UNDERSTANDING EARLY ADOLESCENTS'
SOCIAL BEHAVIOURS AND RELATIONSHIPS WITH PEERS

by

LEANNA CLOSSON

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(Human Development, Learning and Culture)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

April 2011

Abstract

Hawley (1999) proposed that the ability to consider one's own characteristics in relation to the characteristics of interaction partners is an adaptive social skill in guiding the use of prosocial or aggressive behaviour. Although research has shown that social status is associated with aggression and prosocial behaviour generally, we know very little about how youths' behaviours directed toward certain types of peers (e.g., friends vs. nonfriends; popular vs. unpopular peers) vary as a function of their own social status. The purpose of the present study was to evaluate variability in early adolescents' aggressive and prosocial behaviours across peer targets and determine whether higher status youth behave differently toward specific types of peers as compared to lower status youth. Early adolescents in grades 6 through 8 (N = 426) completed self-report measures assessing how often they engaged in aggressive or prosocial behaviours toward each participating peer in their grade. Participants also completed self-report measures assessing their relationship with each grademate (i.e., friendship, liking) in addition to peer-report measures of three indices of social status (i.e., social preference/likeability, perceived popularity, social dominance). Results showed that, regardless of their own social status, early adolescents varied their behaviours toward different types of peers to some degree. However, high and low status youth often behaved differently toward certain types of peers. Importantly, a distinct pattern of findings was apparent for each index of social status. Among the findings, the results showed that popular, but not unpopular, youth reported more prosocial and aggressive behaviours toward popular and personally liked peers than toward unpopular and personally disliked peers. Well-accepted, but not rejected, youth reported engaging in prosocial behaviours toward a variety of peers in addition to greater relational aggression toward friends than nonfriends. Finally, dominant, but not subordinate, youth reported greater aggression toward dominant than subordinate peers. The present study has demonstrated the value of examining multiple social status indices and of considering toward whom youth direct their aggressive and prosocial behaviours to obtain a richer understanding of the complex social processes involved in the early adolescent peer group.

Preface

Ethics approval for this research was issued by the Behavioural Research Ethics Board at the University of British Columbia (certificate number: H09-02294).

Table of Contents

List of Tables

List of Figures

Acknowledgements

I would like to express my sincere gratitude to all who supported me along this journey. First, I would like to thank my supervisor, Dr. Shelley Hymel, for her support, guidance, and words of wisdom. Shelley, thank you for your wonderful encouragement and confidence in my abilities. I am also very grateful to my committee members Dr. Bruno Zumbo and Dr. Marion Porath for their feedback, mentorship, and support. Bruno, I thoroughly enjoyed working closely with you throughout this process. Thanks also to Lina Darwich for your support and kind words when I needed to hear them the most.

I am also grateful for the financial support I received from the Social Sciences and Humanities Research Council, and the UBC Faculty of Education.

Last, but certainly not least, I would like to thank my family for their love and support as always. Mom and Dad, you have been there for me every step of the way and I thank you from the bottom of my heart.

Dedication

To my parents

1 Introduction

 "A man has as many social selves as there are individuals who recognize him" (James, 1890, p. 294; as cited in Harris, 1998).

Over a century ago, William James proposed the idea that people have multiple social selves. Essentially, James believed that we show different people different sides of ourselves; thus, our behaviour changes depending on who we are with at any given time. Contemporary works of fiction have also addressed the notion of multiple social selves as evidenced in Margaret Atwood's novel *Cat's Eye*: "There is no one I would ever tell this to, except Cordelia. But which Cordelia? The one I have conjured up…or the one before, or the one after? There is never only one, of anyone" (Atwood, 1988, p. 6). Although some evidence has demonstrated that an individual's behaviour can vary across interaction partners or targets (e.g., Hinde & Stevenson-Hinde, 1987; Peets, Hodges, & Salmivalli, 2008), much of the research on peer relationships has examined general behavioural tendencies of children and youth (Rubin, Bukowski, & Parker, 2006; Underwood, 2002; Vaillancourt & Hymel, 2004).

According to Hinde and Stevenson-Hinde (1987), our social behaviours vary according to qualities of ourselves and the people with whom we interact, in addition to the relationship between both parties. Indeed, recent peer relations research has begun to demonstrate that a child's aggression can be attributed to general behavioural tendencies as well as context-specific variations in his/her aggressive behaviour (Peets et al., 2008). In fact, Peets and colleagues demonstrated that a *higher* proportion of variance in explaining children's aggression was attributed to the child's perceived relationship with each target than to the child's general tendency to behave aggressively toward all peers. These findings highlight the importance of examining aspects of the context within which children interact in order to better understand their behaviours.

The issue of whether behaviour is consistent or variable across contexts is applicable to people of all ages. However, it may be particularly interesting to examine during early adolescence – a time when youth are said to interact with different types of peers to find their

place within the peer culture (Brown, 1990). Also during this time, achieving and maintaining popularity in the peer group becomes of paramount importance for most youth (LaFontana & Cillessen, 2010; Merten, 2004). Nevertheless, only some youth actually *are* popular. This begs the question: why do some youth have higher social status in the peer group than others? As will be discussed in detail later in the introduction, previous researchers have argued that high status youth maintain their high positions in the peer group because of their general behavioural tendencies toward peers (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003; Puckett, Aikins, & Cillessen, 2008; Rose, Swenson, & Waller, 2004b). Indeed, individuals with tendencies toward behaving both aggressively and prosocially among peers are often the most socially successful members of the peer group (Bukowski & Abecassis, 2007; Hawley, 2003; Puckett et al., 2008). However, comparing the behavioural tendencies of high status youth with those of their lower status peers may not fully explain the discrepancy in their level of social status. Rather, it may be important to consider how youths' behaviours vary among different subsets of peers (Peets et al., 2008; Rodkin & Berger, 2008; Veenstra et al., 2007).

Hawley (1999) proposed that a particularly adaptive social skill is the ability to consider one's own characteristics in relation to the characteristics of interaction partners in guiding the use of prosocial or aggressive behaviour. Given that having high social status reflects adaptation in the peer group, particularly during early adolescence (Hawley, 2003; LaFontana & Cillessen, 2010), high status early adolescents should be more likely to vary their behaviours as a function of the identity of their interaction partners as compared with lower status early adolescents. Furthermore, given that individuals who use socially acceptable behaviours are afforded high status in the peer group (Coie, 1990; Hawley, 1999), high status individuals' social behaviours should reflect what is socially appropriate according to the norms created within the peer group culture. Thus, high status youth should interact with certain types of peers in ways that differ from how lower status youth interact with the same types of peers. For example, high status youth should interact with other high status peers in a manner that is different from how lower status youth interact with high status peers. Accordingly, the purpose of the present study

was to evaluate the variability in youths' social behaviours across interaction partners and determine whether higher status youth behave differently toward specific types of peers as compared to lower status youth.

This introduction is structured in such a way as to provide the reader with an understanding of the extant research on youths' social behaviours with a particular focus on high status youth. First, three indices of social status are described and the behavioural correlates of each are presented. Next, a discussion of how youths' aggressive and prosocial behaviours can be used strategically is provided followed by a discussion comparing the study of social behaviours as consistent or context-specific. Then, a description of the role of the dyadic relationship context in understanding youths' social behaviours is provided, followed by a review of the limited research conducted to date regarding target-specific behaviours of high status youth. Finally, the hypotheses and goals of the present study are presented.

1.1 Social status in the peer group

Investigations of children and adolescents' social status within the peer group have been the focus of numerous studies (see Hymel, Closson, Caravita, & Vaillancourt, 2010, for a review). Social status has been conceptualized and measured in different ways across various social science disciplines. For the past few decades, peer relations researchers have primarily understood a child's social status to reflect the degree to which peers prefer to affiliate with him/her (e.g., Moreno, 1934). From this preference-based approach to social status, peer relations researchers have utilized sociometric measures to understand the experience of social status among peers, measuring feelings of attraction (i.e., liking), and repulsion (i.e., disliking) toward peers (see Cillessen, 2009; Hymel, Vaillancourt, McDougall, & Renshaw, 2002). More recently, peer relations researchers have been investigating reputation-based indices of social status more commonly studied within the fields of ethology, anthropology, and sociology. From this perspective, social status is reflective of youths' reputations of prominence and influence in the peer group (i.e., perceived popularity and social dominance) as opposed to preference or

3

likeability (e.g., Closson, 2009b; Hawley, 2003; LaFontana & Cillessen, 2002; Lease, Kennedy, & Axelrod, 2002a; Lease, Musgrove, & Axelrod, 2002b; Rodkin, Farmer, Pearl, & Van Acker, 2000; Vaillancourt & Hymel, 2006). Previous studies have demonstrated low to moderate positive correlations among likeability, perceived popularity, and social dominance (e.g., Lease et al., 2002a; Vaillancourt & Hymel, 2006). Therefore, these three social status indices may reflect overlapping yet distinguishable constructs.

In light of these findings, peer relations researchers are beginning to advocate the use of a multidimensional approach to the study of social status (Closson, 2009b; Lease et al., 2002b; Rodkin, Farmer, Pearl, & Van Acker, 2006), as such studies provide researchers with a more comprehensive analysis of youths' social experiences in the peer group. In order to better understand why some individuals have higher status in the peer group than others, researchers have examined how children's social status is associated with their behavioural tendencies (Asher & Hymel, 1981). However, when considering both preference- and reputation-based social status, recent research has demonstrated that the associations between social status and behaviours may be more complex than have been previously understood.

