is used more equally by both genders.

In conducting their meta-analysis, Card and colleagues (2008) searched extensively for moderators of gender differences. They found that the reporter of the aggression is the only variable that moderated the results. Parents and teachers tended to report that girls were more indirectly aggressive, whereas self-reports indicated that boys were more indirectly aggressive. Peer nominations and ratings as well as researcher observations tended to find no gender differences.

The authors' results provide support for Hyde's (2005) *gender similarities hypothesis*: there exist far more similarities than differences between the sexes. These results dispel the myth of the many versions of the "two cultures theory" (McCoy, 1990, 1998; Underwood, 2004) used especially in validating gender differences in relational aggression by asserting that boys and girls are socialized in differing cultures, literally cultures distinguishable by gender. Card and colleagues (2008) conclude that overall gender differences in indirect aggression are negligible and that the pattern of similarities between the sexes is much more striking. They attribute the popular misconception that

indirect aggression is the sole province of girls, at least in part, to the recent popular accounts in fictional novels and film and highly sensationalized media of actuarial accounts of the behaviour of so-called 'mean girls' and 'queen bees' mentioned earlier. These results from Card and colleagues (2008) highlighting similarities over differences, are similar to those found by Archer (2004) in a meta-analysis examining the same constructs. In Archer's review of gender differences in forms of aggression, he concluded that in normative samples of school age children the use of indirect aggression is comparable for boys and girls. Furthermore, consistent with the Card, and colleagues' (2008) meta-analysis, Archer (2004) found that the differences fluctuated depending on the reporter, where the largest difference existed for observational studies. He found that girls were reported to engage in more indirect aggression when this methodology was used. Slightly smaller gender differences for peer and teacher ratings were found in favour of girls, and a no gender difference for self-reports and peer nominations was found (note that here peer ratings and peer nominations were differentiated). These results need to be considered in context, however, as the observational studies result considered only a small number of studies and the self-report results considered mainly adult samples.

When considering extreme groups of children however, that is, when groups of highly relationally aggressive and highly physically aggressive children are considered independently (e.g., Delveaux, 2003), gender differences emerge such that extremely relationally aggressive groups are comprised almost entirely of girls whereas extremely physically aggressive groups are comprised almost entirely of boys. There is also a group of extremely relationally and physically aggressive individuals that is comprised of

approximately equal proportions of boys and girls (Delveaux, 2003). Further, gender differences have been found in terms of gender of the aggressor, where relationally aggressive behaviours were considered normative when the aggressor is female, whereas physically aggressive behaviours were considered normative when the aggressor is male (Crick, Bigbee, & Howes, 1996).

It has been suggested that gender differences may vary with respect to age of the child, and methodology used to examine the phenomena (Geiger, Zimmer-Gembeck, & Crick, 2003), for example, girls' higher levels of indirect aggression have been found to be limited to later childhood and adolescence (Archer, 2004). In the most recent meta-analysis on this subject, however, age did not moderate gender differences (Card et al., 2008). It is clear though, that with so many modes of data collection on this behaviour (peer, teacher, parent, self, or observational reports), the findings of gender differences in relational aggression may be confounded by methodology. Further, it seems of importance to consider the potential for confound in the results by the inclusion of differing constructs (indirect, relational, and social aggression) into one singular construct for these meta-analyses. Clearly these constructs are related, but with such an array of instruments of measurement for the behaviours under consideration, it may be of value to consider these constructs separately to examine potential gender differences between them. To date, this has not been done.

The culmination of these analyses with regard to gender differences in relational (and indirect or social for that matter) aggression is that the differences in mean perpetration of this behaviour are slight and may contribute little to our understanding of relational aggression in general. In light of the gender differences that have been found

across many studies, slight as they may be (Archer, 2004; Card et al., 2008; Knight, Guthrie, Page, & Fabes, 2002), it is important to approach the field of aggressive behaviour research in a way that is gender-sensitive. In other words, it is important to consider the differences that may exist beyond mean levels of perpetration for boys and girls. In light of this, the present study will approach the research from the perspective that there exists a potential for gendered motivations behind the aggressive acts of children. While taking into consideration the potential for gender differences, this study was proposed to determine the role of potential predictive value of emotions, attitudes and desires that may contribute to both boys' and girls' reported use of relational and physical aggression.

Where differences in "indirect" and "direct" aggression are clearer and may be more meaningful is in the different responses individuals may have to relational aggression. In their analyses, Card and colleagues (2008) found that maladjustment had two separate streams, each uniquely relating to "direct" and "indirect" aggression. Indirect aggression was found to have a stronger and more unique relationship with internalizing problems and direct aggression was found to have a stronger and more unique relationship with externalizing problems. Given the different outcomes between direct and indirect aggression, the antecedents may also differ between the two forms of behaviour. Further to this, Geiger, Zimmer-Gembeck, and Crick (2003) have suggested that differences in relational aggression may be revealed over time and may vary with context.

For the present study these findings of gender differences and similarities in relational aggression indicate that it is necessary to examine relational aggression and the

emotions and desires that may motivate its use in a way that is gender-sensitive. That is, the analyses and interpretation of these variables needs to be conducted with gender differences as a possibility but not an assumption.

Gender and physical aggression.

Until the mid-1990's, most research on aggression was focused on physical aggression in boys. In fact, considering the rich history of research on aggression (Hyde, 1984; McCoy & Jacklin, 1974), excluding the past decade, the field of aggression had been focused almost exclusively on physical aggression and boys (see Crick, 1996; Crick & Grotpeter, 1996; Underwood, 2003 for reviews). Consistent with the conclusions made in the historical reports of aggression (favouring physical forms), recent meta-analyses on aggression have consistently corroborated the finding that boys use physically aggressive behaviours more than girls (Archer, 2004; Card et al., 2008).

As a caveat to the findings by Card and colleagues (2008) that boys use more physically aggressive behaviours than girls, method of assessment, the percentage of ethnic minorities in the sample and the use of the term "gender" in the title (or the use of terms implying gender was of central importance to the study) moderated the *magnitude* of gender differences in what they termed "direct" aggression (a composite of physical and verbal aggression). More specifically, when direct aggression was assessed by parental and self-reports, the smallest gender differences were obtained, whereas, when this form of aggression was assessed with peer reports and observational reports, the largest gender differences were obtained. Further, smaller gender differences in direct aggression were found for studies with increased percentages of ethnic minorities in the sample. Finally, when the term "gender" (or related terms) were used in the title of the

study slightly larger gender differences in direct aggression were found. Because Card and colleagues (2008) considered studies assessing physical and verbal aggression together (assessing what they referred to as direct aggression), it was of interest in their analyses to also consider the constructs separately. When they did so, they found that gender differences were more pronounced for physical aggression than they were for verbal aggression, indicating that although boys tend to be represented more within both behavioural groupings, this representation is even higher for physical aggression than it is verbal aggression.

Considering the reviewed research on these behaviours, the age range of interest and given the use of self-report measures in the present study, it was expected that levels of physically aggressive behaviours would be higher for boys, and levels of relationally aggressive behaviours would be similar for both genders. Further, based on research related to the field of aggression, in which aggressive behaviours are often compared to prosocial behaviours (e.g., Nelson & Crick, 1999), it was expected that levels of prosocial behaviour would be higher among girls.

Children and self-report measures of aggression

In order to identify emotions that may be related to relational and physical aggression, data was collected from a sample of elementary school children in grades 4 through 7. This age range of 10-13 year-olds was chosen because there is an increased engagement in relationally aggressive behaviours at these ages, and there is also increased understanding that these behaviours are indeed aggressive and harmful at these ages (Crick, Bigbee & Howes, 1996). Given this demonstrated understanding by children, self-report measures of emotions and behaviour were used with confidence to

reflect the goals of the present study (to better understand children's reported emotions, desires and reported related behaviour). Further, the research literature has shown that at least some of the variables being considered in this study (e.g., social status hierarchies and jealousy within a best friendship) are most easily identified in this age range as they are in peak use (Cillessen & Burch, 2006; Parker, Low, Walker, & Gamm, 2005). As described in more detail later, these students completed self-report measures of relational aggression, anger, jealousy, sensitivity to rejection, and social motivation in order to determine the relationship between children's underlying desires and emotions and their reported use of both relationally and physically aggressive behaviours. Self-report measures are often used in the study of aggression in children (e.g., Fite, Stauffacher, Ostrov, & Colder, 2008).

Many modes of data collection have been used in the study of relational, social and indirect forms of aggression. Peer nomination techniques, where students are asked to indicate whom in their classes or grade utilizes these forms of aggression most, are used often (Crick & Grotpeter, 1995). This technique is, however, only one way to obtain this information and forms a picture of who is perceived as aggressive by peers. Other modes of collecting this information that have been utilized are observational methods (Ostrov & Keating, 2004), teacher report methods (Crick, Casas, & Mosher, 1997), interview techniques (Owens, Shute, & Slee, 2000) and self-report measures (Crick & Grotpeter, 1995; Lagerspetz, Björkqvist, Peptone, 1988). Self-report measures in particular, offer unique information about individuals that cannot be collected by any other means. Self-reporting provides an indication of the way an individual feels and feels she or he behaves.

A review follows of what is known to date about the underlying emotions experienced by children who use relationally and physically aggressive behaviours. In this review, it is highlighted that our existing knowledge in this area is limited. The role of emotions, social goals and motivations in the use of relationally aggressive behaviours has generally been ignored thus far in research on relational aggression. The involvement of emotions in motivating relationally aggressive behaviours has been speculated by leading researchers in the field as being of increased importance (e.g., Underwood, 2003), but has not been studied explicitly. Specifically, Underwood speculates about the important role of the experience of anger and jealousy leading to the use of socially aggressive behaviours. She highlights that in North American culture, girls are socialized to always behave nicely toward others and to suppress any angry or aggressive tendencies. Instead of actually behaving nicely, she argues, this pressure leads girls to use social aggression so that they may appear to be acting nicely, when in fact they are acting aggressively. This is an argument echoed by many researchers in the fields of psychology (Brown, 1998; 2003) and sociology (Currie, Kelly, & Pomerantz, 2007), but is a theory not yet substantiated by research evidence. In the present study, it was proposed that experiencing anger and jealousy, especially after experiencing a perceived threat to one's best friendship, and being sensitive to rejection play a significant role in a child's use of relationally aggressive behaviours because, this form of retaliation makes use of the same vehicle of harm as the initial hurt, namely the relationship. Although relationally and physically aggressive behaviours are being studied in the contexts of both the best friendship realm and the larger peer context, it was not clear how emotions would, or if they would, differentially relate to these separate contexts.

Finally, in the literature review, the research on both being perceived by peers as popular (i.e., peer-perceived popularity) as well as being liked or not by peers (i.e., sociometric popularity) as they relate to the use of relationally aggressive behaviours is summarized (Prinstein & Cillessen, 2003). It has been shown in the literature that children who use relationally aggressive behaviours are rated highly on peer-perceived popularity. Therefore, it is argued that the goal of achieving peer-perceived popularity may be another driving factor for a child's use of relational aggression. What follows is a review of what is known to date about motivations for the use of relationally aggressive behaviours. Following that, the emotions and social goals that may be motivators for relationally aggressive behaviours that have not yet been studied empirically are reviewed.

Review of the Literature on Motivations for Relational Aggression

A number of factors have been suggested as motivations for the use of relationally aggressive behaviour, but they have not been examined quantitatively (see Owens, Shute, & Slee, 2000 for a qualitative study on girls' motivations for relationally aggressive behaviours). Owens, Shute and Slee (2000) found that girls reported using relationally aggressive behaviours to alleviate boredom and create excitement, to seek attention from their peers, to be included in the group, to belong to the 'right' group, because they felt jealousy over friendships or romantic relationships, for self-protection and to seek revenge. A few of the most prominent of these findings (jealousy as well as inclusion in the group and belonging to the right group, or in other words, social motivation) along with factors that are theoretically related to these variables (anger and rejection sensitivity) will be explored in the current study for their quantitative relations.

The existing quantitative knowledge of motivations for relationally aggressive behaviours is limited to one study where the researchers found that unlike physically aggressive strategies, relationally aggressive strategies were used in part to avoid getting into trouble while at the same time achieving the goal of maintaining a relationship with the peer group (Delveaux & Daniels, 2000). The motivation assumed here is the avoidance of retribution. These researchers also found some similar goals between physically and relationally aggressive behaviour use, namely, the goals of self-interest, personal control, and revenge. These findings suggest that the use of relationally aggressive behaviours and physically aggressive behaviours, though both aggressive in intent, may differ as a function of the child's underlying goals and motivations. The motivations for physically aggressive strategies seem to be more personal in nature, while the motivations for relationally aggressive strategies seem to be both personal as well as social in nature. Little beyond these factors is known about the motivation for children's use of relational aggression. In the following sections, emotions and desires that may motivate children's use of relational aggression are presented. These emotions and desires are reviewed as they have related to relational aggression in past research only and are not reviewed for the field of physical aggression. Determining underlying emotions and desires for relational aggression was the primary purpose of this study and therefore variables were chosen that theoretically had the most clearly defined relationships with relational aggression. Physically aggressive behaviours and prosocial behaviours were used for comparison purposes directed at this main goal.

Although they are certainly not the only motivations possible for a person's use of relationally aggressive behaviours, jealousy, anger, rejection sensitivity and social

motivation were chosen as the four variables of interest to this study because they have each been studied preliminarily with regard to relational aggression and in each case an intriguing relation has been found. Individually, each of the four variables has been suggested to have a theoretical relation to relational aggression. The first of the variables I propose as motivating relationally aggressive behaviours is jealousy. The experience of jealousy over a friendship is one that may charge an individual with the desire to retaliate against a person, especially in a relationally aggressive way.

Jealousy.

Jealousy is often studied in the context of romantic relationships (Roth & Parker, 2001; Sheets, Fredendall & Claypool, 1997; White, 1980) but more recently developmental researchers have looked at it in the context of friendships (DeSteno, Valdesolo & Bartlett, 2006; Parker, Low, Walker, & Gamm, 2005). The term jealousy is commonly used in the literature to describe, “the negative emotional state generated in response to a threatened or actual loss of a valued relationship due to the presence of a real or imagined rival” (DeSteno, Valdesolo & Bartlett, 2006, p. 627). The experience of jealousy, particularly in the context of a child's friendship, is one that may motivate the child to retaliate against her or his perceived rival or friend in order to in some way remedy that feeling of threat to the relationship. The child may do this in order to distance her or himself from the potential of further threat (i.e., the relationship) or to seek revenge for the threatened or actual loss of friendship. This retaliation may take the form of relational aggression against the perceived rival or the friend.

The only study to have quantitatively examined the relation between jealousy within a same-sex best friendship and relational aggression was conducted by Parker and

colleagues (2005). In their study, the researchers found that children reported that their most jealous peers were also the most aggressive. This finding is incomplete however, as the measure of aggression used in this study had significant measurement issues and the authors were forced to combine scales measuring physical, social, passive, and verbal forms of aggression into one single construct because the scales were highly positively correlated with one another and caused problems with multicollinearity-related fit.

Combining these scales is problematic due to the distinction of these constructs that have been established in the literature (Crick & Grotpeter, 1995). Because of this, it may be that interesting results are actually hidden within this data. Research needs to be done to determine whether jealousy plays a unique role in the use of different types of aggression (i.e, does jealousy within a same-sex best friendship play a unique role in the underlying emotions and desires that may lead to the use relational aggression versus physical aggression?). In this study two different measures of aggression are used to assess the child's cognitive belief about her or his use of relational and physical aggression, one assessing both forms of aggression within the context of a same-sex best friendship (Parker, Low, Walker, & Gamm, 2005) and one assessing both forms of aggression within the larger peer group context (Crick, 1991; 1995).