1.2 Social preference/likeability

Preference-based sociometric measures of social status reflect how well an individual is liked or accepted by his/her classmates or grademates. Sociometric status is most commonly assessed using peer nominations (e.g., "Who do you like most/least?") or rating scales (e.g., "How much do you like/dislike _____?"). Both methods allow researchers to obtain continuous measures of acceptance (i.e., highly liked), rejection (i.e., highly disliked), and/or a single index of likeability, taking into account both acceptance and rejection (see Hymel et al., 2002). Peer likeability has been positively related to assertiveness, athletic ability, academic ability, physical attractiveness and prosocial behaviour (e.g., helping, sharing) (e.g., Coie, Dodge, & Coppotelli, 1982; LaFontana & Cillessen, 2002; Lease et al., 2002a; Vaillancourt & Hymel, 2006). In comparison, peer likeability has been negatively related to several subtypes of aggression,

4

including physical (e.g., hitting, kicking), verbal (e.g., calling names), and relational (e.g., gossip, exclusion) aggression (LaFontana & Cillessen, 2002; Vaillancourt & Hymel, 2006).

However, as Vaillancourt and Hymel (2006) have pointed out, it is important to note that the seemingly distinct correlates of peer acceptance and rejection are not always clear cut. Indeed, some studies have shown that only half of youth who are aggressive toward peers are also rejected by peers (e.g., Cillessen, Van Ijzendoorn, van Lieshout, & Hartup, 1992; French, 1988, 1990). In addition, although Newcomb, Bukowski, and Pattee's (1993) meta-analysis demonstrated that, overall, well-accepted children are less aggressive toward peers than rejected children, well-accepted children are also found to engage in aggression at levels comparable to average status children. Thus, many youth who engage in aggressive behaviours are *not* rejected by peers (see also Bukowski, 2003; Coie & Dodge, 1998).

Previous assumptions about the correlates of acceptance and rejection have also been called into question when possible moderators are considered. When accounting for other factors such as prosocial behaviour (Bukowski & Abecassis, 2007; Closson, 2009b; Hawley, 2003; see also Crick, Murray-Close, Marks, & Mohajeri-Nelson, 2009) and peer-valued characteristics such as physical attractiveness, athleticism, sense of humour, wealth, and having trendy clothing and possessions (Vaillancourt & Hymel, 2006), previous research has shown that some well-liked youth do engage in aggressive behaviours. Indeed, some evidence has shown that a high level of both aggressive and prosocial behaviours toward peers is positively related to acceptance. Specifically, in a sample of 9- to 12-year-olds, Bukowski and Abecassis (2007) found that, although aggression was negatively associated with acceptance, aggression was positively associated with acceptance if the level of prosocial behaviour was also high. Moreover, although prosocial behaviour was positively associated with acceptance, the correlation was even higher if the level of aggression was also high. Taken together, these findings demonstrate that an individual's likeability may be highest if he/she engages in high levels of aggressive *and* prosocial behaviour toward peers.

Finally, other research has shown that at least some rejected or disliked children demonstrate social competence. For example, since many rejected children have friends (Parker & Asher, 1993), even those who are also highly aggressive (Dishion, McCord, & Poulin, 1999), they may be well-liked by at least some members of the peer group. Indeed, some studies have shown that aggressive youth can be viewed as attractive social partners (e.g., Bukowski, Sippola, & Newcomb, 2000). In addition, other research has shown that not all rejected children lack prosocial abilities. For instance, rejected children who are socially withdrawn (but not aggressive) have been rated by peers as engaging in helpful and cooperative behaviours at levels similar to average status peers, yet they remain disliked (Hymel, Bowker, & Woody, 1993).

Taken together, these studies indicate that, generally, well-accepted youth tend to engage in high levels of prosocial behaviour and low levels of aggression toward peers, whereas rejected youth tend to engage in high levels of aggression and low levels of prosocial behaviour toward peers. Indeed, Coie's (1990) theory that children's likeability in the peer group is a result of their general behavioural tendencies among peers seems to be supported. However, under closer examination it appears that well-accepted youth, and at least some rejected youth, have friends and may engage in some degree of both aggressive and prosocial behaviours toward peers. Therefore, well-accepted and rejected youth may not always be easily distinguishable on the basis of their behavioural tendencies, as the associations between likeability and social behaviours toward peers can be quite complex. Importantly, it is not clear from the extant literature whether youth of varying levels of social preference direct their aggression and prosocial behaviours toward different types of peers.

Thus far, the present review has considered the behavioural correlates of popularity as defined by peer relations researchers, in terms of likeability or social preference. However, it is necessary to also examine the behavioural correlates of popularity as the construct is understood by youth themselves. It is this literature that is turned to next.

1.3 Perceived popularity

An index of peer group social status that has received increased attention by peer relations researchers over the past decade is perceived popularity (see Hymel et al., 2010). Research in fields such as sociology and anthropology (Adler & Adler, 1998; Eder, 1985; Eder, Evans, & Parker, 1995; Merten, 1997, 2004) has portrayed popularity as a construct relating to social reputation and prominence in the peer group. These researchers (e.g., Adler & Adler, 1998; Eder, 1985; Merten, 1997) have found that popular children are not always nice or well-liked by all peers – a stark contrast to the operational definition of popularity held traditionally by peer relations researchers. Intrigued by the findings in other fields, peer relations researchers became interested in studying reputation-based popularity in addition to the more traditional preference-based indices of popularity. Parkhurst and Hopmeyer (1998), and many other peer relations researchers to follow (e.g., Košir & Pečjak, 2005; LaFontana & Cillessen, 2002; Lease et al., 2002a; Prinstein & Cillessen, 2003; Rose, Swenson, & Waller, 2004b; Schwartz, Gorman, Nakamoto, & McKay, 2006; Vaillancourt & Hymel, 2006), have demonstrated that perceived popularity and sociometric popularity (i.e., social preference or likeability) are distinct yet overlapping constructs. Therefore, studies examining how both constructs are related to youths' social experiences are warranted.

Measures of perceived popularity have been said to assess the peer group's own social constructions of popularity (Lease et al., 2002a). Lease and colleagues have argued that by allowing participants to define "popular" for themselves, researchers can obtain more meaningful studies than if they impose their own definition. When directly asking youth what popularity means to them, researchers have found that children and adolescents acknowledge physical attractiveness and social connectedness as critical to defining popularity (Closson, 2009a; LaFontana & Cillessen, 2002; Xie, Li, Boucher, Hutchins, & Cairns, 2006).

Although perceived popularity has many benefits as an index of social status, it also has some drawbacks. For instance, perceived popularity has been associated with several positive characteristics (i.e., peer-valued characteristics; Vaillancourt & Hymel, 2006) including

leadership, influence, admiration, social control, and being perceived by peers as smart, funny, athletic, physically attractive, socially desirable/connected, and cool (Closson, 2009a; Hawley, Little, & Card, 2007; LaFontana & Cillessen, 2002; Lease et al., 2002a; Puckett et al., 2008; Rodkin et al., 2000; Vaillancourt & Hymel, 2006; Xie et al., 2006). However, youth who are perceived as popular have also been viewed by peers as snobby, mean, and conceited (Closson, 2009a; Gorman et al., 2002; Lease et al., 2002a; Parkhurst & Hopmeyer, 1998) and may be likely to engage in risky behaviours such as alcohol use, smoking, and sexual activity (Mayeux, Sandstrom, & Cillessen, 2008; Prinstein, Meade, & Cohen, 2003).

Previous studies have also shown that youth who are perceived to be popular tend to engage in both aggressive and prosocial behaviours toward peers (Adler & Adler, 1998; Lease et al., 2002a; Merten, 1997; Parkhurst & Hopmeyer, 1998; Puckett et al., 2008). Specifically, perceived popularity has been associated with the use of prosocial behaviour toward peers across grades 4 through 10 (Gorman, Kim, & Schimmelbusch, 2002; LaFontana & Cillessen, 2002; Parkhurst & Hopmeyer, 1998; Rodkin et al., 2000). At the same time, positive associations between perceived popularity and both overt (i.e., direct physical and/or verbal attacks) and relational (i.e., gossip, exclusion) subtypes of aggression toward peers have been most commonly reported across grades 6 through 12 (Cillessen & Borch, 2006; LaFontana & Cillessen, 2002; Mayeux & Cillessen, 2008; Parkhurst & Hopmeyer, 1998; Puckett et al., 2008; Prinstein & Cillessen, 2003; Rose et al., 2004b; Vaillancourt & Hymel, 2006), although some researchers have found significant associations between perceived popularity and aggression as early as grade 4 (Andreou, 2006; Lease et al., 2002a; Rodkin et al., 2000; Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2008).

Longitudinal studies have revealed that, although perceived popular youth may engage in overt aggression, their use of relational aggression in particular may facilitate both the attainment and maintenance of perceived popularity, especially for girls (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003; Rose et al., 2004b). For example, Rose and colleagues (2004b) found that when relational aggression was controlled, overt aggression had a

nonsignificant association with perceived popularity. However, when overt aggression was controlled, the positive association between relational aggression and perceived popularity remained significant. Given that overt and relational aggression are often moderately correlated (e.g., Crick & Grotpeter, 1995; Rose et al., 2004b; Vaillancourt & Hymel, 2006), it may be that relational aggression, regardless of the level of overt aggression, facilitates hierarchy ascension and the maintenance of status. Taken together, these studies suggest that the use of relational aggression toward peers may be an adaptive strategy for securing and attaining a high status position in the peer group.