Parker and colleagues (2005) echo the call for more research on the social world's of aggressive children (a call also put forth by Underwood, 2003 and most recently, by Sippola, Paget, & Buchanan, 2007), noting that they have just started to peel away the layers by finding that threats to friendships may be a key motivation for aggressive behaviour. In contrast to this earlier work, the current study is unique in that children's own internal perceptions of their aggressive behaviour will be examined rather than peer-

or other-reports. This is an important difference between this and most other studies in this area. The current study will examine children's self-reports of jealousy within a same-sex best friendship as they relate to their self-reports of both relational and physical aggression. While it is possible that self-reports may not be an exact reflection of how the individual may act outwardly, it is a true reflection of how they believe they behave and their rationale for why they might behave in a particular way.

One study to have examined jealousy as an actual motivating factor to aggression was conducted with undergraduate students and took place in the laboratory (DeSteno, Valdesolo & Bartlett, 2006). The researchers manipulated relationships to elicit a jealousy response by the participant and then provided the option for the participant to aggress against a perceived rival and perceived partner (both confederates of the study and individuals unknown to the participant). The participant's aggression was measured by deciding the amount of hot sauce their rival and partner would receive in a 'taste test'. The researchers found that participants aggressed toward the rival and the partner an equal amount but to a significantly higher degree when they were manipulated to experience jealousy than when they were not. This finding may have implications for individuals' motivations for the use of relationally aggressive strategies as a way of seeking retribution as a function of feeling jealous. Providing hot sauce to their rival and their partner could be interpreted as a more covert form of aggressing against a person.

When studying and defining jealousy, there is a challenge in differentiating it from envy. DeSteno, Valdesolo & Bartlett (2006) believe that jealousy "is used in modern parlance to connote begrudging feelings toward another individual due to his or her possession of some desired object or attribute, [but] this feeling state is more

appropriately labeled as envy” (p. 627). However, Parker, in his work with elementary school children has made this differentiation in past (unpublished) research with no fruitful outcome (personal communication, January 2008). It seems that despite the conceptual difference, the two concepts may not be distinguished in a child's life, or it may be that as researchers we have not yet designed an adequate measurement of this experience. Thus, the present research study will not distinguish jealousy from envy, and will use the measure of jealousy developed by Parker and colleagues (2005) where participants are asked only about jealousy since it is specifically for use with children.

Schoening (2005), who conducted one of the only studies to have looked at motivations for the use of relational aggression, examined jealousy and envy as motivators. In interviews with preadolescent girls, Schoening presented a hypothetical situation regarding a friendship that was designed to prime jealousy. The girls were told to imagine that a new girl who had enviable qualities (the envy primer) was spending time during and after school with one of their best friends (the jealousy primer). She found that jealousy was a central motivator to girls' fights, especially when jealousy was primed in a situation that threatened one of the girls' best friendships, and even when the girls were primed with envy. All participants reacted to the potential loss of friendship more so than to the fact that the new girl had qualities that might be desired by other girls, such as good looks or clothes. This indicates that jealousy, more so than envy, may be a motivating factor for girls' use of relationally aggressive strategies. It is this relation between jealousy within a same-sex best friendship and the use of relational aggression that will be explored in the present study.

Schoening hypothesizes that the need for belonging is a primary motivator for girls and directly influences the social strategies they employ. This researcher has tied her theory of preadolescent girls' motivations into one of the main tenants of Adlerian psychology (Adler & Stein, 2006), that humans are social beings with a main desire toward community and connectedness, or in other words, they are motivated by a need to belong. This stems from Maslow's (1943) theoretically proposed hierarchy of needs, a theory that there is an order to a person's requirements in the quest for self-actualization, which includes as a third need (only realizable once the basic physiological and safety needs are met): the need for love, affection and belonging. The need to belong may be such a strong one that some children are motivated to use social strategies like relational aggression to fulfill that need. They may indeed see relational aggression as a strategy that will be successful if their group belonging has been threatened. Thus it may be the case that children who feel their friendship is being threatened and experience high levels of jealousy may choose relationally aggressive strategies in order to address this threat.

Jealousy rationale.

It was hypothesized that children's levels of jealousy within a same-sex best friendship would predict children's levels of reported engagement in relationally aggressive behaviours within a best friendship. This hypothesis is based on Parker and colleagues' research on jealousy and peer-perceived aggression (Parker, Low, Walker, & Gamm, 2005). Whether jealousy experienced within a best friendship was related to perceived relationally and physically aggressive behaviours (or both) within the larger peer context was not clear but was explored. As jealousy within a friendship was conceptualized as a state rather than trait-based emotion, it was not clear whether this

emotional state would be indicative of state-disposition and would predict larger peer-context behaviour. This is the first research study to differentiate between these contexts and thus, the analyses are largely exploratory. Further, the degree to which there existed a predictive relationship for jealousy within a best friendship and reported physically aggressive behaviour (in both the friendship and larger peer group context) was also explored but specific hypotheses were not made about this relationship. Following the experience of a threatened friendship, a person may also be inclined to feel angry as feelings of jealousy and feelings of anger are closely related. The next section will focus on the experience of anger as it relates to relational aggression.

Anger.

It is widely accepted that anger plays a causal role in physical forms of aggression (Andersen & Bushman, 2002). Little is known about the role of anger as a causal role in relationally aggressive behaviours, however, it seems reasonable to assume a similar mechanism. Andersen and Bushman (2002) link physically aggressive behaviour to anger in their general theory of human aggression, the General Aggression Model (GAM).

They theorize that anger can interfere with judgment and control and also may consciously justify the use of aggressive behaviour for some. They also speculate that the most important, single, cause of human aggression is interpersonal provocation.

However, the function of anger with regard to relational aggression is to date unknown and is not speculated about in the GAM. Furthermore, there is no other such theory for anger and relational aggression. Since relational aggression is focused on interpersonal relationships it seems reasonable to suggest that those children who are easily angered

when their friendships are threatened may report engaging in more relationally aggressive behaviours.

Theoretically and anecdotally anger is suggested as a causal factor in girls' use of relationally aggressive behaviours specifically (Underwood, 2003) but this relationship has yet to be explored empirically. Buntaine and Costenbader (1997) conducted a study on self-reported anger differences between elementary school-aged boys and girls. They found no differences in level of anger reported between genders. This is a consistent finding in the literature throughout time (Averill, 1983; Deffenbacher, 2008; Zoccali et al., 2007). Interestingly, Buntaine and Costenbader (1997) did find item-analysis differences in their questionnaire. They found that girls reported more anger to the hypothetical situation "your best friend didn't invite you to a party" (the only example of a relationally aggressive event in the measure). Further, it was found in an observational study of preschoolers, that marginal gender differences exist in children's responses to anger (Fabes, Eisenberg, Smith, & Murphy, 1996). The researchers found that girls exhibited more relationally aggressive responses (i.e., rejection/social exclusion) when angered whereas boys exhibited more physical and verbal responses when angered. In the present study the relationship between anger as a reaction to threatened friendship and the reported use of relationally and physically aggressive strategies will be explored for both boys and girls.

Earlier research on anger and aggression did not take relationally aggressive coping strategies into account and thus made sweeping conclusions such as, "boys are more likely than girls to react in an aggressive manner when they become angry. This finding is robust across age levels, ethnicity, and socioeconomic status" (Buntaine &

Costenbader, 1997, p. 627). It is now clear that these types of gender-stereotyped conclusions were based on an inaccurate and incomplete knowledge of aggression. When we consider what is now known about relational aggression we may find that girls sometimes also react aggressively when they become angry, but it may be that they react in a relationally aggressive manner more often than a physical one.

Anger rationale.

Next, based on the preliminary findings in previous research that children report experiencing anger in situations that provoke relational aggression (Buntaine & Costenbader, 1997) and that some children report using relationally aggressive strategies in response to angering situations (Fabes, Eisenberg, Smith, & Murphy, 1996), it was hypothesized that children reported level of anger in response to a threatened friendship would predict their level of engaging in relationally aggressive behaviours. The degree to which this was true for relationally aggressive behaviour in the larger peer group, physically aggressive behaviour in both contexts and prosocial behaviour in both contexts was also explored but specific hypotheses were not made for these variables. That anger may motivate aggressive behaviours may be particularly true for children who are more sensitive to rejection than others. The next section will explore the literature on sensitivity to rejection as it relates to relational aggression.

Rejection sensitivity.

Rejection sensitivity is one's "disposition to defensively expect, readily perceive, and intensely react to rejection" (Purdie & Downey, 2000, p. 338). Sensitivity to rejection from peers, teachers, and even in intimate relationships has been found among children, adolescents and young adults (Downey, Lebolt, Rincón, & Freitas, 1998; Purdie &

Downey, 2000). Rejection sensitivity in children has been found to result from repeated peer rejection (Downey, Lebolt, Rincón, & Freitas, 1998), and parental emotional neglect (Downey, Khouri, & Feldman, 1997). More important for the purpose of this study, rejection sensitivity has been found to result in an individual's readiness to perceive and cognitively and affectively react to rejection in a verbally aggressive or more covert way (i.e., reacting with withdrawal and avoidance; Ayduk, Downey, & Kim, 2001; Downey, Feldman, & Ayduk, 2000; Downey, Freitas, Michaelis, & Khouri, 1998; Purdie & Downey, 2000). This is important because if individuals who are highly rejection sensitive are more likely to react negatively they may also be more likely to react aggressively, in a relational way.

The possibility that sensitivity to rejection may lead to a child's use of relational aggression has not yet been explored, but the relationship between rejection sensitivity and verbal aggression has led the researcher to believe these relationships are important and do exist. They are explored in the current study. To further support the possibility of a relation between rejection sensitivity and relational aggression, Downey and colleagues found that women's level of rejection sensitivity predicted their likelihood to reject others during conflict situations whereas men's did not. Women who were rated highly on sensitivity to rejection were more likely to reject others (a relationally aggressive behaviour) than women low on rejection sensitivity (Downey, Freitas, Michaelis, & Khouri, 1998). It is possible, however, that the relationship between sensitivity to rejection and relationally aggressive behaviours is confounded as all gender comparisons were not made in this study. Specifically, it is unknown whether highly rejection sensitive women are more likely to reject others than highly rejection sensitive men. In

the present study, boys and girls reported use of relationally and physically aggressive behaviours will be correlated with their reports of rejection sensitivity in order to better understand the relationship.

There has only been one study to date conducted on children's sensitivity to rejection by peers (Downey, Lebolt, Rincón, & Freitas, 1998). The Children's Rejection Sensitivity Questionnaire (CRSQ) can be used to assess children's dispositional sensitivity to rejection from peers and adults in two ways: the anxious expectation of rejection and the angry expectation of rejection. The researchers found that children who angrily expected rejection (anxious expectation was not assessed) became more distressed by an experimentally manipulated rejection by a peer than children low on rejection sensitivity. The researchers conducted a second study that examined behavioural outcome of rejection sensitivity. They found that angry rejection sensitivity predicted increases in self-reported physical aggression and increases in teacher-reported aggression toward peers over time, however they did not assess relational aggression. To date it is unknown what the nature of the relationship between rejection sensitivity and the desire to use relationally aggressive behaviours for boys and girls is. This is one of the goals of the present study.

Rejection sensitivity rationale.

Based on Downey and colleagues' research on rejection sensitivity in children (Downey, Lebolt, Rincón, & Freitas, 1998) and their finding that children who are highly rejection sensitive were more likely to react in an aggressive way, it was hypothesized that this finding would hold true for children's reported feelings of rejection sensitivity and their reported engagement in relationally aggressive behaviours. Specifically, it was

hypothesized that children's levels of rejection sensitivity would predict their level of engagement in relational aggression. The degree to which this was true for relationally aggressive behaviour in the larger peer group, physically aggressive behaviour in both contexts and prosocial behaviour in both contexts was also explored but specific hypotheses were not made for these variables. Further to the discussion of the important role emotions may play in children's motivations for relational aggression, factors that heighten or elicit these emotions may also play a role. Children's social motivation may be one such factor. The relation between social motivation and relational aggression will be explored in the following section.

Social motivation.

Social status is a highly researched topic in developmental psychology because of the important role the social hierarchy plays for children (Cillessen & Rose, 2005). Never before, however, has the motivation to achieve a heightened social status been studied. Therefore, it is not known what role social motivation may play in the use of relationally aggressive strategies but the present study is directed at exploring this relationship.

Peer-perceived popularity is based on peer nominations of who is "most popular" and "least popular" in the population of interest. This should be differentiated from sociometric popularity, a preference-based measure of sociometric status, which is derived from children nominating peers whom they "like most" and "like least". Sociometric popularity scores capture how well an individual is liked by peers while peer-perceived popularity captures peers' perceptions of an individual's social reputation. A recent study by Andreou (2006) found that relational aggression was a positive

predictor of peer-perceived popularity for both boys and girls whereas it was not a significant contributor to the variance in peer nominated social preference.

Similar findings have been reported in past research (Cillessen & Borch, 2006; Lease, Kennedy, & Axelrod, 2002; Rose, Swenson & Carlson, 2003; Salmivalli, Kaukiainen & Lagerspetz, 2000; Sandstrom & Cillessen, 2006), but there has been a call for more investigation as to why the relationship between relational aggression and perceived popularity exists. While it is clear in the literature that relational aggression is a predictor of peer-perceived popularity, it is still unclear whether children who engage in relationally aggressive behaviours are motivated to do so in order to increase their popularity. The present study examined the relationship between self-reported desire for popularity and self-reported use of relationally and physically aggressive strategies in both boys and girls.

Social motivation rationale.

Based on the finding that relational aggression is a predictor of peer-perceived popularity (Andreou, 2006), it was hypothesized that children levels of social motivation and desire for affiliation would predict levels of engagement in relationally aggressive behaviours. The degree to which this was true for relationally aggressive behaviour in the larger peer group, physically aggressive behaviour in both contexts and prosocial behaviour in both contexts was also explored but specific hypotheses were not made for these variables.

Measuring relational aggression

Concerns have been raised about the lack of agreement across the forms of measurement currently used to explore the aggressive behaviours of individuals (Henry,

2006; Peets & Kikas, 2006). Teacher-reports, peer-reports, and self-reports are most often employed to measure the actual level of aggression an individual engages in. For the purpose of this study, self-reports were used not as a measure of the actual level of aggression the children engage in, but rather as a measure of their perception of how much they use physically and relationally aggressive behaviours. As this is a study about children's internal beliefs and feelings about their behaviours, self-reports for all variables are being used. The purpose of the present study is to determine the nature of the relationship between boys' and girls' self-reported emotions and desires (specifically, jealousy, anger, rejection sensitivity and social motivation) and their self-reported use of both relationally and physically aggressive strategies. Several hypotheses are proposed for these relationships and are presented next.

Hypotheses

A regression analysis was used for this study to examine the relationships between the variables under study (jealousy, anger, rejection sensitivity and social motivation) as they relate to relational and physical aggression, and in turn how they relate to prosocial behaviour. The regression analyses that were used also allowed for the examination of whether the feelings proposed predicted behaviour. It was of interest to determine if, and to what degree, these particular behaviours serve as motivators for relationally aggressive behaviours and physically aggressive behaviours. Another advantage to the proposed analyses is that because we are examining the emotions, desires and behaviours of a normative sample of school children (rather than groups of extremely aggressive children) no subjects were excluded from the analyses. Causation is not addressed within this study because a correlational design is being used.

Conceptually, these feelings may be related to behaviour but as a correlational study, whether one causes the other cannot be addressed. In fact, some researchers have speculated that an underlying cause of relational aggression may be insecure attachment (Moretti, DaSilva, & Holland, 2004) and this experience could lead to higher levels of jealousy, anger and rejection sensitivity that would subsequently lead to higher levels of relational aggression. Results from this study are interpreted with caution as other variables may be underlying the results.

This study was led by the research question: which variables (reported feelings) predict reports of relational aggression? It was hypothesized that children who report strong feelings of jealousy and anger when a friendship is threatened, higher levels of rejection sensitivity, and higher levels of social motivation would also report the use of higher levels of relationally aggressive behaviour. How these emotions were related to motivations for physical aggression was less clear but was explored. It was hypothesized that these relationships would differ for boys and girls and thus it was expected that regressions would be run with gender entered in the model. It was exploratory to see how these behaviours and emotions differed by context (threatened friendship versus larger peer group).