Interestingly, when asked to describe popular and unpopular peers, youth have identified the possession of peer-valued characteristics among popular peers as a major factor distinguishing them from unpopular peers, whereas popular and unpopular peers' behavioural tendencies have been viewed as less discernable (LaFontana & Cillessen, 2002; Xie et al., 2006). For instance, descriptive studies by LaFontana and Cillessen and by Xie et al. have shown that perceived popular and perceived unpopular peers were described by youth as sharing tendencies toward aggressive and deviant behaviours. Similarly, Prinstein and Cillessen (2003) found a curvilinear association between perceived popularity and aggression, where direct physical or verbal attacks, social exclusion, and gossiping were positively associated with both high and low levels of perceived popularity. In contrast, the findings with regard to prosocial behaviour have been mixed. Specifically, LaFontana and Cillessen found that peers who are perceived to be popular and those who are perceived to be unpopular were equally likely to be described as having prosocial tendencies, whereas Xie and colleagues found that peers perceived to be popular were more likely than those perceived to be unpopular to be described as engaging in prosocial behaviour toward peers.

In sum, the extant literature on perceived popularity indicates that perceived popularity may be associated with peer-valued characteristics in addition to aggressive and prosocial behavioural tendencies. Furthermore, the use of relational aggression toward peers may be particularly adaptive for youth who are perceived to be popular. Although there are very few

studies that examine perceived *unpopularity* (LaFontana & Cillessen, 2002; Prinstein &

Cillessen, 2003; Xie et al., 2006), these studies indicate that the behavioural tendencies of

youth who are perceived to be popular and those perceived to be unpopular are comparable,

particularly in terms of their use of aggression. Although a clear distinction can be made

between perceived popularity and perceived unpopularity with regard to the level of peer-valued

characteristics, these two subgroups may not always be easily distinguishable in terms of their

associated behavioural tendencies toward peers. Moreover, it is not clear from the extant

literature whether youth of varying levels of perceived popularity direct their aggression and

prosocial behaviours toward different types of peers.

1.4   Social dominance

Another important index of social status in the peer group that has been related to youths'

social behaviours is social dominance – a construct that stems from the field of ethology.

Studies of social dominance have been of interest to child development researchers for many

years (e.g., Savin-Williams, 1979). In ethology, the organizational structures within animal

groups (i.e., dominance hierarchy or pecking order) have been assessed by examining the

relative dominance of individuals in the group (e.g., Langbein & Puppe, 2004). Psychologists

have primarily drawn upon non-human primate models of social dominance to inform their

understanding of social dominance among humans (e.g., Hawley, 1999; La Freniere &

Charlesworth, 1983; Savin-Williams, 1979; Strayer & Trudel, 1984). As in non-human primate

social groups, human social groups consist of dominance hierarchies. A dominance hierarchy

refers to a social system in which certain individuals within a group reliably gain greater access

than others to social or material resources that are highly desired by members of the group

(Hawley, 1999). It is assumed that group members differ in their ability to compete; thus,

dominant individuals gain greater access and control over key resources than those who are

less skilled (i.e., subordinate) (Hawley, 1999).

Socially dominant individuals have been shown to be focal members of a group (Lease et al., 2002a). They are influential, highly watched, and are perceived as attractive social partners (Hawley, 1999; La Freniere & Charlesworth, 1983). Dominant individuals have also been characterized as likeable, athletic, daring, attractive, and well-adjusted (Hawley, 2003; Lease et al., 2002a, Lease et al., 2002b; Savin-Williams, 1979; Savin-Williams & Freedman, 1977; Vaillancourt & Hymel, 2006). In addition, socially dominant individuals typically have well-developed social skills (Lease et al., 2002b). For instance, when engaged in a social situation, they are able to assess whether they would be more likely to succeed in obtaining their goals by asserting their dominance or by waiting for a more advantageous opportunity (Hawley, 1999).

In contrast, subordinate individuals (i.e., low dominant) may be at risk for experiencing peer difficulties (Hawley, 2003; Hawley, Little, & Pasupathi, 2002). Subordinate youth have been described as withdrawn, odd, socially clumsy, and are some of the least liked individuals in a group (Hawley, 2003; Lease et al., 2002b; Savin-Williams, 1979; Savin-Williams & Freedman, 1977). Relative to their more dominant peers, subordinate youth have more difficulty attending to social cues and have poorer social self-concept and lower social self-esteem (Hawley, 2003; Hawley et al., 2002; Lease et al., 2002b). In addition, subordinate children have been rated by peers as lacking leadership skills, influence, and control over other children (Hawley et al., 2002; Lease et al., 2002b) and are also perceived to be some of the least cool and least admired members of the peer group (Lease et al., 2002b).

Although the traditional ethological perspective is that *aggression* serves an adaptive function that allows individuals within groups to establish and maintain dominance hierarchies (La Freniere & Charlesworth, 1983; Pellegrini, 2002; Strayer & Strayer, 1976; Strayer & Trudel, 1984), Hawley (1999) proposed that social dominance is achieved through the acquisition and control of resources (e.g., access to social partners, attention from peers, choice of activities), regardless of the means by which they are attained. Hawley's (1999) resource control theory suggests that the ability to compete for and control resources determines the dominance of each group member. According to Hawley and her colleagues (e.g., Hawley, 2003; Hawley et

11

al., 2007), dominant individuals use one of three strategies for resource control: prosocial (e.g., reciprocity, cooperation, persuasion, and helping behaviours), coercive (e.g., aggression, manipulation, deception, insults, and threats), or bistrategic (i.e., the use of either prosocial or coercive strategies depending on what would bring the most success in a particular situation).

Indeed, other researchers have found that social dominance is positively associated with a high level of influence and control over peers (Lease et al., 2002b) as well as the use of both overt and relational aggression and prosocial behaviour toward peers (Lease et al., 2002a). However, findings regarding subordinate youths' aggressive and prosocial behavioural tendencies have been mixed. For instance, Hawley (2003) found that subordinate youth tend to be the least aggressive members of the peer group and are the least likely to employ prosocial or coercive strategies to get what they want. In contrast, Lease and colleagues (2002b) have found that subordinate youth did not differ significantly from average peers on measures of their aggressive or prosocial behavioural tendencies.

As a whole, these studies have shown that an individual's social dominance is likely related to his/her behaviour toward other members of a group. Although dominant youth tend to engage in high levels of aggressive and/or prosocial behaviours toward peers, it is less clear to what extent subordinate youth use aggressive and prosocial behaviours. Therefore, dominant and subordinate youth may not always be easily distinguishable on the basis of their behavioural tendencies toward peers. In fact, as illustrated thus far, general behavioural tendencies may not sufficiently distinguish youth who are well-accepted, perceived as popular, or socially dominant from the rest of their peers. In the present research, it is argued that behavioural tendencies *per se* may not adequately explain the socially hierarchical nature of the peer group. Rather, it is hypothesized that it is the more skilled use of social behaviours that differentiates high status youth from the rest of the peer group. In other words, it is *how* high status youth use aggression and prosocial behaviour toward *different* peers that makes their behaviours more adaptive than those of lower status youth.

1.5   Socially skilled use of social behaviours among peers

Hawley (1999) has argued that aggression/coercion, prosocial behaviour, or the combined use of aggression/coercion and prosocial behaviour can be effective tools to obtain desired social resources (e.g., high social status) depending upon contextual factors such as the characteristics of the individual relative to his/her peers. Furthermore, Hawley and Little (2002) have suggested that individuals may differ in the level of agency or sense of personal control over their actions used to achieve their goals. Across development, socially competent individuals become increasingly better able to assess a variety of social cues in order to help them decide what action to take when interacting with peers (Crick & Dodge, 1994; Hawley, 1999). However, given that low status youth are more inattentive and have greater difficulty attending to social cues as compared with their higher status counterparts (Hawley, 2003; Lease et al, 2002b), it may be that only those with the highest social status in the peer group possess the necessary social prowess to decide whether coercion/aggression or prosocial behaviour will bring about the highest personal reward (e.g., the maintenance of their high status) in social interactions with each type of peer they encounter. Of primary interest in the present study was to determine whether this hypothesis can be empirically supported.

During early childhood, a time when the use of physical aggression is at its peak (Tremblay, 2000), social dominance is manifest primarily through the use of coercive strategies. Among younger children, coercive strategies may aid in securing social power in the peer group explicitly through their heightened use of aggression and intimidation (La Freniere & Charlesworth, 1983). Between ages four through seven, dominant children's social and cognitive skills develop and they begin using a combination of prosocial and coercive strategies. Hawley (1999) has described this intermediate stage as a time when children "try on" different resource control strategies and develop an understanding of which methods yield the most desired results.

Children with goals of maintaining positive relationships with peers should eventually choose predominantly prosocial strategies, whereas those who are less concerned with

13

maintaining positive relationships should eventually choose predominantly coercive strategies (Hawley, 1999). However, youth who prefer coercive strategies may lose their status over time, whereas youth who prefer prosocial strategies may be better able to achieve and/or maintain their high social position while minimizing interpersonal conflict by reciprocating and cooperating with their peers (Hawley, 1999, 2003). By early adolescence, youth who use both aggressive and prosocial behaviours typically are very socially savvy and have the highest levels of social status (Closson, 2009b; Hawley, 2003; Hawley et al., 2007; Lease et al., 2002b; Puckett et al., 2008). Indeed, high status early adolescents who use both aggressive and prosocial behaviours have admitted that their use of prosocial behaviours toward peers helps them to maintain their status by not being viewed as stuck-up (Merten, 1997). These highly alluring youth (Hawley et al., 2007) may hold social power that is implicit, stemming from their peers' admiration and recognition of their status and competence (La Freniere & Charlesworth, 1983).