Summary

The purpose of the present study was to assess how well children's reported aggressive and prosocial behaviours could be predicted from children's reported emotions and desires (specifically, jealousy and anger in response to a perceived threat to one's best friendship, anger and anxiety in sensitivity to rejection, and factors assessing social motivation). These behaviours were measured within two distinct contexts: one

within the context of a best friendship threatened by an interloper and one within the context of the larger peer group. These analyses were achieved with the use of regression analyses so that the variance in behaviours could be assessed and so that the function of individual predictor variables could be better understood.

It was hypothesized that the strongest model to emerge would be that jealousy, anger, rejection sensitivity and social motivation would predict a large amount of variance in relationally aggressive behaviour. It was also predicted that jealousy, anger, rejection sensitivity and social motivation would predict variance in physically aggressive behaviours, but the degree to which this was true was not hypothesized as it was largely exploratory and was conducted for comparison purposes based on some of the previous findings that there are differentiated goals for relational and physical aggression (Delveaux & Daniels, 2000). It was hypothesized that jealousy and anger would be the strongest predictors of variance for relationally aggressive behaviours as well as physically aggressive behaviours. As prosocial behaviours were used for comparison purposes in this study as well, specific predictions were not made regarding the degree of variance that would be explained in the use of these behaviours. It was predicted, however, that the variance in prosocial behaviour would not be largely explained by the emotion and desire variables under consideration. Lastly, it was hypothesized that gender would not account for a significant proportion of the variance in relationally aggressive behaviours but would account for a significant proportion of the variance in physically aggressive behaviours.

Method

Participants

The sample consisted of students in grades 4, 5, 6 and 7 from one Catholic rural Ottawa elementary school ($N = 76$; 46 girls and 30 boys) whose parents provided written consent to participate in this study (see Appendix A). The mean age of participants was 11.16 ($SD = 1.19$). Of 151 consent forms sent home with students, 85 were returned by the deadline. This reflects an overall response rate of 56.3%. The low response rate is attributed to a short timeline given for participants to return their consent forms as data collection was done at the end of the school year. Of the 85 students who returned consent forms, however, 76 participants were available to participate (4 students were absent the day of data collection and 5 students were not given permission to participate).

Procedure

Ethics approval for the research was given by the Carleton University Research Ethics Committee as well as the Catholic District School Board of Eastern Ontario. Individual schools were contacted to solicit in-class participation. One school in rural Ottawa agreed to participate and parental consent forms were distributed to students. Students were asked to return consent forms within 4 days of distribution. Parents were also distributed a letter from the principal asking for their participation and were called at home as reminder to send back the signed consent form, regardless of whether they were consenting to participation. Only students whose parents provided consent were asked to participate in the study. Students whose parents did not provide consent to participate were asked to sit quietly and read while data collection took place.

Four researchers, including the author as well as the supervisor for this thesis, collected the data. All researchers had experience working with children and had completed or were in the process of at least a Bachelor's degree. Two researchers and the teacher for each class were present in each collection session to ensure timely and efficient sessions. Teachers were asked to be present but not participate in the session. One researcher read instructions aloud while the other watched for individual questions. The researcher informed the participants that their answers would be anonymous and that they could refuse to answer any question or cease participation at any time (see Appendix B). Participants were asked to raise their hands for questions during the completion of the questionnaires. Questionnaires were all read aloud to compensate for potential reading level differences among students. Students were permitted to complete the current questionnaire at their own pace but were asked to stop when they encountered a blank page (a blank page divided the individual questionnaires).

Upon completion of all questionnaires, participants were thanked for their time and effort (see Appendix C). They were debriefed about the purpose of the study and were told that if any of the issues they had responded to on the questionnaire made them feel uncomfortable, sad, or distressed, they should talk to a trusted adult in or out of the school, including a support counsellor with the Kids Help Phone. They were given a pamphlet which included contact information for the researchers and the number for Kids Help Phone, along with a business card for Kids Help Phone to keep on their person if they wanted to. Each class was also given a poster for Kids Help Phone to hang in their classroom. Each student was also given a pencil as a thank you gift for participation and a

debriefing form that briefly outlined the study and were asked to give this to their parent(s)/guardian(s) (see Appendices D and E).

Measures

On the first page of the questionnaires participants were asked to indicate their age and gender and they were introduced to the format of the study. This first portion of the battery participants were given was a general introduction to answering survey questions and gave an example of how to fill out the questionnaires (see Appendix F).

Relational aggression within the peer context.

The level of relational aggression the child feels she or he typically engages in within the general peer context was measured with the Children's Social Behavior Scale – Self Report (CSBS-S; originally developed by Crick, 1991 as the Children's Peer Relations Scale and further modified and renamed by Crick, 1995). Participants were asked to respond to questions about "how kids get along with one another" that assessed 6 arenas of children's social behaviour: relational aggression, physical aggression, prosocial behaviour, verbal aggression, inclusion, and loneliness (see Appendix G). An example of a question on this scale is "Some kids tell lies about a classmate so that the other kids won't like the classmate anymore. How often do you do this?" and subjects asked to rate their answer on a scale from 0 (Never) to 4 (All the Time). This scale was modified from the original 1 to 5 Likert scale to be consistent with the other measures used.

Scores on the CSBS-S relational aggression subscale have the possibility of ranging between 0-28, with a high score indicating a higher reported engagement in relational aggression within the general peer context. Children's responses for items on

each subscale are summed to obtain total subscale scores. There has been little reported data on the psychometric properties of this scale, as it has not been used frequently in research. However, it has been shown to have good internal consistency (Cronbach's alpha for relational aggression subscale = .73, overt aggression subscale = .82). The Children's Peer Relations Scale, which the CSBS-S was adapted from, was reported to have had good construct validity (Crick, 1991) and good test-retest reliability ($r = .93$ and $.86$ for boys overt and relational aggression, respectively, and $r = .81$ and $.80$ for girls' overt and relational aggression, respectively) over a one-month period (Crick, 1996). For the current study, Cronbach's alpha for the relational aggression subscale was $.87$, and for the physical aggression subscale was $.86$, and for the prosocial subscale was $.83$. Overall this indicates good reliability for all subscales of the CSBS (George & Mallory, 2003).

Jealousy and anger and relational aggression within a best friendship.

Dispositional jealousy and anger with regard to a threatened friendship was measured with a revised version of the Friendship Jealousy Questionnaire (FJQ) developed by Parker, Low, Walker, and Gamm (2005). Participants were asked to provide answers to 15 short hypothetical vignettes, which represented threats to a same-sex best friendship. The original scenarios from the FJQ were presented without the emotion originally presented (e.g., rather than the original item, "I would feel jealous if I invited my best friend to go see a new movie, but she told me she was already going with another girl from our group" the item read, "If I invited my best friend to go see a new movie, but she told me she was already going with another girl from our group..."). The participant was then presented with a series of questions: how likely they would be to feel jealous, how likely they would be to feel angry, and how likely they would be to feel fine,

and then gave a series of options for strategies they might use in dealing with the threat. These strategies represented a relationally aggressive strategy (e.g., "I would ignore both of them on purpose for the day to make them feel bad"), a physically aggressive strategy (e.g., "I would push them around the next time I see them in the hall"), and a prosocial strategy (e.g., "I would ask them if I could join their study group"). Participants were asked to indicate the level of jealousy, anger, and feeling fine they would feel on a 5-point scale, ranging from 0 (not at all true of me) to 4 (really true of me) and were asked to indicate their likelihood of using any of the presented strategies on the same scale. Level of reported jealousy within a same-sex best friendship as well as level of reported anger within a same-sex best friendship is computed by summing responses across the items for both constructs separately. Levels of endorsement of relationally aggressive, physically aggressive and prosocial strategies are computed by summing responses across the items for each of the three constructs separately. The questionnaires are gender specific (see Appendix H).

Scores on each subscale of the FJQ-r have the possibility of ranging between 0-60, with a higher score indicating the reported experience of more jealousy or more anger in response to a threat to friendship, or more endorsement of relationally aggressive, physically aggressive or prosocial strategies in response to a threat to friendship. Parker and colleagues (2005) found that this measure (with regard to jealousy only, as they did not measure anger, relationally aggressive responses or physically aggressive responses) is a reliable, stable and conceptually clear way to assess jealousy within a same-sex best friendship with good psychometric properties overall. They reported that the 15 jealousy items demonstrated excellent statistics for kurtosis and skew, the distributions of the

scores for jealousy within a same-sex best friendship ($M = 2.39$, $SD = 0.92$) were approximately normal (Kolmogorov-Smirnov $Z = .70$) and internal consistency across the 15 jealousy items was high (.93). Test-retest data indicated high short-term stability in scores, $r(39) = .94$, $p < .01$ and test-retest correlations calculated separately for boys and girls indicated that reliability did not differ by sex: $r(19) = .96$ for girls versus $r(20) = .92$ for boys. Finally, Parker and colleagues (2005) reported that jealousy was unrelated to socially desirable responding ($r(23) = .03$, ns) as measured by the Social Desirability Questionnaire (Crandall, Crandall, & Katkovsky, 1965).

For this sample, Cronbach's alpha for the jealousy subscale was .94, for the anger subscale was .94, for the relationally aggressive strategy endorsement subscale was .87, for the physically aggressive strategy endorsement subscale was .83, and for the prosocial strategy endorsement subscale was .87. Overall this indicates excellent internal consistency reliability for the jealousy and anger subscales and good reliability for the relationally aggressive, physically aggressive, and prosocial subscales (George & Mallory, 2003).

Rejection Sensitivity.

Rejection sensitivity was measured with the Children's Rejection Sensitivity Questionnaire (CRSQ; Downey, Lebolt, Rincón, & Freitas, 1998; see Appendix I). The CRSQ is a measure intended for administration to 3rd to 8th grade children that assesses the extent to which children anxiously or angrily expect rejection from peers and adults (Downey, Lebolt, Rincón, & Freitas, 1998). It is a self-report questionnaire with 12 items that present hypothetical situations reflecting an ambiguous rejection by either a peer or by a teacher (i.e., that could potentially but does not necessarily have hostile intent).

Children's Emotions and Desires and Aggression

Children are asked to rate their anxiety about the situation on a scale from 0 (not nervous) to 4 (very, very nervous) and their anger on a scale from 0 (not mad) to 4 (very, very mad). They then rate their expectation of rejection regarding the scenario on a scale from 0 (YES!!!) to 4 (NO!!!). On the original version of the CRSQ the Likert scales ranged from 1 to 6. These scales were modified for the present study to be consistent with all other measures that were administered to students in the interest of avoiding confusion (i.e., 0-4). Upon analysis however, they were recoded so that the computation of the overall anxious and angry expectation scores reflected the original scale less one choice.

An example of a peer scenario on the CRSQ is: "Imagine you had a really bad fight the other day with a friend. Now you have a serious problem and you wish you had your friend to talk to. You decide to wait for your friend after class and talk with your friend. You wonder if your friend will want to talk to you." The child is then asked, "How NERVOUS would you feel, RIGHT THEN, about whether or not your friend will want to talk to you and listen to your problem?" (not nervous/very, very nervous), "How MAD would you feel, RIGHT THEN, about whether or not your friend will want to talk to you and listen to your problem" (not mad/very, very mad), and "Do you think he/she will want to talk to you and listen to your problem?" (YES!!!/NO!!!). Each item on the CRSQ includes a question about anxiety and a question about anger. Scores for each factor (anxiety or anger) are obtained by multiplying the chosen score on that factor by the score chosen for the expectancy of rejection overall for that item. The total score for each factor is obtained by averaging the scores for the items on each factor. Scores on each of the two subscales of the CRSQ have the possibility of ranging from 1-25, with a

higher score indicating the experience of higher (angry or anxious) sensitivity to rejection.

The peer and teacher items loaded together on the same factor when the Downey and colleagues (1998) conducted their factor analysis and therefore are considered as one general measure of sensitivity to rejection. They have performed factor analyses on all items to determine factor loadings for anxious versus angry expectation items and found that all items loaded on their proper factor. This measure has shown good test-retest reliability (anxious = .82, angry = .85, $r = .49$, $p < .001$), good Cronbach's standardized alpha (anxious = .79, angry = .82) and good Eigenvalue for all factors (anxious = 4.05, angry = 3.76) in the research conducted by Downey and colleagues (1998).

For the current study, Cronbach's alpha for the anxious expectation of rejection was .74, and for the angry expectation of rejection subscale was .71. Overall this indicates acceptable reliability for these two subscales (George & Mallory, 2003).

Social Motivation.

Social motivation was measured with a questionnaire developed for this study (see Appendix I) consisting of 16 questions where the intention was that 4 questions on each subscale were to assess the degree of *desire* for peer-perceived popularity, sociometric popularity, friendship and centrality within the peer group. These factors were selected because it was believed that they were theoretically related to the desire to obtain a high profile reputation among peers. Participants were asked to rate the importance of a statement on the questionnaire between 0 ("not at all important to me") and 4 ("really important to me"). An example of a question on each subscale of this measure is, "Being cool is...", "Being liked by others is...", "Having lots of friends is..."

and "Being the boss of the group is...", for the factors named above, respectively. Scores on each of the subscales (peer-perceived popularity, sociometric popularity, friendship and centrality) have the possibility of ranging between 0-16 on each, with a higher score indicating that the individual is highly socially motivated for that respective category of social interaction or status.

Results

Before regression analyses could be conducted it was necessary to evaluate the psychometric properties of the Social Motivation Scale, an instrument designed for this study that was meant to assess the level of importance peer-perceived popularity, sociometric popularity, friendship and centrality have in children's lives. It was then necessary to evaluate and clean the data to prepare for the regression analyses. Once this was completed, six regression analyses were performed. Each of these analyses assessed the degree to which the variables of interest in this study were predictive of the behaviour variables in this study. Each of these behaviour variables was considered within the context of a best friendship and within the context of the larger peer group.

Psychometric evaluation of the social motivation scale

The overall psychometric properties of the social motivation scale (SMS) were analyzed so that the variables under consideration (peer-perceived popularity, sociometric popularity, friendship and centrality) could be better understood. More specifically, it was necessary to determine which items on the scale clustered together to form conceptually sound factors. A principal components analysis was conducted to determine the component loadings of the items. The principal components analysis was performed with both Varimax and Promax rotations and both produced identical factors. All items could

be fairly well explained by the identified factors. This was evidenced by the fairly high values of communalities for all items, which indicate the proportion of variance in each item that can be explained by the identified factors (h^2 range = .55 – .84). Four factors with Eigenvalues over 1 were identified. The first factor accounted for a substantial amount of the variance (39.1%), the second accounted for a moderate amount of the variance (15.3%), and the third and fourth factors accounted for small amounts of the variance (8.8% and 7% respectively). Factor 1 was comprised of 8 items from the SMS scale. The items that loaded most highly on this factor reflected the desire for control and power over the peer group as well as reputation and identification with “popular” peers. Factor 2 was comprised of 3 items that reflected the desire for close friendships. Factor 3 was comprised of 3 items that reflected the desire for numerous friends and having influence, whereas factor 4 was comprised of only 2 items that reflected being unpopular or un-liked (these were reversal items).

As extracted factors 1 and 3 were substantially correlated ($r = .49$) and factor 1 explained more of the variance than 3, only factor 1 was retained in all subsequent analyses. As factor 4 explained only 7% of the variance and was comprised of only 2 variables, it was not retained. See Table 1 for the component loadings from the Promax rotation. The two factors retained were labelled “desire for popularity” and “desire for friendship” based on the themes within the questions that comprised these factors. For this sample, Cronbach's alpha for the desire for popularity subscale was .92 and for the desire for friendship subscale was .75. These reflect excellent and acceptable alphas, respectively (George & Mallory, 2003). Nunnally (1978) theorized that .7 was an acceptable alpha coefficient for this test, and even suggested that .6 was an acceptable

Table 1.

Principal components analysis of social motivation scale using Promax rotation with Kaiser Normalization (pattern matrix - unique correlations between variables and factors).

| Variable | Comp 1: "desire for popularity" | Comp 2: "desire for friendship" | Comp 3 (not retained) | Comp 4 (not retained) |
|---|---------------------------------------|---------------------------------------|-----------------------------|-----------------------------|
| Being in charge of the group is | .958 | | | .319 |
| Being the boss of the group is | .933 | | | .435 |
| Being the leader of the group is | .848 | | | |
| Being liked by the popular kids is | .812 | | | -.309 |
| Being popular is | .764 | | | |
| Being cool is | .633 | | | |
| Being a member of a popular group in my grade is | .723 | | | -.302 |
| Being liked by everyone is | .402 | | .311 | -.327 |
| Having a best friend is | | .908 | | |
| Having really close friends is | | .875 | | |
| Being a friend to everyone is | | .533 | | -.327 |
| Being liked by others is | | | .860 | |
| Having lots of friends is | | | .708 | |
| Having influence over the group is | | | .755 | .315 |
| Being left out of an activity would be (R) | | | | .703 |
| If someone called me loser it would be (R) | | | | .813 |

Note. (R) variable was reversed

Only correlations above .3 are presented for ease of interpretation.

Bolded variables were retained for final analyses.

alpha for scales that have not been validated. The current analysis has shown that the two SMS factors retained surpass this standard. Based on the principal components analysis for the SMS, the decision was made to retain the two strong factors which measured children's desire for peer-perceived popularity (as a function of the desire for power, control and leadership over the peer group), and children's desire for close friendship (as a function of their desire for best friendship, having close friendships and being a friend).

To compare children's mean scores for their reported desire for popularity and desire for close friendship, a paired-samples t-tests was used. The result of this analysis was that the participants reported significantly higher means for desire for friendship ($M = 3.34$, $SD = .84$) than they did desire for popularity ($M = 1.63$, $SD = 1.06$; $t(75) = -13.6$, $p < .001$). Also, there were no gender differences in terms of mean levels of these desires. Further, children's desire for popularity and their desire for friendship was significantly correlated ($r = .36$, $p < .01$).

Preliminary analyses

Descriptive analyses were run to examine the data and preliminary analyses were conducted to assess the data for outliers and irregularities. Missing values for all variables ranged from 0% in multiple variables to the highest of 13.2% missing responses (physical aggression within a best friendship). Because all variables had less than 15% missing responses, mean scores for all other subjects for each variable were used to replace missing values (George & Mallory, 2003).

The data was tested for outliers and assumptions for regression analyses and some results provided cause for concern. Outliers were present in the data but testing with z-scores, leverage,

Cook's Distance and standardized dfbeta produced no striking pattern of outliers. Thus, it was decided that outliers would not be removed. The normality assumption was tested on all variables and although a number of them produced violations of normality, most of those variables were not included in the analyses. Normality is not considered a violation of concern in multiple regression as the analysis is robust against non-normality (Tabachnick & Fidell, 2007). Homogeneity of variance and linearity were causes for concern in this analysis however, as they appeared to be violated in the present study for two variables: relational aggression within the peer group and physical aggression within the peer group. Due to these violations, both variables were transformed using natural log transformations and square root transformations (Tabachnick & Fidell, 2007). Comparisons of regression analyses were made using the transformed data versus the untransformed data and it was concluded that the assumption violations and individual cases of concern were not highly influential to the results of the regression analyses. The results reported below are that of the untransformed data to enhance the interpretability of the results of this study.

Descriptive statistics

See Table 2 for mean scores and standard deviations of all variables used in the subsequent regression analyses.

Gender differences

In order to determine if boys and girls differed on types of aggressive behaviour, prosocial behaviour and emotions and desires, t-tests were conducted to compare means (see Table 3). Only 3 measures had statistically significant differences for gender:

Table 2.

Mean Reported Behaviour, Emotion, and Desire Scores for Entire Sample, Raw and Standardized

| Variable | Raw scores | Raw Range | Standardized | Standardized |
|---------------|---------------|-----------|---------------|--------------|
| | <i>M (SD)</i> | | scores | Range |
| | | | <i>M (SD)</i> | |
| Friend RA | 4.21 (6.03) | 0-60 | .28 (.40) | 0-4 |
| Group RA | 6.61 (5.03) | 0-28 | .95 (.72) | 0-4 |
| Friend PA | 4.18 (4.67) | 0-60 | .28 (.31) | 0-4 |
| Group PA | 1.22 (1.65) | 0-8 | .62 (.83) | 0-4 |
| Friend Pros | 40.87 (10.54) | 0-60 | 2.73 (.70) | 0-4 |
| Group Pros | 10.56 (3.30) | 0-16 | 2.64 (.82) | 0-4 |
| Jealousy | 17.04 (13.38) | 0-60 | 1.14 (.89) | 0-4 |
| Anger | 15.77 (13.21) | 0-60 | 1.05 (.88) | 0-4 |
| Angry RS | 6.18 (2.37) | 1-25 | 6.18 (2.37) | 1-25 |
| Anxious RS | 7.81 (2.71) | 1-25 | 7.81 (2.71) | 1-25 |
| Desire Pop | 1.63 (1.06) | 0-4 | 1.63 (1.06) | 0-4 |
| Desire Friend | 3.34 (.84) | 0-4 | 3.34 (.84) | 0-4 |

Table 3.

Mean Reported Behaviour, Emotion, and Desire Scores by Gender and T-Tests for Differences Between Boys and Girls

| Variable | Boys (<i>N</i> = 30) | Girls (<i>N</i> = 46) | <i>t</i> , <i>p</i> |
|---------------|------------------------|------------------------|---------------------------------------|
| | <i>M</i> (<i>SD</i>) | <i>M</i> (<i>SD</i>) | |
| Friend RA | 4.77 (7.65) | 3.84 (4.74) | <i>t</i> (74) = .66, <i>p</i> = .51 |
| Group RA | 5.53 (5.00) | 7.32 (4.98) | <i>t</i> (74) = -1.53, <i>p</i> = .13 |
| Friend PA | 4.76 (6.42) | 3.81 (3.05) | <i>t</i> (74) = .87, <i>p</i> = .39 |
| Group PA | 1.77 (1.72) | .87 (1.53) | <i>t</i> (74) = 2.38, <i>p</i> < .05 |
| Friend Pros | 37.93 (11.78) | 42.78 (9.29) | <i>t</i> (74) = -2.0, <i>p</i> < .05 |
| Group Pros | 9.20 (3.66) | 11.45 (2.72) | <i>t</i> (74) = -3.08, <i>p</i> < .01 |
| Jealousy | 15.80 (12.31) | 17.85 (14.10) | <i>t</i> (74) = -.65, <i>p</i> = .52 |
| Anger | 16.80 (14.29) | 15.10 (12.57) | <i>t</i> (74) = .55, <i>p</i> = .59 |
| Angry RS | 6.06 (2.11) | 6.25 (2.54) | <i>t</i> (74) = -.34, <i>p</i> = .73 |
| Anxious RS | 7.42 (2.69) | 8.07 (2.72) | <i>t</i> (74) = -1.03, <i>p</i> = .72 |
| Desire Pop | 1.71 (1.45) | 1.57 (1.00) | <i>t</i> (74) = .58, <i>p</i> = .57 |
| Desire Friend | 3.15 (.94) | 3.46 (.76) | <i>t</i> (74) = -1.58, <i>p</i> = .12 |

Note. All scores reported are unstandardized. Range for scales: Friend RA, Friend PA, Friend Pros, Jealousy, Anger = 0-60. Group RA = 0-28. Group PA = 0-8. Group Pros = 0-16. Angry RS, Anxious RS = 1-25. Desire Pop, Desire Friend = 0-4.

perceived use of prosocial behaviour in the context of a best friendship and in the larger peer context, and perceived use of physical aggression in the larger peer group. Gender differences were not found in all other measures of behaviour, emotions and desire used in this study.

Girls reported more prosocial behaviour in their best friendships ($M = 42.78$, $SD = 9.29$) than boys did ($M = 37.93$, $SD = 11.78$; $t(74) = -2.0$, $p < .05$), and they also reported more perceived use of prosocial behaviour in the larger peer context ($M = 11.45$, $SD = 2.72$) than boys did ($M = 9.2$, $SD = 3.66$; $t(74) = -3.08$, $p < .01$). Boys reported more physical aggression in the context of the larger peer group ($M = 1.77$, $SD = 1.72$) than girls did ($M = .87$, $SD = 1.53$; $t(74) = 2.38$, $p < .05$). Differences were not found for relational aggression in the best friendship context between boys ($M = 4.77$, $SD = 7.65$) and girls ($M = 3.84$, $SD = 4.74$; $t(74) = .66$, $p = .51$) and differences were not found for relational aggression in the peer group context between boys ($M = 5.53$, $SD = 4.99$) and girls ($M = 7.32$, $SD = 4.98$; $t(74) = -1.53$, $p = .13$) either. Interestingly, differences were not found for mean levels of reported physical aggression within the friendship between boys ($M = 4.76$, $SD = 6.42$) and girls ($M = 3.81$, $SD = 3.05$; $t(74) = .87$, $p = .39$).

Gender differences were not found for any of the measures of emotions under consideration in this study. Boys ($M = 15.80$, $SD = 12.31$) and girls ($M = 17.85$, $SD = 14.10$) did not report significantly different mean levels of jealousy within their best friendships ($t(74) = -.65$, $p = .52$) and likewise, boys ($M = 16.81$, $SD = 9.49$) and girls ($M = 15.11$, $SD = 12.57$) did not report significantly different mean levels of anger within their best friendships ($t(74) = .55$, $p = .59$). Similarly, boys ($M = 5.93$, $SD = 2.12$) and girls ($M = 6.09$, $SD = 2.54$) did not report significantly different mean levels of angry

expectation of rejection ($t(74) = -.27, p = .79$) and likewise, boys ($M = 7.31, SD = 2.65$) and girls ($M = 7.89, SD = 2.77$) did not report significantly different mean levels of anxious expectation of rejection ($t(74) = -.91, p = .37$).

Finally, differences were not found between boys ($M = 1.71, SD = 1.15$) and girls ($M = 1.57, SD = 1.00$) for mean levels of desire for popularity ($t(74) = .58, p = .57$), and differences for boys ($M = 3.15, SD = .94$) and girls ($M = 3.46, SD = .76$) were not found for mean levels of desire for friendship ($t(74) = -1.58, p = .12$) either. Considering all variables in the current study, gender differences on mean levels reported by children were found on only few, namely reported prosocial behaviour within both the best friendship and larger peer group contexts (with girls reporting more) and reported physical aggression within the larger peer group context (with boys reporting more).

Correlational analyses

To examine the nature of the relationships between all variables in the present study and to determine whether any variables were redundant, a correlation matrix was generated (see Appendix K). Of particular interest to the present study were the relationships between criterion (all aggression and prosocial variables) and predictor (emotions and desire) variables. What follows is a description of the correlations between the variables included in the regressions.

Relational aggression.

Relational aggression within a best friendship was positively correlated with peer group relational aggression ($r = .49, p < .01$). Children's reported use of relational aggression within a best friendship was significantly positively correlated with reported jealousy when their best friendship was threatened ($r = .37, p < .01$) and their desire for

popularity ($r = .27, p < .05$). Children's reported use of relational aggression within the larger peer group was correlated with some emotions and desires under study.

Specifically, children's reported use of relational aggression within the larger peer group was significantly positively correlated with jealousy the best friendship was threatened ($r = .35, p < .01$) and with the desire for popularity ($r = .53, p < .01$).

Physical aggression

Physical aggression within a friendship was significantly correlated with physical aggression within the larger peer group ($r = .44, p < .01$) and with jealousy in response to a threatened friendship ($r = .24, p < .05$). Physical aggression in the larger peer context found only to be significantly positively correlated with the desire for popularity ($r = .39, p < .01$).

Prosocial behaviour.

Neither prosocial behaviour within the context of a best friendship nor the larger peer group was correlated to any emotions or desire of interest in the present study, but these variables were correlated together ($r = .53, p < .01$). Prosocial behaviour within both contexts was not significantly correlated with jealousy, the angry response to the fear of rejection, or a child's desire for popularity.

Comparing regression variables

Of tangential interest was an analysis of which context the aggressive behaviour variables were used more. Although no hypotheses were made in this regard, it was interesting to note that children were equally as likely to report being relationally aggressive within the friendship in response to a threat ($M = 4.21, SD = 6.03$) as they were physically aggressive in the friendship in response to a threat ($M = 4.18, SD = 4.67$).

Further, children were more likely to report being relationally aggressive within the larger peer group ($M = .95$, $SD = .72$) than they were physically aggressive within the larger peer group ($M = .61$, $SD = .83$; $t(75) = 3.85$, $p < .001$; for unstandardized mean scores, see Table 3).

Regression analysis

The goal of the following regression analyses was to predict behaviour from emotions and desires. In order to predict which emotions and desires (namely jealousy within a best friendship, angry expectation of rejection and desire for popularity) may lead to the use of aggressive, and prosocial behaviours. Simultaneous multiple regression analyses were used to determine which variables best predicted relational and physical aggression and prosocial behaviour, each measured within the context of a best friendship (FJQ-R; originally developed by Parker et al., 2005 and modified for this study), and in the larger peer network context (CSBS-S; Crick, 1991; 1995). Given the sample size of 76 for this study, although all variables were interesting, in order to utilize the regression analyses in a way that was valid and interpretable, it was required that the number of predictor variables in the regression be reduced. Using the formula described by Tabachnick and Fidell for the required sample size for regression analyses ($N > 50 + 8m$, where m = number of IVs; 2007, p. 123), and based on the sample size in this study ($N = 76$), four predictor variables were selected for inclusion in the multiple regression analyses. The method used to determine which variables to include in the analyses is outlined next.

Gender was included in these analyses because of the potential for gender differences in the behaviours measured, and the other three variables included as

predictors were chosen on the basis of their theoretical significance to aggression. As such, jealousy as a response to an interloper, the angry response to the fear of rejection, and desire for popularity were selected for inclusion. Jealousy within a best friendship was chosen as it was the main variable of interest to the present study. Angry expectation of rejection was retained because past research has demonstrated its ability to predict relationally aggressive behaviours. Finally, desire for popularity was chosen because the nature of this variable reflected more of the features that would be considered precursors to potentially aggressive behaviours (desire for power, control and leadership). SPSS REGRESSION was used to perform these analyses.

Relational aggression

Relational aggression within a best friendship.

The regression analysis predicting relational aggression within a best friendship produced a model that explained 14% of the variance ($R^2_{adj} = .14$; see Table 4). The model was statistically significant ($F(5,70) = 3.38, p < .01$). This model included the interaction term between gender and jealousy because it was of interest to see if there was a moderating effect of gender in this variable. This interaction, however, was not a significant predictor in the model. In terms of individual predictor variables, reported jealousy within a best friendship had the largest impact on reported relational aggression within a best friendship (standardized $\beta = .32, p < .01$), meaning for every unit (standard deviation) increase in scores for jealousy within a best friendship, scores for relational aggression within a best friendship increased by .32 (holding constant the variance in gender, angry expectation of rejection, desire for popularity, and the interaction between gender and jealousy). In summary, the predictive value of jealousy within a best

Table 4.

Summary of Simultaneous Regression Analysis for Variables (including the interaction between gender and jealousy) Predicting Relational Aggression in the Threatened Friendship (N = 76)

| Variable | <i>B</i> | <i>SE B</i> | β |
|---|----------|-------------|---------|
| Gender | -.2 | .22 | -.1 |
| Jealousy | .35 | .13 | .35** |
| Angry Expectation of Rejection | -.003 | .12 | -.003 |
| Desire for Popularity | .14 | .12 | .14 |
| Interaction between Gender and Jealousy | -.17 | .11 | -.17 |

Note. $R^2_{adj} = .14$

** $p < .01$

friendship to reported use of relational aggression within a best friendship is very good. This model significantly predicts relational aggression in response to an interloper.

Relational aggression within the peer group.

The regression analysis for relational aggression within the larger peer group produced a model that explained 30% of the variance in reported use of relational aggression in this context ($R^2_{adj} = .30$). The model was statistically significant ($F(5,70) = 7.48, p < .001$). Once again the interaction term between gender and jealousy was included in this model, but was not a significant predictor of relational aggression in this context. The results for the full model are presented in Table 5.