Hawley (1999) has argued that adaptation in the peer group is manifest through the successful navigation of dyadic interactions with peers. Some empirical evidence has been found to support this notion. For example, compared to aggressive-rejected boys, aggressive-nonrejected boys have been found to be less argumentative and more effective at controlling resources when engaged in interpersonal conflict (Bierman, Smoot, & Aumiller, 1993; Perry, Kusel, & Perry, 1988; Perry, Perry, & Kennedy, 1992). In addition, well-accepted children have been found to endorse verbally assertive methods for handling peer conflict, whereas children low in peer acceptance are more likely to endorse less socially acceptable strategies such as overt aggression or seeking out help from adults (Chung & Asher, 1996; Erdley & Asher, 1999; Hopmeyer & Asher, 1997).

Although the studies reviewed above have shown that well-accepted youth are more skilled when interacting with peers than are less accepted youth, it remains unclear whether high status youths' behaviours vary across interaction partners in a manner that is different from lower status youth. Whether well-accepted children can conceive of more strategies for negotiating peer interactions than can less accepted children has been debated within the

14

sociometric literature (see Erdley & Asher, 1999). However, previous to the present study, no attention has been paid to whether well-accepted youths' behaviours are more likely than are less accepted youths' to vary as a function of the type of interaction partner. Moreover, there has been no empirical study that has examined this issue among youth of varying levels of reputation-based status (i.e., perceived popularity, social dominance). Accordingly, the present study sought to determine whether early adolescents' social behaviours that are directed toward certain types of peer targets vary as a function of their own level of social preference (i.e., acceptance/rejection), perceived popularity, and social dominance in the peer group.

Hawley (1999) has argued that a highly adaptive skill is the ability to take into account contextual factors such as one's own characteristics relative to one's peers' in order to determine how to behave. Based on this perspective, youths' behaviours, especially those of socially skilled, high status youth, should not necessarily be consistent across interaction partners; rather, they should differ depending upon who their interaction partners are. Although a number of researchers recognize the importance of investigating the role of social context on interpersonal behaviour (e.g., Asher & McDonald, 2009; Crick & Dodge, 1994; Fabes, Martin, & Hanish, 2009; Hartup, 2009; Hawley, 1999; Hawley & Little, 2002), many tend to study youths' social behaviours in a more general manner. A discussion of these two approaches to understanding youths' interpersonal behaviours is presented next.

1.6 Studying social behaviours as consistent versus context-specific

In the peer relations field, researchers seek to understand the peer experiences of children and adolescents by examining several levels of social complexity (Hinde & Stevenson-Hinde, 1987; Rubin et al., 2006). The *individual* level includes fairly consistent characteristics or temperaments that predispose an individual to respond to social situations in a predictable manner. Individual characteristics that are commonly of interest to peer relations researchers include behavioural tendencies toward aggression, withdrawal, or prosocial behaviour (Rubin et al., 2006). The *interaction* level includes the examination of social exchanges between certain

15

individuals. At the interaction level, the type of individuals' interactions (e.g., aggressive/hostile, prosocial/sociable) can vary across different social situations and social partners (Rubin et al., 2006). Behaviours and social exchanges are often studied within specific relationship or group contexts. The *relationship* level depends upon characteristics of the individuals, the history of their interactions, and the meaning attributed to the relationship by the individual (Hinde & Stevenson-Hinde, 1987). The types of relationships that are often studied by peer relations researchers include friendships and antipathetic relationships (i.e., enemies). Finally, at the broadest level are *groups* within which all other levels are embedded. Groups have properties such as patterns or networks of affiliation among individuals and hierarchical organization (Hinde & Stevenson-Hinde, 1987; Rubin et al., 2006). Thus, at the group level, many aspects of youths' peer experiences can be examined such as those relating to their social position within the group's status hierarchy (i.e., social status).

Given that the designs for studies considering all levels of social complexity would be highly complicated, peer relations researchers have tended to focus on only one or two levels in a single study (Rubin et al., 2006). However, with increasing use of sophisticated statistical techniques such as multilevel modeling, some researchers are beginning to examine multiple levels of social complexity simultaneously (Peets et al., 2008; Rodkin & Berger, 2008; Veenstra et al., 2007). In the present study, multilevel modeling was utilized to investigate early adolescents' target-specific aggressive and prosocial behaviours by examining aspects of all levels of social complexity described in the Hinde and Stevenson-Hinde model. Specifically, the individual level was reflected by examining early adolescents' behaviours across targets, whereas the interaction level was reflected by examining their behaviours toward specific targets. Assessments of friendship with and liking for particular peer targets represented the relationship level and measures of social status in the peer group for both actor and target represented the group level of social complexity. Each of these levels was evaluated in the present study to determine (a) whether higher status youth vary their behaviours across interaction partners more than lower status youth and (b) whether early adolescents' social

status in the peer group moderates the links between their aggressive and prosocial behaviours directed toward specific interaction partners (i.e., whether high status youth behave differently toward specific types of peers [e.g., friends] as compared to lower status youth).

According to Hinde and Stevenson-Hinde's (1987) model, the levels of social complexity should not be studied in isolation because they are all interconnected. Nevertheless, most studies have focused on the individual level in understanding children and adolescents' interpersonal experiences (Hinde & Stevenson-Hinde, 1987; Rubin et al., 2006). When focusing on the individual level, research questions relating to youths' behavioural tendencies, perceptions, or reputations are appropriately addressed using self- or other-report questionnaires regarding the use of certain behaviours toward unspecified others (Fabes et al., 2009). Implicit in these types of measures is an assumption that youths' social behaviours are consistent across interaction partners. Thus, these studies have been conducted in such a way that conclusions are often drawn about how youth behave among peers in general (Asher & McDonald, 2009; Fabes et al., 2009; Rubin et al., 2006). Peers are considered to be individuals who are equal in some way and most frequently are identified on the basis of age or grade level at school or being in the same classroom. Therefore, researchers focusing on the individual level typically study children and adolescents' social behaviours among fellow grademates or classmates at school.

As mentioned above, a common method used in peer relations research for the study of youths' social behaviours is to administer questionnaires to students in their classrooms at school. Often, researchers consider self-reports of students' behavioural tendencies among classmates or grademates (e.g., Little, Jones, Henrich, & Hawley, 2003), or peer-reports of the behavioural tendencies of classmates or grademates (e.g., Crick & Grotpeter, 1995). Items in these types of questionnaires assess social behaviours in a general manner where the target of the behaviour is only specified as "peers" who are often referred to as "others" or "someone" for each item. For example, an 18-item self-report instrument developed by Little and colleagues (2003) assesses several subtypes of aggression using items such as "I'm the kind of person

who often fights with others" and "When I'm hurt by someone, I often fight back." In these examples, the type of peer who is being referred to as "others" or "someone" is not specified. The participant is free to evaluate their own perception of their behaviours toward anyone, possibly even peers outside of school, siblings, or even adults, depending on how the instructions are presented. Although such instruments inform researchers as to the overall or general behavioural tendencies of youth, they are limited because the targets of their behaviours remain unspecified. Therefore, researchers are unable to determine whether youths' behaviours are consistent across different types of interaction partners when using these types of measures.

Other concerns with regard to target-specificity arise among instruments that have variability within and between subscales in which some items refer to "others," "people," or "a person," whereas other items refer to "friends" (e.g., Crick & Grotpeter, 1995). For example, consider the following two items from Crick and Grotpeter's (1995) peer-report nomination measure of relational aggression: "tells friends they will stop liking them unless friends do what they say" and "when mad at a person, ignores them or stops talking to them." In these example items, "friends" refer to a specific type of peer, whereas "a person" could refer to any peer. Therefore, this measure does not take into account the possibility that children behave differently among friends than they do among other types of peers. Indeed, as hypothesized in the present study, it is quite possible that there are fundamental differences in how youth behave among different types of peers, particularly for high status youth. For researchers who are interested in a more nuanced understanding of youths' interpersonal behaviours, the methodological approaches described above may not be appropriate (Fabes et al., 2009).

Hinde and Stevenson-Hinde (1987) criticized such general assessments because the continuity of behavioural "traits" across contexts tends to be low. Hinde and Stevenson-Hinde further argued that studies exclusively examining the individual level are limited because they do not take into account other factors such as the characteristics of the interaction partners and the meaning the individual attributes to his/her relationships. Similarly, Fabes and colleagues

18

(2009) suggested that such questionnaires may be too broad, only capturing high impact or salient behaviours. Indeed, observational studies have shown that children's interactions with peers are influenced by contextual factors beyond an individual's behavioural tendencies or temperament (see Fabes et al., 2009).

In comparison to the methodological approaches to studying youths' general behavioural tendencies, studies employing a context-specific approach have commonly used observational methods in addition to hypothetical vignettes administered through surveys or individual interviews (Fabes et al., 2009; Rubin et al., 2006). For instance, when using hypothetical vignettes, researchers have presented children with peer conflict situations or hypothetical ambiguous provocation situations (i.e., the child is hypothetically harmed by a peer but it is ambiguous whether the harm was intentional or accidental). Using this method, children's social goals, response strategies, and attributions of the hypothetical peer's intent have been studied in regard to specific social situations (Chung & Asher, 1996; Crick & Dodge, 1994; Erdley & Asher, 1996; Hymel, 1986; Peets et al., 2008; see also Asher & McDonald, 2009).