In terms of individual predictor variables, reported desire for peer-perceived popularity had the largest impact on reported relational aggression in the context of the peer group (standardized $\beta = .48, p < .001$), meaning for every unit (standard deviation) increase in desire for peer-perceived popularity scores, scores for relational aggression within the larger peer group increased by .48 (holding constant the variance in gender, angry rejection sensitivity, jealousy, and the interaction term). Gender of the child had a marginally significant impact on reported relational aggression in the larger peer group (standardized $\beta = .19, p = .06$), indicating that with more power in the analysis, presumably, being a girl would significantly predict more frequent reports of relational aggression in this context than being a boy (holding constant the variance in jealousy within a best friendship, angry expectation of rejection, and desire for popularity). In sum, the desire for peer-perceived popularity and being a girl were predictive of reported use of relational aggression within the larger peer context.

Table 5.

Summary of Simultaneous Regression Analysis for Variables (including the interaction between gender and jealousy) Predicting Relational Aggression in the Larger Peer Group (N = 76)

| Variable | B | SE B | β |
|---|------|------|------------------|
| Gender | .38 | .2 | .19 ^a |
| Jealousy | .21 | .14 | .21 |
| Angry Expectation of Rejection | .05 | .11 | .05 |
| Desire for Popularity | .48 | .11 | .48*** |
| Interaction between Gender and Jealousy | -.12 | .18 | -.09 |

Note. $R^2_{adj} = .30$
 *** $p < .001$ ^a $p = .06$

*Physical aggression**Physical aggression within a best friendship.*

The regression model for physical aggression within a best friendship produced a model that explained 3% of the variance in reported use of physical aggression within a best friendship ($R^2_{\text{adj}} = .03$). The results for the full model are presented in Table 6. The overall model was not statistically significant ($F(4,71) = 1.51, p = .21, \text{n.s.}$).

Physical aggression within the peer group.

The regression analysis for peer group physical aggression produced a model that explained 19% of the variance in this behaviour ($R^2_{\text{adj}} = .19$). The results for the full model are presented in Table 7. The overall model was statistically significant ($F(4,71) = 5.44, p < .001$). In terms of individual predictor variables, reported desire for popularity had the largest impact on reported physical aggression in the peer group (standardized $\beta = .42, p < .001$), meaning for every unit increase in scores of desire for popularity, scores for physical aggression within the larger peer group increased by .42 (holding constant the variance in gender, angry expectation of rejection, and jealousy within a best friendship). Gender of the child had a statistically significant impact on reported physical aggression within the peer group as well (standardized $\beta = -.23, p < .05$), indicating that being a boy predicted more frequent reports of physical aggression in the larger peer context than being a girl (holding constant jealousy within a best friendship, angry expectation of rejection, and desire for popularity). In sum, reported level of desire for popularity and being a boy were of predictive value to reported engagement in physical aggression within the larger peer group.

Table 6.

Summary of Simultaneous Regression Analysis for Variables Predicting Physical Aggression in the Threatened Friendship (N = 76)

| Variable | <i>B</i> | <i>SE B</i> | β |
|--------------------------------|----------|-------------|---------|
| Gender | -1.08 | 1.09 | -.11 |
| Jealousy | .07 | .05 | .19 |
| Angry Expectation of Rejection | .17 | .24 | .09 |
| Desire for Popularity | .04 | .07 | .06 |

Note. $R^2_{adj} = .03$, n.s.

Table 7.

Summary of Simultaneous Regression Analysis for Variables Predicting Physical Aggression in the Larger Peer Group (N = 76)

| Variable | <i>B</i> | <i>SE B</i> | β |
|--------------------------------|----------|-------------|---------|
| Gender | -.78 | .35 | -.23* |
| Jealousy | -.02 | .02 | -.14 |
| Angry Expectation of Rejection | .09 | .08 | .13 |
| Desire for Popularity | .08 | .02 | .42*** |

Note. $R^2_{adj} = .19$

* $p < .05$. *** $p < .001$

Prosocial behaviour

Prosocial behaviour within a friendship.

The regression for prosocial behaviour within a best friendship produced a model that explained 2% of the variance of prosocial behaviour within this context ($R^2_{adj} = .02$).

The results for the full model are presented in Table 8. The overall model was not statistically significant ($F(4,71) = 1.44, p = .23, n.s.$).

Prosocial behaviour within the larger peer group.

The regression model for prosocial behaviour within the larger peer group produced a model that explained 9% of the variance in reported prosocial behaviour in general ($R^2_{adj} = .09$). The results for the full model are presented in Table 9. The overall model was statistically significant ($F(4,71) = 2.85, p < .05$). The best predictor variable for this model was gender of the child, where being a girl predicted more frequent reports of prosocial behaviour in the larger peer group than being a boy (standardized $\beta = .33, p < .05$).

Summary of regressions

In summary, feeling jealous in response to the threat of an interloper significantly predicted the use of relationally aggressive behaviour within a best friendship in response to that threat. In contrast, the desire for popularity and being a girl predicted the use of relationally aggressive behaviour within the peer group. The variables under consideration in this study did not significantly predict physically aggressive behaviour within the threatened best friendship whereas the desire for popularity and being a boy predicted reports of physically aggressive behaviour within the peer group. Prosocial

Table 8.

Summary of Simultaneous Regression Analysis for Variables Predicting Prosocial Behaviour in the Threatened Friendship (N = 76)

| Variable | <i>B</i> | <i>SE B</i> | β |
|--------------------------------|----------|-------------|---------|
| Gender | 4.61 | 2.47 | .22 |
| Jealousy | .02 | .1 | .02 |
| Angry Expectation of Rejection | -.1 | .54 | -.02 |
| Desire for Popularity | -.2 | .15 | -.16 |

Note. $R^2_{adj} = .02$, n.s.

Table 9.

Summary of Simultaneous Regression Analysis for Variables Predicting Prosocial Behaviour in the Larger Peer Group (N = 76)

| Variable | <i>B</i> | <i>SE B</i> | β |
|--------------------------------|----------|-------------|---------|
| Gender | 2.22 | .74 | .33** |
| Jealousy | .04 | .03 | .15 |
| Angry Expectation of Rejection | -.13 | .16 | -.1 |
| Desire for Popularity | .01 | .05 | .03 |

Note. $R^2_{adj} = .09$

** $p < .01$

behaviour within the best friendship was not significantly predicted by the model whereas prosocial behaviour within the larger peer group was predicted by being a girl.

Discussion

This research has introduced new ideas within the study of childhood aggression. First, the most novel aspect of this study is the distinction between the experiences of aggression within two different peer contexts (the dyadic best friendship that has been threatened by an interloper and the larger peer group with no such threat). Second, this study explores variables that have never before been assessed in this context (i.e., the *desire* for peer-perceived popularity). The main research question in this study was: Do girls' and boys' feelings regarding threatened best friendships, fear of rejection by peers and desires for social interaction including peer-perceived popularity predict self-reports of relational aggression, physical aggression and prosocial behaviour? It was hypothesized that children who would report strong feelings of jealousy when a friendship was threatened, higher levels of rejection sensitivity, and higher levels of social motivation would also report the use of higher levels of relationally aggressive behaviour. To better understand underlying emotions and desires as they relate to the use of relational aggression, this research question was examined in two separate contexts: close friendships and the larger peer group. The hypothesis that jealousy, angry rejection sensitivity and the desire for peer-perceived popularity would predict the use of relational aggression within the context of both the best friendship and the larger peer group were partially supported. While a jealous response to the threat of an interloper within the best friendship was found to be clearly related to the reported use of relational aggression in this friendship, this was not the case for reported use of relational aggression within the

larger peer group. Rather, in the larger peer group, higher levels of the desire for peer-perceived popularity as well as being a girl predicted this behaviour. The angry expectation of rejection did not predict reported use of relational aggression in this context.

Regression analyses for the physical aggression variables were exploratory and hypotheses were not made for which variables would have predictive value in either context. This type of aggression was included in the present study for comparison purposes to determine if the emotions and desires that predict aggression differ as a function of type of aggression. It was expected that this would be the case given earlier research that suggests that the social goals influencing aggression use differ for physical and relational aggression (Delveaux & Daniels, 2000). Reported use of physical aggression within a best friendship was not significantly predicted by the emotion and desire variables in the model. In contrast, having a higher desire for popularity and being a boy predicted children's reported use of physical aggression in the larger peer group.

Finally, regression analyses for reported use of prosocial behaviour in the threatened best friendship and the larger peer group were also exploratory. They were included in the present study to allow a comparison of the emotions and desires that predicted prosocial behaviours in contrast to those that predicted either relational or physical aggression. The reported use of prosocial behaviour in best friendships in response to the threat of an interloper was not significantly predicted by any of the variables in the model. The reported use of prosocial behaviour in the larger peer group was predicted by being a girl. Each of these findings will be discussed in greater detail following a discussion of the psychometric properties of the Social Motivation Scale

(SMS), a scale designed specifically for this study to assess the child's motivations for peer-perceived popularity, sociometric popularity, friendship and centrality.

Social Motivation Scale

The SMS was intended as a measure of the importance of peer-perceived popularity, sociometric popularity, friendship and centrality within the peer group in a child's life. It has often been discussed in the literature that some children are more socially motivated to interact with others while some are content with a smaller peer group and more solitary activity. Surprisingly, a measure of this desire to affiliate with peers has not been developed until now. A principal components analysis clearly identified two factors from this new measure. The measure was successful in allowing us to measure two aspects of desire to affiliate in school-aged children: desire for peer-perceived popularity and desire for close friendships.

In the first phase of analyses, the psychometric properties of the SMS were assessed to determine the validity of the measure and to better understand the variables being measured. The internal consistency reliability results exceeded standards in the field for newly constructed measures for the two factors retained (Nunnally, 1978) indicating that children are able to distinguish their desires for social relations into at least two distinct streams. Specifically, they are clearly differentiating between their desires for peer-perceived popularity and their desires for close friendships. Although the SMS was theoretically designed to assess four constructs thought to be aspects of a child's desire to affiliate with others (peer-perceived popularity, sociometric popularity, friendship and centrality), all four were not identified in the principal components analysis. Further, half of the items from the scale loaded onto the single factor of peer-

perceived popularity whereas only three items loaded onto the second factor of desire for friendship.

The factor assessing peer-perceived popularity is comprised of questions which assess the degree of importance power, control over the peer group and a reputation for popularity have in child's life. This one factor essentially amalgamated items that were meant to assess two separate constructs (i.e., it was expected that peer-perceived popularity and power and centrality within the peer group would to be distinct constructs, but in fact these factors loaded together). The factor assessing desire for friendship is comprised of questions which ask the child of the degree of importance close and best friendships have in their lives, and was thus identified as a measure of "desire for close friendships." It was originally expected that this measure of desire for friendship would include a desire for a large number of friends in addition to the desire for close friendships, but this was not the case. The hypothesized factor that was not supported was that of sociometric popularity, a measure of being well-liked by peers. It is not clear why children did not distinguish this construct from the others but it may be that peer-perceived popularity and the desire for close friendships are more clear motivations to children than the desire to be well-liked by numerous peers.

Overall, the SMS was found to have good internal consistency reliability for the two factors that were retained from the principal components analysis. The two strong variables that were extracted from this analysis (the desire for peer-perceived popularity and the desire for close friendships) are conceptually and statistically clear and distinct. They have value and with further psychometric evaluation and confirmation of the results obtained here, they will clearly be variables of interest for future research in the field of

motivations, especially in the motivation to be aggressive. This was the first time the desire for peer-perceived popularity and the desire for close friendships has been examined in research, and as such it is interesting to note that close friendships were more desired than peer-perceived popularity by both boys and girls. Interestingly, regardless of gender, children rank close, intimate friendships as being very important in their lives, more so even than the importance they place on being highly ranked within the peer hierarchy system. A discussion of gender differences that were found on the variables of interest in this study is presented next.

Gender differences

Gender differences were for the most part consistent with the field of research on aggressive behaviour. There is a well-supported finding that boys are more physically aggressive than girls (Archer, 2004; Card et al., 2008; Hyde, 1984; Maccoby & Jacklin, 1974) and to a certain extent this was supported by results from the current study. It is true that boys were found to report more physical aggression within the larger peer group. In contrast, however within the context of their best friendships boys' mean reported levels of physically aggressive behaviour were not found to differ from girls. One potential explanation for this finding might be that boys actually are more physically aggressive in the larger peer group than girls, while within best friendships, boys and girls are equally as physically aggressive. Another possibility is that boys may find it more acceptable to *report* that they are more aggressive in the peer group than girls do.

Gender differences were also found in the assessment of reported engagement in prosocial behaviour. The finding that girls are more prosocial overall has been demonstrated in the research field (Nelson & Crick, 1999) and the results of the current

study supported these findings. Girls were found to be more likely to report being prosocial in both the friendship and larger peer group contexts than boys were. In addition, being a girl predicted the reported use of prosocial behaviour in the peer group context.

Many more similarities than differences were found, confirming the 'gender similarities hypothesis' put forth by Hyde (2005). Consistent with self-report data as well, which tends to find fewer gender differences in aggression especially (Archer, 2004), the current research confirmed these findings. Consistent with meta-analytic results on gender differences in relational aggression (Archer, 2004; Card et al., 2008), but perhaps in contrast to the general perception for this behaviour, no gender difference was found in the mean levels of engagement in relational aggression within both close friendship and the larger peer group. It is interesting to note however, that there were marked differences in the variability of scores for relational aggression within the friendship as evidenced by the larger standard deviation for boys. This difference in variability is important because even though the means are the same for relational aggression in the friendship, there is a much wider range of scores in boys' reports of this behaviour. This may be one reason there is so much confusion in the field; mean levels of perpetration may not be different for boys and girls, but the amount of variability among boys in their use of these behaviours appears to be much less consistent than among girls. Girls appear to be more similar in their use of relational aggression. This is an important distinction to examine in future research.

Perhaps most interestingly, in the regression analyses gender was found to predict aggressive behaviour within the context of the peer group but not within the context of

best friendships. There are many possibilities for this finding. It could be that both boys and girls react similarly to a threat posed to a close friendship. That is to say, the conformity to use perceived gender normative aggressive behaviours (as proposed by Crick, 1997) may be more likely for children in a more public sphere (the peer group) than in a more private one (the best friendship). The significant predictive ability of gender to the behaviours within the larger peer group is what would be expected when considering gender stereotypical behaviour: girls were more likely to report the use of relationally aggressive behaviour and prosocial behaviour within the peer group while boys were more likely to report physically aggressive behaviour within the peer group. It could be that children believe they act, or should act, the way popular culture and media says they do and should within the larger peer group, but that these gender stereotypes do not carry over to close intimate friendships.

This stereotypical bias may have been avoided on the measure of reported behaviour in response to a threatened a friendship (FJQ-R) by asking about specific situations and presenting examples that reflect how individuals may actually react. Instead of assessing general perceptions of general behaviour (potentially capturing how they believe their gender should act in a certain situation) specific behaviours were assessed with respect to specific situations. This may have captured more accurately which behaviours would have been used in retaliation or response to the situations depicted.

In summary, gender differences and similarities were found in this study that were mostly consistent with previous research (Archer, 2004; Card et al, 2008) but have also inspired new avenues for research. Although gender differences were found for mean

levels of prosocial behaviour in both contexts (favoring girls) and mean levels of physical aggression within the larger peer group (favoring boys), more interesting was the predictive value of gender in some of the regression analyses. Being a girl was predictive of relational aggression within the larger peer group and being a boy was predictive of physical aggression within the larger peer group. Alternatively, gender was not predictive of the use of relationally aggressive or physically aggressive behaviours within close friendships. These results are suggestive of the need for more research examining aggression in differing contexts and including a gender analysis in this research.

Also apparent is the need for more research that examines the role of emotions with regard to aggressive and prosocial behaviours. In the current study there were some fascinating findings, and these findings have inspired new questions about the role of emotions in behaviour. The next section will be a discussion of the findings with regard to emotions in the present study. Each emotion will be discussed in turn.