Using the social tasks approach (Asher & McDonald, 2009) described above, researchers have sought to determine whether children's behavioural strategies and social cognitions remain consistent across a variety of specific social encounters with hypothetical peers. For example, many of these studies have focused on comparing children who are characterized as aggressive versus non-aggressive toward peers or comparing children who are well-accepted versus rejected by peers. Generally, these studies have revealed that aggressive children tend to endorse more aggressive responses to a range of different, ambiguously-caused negative events than do non-aggressive children (Orborio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). In addition, well-accepted children tend to endorse more prosocial responses, whereas rejected children tend to endorse more aggressive or withdrawn responses across hypothetical contexts (Erdley & Asher, 1999). At first glance, it appears these studies suggest that children's social behaviours are quite consistent across different contexts. However, as hypothesized in the present study, identifying the target's social status and the

individual's relationship with the target may reveal that individuals (particularly high status youth) vary their behaviour toward different types of peers.

Although most previous studies have not focused on how children's behaviours vary toward specific types of peers (see Peets et al., 2008, Rodkin & Berger, 2008; Veenstra et al., 2007 for exceptions), many have focused on understanding how children perceive the behaviours of hypothetical peers (i.e., affective bias, reputational bias; e.g., Hymel, 1986; Hymel, Wagner, & Butler, 1990; Peets, Hodges, Kikas, & Salmivalli, 2007; Peets et al., 2008). These studies have demonstrated that a peer's social status (i.e., accepted, rejected) and the focal child's affect toward the peer (i.e., personally liked, personally disliked) may impact how the child interprets the peer's behaviour. Specifically, a behaviour that is deemed acceptable for a well-accepted or personally liked peer is deemed less acceptable when enacted by a rejected or personally disliked peer (Hymel, 1986; Hymel et al., 1990; Peets et al., 2007, 2008).

Taken together, the studies described above have provided information about how children interpret the behaviours of specific peers and have highlighted the importance of using a context-specific approach to studying youths' social cognitions and behaviours. However, as will be reviewed in the next section, much less is known about whether youths' own behaviours may be differentially related to their interactions with specific types of peers (Peets et al., 2007, 2008; Veenstra et al., 2007). In order to provide support for the hypothesis that, compared to lower status youth, higher status youth more often take into account characteristics of their interaction partners in guiding their behaviours with peers, aspects of the context must be measured. Furthermore, in the present study it is argued that in order to better understand whether and how high status youths' behaviours are more adaptive than their lower status peers', researchers should more closely consider variations across interaction partners. Indeed, as noted by Fabes et al. (2009), "A person's behaviour during a social interaction is determined by not only the person's dispositional or situational characteristics but also by his or her social relationships with interactional partners" (p. 56). As such, peer relations researchers have identified dyadic relationships based on measures of friendship or liking/affection as an

20

important context within which to study youths' social behaviours (e.g., Grotpeter & Crick, 1996; Parker & Asher, 1993; Rose, 2002; see also Rubin et al., 2006). A review of this literature is provided in the section to follow.

1.7   Behaviours between friends, non-friends, personally liked, and personally disliked peers

Baumeister and Leary (1995) have argued that humans have a fundamental need to form social attachments to others. Indeed, during late childhood and early adolescence, a sense of belonging becomes a particularly critical feature of the social experiences of youth (Ojanen, Grönroos, & Salmivalli, 2005; Sullivan, 1953). Given the impact that dyadic friendships and affective relationships may have on youths' psychosocial functioning (e.g., Bagwell, Newcomb, & Bukowski, 1998; Hodges, Boivin, Vitaro, & Bukowski, 1999; Parker & Asher, 1993; see Vitaro, Boivin, & Bukowski, 2009 for a review), it becomes important to evaluate whether high status youths' behaviours toward peers with whom the closeness of their relationships varies are different than those of lower status peers. Indeed, the relationships youth have with one another will likely affect the kinds of social interactions that occur between them (Fabes et al., 2009; Hinde & Stevenson-Hinde, 1987).

Researchers studying the role of friendship in children and adolescents' social and emotional development have examined both its positive and negative effects (see Vitaro et al., 2009). One of the first scholars to study children's friendships was Sullivan (1953) who acknowledged the importance of "chumships" for the development of positive dyadic exchanges such as mutuality, equality, reciprocity, and cooperation. Researchers examining the positive effects of having friends (see Crick et al., 2009; Vitaro et al., 2009 for reviews) have found that friendship participation predicts later emotional well-being (Bagwell et al., 1998). In addition, participation in a friendship may be protective as it has been shown to decrease reports of peer victimization and adjustment difficulty, particularly for rejected children (Hodges et al., 1999; Parker & Asher, 1993). However, friendship participation may not always be a positive

experience for youth (see Vitaro et al., 2009). For example, some researchers have also shown that participation in friendship does not always serve as a protective factor against victimization since victimization can occur within the friendship itself (Closson, Daniels, & Spence, 2006; Grotpeter & Crick, 1996). Therefore, it is important to examine how the social experiences that occur within friendships are related to youths' functioning, rather than only focusing on whether youth have (or do not have) friends.

Some of the research in the area of childhood and adolescent friendship has contrasted the social experiences that occur with friends versus non-friends. Friendships are usually typified by mutual caring and enhanced levels of understanding compared to relationships with non-friends (Newcomb & Bagwell, 1995). Although friendship quality can vary across dyads (Brendgen, Bowen, Rondeau, & Vitaro, 1999), prosocial behaviour is often exchanged within friendships (Bukowski, Hoza, & Boivin, 1994; Parker & Asher, 1993), particularly between girls (Bowker, 2004). However, research has also shown that children engage in more conflict with friends, and exhibit more quarrelling and hostility with friends than with non-friends (Bukowski, Motzoi, & Meyer, 2009; Rubin, Coplan, Nelson, Cheah, & Lagace-Seguin, 1999; Simpkins & Parke, 2002). It may be that the close proximity and frequency of interactions between friends provides increased opportunities for conflict (Hartup, Laursen, Stewart, & Eastenson, 1988). Given that conflict may be higher between friends than non-friends, it may also be the case that individuals are more aggressive toward friends than toward non-friends.

Supporting the view that social behaviours tend to be consistent across interaction partners, researchers have demonstrated that youth who are characterized by peers as high in overt or relational aggression tend to have friendships that involve high levels of conflict (Cillessen, Jiang, West, & Laszkowski, 2005; Rose, Swenson, & Carlson, 2004a). Moreover, Grotpeter and Crick (1996) found that 9- to 12-year-old children who were characterized as highly relationally aggressive by peers used more relational aggression toward their friends than did children who were *not* characterized as highly relationally or overtly aggressive by peers. Nevertheless, peer-identified "nonaggressive" children employed levels of overt aggression

toward their friends that was comparable to children who were characterized as highly overtly aggressive by peers. In addition, "nonaggressive" children reported using *some* degree of relational aggression within their friendships. Therefore, a closer examination of Grotpeter and Crick's results suggest that it is unlikely that "nonaggressive" children's friendships are necessarily void of aggression.

In a related area of study, researchers studying school bullying have reported mixed findings in regard to the frequency of its occurrence within students' friendships. For example, by asking 10- to 11-year-old Dutch children "by whom are you bullied?" and "who do you bully?" Veenstra and colleagues (2007) found that when a child nominated a target as a friend, the likelihood of a bully-victim relationship decreased. In contrast, in a study of Canadian students in grades 5 to 7, Closson, Hymel, Konishi, and Darwich (2007) found that the majority of students reported they more often bullied someone who is a friend or in their group as opposed to someone they know a little or do not know at all. These conflicting findings may be due to cultural differences, developmental differences, or methodological differences. For instance, students were asked about "bullying" in Veenstra et al.'s study but in the Closson et al. study, bullying behaviour was described as "negative actions or mean behaviours," avoiding specific use of the term bullying. These studies highlight the need to examine the nature of the relationship between an individual and his/her target in order to better understand youths' social behaviours toward specific types of peers. Doing so will help to determine whether using a target-specific approach to understanding youths' interpersonal behaviour is warranted.

In addition to friendships and non-friendships, studying dyadic relationships expressly based on a child's affect toward a peer may also be important. Moreno (1934) conceived of two ways a child's experience with others can be understood: (1) how the child is seen by others (i.e., social status) and (2) how the child perceives members of his/her peer group (i.e., liking/personal preference). As reviewed previously, a great deal of attention has been paid to understanding how a child's social status is related to his/her social experiences in the peer group. However, as Cillessen and Bukowski (2000) have recognized, the fact that researchers

have largely overlooked Moreno's second idea is a limitation in the literature and may deserve more attention.

More recently, researchers have begun to turn their attention toward antipathetic relationships (i.e., enemies) (see Hartup, 2003; Pope, 2003 for reviews). The conceptualization of antipathetic relationships has varied across studies ranging from aversion (i.e., prefers not to interact with a certain peer) to intense disliking (Hartup, 2003). It is important to note that, although many peer-rejected youth are involved in antipathetic relationships, it is also possible for a child who is well-liked by peers to be involved in an antipathetic relationship (Pope, 2003).

Hartup (2003) has cautioned against making generalizations regarding antipathetic relationships, arguing that some of these relationships involve aggression or conflict, whereas others may involve avoiding the disliked peer. Nevertheless, some recent evidence has indicated that children may be more aggressive toward a disliked peer than toward a liked peer (Peets et al., 2008). Specifically, Peets et al. (2008) found that fifth-grade boys and girls used higher levels of proactive and reactive (overt) aggression toward peers they disliked and lower levels of aggression toward peers they liked or felt indifferent about. Similarly, Veenstra and colleagues (2007) found that when an actor nominated a target as a disliked peer, the likelihood of a bully-victim relationship increased.

In contrast to the often negative quality of interactions with disliked peers, children may be better able to regulate their emotions and control negative responses when provoked by peers they personally like (Fabes, Eisenberg, Smith, & Murphy, 1996). Moreover, a child's engagement in prosocial behaviours may be more closely related to their feelings of affection toward a peer than to qualities inherent in the child (i.e., a propensity toward behaving prosocially toward all types of interaction partners) (Eisenberg, Lundy, Shell, & Roth, 1985). Given such findings, it is highly probable that individuals will demonstrate more altruistic acts toward those they personally like (see Trivers, 1971).

In sum, research examining the role of dyadic social relationships in youths' social behaviours has indicated that there are some similarities and some differences in how youth

behave toward friends versus non-friends or toward liked versus disliked peers. Youth may engage in both aggressive and prosocial behaviours with both friends and non-friends, and they may be more likely to use aggression toward disliked peers than toward liked peers. However, we still know very little about how high status youth behave toward specific types of peers (e.g., friends, enemies, popular peers, unpopular peers) and whether their target-specific behaviours are different than those of lower status youth. Examining this issue may help researchers better understand why high status youth are afforded a higher social position in the peer group compared to lower status peers and how high status youths' behaviours are more adaptive.

1.8   Target-specific behaviours as a function of social status

Most of what is known about the target-specific behaviours of high status youth comes from ethnographic research (Adler & Adler, 1998; Merten, 1997). These studies have shown that high status youth use a combination of prosocial and aggressive behaviours targeted toward certain types of peers. In these studies, high status youth were often described as being "mean" and "nice" toward the members of their friendship group (Adler & Adler, 1998; Merten, 1997), a finding which has received some support using quantitative measures (Closson, 2009b).

Other research has demonstrated that socially dominant youth, particularly those who are rated by peers as bistrategic controllers, may use a higher level of overt and relational aggression within their friendships than do subordinate youth (Hawley et al., 2007). Although dominant adolescents who are bistrategic toward peers have been reported to experience high levels of aggression and conflict in their friendships, their friendships have also been viewed as intimate and fun (Hawley et al., 2007). Interestingly, Hawley and colleagues also found that all three types of adolescents who were perceived as dominant within the larger peer group (i.e., prosocial controllers, coercive controllers, and bistrategic controllers) employed comparable levels of prosocial and coercive strategies within their friendships. In other words, dominant adolescents who were characterized as prosocial, coercive, or bistrategic by grademates did

not necessarily behave according to their grademates' characterizations of them in their interactions with friends. Importantly, these findings indicate that dominant adolescents' use of aggressive and prosocial behaviours differ depending on the target type to some degree (i.e., behaviours toward grademates versus toward friends).

With regard to the target's social status, previous studies have demonstrated that higher status youth direct negative behaviours toward lower status group members. For example, in their study of peer-reported bullying among boys in middle childhood, Rodkin and Berger (2008) found that bullies most often targeted perceived popular/liked girls and perceived unpopular/disliked boys. However, bullies were perceived to be more popular and liked by peers if they bullied other boys than if they bullied girls. In a similar study, Veenstra and colleagues (2007) found that a bully's social preference in the peer group did not predict whether he/she was in a bully-victim relationship. However, self-reported bullies primarily targeted either boys or girls who were rejected by peers. Thus, these findings indicate that youth who are accepted or rejected by their peers engage in negative behaviours toward targets that are widely disliked by peers. By early adolescence, youth should begin to understand that bullying or aggression toward higher status peers is not acceptable behaviour according to the standards created by the peer group (Pellegrini, 2002). Thus, aggression directed toward higher status peers by lower status peers should become even less likely during adolescence.

Some research has shown that individuals with the highest dominance rank in a group may be the most aggressive members of the group (e.g., Closson, 2009b). Less is known about who these dominant individuals target with their aggression. According to an ethological perspective, aggression is normally directed toward group members who are at near-adjacent points in the dominance hierarchy (La Frenerie & Charlesworth, 1983; Savin-Williams, 1979). The most dominant member(s) of the group may target their aggression toward group members who are perceived as threats to his/her rank in the group, doing so to maintain a high-status position. For example, Merten (1997) found that dominant members of a clique of perceived popular girls were verbally or relationally aggressive toward other members of their clique if they

felt their dominant positions were being threatened. Indeed, these girls admitted they often were aggressive toward group members who were "acting real hot" in order to "put them in their place" (p. 179). Similarly, Adler and Adler's (1998) ethnographic study showed that the "leaders" within cliques often used aggression toward subordinate group members if they were perceived as an interpersonal threat or were seen as "deserving" derision. Thus, socially dominant group members may direct their aggression toward subordinate group members as an effort to maintain their status position.

Even less is known about the target-specific use of prosocial behaviour toward others who vary in levels of social status. However, ethnographic findings suggest that high status children may behave primarily in a prosocial manner toward peers of similar high status whereas average status youth tend to direct prosocial behaviour toward all peers (Adler & Adler, 1998). It is unclear from Adler and Adler's study whether low status youth vary in the targets to which they direct their prosocial behaviours. However, as noted previously, low status youth do engage in some degree of prosocial behaviour (Hymel et al., 1993; LaFontana & Cillessen, 2002; Lease et al., 2002b), although their targets' social status remains unknown.

In summary, the status-behaviour link has been a primary focus of research to date, particularly the association between an individual's social status in the peer group and his/her aggressive behaviour toward peers generally. In comparison, little is known about how an individual's aggressive and prosocial behaviours are related to their own social status, the social status of their targets, or the closeness of their relationship with each target. Nevertheless, some studies have suggested that prosocial behaviour is typically directed "up" the hierarchy and aggressive behaviour is typically directed "down" the hierarchy, although high status youth use both aggressive and prosocial behaviours toward similarly high status peers (Adler & Adler, 1998; Closson, 2009b; Merten, 1997). Moreover, previous research has also shown that high status youths' behaviours vary, to some degree, depending on whether the targets are friends or unidentified peers (Hawley et al., 2007). Based on the ethnographic findings in particular, it was anticipated in the present study that high status early adolescents would use prosocial and

27

aggressive behaviours toward specific types of peers, whereas lower status youths' behaviours would be less target-specific (Adler & Adler, 1998; Merten, 1997).

1.9 Statement of the problem

1.9.1 Purpose of the study

The majority of studies of youths' social behaviours have used a methodology that does not allow for the identification of the targets of an individual's behaviours, with behaviours often measured as directed toward generalized "others." However, recent research, focusing primarily on negative behaviours, has demonstrated that social behaviour varies across contexts, with context defined in terms of dyadic affect (liking/disliking) of the interaction partner, friendship versus non-friendship, and even the social status of the other. To date, however, studies have not considered how both aggressive and prosocial behaviours reported within each of these different contexts may vary as a function of the social status of the actor (i.e., participant). This rare, yet valuable target-specific approach was employed in the present study to uncover important information about whom early adolescents target with their aggressive and prosocial behaviours, extending previous research by considering multiple levels of social context in this regard, including the social status of the actor.

As the preceding review of research demonstrates, high social status is often positively associated with prosocial behaviour and aggression *toward peers generally* (e.g., Bukowski & Abecassis, 2007; Hawley, 2003; Puckett et al., 2008). Researchers have argued that the use of these types of behaviours enables high status youth to achieve and maintain their status (Adler & Adler, 1998; Hawley, 1999, 2003; Merten, 1997; Puckett et al., 2008). However, we know very little about whether youths' aggressive and prosocial behaviours directed toward certain types of peers vary differentially as a function of their own social status in the peer group. If high status youth use certain types of behaviours differentially toward certain types of peers (in ways that lower status peers do not), researchers need to go beyond examining youths' behaviours toward peers in general and consider a more target-specific approach.

Understanding who youth of varying levels of status target with different types of behaviours may help explain why high status youth have a higher social position in the peer group than do their lower status peers (i.e., may help explain *how* high status youths' behaviours are adaptive).

The primary research question under investigation in the present study concerns whether support can be found for the hypothesis that it is their more skilled use of social behaviours that differentiates high status youth from the rest of the peer group. Hawley (1999) proposed that a highly adaptive skill is the ability to account for contextual factors in determining whether aggression or prosocial behaviour would bring about the most success in social interactions with certain peers. Indeed, Hawley (2003) has recognized the importance of studying the potentially target-specific nature of high status youths' aggressive/coercive and prosocial behaviours, although no research to date has directly examined this issue. Therefore, the two main goals of the present study were to evaluate (a) whether higher status youth vary their behaviours across interaction partners more than lower status youth and (b) whether aggressive and prosocial behaviours as directed toward specific types of peers vary as a function of the actor's level of social status.

1.9.2 Social behaviour subtypes

It was of interest in the present study to examine several subtypes of social behaviours in order to determine *how* youth behave toward different types of peers. Historically, the most common subtypes of aggressive behaviours studied within the field have been physical and verbal aggression. Physical aggression includes acts such as hitting, kicking, and punching, whereas verbal aggression includes name-calling, threatening, or other direct verbal attacks (Coie & Dodge, 1998). More recently, the study of relational aggression (e.g., Crick & Grotpeter, 1995) has garnered the attention of peer relations researchers. Relational aggression consists of manipulating peer relationships with the intent to damage a peer's self-esteem and/or social reputation within the peer group through behaviours such as gossip and exclusion (Crick & Grotpeter, 1995). Researchers have suggested that such forms of

aggression require advanced verbal and cognitive capabilities as they have been associated with increased levels of social intelligence (Kaukiainen et al., 1999). Therefore, relational aggression is particularly important to consider, given the present study's focus on understanding the behaviours of socially savvy (Adler & Adler, 1998), high status youth.