Jealousy in response to a threatened best friendship

Children's reported experience of jealousy in response to a best friendship threatened by an interloper was found to be related to the use of relational aggression but not physical aggression in best friendships. This is an interesting result as it leads to speculations about the motivation for using relational aggression compared to the motivation for using physical aggression. Although this study was correlational in nature and therefore causation cannot be determined from the results, it seems clear that the experience of jealousy in response to a threatened best friendship plays a unique role in relationally aggressive behaviour as compared to physically aggressive behaviour. Clearly, the experience of jealousy in response to a threatened best friendship needs

further study to better understand the nature of the relationship between this emotion and relationally aggressive behaviours.

Even though causality cannot be implied from the results of the present study, the relationship between the experience of jealousy in response to a threatened best friendship and reported use of relational aggression within this context are clearly related. As will be discussed in more detail later, it seems evident that intervention programs for this type of aggressive behaviour need to consider the role and degree of intervention possible for the experience of jealousy. No intervention programs to date for this behaviour have a component on the role of jealousy or strategies to cope effectively with this experience (though, of course, the intervention programs themselves are few in number; e.g., Cappella & Weinstein, 2006). This must be done with caution, of course, as the intention is not to prevent children from experiencing jealousy altogether, but rather children need to be taught how to experience jealousy in a way that does not lead them to retaliate aggressively.

In past research, which does not distinguish between form of aggression, children have reported that their most jealous peers were also the most aggressive (Parker et al., 2005). The present study has made this finding much clearer by differentiating type of aggression and the context of the jealousy. Higher levels of reported jealousy were predictive of the reported use of relational aggression in situations where children felt their best friendship was being threatened by a third person. Jealousy in response to a threatened best friendship however, did not predict physical aggression in a friendship, relational aggression in the general peer group or physical aggression in the general peer group.

In the introduction of this paper the question “does jealousy within a best friendship play a unique role in the underlying emotions and desires that may lead to the use of relational aggression versus physical aggression?” was asked. In fact, what the results show is that the unique role of jealousy within the best friendship is even more specific – it predicts only relational aggression in the unique context of the best friendship. It seems that the experience of this emotional state of threat or actual loss of a valued relationship at the hands of a perceived rival may be enough to increase an individual's reported use (which may indicate desire to use or actual use) of relational aggression within that friendship in response to this threat. The reasons for this relationship are not known but it may be that the individual wishes to enact revenge for the threat by retaliating in a way that will not likely end the friendship but will be punitive to the threatening rival or friend. Another possibility is that the individual may wish to distance her- or himself from further experience of this threat by acting aggressively with the friend or rival by acting in a way that is likely to be hurtful to the friend.

In summary, the predictive value of reported experience of jealousy in response to a threatened best friendship has been established. Jealousy in response to a threatened best friendship explains a significant proportion of the variance in the reported desire to engage in relational aggression within a best friendship, though clearly other variables need to be considered in explaining this behaviour.

Angry expectation of rejection

In the only study to have examined anger in response to expectations of rejection (rejection sensitivity) in children and the outcome of aggression, researchers found that

angry rejection sensitivity predicted increases in self-reported physical aggression and increases in teacher-reported aggression toward peers (though, relational aggression was not assessed; Downey, Lebolt, Rincón & Freitas, 1998). In contrast we found that levels of rejection sensitivity did not significantly predict reported use of relational aggression within a best friendship or the larger peer group and they did not predict reported use of physical aggression in either context. Interestingly, in the present study, angry expectation of rejection did not significantly predict reported use of physical aggression or relational aggression within the larger peer group whereas in the study by Downey and colleagues (1998) angry fear of rejection and physical aggression within the larger peer group were found to be significantly related. Perhaps the angry response to the fear of rejection shares variance with the emotions and desires of interest in this study and thus, this predictive value of this fear was removed. Interestingly, angry rejection sensitivity was correlated with jealousy, but was not significantly related with any of the other variables studied.

Desire for peer-perceived popularity

Interestingly, although jealousy significantly predicted the use of relational aggression within friendships, this was not the case for relational aggression in the peer group. Rather, the desire for popularity, status and control were predictive of reported aggressive behaviour in the larger peer group. An individual's drive for peer-perceived popularity (where the items measured desire for power, control and influence over the peer group) positively predicted reported use of relationally and physically aggressive behaviours in the context of the larger peer group. These results are best understood by examining the items that loaded together to produce this measure. They included: being

in charge of the peer group, being the boss of the peer group, being the leader of the peer group, being liked by popular kids, being popular, being cool, being a member of the popular group, and being liked by everyone. This power and control-driven form of 'peer-perceived popularity' that children report in the present study is not the same as the desire for 'sociometric popularity' where the desire would be to be well-known and loved by the larger peer group. The distinction between these two constructs is reflected in the goals that may motivate the behaviour. Peer-perceived popularity (where others see the individual as high in status but also dominant, aggressive, stuck-up, bossy and controlling) is highly contrasted with sociometric popularity (which is a measure of status afforded to an individual by others because of kind and trustworthy behaviour, egalitarian leadership and the use of prosocial behaviours).

These findings are in line with previous research. Several studies have found that peer-perceived popularity is a distinct factor in the principal components analyses, and is comprised of mostly control and power-driven desires (Cillessen & Rose, 2005; Parkhurst & Hopmeyer, 1998). It is also of value to note that, aside from gender, desire for popularity was the only statistically significant predictor in both the model for relational aggression within the larger peer group and physical aggression within the larger peer group. Alone, it explained much of the variance in these two types of behaviour within the peer group context.

The reason desire for popularity does not have predictive ability in relational or physical aggression within the context of a best friendship is an interesting question. It is possible that in circumstances where children decide to use this type of behaviour in their close friendships, the social status hierarchy in children's lives loses meaning. In all other

arenas, the power of the hierarchy holds. The pervasive nature of this variable might indicate just how meaningful peer-perceived popularity is in the decision to behave in certain ways within the more general peer context. Research with methodology that better assesses causality would be valuable to substantiate the true nature of the relationship between desire for popularity and behaviour. What is clear from the analyses of this study is that different variables predict relationally and physically aggressive behaviours depending on the context within which the behaviour variable is assessed. The same variables (desire for peer-perceived popularity and gender) predict peer group aggressive behaviour whereas an entirely different variable predicts relationally aggressive behaviour in the friendship (jealousy). Interestingly, jealousy has no predictive value for physically aggressive behaviour in the best friendship, therefore suggesting that the motivations for the use of these two forms of aggressive behaviour may indeed differ, but only in the context of the best friendship.

In summary, most of the individual predictor variables studied have been shown to have value in the present study, each in different ways predicting to different criterion variables. Gender, in favour of girls, was predictive of reported relationally aggressive behaviours within the larger peer group, as well as reported prosocial behaviour within both contexts. Gender in favour of boys was predictive of reported physically aggressive behaviours within the larger peer group context. Jealousy within the best friendship was significantly predictive of reported relationally aggressive behaviours within the best friendship. Finally, only the angry expectation of rejection was not predictive of reported aggressive behaviours within either context.

Summary

Overall, a large amount of the variance in social behaviour can be accounted for by children's emotions and desires. The emotions and desires considered however, differentially predict each of the behaviours, and even more interesting is that they predict behaviours differently depending on the context within which the behaviour was situated. Of particular interest to the present study was the degree to which jealousy within the best friendship could be used to predict children's reported use of relational aggression within their best friendship. That some of the variance in this behaviour within this context could be accounted for by jealousy indicates that this emotion is deserving of further study. It is also indicative of its potential as a path necessary to take in intervention for serious levels of relationally aggressive behaviour.

Also of interest to the present study was the degree to which the motivation to be perceived as popular by one's peers may have motivated aggressive behaviour. It is clear that this motivation influences aggressive behaviour, but only in the context of the larger peer group. Interestingly, this motivation does not have influence on reported prosocial behaviour in either context. Although reports of prosocial behaviour were used in this study to examine the different potential motivations for aggressive as compared to prosocial behaviours, it was interesting to find that the desire to be popular does not influence children's use of prosocial behaviours. This is further evidence for a differentiation between sociometric popularity and peer-perceived popularity.

Finally, the reported engagement in physically aggressive behaviours in response to a threatened best friendship was not significantly predicted by any of the variables under consideration in this study. This is a particularly interesting finding because it is in line with previous research finding that the goals used in physically and relationally

aggressive behaviours are different (Delveaux & Daniels, 2000). It is now known that not only are the goals of these behaviours different, emotions that may motivate these behaviours (within the context of a best friendship) are different as well.

Implications for intervention

Clearly the most interesting finding in the present study, we now know that understanding and addressing jealousy will play a critical role in helping researchers and practitioners understand the dynamics and inner workings of children's close friendships and social groups as well as the likelihood that both girls and boys will be inclined to use relationally aggressive strategies within their close friendships. Jealousy in response to a threatened friendship is an emotion that children can be taught about – how to experience it without reacting in a way that may be hurtful to another; essentially, how to cope with jealousy in an effective and more prosocial way. This will be an important consideration in the development of future interventions for relational aggression.

The second critical finding of the present study is that the underlying emotions and desires that *may* cause an individual to react aggressively (relationally and physically) differ depending on who the aggression is being directed to (i.e. either the best friend involved in the threatened friendship or the larger peer group). While jealousy within the best friendship predicted relationally aggressive behaviour in response to the threatened friendship, this contextual jealousy did not significantly predict physical aggression in response to the threatened friendship. Alternatively, the motivation to be perceived as popular by peers significantly predicted aggressive behaviour in the larger peer group but not within the best friendship.

To a certain extent, relational aggression has been deemed a normative behaviour in the lives of adolescents, especially in the lives of adolescent girls (Sippola, Paget, & Buchanan, 2007). Sippola and colleagues identified two types of traditional feminine stereotypes that girls tend to adhere to: the girl who uses prosocial strategies to attain her goals and the girl who, to attain her goals, “on the surface appears to be very socially skilled but who is capable of seriously undermining the confidence of other girls around her while avoiding direct blame for the harm inflicted” (p. 169). They suggest that in both cases these girls are typically in competition with one another for the male gaze – a by-product of a social and cultural context that devalues and hypersexualizes them. In the latter case, however, relationally aggressive girls assert their dominance and gain their power in the competition with this form of acceptable, deemed “feminine,” aggressive behaviour. The authors argue that these aggressive behaviours, harmful as they may be, can be seen as adaptive responses to a competitive, patriarchal and misogynistic culture that pits girls against one another.

Sippola and her colleagues (2007) have argued that intervening in children's and especially girls' lives to inhibit the use of social aggression with the traditionally endorsed modes of doing so (abstaining from the use of the behaviour) will prove unsuccessful. They argue this because of the pervasiveness of this form of behaviour in lives of children and adolescents, mostly stemming from the fact that this behaviour is used in every environment within which these children find themselves (family/home, school, media, work, etc.). Due to its omnipresent nature, these authors conclude that there is hypocrisy and unrealism in telling adolescents that this behavior is unacceptable. They do, however, recognize the harmfulness of the behaviour regardless of reason for

(or context of) its use, and suggest enlisting the girls within the school walls who are most influential in the peer context. Even though these may in fact be the children who are using relational aggression, they have the capabilities to be the children who are most effective at opposing it.

The same theory can be applied to the findings of the present study. Even though the relational and physical aggression scores were not extreme in level in the current findings, the fact that this behaviour seems to be normative does not make it acceptable interpersonal relation. The behaviour, at any level, has the ability to harm another person and for this reason, children and adolescents (and arguably adults as well) need to be taught the potential consequences of this behaviour. Further, they need to be taught alternative and more prosocial skills to deal with conflict in relationships. Children and adolescents who are high in social status tend to have more social currency (Milner, 2001) and should be sought out as allies in the effort to improve the quality of life of their peers by denouncing harmful forms of aggression (both relational, physical and verbal) and challenging their peers to use this energy in more positive ways.

Limitations of this study

Because the Friendship Jealousy Questionnaire – Revised (originally developed by Parker et al., 2005) measured all friendship variables under consideration in this study and the Children's Social Behavior Scale – Self-Report (Crick, 1991; 1995) measured all peer group variables under consideration, shared method variance is a concern for the results presented. Shared method variance allows for the possibility that high correlations are spurious (Kenny & Kashy, 1992). To remove this threat independent observers or

raters would need to qualify the findings in the present study. This is an area of future direction for research.

Another issue of concern in this study was the sample size obtained and the low response rate for participants. It is possible that the parents or guardians of the participants who responded so quickly were motivated to do so for a common reason, though of course, this cannot be known. It is more plausible that simply not enough time was given for participants to return their consent forms as they only had a few days to do so. In the future more time will be given to participants to return their consent forms and every effort will be made to attain higher rates of response.

The final limitation in this study was the sole reliance on self-report measures. Although it was of interest and value to use this methodology in this research, it would be of value to see if the same results would be obtained if reports of teachers, parents or peers were used in conjunction with the self-reports. It could be that the self-reports used depicted a true picture of the social relationships and emotions and desires that may underlie those behaviours, but it could as easily be true that only a picture of the way children believe they would behave was measured. It could also be true that the picture that emerged was one that reflected the way children believed they should behave. Previous meta-analytic findings suggest that self-reports reflect the smallest gender differences obtained in studies of indirect and direct aggression (Card et al., 2008). It may be that when children report on their own behaviour they are less influenced by how they think people should behave based on gender stereotypes than when they report on other peers or when adults report on them, such as with the use of teacher reports. Overall these limitations are to be kept in mind but do not take away substantially from the value of the

present study. In fact, the limitations mentioned provide great inspiration for directions for future research.

Future directions for research

There are new avenues for research that this study has inspired. First, an exciting new development is that the contexts in which these variables exist should be explored further. Second, the novel variables and the variables that were found to be significantly predictive in this study should now be explored in more detail. Finally, there exists a potential for developmental differences for these variables and this analysis could not be completed in the present study. It should be considered in future research.

The first direction for future research should be whether the findings from the present study hold when different contexts than those considered here are assessed. For example, it would be interesting to see whether and how these predictions differ when contexts such as the family or even adult romantic and work relationships are considered. It would also be interesting in future research, to determine the differing features in the constructs measured in the present study to those that measure other-sex relationships. Specifically, the current research only examined aggression, jealousy and anger among same-sex best friendships, but the findings may differ if other-sex best friendships are considered or if dating relationships are considered. Further, it would be interesting to examine the findings of the current research against a study looking at friendships other than that considered the "best" friendship. It would be interesting to see if the current findings differed from a study where the other members of an individual's friendship group were considered.

A second potential avenue for future research on this subject is whether jealousy more generally (trait based) rather than based within a threatened friendship (state based), is also a predictor of peer group aggression. Presumably if jealousy within the friendship is predictive of relational aggression within the best friendship, jealousy as a more general trait may be predictive of more generalized behaviour, such as relational (or even physical) aggression within the larger peer group. Finally, a third potential avenue for future research inspired by this study is whether there are developmental differences for the predictive value of the emotions and desire studied. As the present study had too small a sample size to enter age or grade into the regression analyses, this would be an interesting question to extend the current research.

The findings of this study are comprehensive and assist in developing our knowledge base of relationally aggressive behaviour and physically aggressive behaviour, but they also highlight the importance of future research. An interesting future direction to take in this research would be to compare the experience of jealousy within a friendship to a more generalized dispositional form of jealousy to see whether jealousy within a friendship predicts behaviour within a friendship and jealousy in general predicts more general behaviour. Without a measure of dispositional jealousy, this distinction cannot be made.

Lastly, the constructs examined in this study (in particular, friendship, jealousy and the desire for peer-perceived popularity) need careful consideration. Children were asked about feelings and reported related behaviours within their *very best* friendship without having this relationship defined for them in more detail. In this way, it was thought that children would conceive of a close friendship where intimacy, closeness, and

trust were valued. It did not matter for the purpose of this research whether the child indeed had a "best friend" or was part of a reciprocated "best friendship" but rather that they could imagine what this type of friendship would be like. It may be of interest in future research to examine actual reciprocated best friendships, or even other close relationships, to see whether the findings of the present study hold true when more than the abstract concept is presented. Perhaps even having the children report the name of their best friend (as they are asked to when using a measure like the *Friendship Quality Questionnaire*; Parker & Asher, 1993) would be beneficial in conceptualizing that type of intimate relationship. It would be interesting to see if the children who reported these behaviours were reported to behave in this way by their best friends as well.