Again, given that the focus of the present research is on understanding how the behaviours of high status youth differ from those of their peers, it may be important to examine another form of aggression that may require a great deal of social skill and control over peers. To date, researchers have not attempted to tap this subtype of aggression that has been described in non-academic sources (e.g., Cabot, 2006; Simmons, 2004) whereby children recruit *others* to aggress against a target peer. Given that a surrogate aggressor is required for this type of aggression, it is logical that this subtype of aggression be named *surrogate aggression*. Within the extant literature, the closest related construct to surrogate aggression is third-party aggression among adult males. For third-party aggression, a third-party voluntarily attacks one individual on behalf of another (Kingsbury, 1978). Specifically, Person A provokes Person B and a third-party (Person C) is aggressive toward Person A on behalf of Person B. Moreover, the third-party is not necessarily recruited by Person B but may intervene in the conflict of his/her own volition. Surrogate aggression is conceptually distinct from third-party aggression because the individual (i.e., actor) *solicits* a peer(s) to use aggression toward another peer (i.e., target) on his or her behalf and the aggressive act is not necessarily instigated by the target. By using surrogate aggression, the actor remains anonymous to the target yet is able to victimize the target through the use of a surrogate peer.

The degree to which surrogate aggression overlaps with relational aggression was examined in the present study. It was anticipated that the findings relating to surrogate aggression would generally be similar to those for relational aggression due to its reliance on social manipulation. However, as described below, these two forms of aggression were not expected to be entirely redundant constructs.

Conceptually, surrogate aggression is related to Bandura's (2001) notion of proxy agency. Proxy agency is a socially mediated mode of agency in which individuals achieve their goals by enlisting others to act on their behalf to achieve their desired outcome. For surrogate aggression, the individual's goal is to cause harm to a target without doing so directly. Thus, the individual achieves his/her goal by soliciting another peer(s) to harm the target on his/her behalf. In other words, surrogate aggression can only be used indirectly. The individual is able to manipulate the social community by soliciting peers to engage in aggressive behaviour toward the target without engaging in the aggressive behaviour him/herself. In contrast, relational aggression can be used directly or indirectly toward a target (Archer, 2001). Nevertheless, for relational aggression, the individual engages in the behaviour him/herself (Crick & Grotpeter, 1995). For example, engaging in exclusionary behaviour toward a target is manifest differently for relational and surrogate aggression. For surrogate aggression, the individual solicits others to exclude a target and does not necessarily exclude the target him/herself. However, for relational aggression, the individual *does* exclude the target him/herself.

Another difference between surrogate and relational aggression is that relational aggression is manifest through one form of aggression, yet surrogate aggression may take on several forms. More specifically, for relational aggression, the target experiences only one form of aggression, whereas for surrogate aggression, the behaviour that is enacted toward the target by the surrogate peer may take on a variety of forms including overt or relational aggression. For example, not only can the individual engaging in surrogate aggression solicit peers to spread rumours or exclude a target (i.e., relational aggression), but he/she can also solicit peers to physically harm or say mean things toward a target (i.e., overt aggression). In sum, the key features of surrogate aggression are that it is enacted indirectly and can be manifest in either overt or relational forms of aggression.

By examining early adolescents' reports of surrogate aggression, the present research provides an indication of whether its study contributes to our understanding of youths' use of

aggressive behaviours among peers.   Given that surrogate aggression requires social connections and a high degree of control over others, it was of interest to determine whether higher status peers were more likely than lower status peers to utilize surrogate aggression toward specific types of targets.

Generally, peer relations research has typically focused on global measures of prosocial behaviour; few studies have considered subtypes of prosocial behaviour (see Grusec, Davidov, & Lundell, 2002). Two subtypes of prosocial behaviour were examined in the present study: public and altruistic (Carlo, Hausmann, Christiansen, & Randall, 2003). Although prosocial behaviour is undoubtedly a positive act, prosocial behaviour can also be self-serving (Batson et al., 1989; Grusec et al., 2002; Trivers, 1971). For example, one's reputation may be bolstered due to a display of kindness (Trivers, 1971). Trivers has suggested that in order to be viewed positively by peers, one must not necessarily be genuinely altruistic, but rather, one must only *appear* this way (see also Merten, 1997). Therefore, behaving prosocially toward others in a public setting may be beneficial to improving or maintaining one's social status within the peer group.

A few studies have revealed interesting findings that indicate overt aggression may be positively related to self-serving subtypes of prosocial behaviour and negatively related to altruistic subtypes (Boxer, Tisak, & Goldstein, 2004; McGinley & Carlo, 2007). For instance, Carlo and colleagues have found marked differences between altruistic prosocial behaviour (i.e., prosocial acts conducted without expecting a reward) and public prosocial behaviour (i.e., prosocial acts conducted in front of an audience). These two subtypes of prosocial behaviour were found to be negatively correlated (Carlo et al., 2003; Carlo & Randall, 2002) and factor analyses provided additional evidence for their distinctiveness (Carlo & Randall, 2002). Moreover, Carlo et al. have found that adolescents who reported engaging in more public prosocial behaviour were highly concerned with gaining others' approval. Of interest in the present study was an examination of youths' use of public and altruistic prosocial behaviours

toward specific targets, with the expectation that high status youth may be particularly likely to use public prosocial behaviours.

To summarize, the present study examined a broad range of positive and negative social behaviours as directed toward certain types of peers. Specifically, the present study considered two forms of prosocial behaviour – public prosocial behaviour and altruistic prosocial behaviour – and four forms of aggressive behaviour – physical, verbal, relational, and surrogate aggression.

1.9.3 Considering gender differences

Early studies of aggression among children demonstrated that boys were more aggressive than girls (e.g., Hyde, 1984; Maccoby & Jacklin, 1974). However, as researchers began examining other forms of aggression (i.e., indirect, relational, and social), they found that girls were just as likely to be aggressive as boys (e.g., Bjorkqvist et al., 1992; Crick & Grotpeter, 1995). During the elementary school years and beyond, boys have been consistently found to be more physically aggressive than girls (Archer, 2004; Hyde, 1984; Maccoby & Jacklin, 1974; Underwood, 2002, 2003) and are usually found to be slightly more verbally aggressive than girls (Archer, 2004; Hyde, 1984; Maccoby & Jacklin, 1974). Some researchers have found that boys primarily use overt aggression (i.e., composite of physical and verbal aggression) whereas girls primarily use relational aggression (e.g., Crick & Grotpeter, 1995). Although this gender difference has been found in some studies, gender differences in relational or indirect aggression are not always demonstrated (e.g., Closson, 2009b; Prinstein & Cillessen, 2003; Savin-Williams, 1979; Tomada & Schneider, 1997; see Archer, 2004 for a review).

Previous research has also indicated that it is quite common to find gender differences in prosocial behaviour, with girls found to engage in more prosocial behaviour than boys (e.g., Closson, 2009b; Hawley, 2003; Lease et al., 2002a; Savin-Williams, 1979; see Golombok & Hines, 2002 for a review). Girls' heightened use of prosocial behaviours relative to boys may reflect their socialization into stereotypical gender roles where girls are expected to be kind, nurturing, and caring (Golombok & Hines, 2002; Maccoby & Jacklin, 1974). With regard to

prosocial behaviour subtypes, Carlo et al. (2003) have reported that adolescent girls use more altruistic prosocial behaviours than boys, whereas boys use more public prosocial behaviours than girls.

In the present study, no specific hypotheses were put forth regarding the possible role of gender in the relationship between early adolescents' target-specific behaviours, the actor's and target's social status, and the actor's rating of friendship and liking toward the target. However, given previous research findings on gender differences in aggression and prosocial behaviour toward peers, exploring possible gender differences may be important. Therefore, gender was included as a variable in all analyses.

1.10 Hypotheses

The purpose of the present study was to evaluate the degree to which different types of aggressive and prosocial behaviours as directed toward certain types of peers (i.e., friends/nonfriends, liked/disliked peers, high/low status peers) vary as a function of the actor's social status. Generally, it was expected that early adolescents' social behaviours would differ across targets (Peets et al., 2008). However, drawing upon arguments put forward by Hawley (1999), it was expected that high status actors' behaviours would be more target-specific than those of average status and low status actors. Of primary interest, however, was whether the actor's status moderated the relationship between their aggressive and prosocial behaviours toward different types of targets. In other words, it was expected that high status youth would direct their aggressive and prosocial behaviours toward certain types of peers in ways that differ from lower status youth. Indeed, several specific hypotheses with regard to the moderating role of the actor's status were proposed, as outlined below. Given the lack of previous research on youths' target-specific social behaviours, many of the following hypotheses were based on previous research on cliques (Adler & Adler, 1998; Closson, 2009b; Merten 2007).

(1) *Public prosocial behaviour was expected to be positively related to the target's friendship with the actor and to the target's perceived popularity, social preference, and social*

34

dominance at high levels of the actor's status (all 3 indices) but not at low levels of the actor's status. This hypothesis was based on previous research showing that public prosocial behaviour toward peers is positively associated with a desire to gain others' approval (Carlo et al., 2003). It was expected that higher status actors would engage in more public prosocial behaviour, given that high status youth are afforded their status by the other members of the peer group (La Freniere & Charlesworth, 1983; Vaillancourt & Hymel, 2006). Moreover, ethnographic research suggests that the types of peers whose approval may be most critical to maintaining high status are friends and other high status youth (Adler & Adler, 1998). Thus, it was expected that early adolescents with higher levels of social status would direct their public prosocial behaviours toward friends and high status peers.