Also, the conceptualization of jealousy within the context of this study is worthy of consideration. "Jealousy" was not defined for the children; rather it was assumed that children would conceptualize jealousy within their own framework and realm of personal experience. For future research it may be of interest to present children with an operational definition of jealousy and ask if, in response to the vignettes that were presented, they would experience this feeling. It is worth consideration that jealousy may not be conceptualized by children the same way it is by adults, or that jealousy may not be conceptualized the same by anyone at all. This emotion may be dynamic and this experience may fluctuate depending on the individual who experiences it. To date the research on jealousy seems to be limited to mostly adult samples, especially those considering romantic relationships (Roth & Parker, 2001) and children have been mostly left out of this body of research (see Parker et al., 2005 for an exception). Much more

research is needed on the experience of jealousy and how this is conceptualized in the minds of children.

Conclusion

This study provided support for the distinction between relational and physical aggression as unique constructs. It was found that different emotions and goals predicted relationally and physically aggressive behaviours both within the context of a best friendship and within the context of more general experience. Specifically, jealousy in reaction to a threatened friendship predicted a significant amount of the variance in reported use of relationally aggressive behaviours and it is clearly an area that needs to be assessed in future research. It is also evident that it is an emotion that needs to be discussed with children and a discussion of it should be included in intervention programmes for relationally aggressive behaviour. Future longitudinal research would help us better understand whether it is a motivating factor in the use of relationally aggressive behaviour. The desire to be perceived as popular by peers is also an area of concern. This desire readily predicts children's use of relationally and physically aggressive behaviours within the larger peer context. The results of this study provide researchers and practitioners alike with knowledge that jealousy in the friendship context, the expectation of rejection and desire for popularity in children's lives can be assessed and intervention programmes could be developed that take both *context* and underlying *goals and motivations* into account. The manner in which intervention happens will call for ingenuity, as these are highly contentious arenas of children's lives.

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Children's Emotions and Desires and Aggression

Appendix A

Parental Consent

Children's Emotions and Desires and Aggression

Dear Parents/Guardians,

June 11, 2008

As individuals concerned about children and youth and committed to research that will help them develop healthy relationships, we find ourselves not fully understanding why children use physically and emotionally aggressive behaviours. Because of this, we are writing to ask for your help by allowing your child to participate in a study that will increase our understanding of these behaviours. We are interested not only in the more obvious forms of aggression, such as hitting and name calling, but also in more subtle but equally hurtful acts such as exclusion from the group or threatening to reveal personal information to others. To this end, we're interested in the role different emotions and goals might play in using these behaviours.

This study will take place at the school your child attends next week. Children will be asked to complete a questionnaire about their feelings, attitudes and behaviours. The administration of this questionnaire will take approximately 45 minutes to an hour of the children's class time. Scheduling of the administration of the questionnaire will be at the teacher's convenience to minimize interference with daily class routine.

The Carleton University Ethics Committee, the Catholic District School Board of Eastern Ontario, and the principal of your child's school have approved this project. The results of this study will be reported in ways that ensure complete confidentiality of individual participants. No child or school will be identified by name and results will not appear in any school records. For interested parents, general results of the study will be presented once the data has been analyzed.

Participation in this study is voluntary and your child may choose to not answer any question as well as to withdraw at any time. Additionally, only students with written permission will be allowed to participate. Children will be encouraged to discuss any concerns with their parents, teacher and/or the school guidance counselor or student support personnel. We will provide parents and teachers with a list of external resources that deal with bullying and aggression as well. Furthermore, should parents or teachers desire additional support or information, an in-service session or material would be offered upon their request.

We would be grateful for your cooperation. However, whether or not you wish to have your child participate in this study, please complete the attached form and have your child return it by next week as we wish to be sure that you received this request. If you have any further questions, please feel free to contact us. Thank you for your assistance.

Sincerely,
Danielle Quigley, MA (candidate)
Psychology Department,
Carleton University
dquigley@connect.carleton.ca
613-520-2600 x 2406

Tina Daniels, Ph.D.
Associate Professor of Psychology
Carleton University
tina_daniels@carleton.ca
(613-520-2600 x 2686)

CONSENT FORM

I have read and understood the request for my daughter/son to participate in the study of children's feelings and attitudes. I have discussed it with my daughter/son and...

I give permission for my child to participate

I do not give permission for my child to participate

Date _____

Name of child _____ Child's date of birth _____ Grade _____
(please print)

Name of Parent or Guardian _____
(please print)

Signature of Parent or Guardian _____

If you would like a copy of the general results of this study, please put you're your mailing address or email address below.

Please have your child return the signed consent form as soon as possible. Thank you.

Children's Emotions and Desires and Aggression

Appendix B

Beginning of Session Script

Children's Emotions and Desires and Aggression

We're here today to get some ideas about kids and how they feel about themselves and their friendships. We're going to hand out some questionnaires for you to fill out for us and we'll read the questions out loud while you fill them out. If you have any questions, please raise your hand and one of us will come over to help you out. If there are any questions you don't want to answer, leave them blank. If you don't feel comfortable answering any of the questions, just leave the whole thing blank and hand it back to me at the end. I do need everyone to fill out the first couple of questions for me.

Ok, does anyone have any questions before I hand out the questionnaires?

Great, let's get started.

Children's Emotions and Desires and Aggression

Appendix C

Debriefing Script

Children's Emotions and Desires and Aggression

I would like to thank you very much for helping me with my study today. First, I want to remind you that the things we talked about today are “confidential”. That means that I’m not going to share your answers to these questions with your teachers, parents, or other kids. Also, I want you to know that you don’t have to talk about these things with anyone either. Even if your classmates ask you about any of your answers, you don’t have to tell them anything that you don’t want to. But sometimes we all need to talk about the way we feel. So, if you want to talk to someone about the questions you were asked today, or you feel that you are having problems with other kids at school, please talk to your parents, teachers, principal, or anyone else you trust.

Second, I would like to give you a little more information about my study. As you all know, friendships and the relationships you have with people at school can be a lot of fun. But sometimes people have arguments or disagreements with their peers. What I’m trying to do is find out how people your age get along with each other and why people sometimes do nice things for each other, but other times might do some “not-so-nice” things, like teasing or fighting. If researchers can find answers to questions like these then maybe we can find a way to help kids when they have problems with their relationships and help them have more positive relationships. The answers that you have given us will help us do this.

So, I want to thank you very much for sharing your thoughts and feelings with us. Does anyone have any questions about the surveys we did? If you’re feeling sad or anxious as a result of anything we’ve asked you about today, it’s really important that you talk to somebody. Try your teacher, your guidance counselor, a student support worker, your principal or vice-principal, your parent or guardian or anyone else you trust

Children's Emotions and Desires and Aggression

to listen. I'm going to leave you with 2 things: the phone number for kids help phone and the address for the website. Both services are completely confidential and they really know how to help if you're having a problem (1-8000-668-6868 and www.kidshelpphone.ca).

OK, thanks again for your help!

Children's Emotions and Desires and Aggression

Appendix D

Pamphlet for Students

Children's Emotions and Desires and Aggression

Some Contact Information

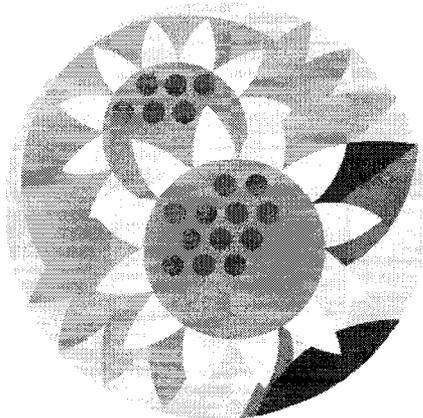
Thanks so much for your help today!! If you would like to contact us about any of the questions you just answered please feel free to. You can email me at danielle.quigley@gmail.com or the lead researcher for this study at tina_daniels@carleton.ca.

If you are experiencing problems at school or at home you can also contact the Kids Help Phone at 1-800-668-6868 or visit their website at www.kidshelpphone.ca to get help. These people will not tell anyone what you tell them.

Also, if you're feeling sad or anxious as a result of anything we've asked you about today, it's really important that you talk to somebody. Try your teacher, your guidance counselor, a student support worker, your principal or vice-principal, your parent or guardian or anyone else you trust to listen.

Thank you again for your help!

Have fun during the rest of your school year and have a great summer!



Children's Emotions and Desires and Aggression

Appendix E

Debriefing Letter for Parents

Dear Parent/Guardian,

September 17, 2008

We would like to take this opportunity to thank you and your child for your participation in our study about children and their friendships. The purpose of this study was to examine the thoughts, attitudes and feelings children have about the way they interact with other children at their school. We know that children's relationships can be positive at times as well as problematic at other times (i.e., teasing, arguments, and minor conflicts are also part and parcel to these relationships). Thus, we want to examine some of the features of children's relationships in greater detail. Friendships in general tend to be relatively positive experiences for children. However, there are times when even "best" friends experience conflict in their relationships. In fact, friendships can sometimes be used as a means for a child to hurt another or to get something that she or he wants. For example, a number of children report that they have experienced the threat of a friendship ending (e.g., "If you don't do what I say, I'm not going to be friends with you anymore"). We think it is important to examine both positive and negative aspects of children's friendship relations if we are going to fully understand the nature of these associations.

Also, we would like to remind you that all individual information collected from students is confidential and no individual results will be reported. However, we do encourage children to talk about any questions or issues they might have regarding their relationships with others their own age, particularly if they feel that they are having difficulties with other individuals at school. We have told all children who participated in this study to speak to a trusted adult (parent, teacher or principal) if they have anything they feel they need to talk about, since we believe that it is important for children to have such an outlet. We have also included a list of agencies and resources (listed on the back of this letter) that you and your child may find useful.

Approximately 200 students from different schools were asked to take part in this study. Over the next few months the information will be analyzed and a summary report based on all information from schools will be written. This summary will be sent to each participating school. If you would like a summary of the results of the study and did not already indicate this on the consent form you signed earlier, please contact Danielle Quigley or Tina Daniels at the numbers listed below. Should you have any ethical concerns about this study, please feel free to contact Dr. Avi Parush (Chair, Carleton University Research Ethics Committee for Psychological Research, 613-520-2600, extension 6026). Should you have any other concerns about this study, please contact Dr. Janet Mantler. (Chair, Dept. of Psychology, 613 520-2600 ext. 417). Thank you again for your assistance in this research project.

If you have concerns about your child please contact your child's school, at xxx-xxx-xxxx. In addition, you can call Open Doors for Lanark Children and Youth in Smiths Falls at 283-8260 (toll free: 1-877-232-8260) or the Child and Youth Wellness Centre of Leeds & Grenville at 1-800-809-2494.

Sincerely,

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List of agencies and resources

Youth Services Bureau of Ottawa-Carleton: 613-729-1000

Kids Help Phone: 1-8000-668-6868 and www.kidshelpphone.ca

Books for adults

Coloroso, Barbara. (2002). *The Bully, the Bullied, and the Bystander: From Preschool to High School – How Parents and Teachers Can Help Break the Cycle of Violence*. Toronto: Harper Collins.

Dellasega, Cheryl & Nixon, Charisse. (2003). *Girl Wars: 12 Strategies That Will End Female Bullying*. New York: Simon & Schuster.

Katch, Jane. *They Don't Like Me: Lessons on Bullying and Teasing from a Preschool Classroom*. Beacon Press.

Paley, Vivian. (1992). *You Can't Say You Can't Play*. Cambridge, MA: Harvard University Press.

Wiseman, Rosalind. (2002). *Queen Bees and Wannabes: Helping Your Daughter Survive Cliques, Gossip, Boyfriends, and Other Realities of Adolescence*. New York: Three Rivers Press.

Books for children

Cole, Joanna. (1989). *Bully Trouble*. New York: Random House.

Fitzhugh, Lousie. *Harriet the Spy*. New York: Harper Collins.

Alexis O'Neill. *The Recess Queen*. New York: Scholastic Press.

Children's Emotions and Desires and Aggression

Appendix F

Demographic Questions

Getting to know kids better

Your answers are totally confidential.
Nobody in your school or your family can
find out how you responded to these
questions.

Thanks for your help and
cooperation!

How old are you? _____

What grade are you in? _____

Please circle your gender: Male Female

Hi!

After you finish filling out this questionnaire we will give you a letter to take home to your parents and a letter for yourself. We'll also give you a small prize for helping us learn more about kids today!

Here are some guidelines for filling out the survey:

- ✓ You should give your answer by darkening the circle for the choice that is right for you.
- ✓ You must completely blacken the circle without going past the lines, like this: ●

Here is an example question that someone has already answered to show you how to do it:

Some kids ask their teachers whenever they have a question. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|------------------------|--|---------------------------------------|--|--|
| ○ | ○ | ○ | ● | ○ |
| "I never ever do this" | "I do this once every couple of months, or rarely" | "I do this a couple of times a month" | "I usually do this, but every once in a while I don't" | "I do this every day or once every couple of days" |

IMPORTANT!!

- ✓ Choose only one answer for each question
- ✓ Read each question and its answers carefully before responding
- ✓ Please use a pencil or pen that is dark in colour.

Ready? Here we go...

Children's Emotions and Desires and Aggression

Appendix G

Children's Social Behaviour Scale – Self-Report

Children's Emotions and Desires and Aggression

CSBS-S

Relational aggression items: 1, 2, 4, 10, 12, 16, 17

Physical aggression items: 5, 9

Prosocial items: 3, 6, 7, 14

Section 1 – Things I do at school

We are interested in how kids get along with one another. Please think about your relationship with other kids and how often you do these things while you're with them.

1. Some kids tell lies about a classmate so that the other kids won't like the classmate anymore. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

2. Some kids try to keep certain people from being in their group when it is time to play or do an activity. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

3. Some kids try to cheer up other kids who feel upset or sad. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

4. When they are mad at someone, some kids get back at the person by not letting the person be in their group anymore. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

5. Some kids hit other kids at school. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

6. Some kids let others know that they care about them. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

7. Some kids help out other kids when they need it. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

8. Some kids yell at others and call them mean names. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

9. Some kids push and shove other kids at school. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

10. Some kids tell their friends that they will stop liking them unless the friends do what they say. How often do you tell friends this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

11. Some kids have a lot of friends in their class. How often do you have a lot of friends in your class?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

12. Some kids try to keep others from liking a classmate by saying mean things about the classmate. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

13. Some kids wish that they had more friends at school. How often do you feel this way?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

14. Some kids say or do nice things for other kids. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

15. Some kids have a lot of classmates who like to play with them. How often do the kids in your class like to play with you?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

16. Some kids ignore other kids when the other kids are mad at them. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

17. When some kids get mad at a classmate they try to get other kids to stop playing with that person or they try to get them to stop liking that person. How often do you do this?

| Never | Almost Never | Sometimes | Almost All The Time | All The Time |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Appendix H

Friendship Jealousy Questionnaire - Revised

FJQ-R

Friendship RA response items: 1d, 2e, 3e, 4e, 5e, 6e, 7e, 8f, 9f, 10e, 11e, 12e, 13e, 14f, 15d

Friendship PA response items: 1e, 2f, 3f, 4d, 5f, 6f, 7f, 8e, 9d, 10f, 11f, 12f, 13f, 14d, 15f

Friendship prosocial items: 1f, 2d, 3d, 4f, 5d, 6d, 7d, 8d, 9e, 10d, 11d, 12d, 13d, 14e, 15e

Friendship jealousy items: 1a, 2a, 3a, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 14a, 15a

Friendship anger items: 1b, 2b, 3b, 4b, 5b, 6b, 7b, 8b, 9b, 10b, 11b, 12b, 13b, 14b, 15b

Section 2 - If it happened, I would feel...

We are interested in learning more about the things that happen in best friendships and how they make students feel. In each of the short statements on the next pages we are going to describe something that might happen between very best friends and how it might make someone feel. Read each of the statements and decide whether it does or does not describe how you would feel if this happened between you and your very best friend.

- ✓ Be careful... The possible answers for this section have changed!

Here is an example question that someone has already answered to show you how to do it:

If I came home after school to find my favourite dinner on the table, I would feel...

...really happy!

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|--|---|---|---|---|
| ○ | ○ | ○ | ○ | ● |
| “that’s not at all true of how I would feel” or “none of these answers reflect how I would feel” | “that’s only a little bit true of how I would feel” | “that is somewhat true of how I would feel” | “that is mostly true of how I would feel” | “that is really true of how I would feel” |

Children's Emotions and Desires and Aggression

FEMALE VERSION

1. If I invited my best friend to go see a new movie, but she told me she was already going with another girl from our group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would say something mean about them to the rest of our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would punch my best friend in the arm

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would suggest we all go to the movie together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

2. If the teacher let us pick study partners for this year and another girl in our group picked my best friend first...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would push them around the next time I see them in the hall

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask them if I could join their study group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore both of them on purpose for the day to make them feel bad

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

3. If my best friend and I used to walk to school together by ourselves and talk and a new girl moved into the neighborhood and began walking with us every day...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite them both over to my house after school to try to get to know the new girl

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would tell everyone in our group not to sit with them at lunch that day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would trip them in the hall next time I saw them together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

4. If I walked into the library and saw my best friend and another girl from our group talking, joking, and making plans to walk home together after school...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would throw my book at them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make up something mean about them and tell all the others in our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would join them and walk home with them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

5. If I found out that my best friend went to a new music store with another girl from our group, when we had said we would go together the first time...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would talk to them about how I felt hurt that they hadn't asked me to go with them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would push them out of my way next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore them for the rest of the day to make them feel bad

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

6. If I found out that my best friend got into a fight with her parents, and she called another girl from our group for advice and didn't talk to me...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would spread a rumour about them so everybody else would be mad at them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would try to be understanding about why they talked to each other

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would elbow them as I walked by them in the hall next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

7. If my best friend was assigned to work on a project with another girl in our group, and they started spending a lot of time together...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would give them dirty looks during class that day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would wait for them after school and push them around

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would invite them both over to my house and see what it was like when all three of us hang out together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

8. If I found out that another girl in our group was planning a cool surprise birthday party for my best friend...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would threaten to hurt her in front of everyone

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask if I could help her plan the party

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make sure she doesn't get invited to anyone else's party

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

9. If my best friend joined a team or club without me, and she started spending a lot of time with the other girls in that group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would ask her what the team or club was like and think about joining one myself

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would turn my back on her next time she wants to talk to me

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would shove her really hard next time I saw her

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

10. If my best friend had a secret and didn't tell me first...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would throw something gross at her

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would give her the silent treatment for the rest of the day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would talk to her about how my feelings were hurt that she hadn't shared her secret with me

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

11. If I gave my best friend a birthday present, and she got one she liked even better from another girl in our group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would tell my best friend I thought the present she got was cool

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would bump into her on purpose and knock the present on the ground

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make up a rumour about them and pass it on

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

12. If my best friend and I used to always check each other's homework together, and another girl in our group started checking it with her...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite all the other girls in our group to check homework together and leave them out

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would see if they would mind if I joined them in checking each other's homework

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would wait for them after school and shove them around

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

13. If I overheard two girls from our group talking and one of them told the other one that she and my best friend are best friends...

... I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would make up something mean about them and tell everyone else in our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would go up to them and push them down

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would talk to them about how I felt

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

14. If I called my best friend to talk and she told me she couldn't because another girl from our group was waiting for her and they were going on a bike ride...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would find them outside and shove them off their bikes

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask them if I could come along on the bike ride

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore them for the rest of the week

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

15. If another girl from our group picked my best friend to go with her family on a camping trip overnight...

... I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite them to sleep over at my house when they get back

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would tell them I won't be friends with them anymore

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would shove them out of my way next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

MALE VERSION

1. If I invited my best friend to go see a new movie, but he told me he was already going with another guy from our group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would say something mean about them to the rest of our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would punch her in the arm

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would suggest we all go to the movie together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

2. If the teacher let us pick study partners for this year and another guy in our group picked my best friend first...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would push them around the next time I see them in the hall

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask them if I could join their study group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore both of them on purpose for the day to make them feel bad

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

3. If my best friend and I used to walk to school together by ourselves and talk and a new guy moved into the neighborhood and began walking with us every day...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite them both over to my house after school to try to get to know the new guy

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would tell everyone in our group not to sit with them at lunch that day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would trip them in the hall next time I saw them together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

4. If I walked into the library and saw my best friend and another guy from our group talking, joking, and making plans to walk home together or sit together on the bus after school...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would throw my book at them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make up something mean about them and tell all the others in our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would join them and walk home with them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

5. If I found out that my best friend went to a new music store with another guy from our group, when we had said we would go together the first time...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would talk to them about how I felt hurt that they hadn't asked me to go with them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would push them out of my way next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore them for the rest of the day to make them feel bad

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

6. If I found out that my best friend got into a fight with his parents, and he called another guy from our group for advice and didn't talk to me...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would spread a rumour about them so everybody else would be mad at them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would try to be understanding about why they talked to each other

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would elbow them as I walked by them in the hall next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

7. If my best friend was assigned to work on a project with another guy in our group, and they started spending a lot of time together...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would give them dirty looks during class that day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would wait for them after school and push them around

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would invite them both over to my house and see what it was like when all three of us hang out together

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

8. If I found out that another guy in our group was planning a cool surprise birthday party for my best friend...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would threaten to hurt him in front of everyone

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask if I could help him plan the party

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make sure he doesn't get invited to anyone else's party

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

9. If my best friend joined a team or club without me, and he started spending a lot of time with the other guys in that group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would ask him what the team or club was like and think about joining one myself

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would turn my back on him next time he wants to talk to me

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would shove him really hard next time I saw him

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

10. If my best friend had a secret and didn't tell me first...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would throw something gross at him

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would give him the silent treatment for the rest of the day

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would talk to him about how my feelings were hurt that he hadn't shared his secret with me

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

11. If I gave my best friend a birthday present, and he got one he liked even better from another guy in our group...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would tell my best friend I thought the present he got was cool

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would bump into him on purpose and knock the present on the ground

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would make up a rumour about both of them and pass it on

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

12. If my best friend and I used to always check each other's homework together, and another guy in our group started checking it with him...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite all the other guys in our group to check homework together and leave them out

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would see if they would mind if I joined them in checking each other's homework

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would wait for them after school and shove them around

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

13. If I overheard two guys from our group talking and one of them told the other one that he and my best friend are best friends...

... I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would make up something mean about them and tell everyone else in our group

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would go up to them and push them down

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would talk to them about how I felt

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

14. If I called my best friend to talk and he told me he couldn't because another guy from our group was waiting for him and they were going on a bike ride...

...I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would find them outside and shove them off their bikes

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ask them if I could come along on the bike ride

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would ignore them for the rest of the week

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

15. If another guy from our group picked my best friend to go with his family on a camping trip overnight...

... I would feel jealous

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel angry

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

...I would feel fine

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

What would you do?

I would invite them to sleep over at my house when they get back

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would tell them I won't be friends with them anymore

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

I would shove them out of my way next time I saw them

| Not at all true of me | A little true of me | Somewhat true of me | Mostly true of me | Really true of me |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> |

Appendix I

Children's Rejection Sensitivity Questionnaire

CRSQ

Anxious items: All a items

Angry items: All b items

Section 3 – How would you feel about it?

This next section presents some scenarios that kids may run into and asks you to answer how you would feel about what's being asked. Try to imagine that your in the situations that are presented.

- ✓ Be careful... The possible answers for this section have changed!

Here is an example question that someone has already answered to show you how to do it:

Imagine your friend told you he wants to watch a scary movie at her/his party on the weekend.

How NERVOUS would you feel, RIGHT THEN, about having to watch a scary movie?

| | | | | |
|-----------------------|-----------------------|-----------------------|----------------------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about having to watch a scary movie?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> |

Do you think he/she will really put on a scary movie at her party?

| | | | | |
|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Ready? Here we go.....

Children's Emotions and Desires and Aggression

1. Imagine you want to buy a present for someone who is really important to you, but you don't have enough money. So, you ask a kid in your class if you could please borrow some money. The kid says, "Okay, wait for me outside the front door after school. I'll bring the money." As you stand outside waiting, you wonder if the kid will really come.

How **NERVOUS** would you feel, **RIGHT THEN**, about whether or not the kid will show up?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How **MAD** would you feel, **RIGHT THEN**, about whether or not the kid will show up?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the kid will show up to give you the money?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

2. Imagine you are the last to leave your classroom for lunch one day. As you're running down the stairs to get to the cafeteria, you hear some kids whispering on the stairs below you. You wonder if they are talking about **YOU**.

How **NERVOUS** would you feel, **RIGHT THEN**, about whether or not those kids were badmouthing you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How **MAD** would you feel, **RIGHT THEN**, about whether or not those kids were badmouthing you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think they were saying bad things about you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

3. Imagine that a kid in your class tells the teacher that you were picking on him/her. You say you didn't do it. The teacher tells you to wait in the hallway and she will speak to you. You wonder if the teacher will believe you.

How NERVOUS would you feel, RIGHT THEN, about whether or not the teacher will believe your side of the story?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher will believe your side of the story?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think she will believe your side of the story?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

4. Imagine you had a really bad fight the other day with a friend. Now you have a serious problem and you wish you had your friend to talk to. You decide to wait for your friend after class and talk with him/her. You wonder if your friend will want to talk to you.

How NERVOUS would you feel, RIGHT THEN, about whether or not your friend will want to talk to you and listen to your problem?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not your friend will want to talk to you and listen to your problem.

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think he/she will want to talk to you and listen to your problem?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

5. Imagine that a famous person is coming to visit your school. Your teacher is going to pick five kids to meet this person. You wonder if she will choose you.

How NERVOUS would you feel, RIGHT THEN, about whether or not the teacher will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the teacher will choose YOU to meet the special guest?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

6. Imagine you have just moved and you are walking home from school. You wish you had someone to walk home with. You look up and see in front of you another kid from class, and you decide to walk up to this kid and start talking. As you rush to catch up, you wonder if he/she will want to talk to you.

How NERVOUS would you feel, RIGHT THEN, about whether or not he/she will want to talk to you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not he/she will want to talk to you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think he/she will want to talk to you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

7. Now imagine that you're back in class. Your teacher asks for a volunteer to help plan a party for your class. Lots of kids raise their hands so you wonder if the teacher will choose YOU.

How NERVOUS would you feel, RIGHT THEN, about whether or not the teacher will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the teacher will choose YOU?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

8. Imagine it's Saturday and you're carrying groceries home for your family. It is raining hard and you want to get home FAST. Suddenly, the paper bag you are carrying rips. All your food tumbles to the ground. You look up and see a couple of kids from your class walking quickly. You wonder if they will stop and help you.

How NERVOUS would you feel, RIGHT THEN, about whether or not those kids will want to stop and help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not those kids will want to stop and help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think they will offer to help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

9. Pretend you have moved and you are going to a different school. In this school, the teacher lets the kids in the class take home a video game to play with on the weekend. Every week so far, you have watched someone else take it home. You decide to ask the teacher if YOU can take home the video game this time. You wonder if she will let you have it.

How NERVOUS would you feel about whether or not the teacher will let you take the video game home this time?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher will let you take the video game home this time?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the teacher is going to let you take home the video game this time?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

10. Imagine you're back in your classroom, and everyone is splitting up into six groups to work on a special project together. You sit there and watch lots of other kids getting picked. As you wait, you wonder if the kids will want you for their group.

How NERVOUS would you feel, RIGHT THEN, about whether or not they will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not they will choose you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the kids in your class will choose you for their group?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

11. Imagine that your family has moved to a different neighborhood, and you're going to a new school. Tomorrow is a big math test, and you are really worried because you don't understand this math at all! You decide to wait after class and speak to your teacher. You wonder if she will offer to help you.

How NERVOUS would you feel, RIGHT THEN, about whether or not the teacher will offer to help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher will offer to help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the teacher will offer to help you?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

12. Imagine you're in the bathroom at school and you hear your teacher in the hallway outside talking about a student with another teacher. You hear her say that she really doesn't like having this child in her class. You wonder if she could be talking about YOU.

How NERVOUS would you feel, RIGHT THEN, about whether or not the teacher was talking about YOU?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not nervous | | | | very, very nervous |
| <input type="radio"/> |

How MAD would you feel, RIGHT THEN, about whether or not the teacher was talking about YOU.

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| not mad | | | | very, very mad |
| <input type="radio"/> |

Do you think the teacher probably meant YOU when she said there was a kid she didn't like having in the class?

| | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| YES!!! | | | | NO!!! |
| <input type="radio"/> |

Children's Emotions and Desires and Aggression

Appendix J

Social Motivation Scale

SMS

Desire for popularity items: 8, 4, 12, 13, 5, 1, 15, 6

Desire for friendship items: 11, 7, 14

Section 4 – How important is it to you?

In the questions below we're interested in how you feel about relating to your friends and others at your school. Fill in the circle for how important the question is to you between 0, which means it's not at all important to you and 4 which means it's really important to you. Please answer as honestly as you can!

✓ Be careful... The possible answers for this section have changed!

Here is an example question that someone has already answered to show you how to do it:

Having spaghetti at lunch every single day is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|----------------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

Ready? Here we go.....

Children's Emotions and Desires and Aggression

1. Being cool is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. Being liked by others is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Having lots of friends is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. Being the boss of the group is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. Being popular is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

6. Being liked by everyone is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7. Having really close friends is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Children's Emotions and Desires and Aggression

8. Being in charge of the group is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. Being left out of an activity at recess by friends would be...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. If someone called me "loser" it would be...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

11. Having a best friend is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

12. Being the leader of the group is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

13. Being liked by the popular kids is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

14. Being a friend to everyone is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Children's Emotions and Desires and Aggression

15. Being a member of a popular group in my grade is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

16. Having influence over the group is...

| Not at all important to me | A little important to me | Somewhat important to me | Pretty important to me | Really important to me |
|----------------------------|--------------------------|--------------------------|------------------------|------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Now, don't forget to come and get a letter for yourself and a letter to take home to your parents about the study. Remember, your answers to these questionnaires are confidential – that means we won't tell anyone what you wrote.

Thanks so much for your help today! 😊

Children's Emotions and Desires and Aggression

Appendix K

Correlations Table

Children's Emotions and Desires and Aggression

Intercorrelations Between Behaviour Variables and Emotion and Desire Variables

| Scale | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-------------------|-------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| 1. Grade | -.121 | .329** | -.180 | .190 | -.085 | .009 | .032 | -.172 | -.236* | -.127 | .243* | .211 |
| 2. Friend RA | - | .487** | .728** | .425** | -.316** | -.107 | .371** | .545** | .122 | -.162 | .272* | -.271* |
| 3. Group RA | | - | .304** | .531** | -.146 | .055 | .349** | .323** | .111 | .015 | .526** | .103 |
| 4. Friend PA | | | - | .435** | -.034 | -.040 | .235* | .366** | .147 | -.134 | .143 | -.086 |
| 5. Group PA | | | | - | -.387** | -.246* | .036 | .202 | .089 | -.126 | .393** | .023 |
| 6. Friend Pros | | | | | - | .529** | -.029 | -.216 | -.014 | .131 | -.168 | .335** |
| 7. Group Pros | | | | | | - | .151 | -.111 | -.032 | .259* | .053 | .260* |
| 8. Jeal | | | | | | | - | .755** | .330** | .243* | .359** | .056 |
| 9. Anger | | | | | | | | - | .472** | .087 | .338** | -.063 |
| 10. Ang RS | | | | | | | | | - | .541** | .037 | .074 |
| 11. Anx RS | | | | | | | | | | - | -.092 | .017 |
| 12. Desire Pop | | | | | | | | | | | - | .355** |
| 13. Desire Friend | | | | | | | | | | | | - |

* $p < .05$ ** $p < .01$