(2) *Altruistic prosocial behaviour was expected to be positively related to the target's friendship with the actor at high levels of the actor's status (all 3 indices) but not at low levels of the actor's status.* This hypothesis was based on previous findings (Closson, 2009b) indicating that perceived popular youth engage in more prosocial behaviours (using global measures) toward members of their friendship group than do perceived unpopular youth and that peer social preference is positively related to prosocial behaviours (using global measures) within friendship groups. Moreover, ethnographic findings suggest that perceived popular/dominant youth have been described as being "nice" toward members of their friendship group (Adler & Adler, 1998; Merten, 1997).

(3) *Physical and verbal aggression were expected to be negatively related to the target's status (all three indices) at high levels of the actor's perceived popularity and social dominance but not at low levels of the actor's perceived popularity and social dominance.* This hypothesis was based on previous findings showing that bullies most often target lower status peers (Veenstra et al., 2007). Moreover, overt aggression has been positively related to perceived popularity and social dominance (e.g., Closson, 2009b; Vaillancourt & Hymel, 2006).

(4) *All subtypes of aggression were expected to positively related to the target's friendship with the actor at high levels of the actor's perceived popularity and social dominance*

but not at moderate levels of the actor's perceived popularity and social dominance. This hypothesis was based on previous findings showing that perceived popular/dominant youth engage in higher levels of aggressive behaviour toward members of their friendship group than do average status peers (Adler & Adler, 1998; Closson, 2009b). No specific hypotheses were made for low levels of the actor's perceived popularity and social dominance.

(5) *Relational and surrogate aggression were expected to be positively related to the target's perceived popularity and social dominance at high levels of the actor's perceived popularity and social dominance but not at low levels of the actor's perceived popularity and social dominance.* This hypothesis was based on previous research showing that relational aggression may be common within perceived popular cliques (Adler & Adler, 1998; Closson, 2009b; Merten, 1997). Moreover, relational aggression has been shown to be positively related to perceived popularity and social dominance and power (e.g., Lease et al., 2002a; Vaillancourt & Hymel, 2006). Since surrogate aggression was expected to be positively related to relational aggression, the findings with regard to surrogate aggression were expected to be similar to those of relational aggression.

(6) *Altruistic prosocial behaviours were expected to be positively related to the degree to which the actor likes the target. In contrast, all subtypes of aggressive behaviour were expected to be negatively related to the actor's reported liking of the target. The actor's social status was not expected to moderate these associations.* This hypothesis was based on previous research showing that altruistic prosocial behaviours may be most commonly directed toward personally liked peers (Eisenberg et al., 1985; Trivers, 1971). Although not directly examined previously, prior research does not indicate that the social status of the actor should be expected to moderate the relationship between altruistic prosocial behaviours and affect felt toward the target. The social status of the actor was also not expected to moderate the relationship between aggressive behaviours and affect felt toward the target in light of previous research demonstrating that reactive and proactive aggression are most commonly directed

toward personally disliked peers (Peets et al., 2008) and that both accepted and rejected

children report bullying personally disliked peers (Veenstra et al., 2007).

2 Method

2.1 Participants

Participants were 426 early adolescents (227 girls, 199 boys) in grades six (n = 133; 31.2%), seven (n = 149; 35%) and eight (n = 144; 33.8%) attending four elementary schools and two middle schools in two small cities in western Canada. Although information regarding socioeconomic status was not collected, the local populations in these communities consist primarily of middle socio-economic status households (Statistics Canada, 2007). Participants ranged from 11 to 15 years of age. The majority of participants identified as Caucasian (n=364; 85.4%) and the remaining participants were of mixed racial/ethnic background (n= 23; 5.4%), Asian (n = 23; 5.4%), Aboriginal (n = 7; 1.7%), and other (n = 9; 2.1%). Only students who received parental permission and who themselves agreed to participate were included in the study. The overall participation rate for the study was 82% (ranging from 73 to 93% across schools).

An early adolescent sample was chosen for the present study for several reasons. First, previous research has indicated that, compared with other points in development, it is during early adolescence that individuals have the strongest desire to achieve high status in the peer group and prioritize popularity over many other domains including maintaining friendships, engaging in romantic relationships, showing compassion for low status peers, conforming to behavioural norms, and achieving athletic or academic success (LaFontana & Cillessen, 2010; Merten, 2004). Second, during early adolescence, friendships provide a prime social arena for learning about interpersonal relationships (Rubin et al., 2006; Sullivan, 1953). Moreover, early adolescents begin to view friendships as distinct from relationships with other peers as they tend to have feelings of attachment toward their friends (Rubin et al., 2006). Third, associations between perceived popularity and aggression consistently appear by grade six in most studies (e.g., LaFontana & Cillessen, 2002) and this association becomes stronger over time, particularly for relational aggression (Cillessen & Mayeux, 2004; Rose et al., 2004b). Finally, according to Harris (as cited in Fabes et al., 2009), during early adolescence, youth

38

demonstrate advancement in social reasoning whereby they internalize social information and begin to formulate complex schemas of themselves and the peers with whom they interact. Therefore, early adolescents should be capable of varying their behaviours across different types of peers.

2.2 Procedure

Prior to data collection, the author visited each school and spoke to the principal, and, in turn, teachers to obtain support for the conduct of this research. Once support was obtained, the author visited each participating classroom and talked with potential student participants to explain the purpose of the study. At this time, a parent consent letter (Appendix A) describing the study for their parents/guardians and a consent form (Appendix B) were sent home with students in participating schools. Student assent was obtained on the day of testing (Appendix C). To encourage students to return consent forms, all students who returned their consent forms, whether they received consent or not, were entered in a draw to win a pair of tickets to the local movie theatre, with one winner per grade. Eligibility for the draw was based solely on the return of the consent form, not the consent for participation itself. The draw was noted in the consent letter for parents/guardians.

Students who received parental permission to participate were asked to complete questionnaires in a single group testing session (approximately 45 to 60 minutes) in their classrooms during normal school hours. During data collection, nonparticipating classmates were asked to read or work on homework quietly at their desks, or go to the library if permitted by the teacher. The teacher remained in the classroom, but was not asked to assist in the data collection. Prior to administration of the questionnaires, participants were orally informed of their right to withdraw from the study at any time (Appendix D). Confidentiality of their responses was also explained and assured. Each questionnaire was presented with written instructions and was also orally explained to make certain that the participants were clear as to the instructions. Participants were instructed to cover their responses with a piece of paper in

order to keep their answers private. A trained graduate student researcher remained in the

classroom during data collection to clarify any questions the participants had and ensure that all

participants responded to their questionnaires independently. Upon completion of the

questionnaires, participants were orally debriefed (Appendix E). Consistent with previous

research on the ethical issues related to sociometric methods (e.g., Bell-Dolan, Foster, &

Sikora, 1989; Hayvren & Hymel, 1984; Mayeux, Underwood, & Risser, 2007), schools did not

report any negative repercussions for students as a result of participating in the study.

2.3 Measures

The cover page of the questionnaire packet assessed information about grade, school,

age, birthday, gender, and racial/ethnic background. It also reminded participants of the

confidentiality of their responses (Appendix F).

2.3.1 Ratings list

A round-robin design (i.e., participants provide ratings for each peer) was used in the

present study to obtain self- and peer-report ratings of each grademate on several measures.

For each measure, a question was presented at the top of each page followed by a list of

participating grademates with a 5-point scale beside each name. Every student on the list was

rated by participants on 16 items. First and last names were listed with the order of names

counterbalanced to avoid effects of alphabetization. To aid in the data entry process, a

corresponding identification number was printed beside each name.

For the measures of friendship, liking, and social behaviours, ratings were limited to

same-gender participating grademates given that liking may be confounded with romantic

feelings during early adolescence and other-gender friendships may serve different functions

than same-gender friendships (Berndt & McCandless, 2009). For the social status measures

(i.e., perceived popularity, social preference, and social dominance), same- and other-gender

ratings were used, given that girls more accurately identify a peer's status than boys

(LaFontana & Cillessen, 1999). Moreover, nomination-based measures that include

nominations received by other-gender grademates have been found to improve the measure's predictive validity (Poulin & Dishion, 2008). Thus, other-gender ratings also improve the psychometric properties of rating-based measures, particularly since nomination- and rating-based measures have been found to create highly correlated indices of the same construct (Bukowski, Sippola, Hoza, & Newcomb, 2000).

Although nomination methods have become commonplace in peer relations research, a rating-based method was used in the present study given that ratings provide highly reliable and valid assessments of sociometric indices (Asher & Hymel, 1981; Terry, 2000). Rating-based approaches provide a refined representation of participants' perceptions of all fellow participating grademates and are appropriate for moderate-sized groups (Maassen, van der Linden, Goossens, & Bokhorst, 2000).

2.3.2 Ratings of self-reported social behaviours toward grademates

Using the list of participating same-gender grademates, participants were instructed to rate the frequency with which they have used each of the four subtypes of aggressive behaviour and two subtypes of prosocial behaviour toward each student on the list using a 5-point scale from "never" to "always," with "sometimes" at the midpoint (adapted from Peets et al., 2008) (Appendix G). A total of twelve items were used to assess six behaviour subtypes. The four subtypes of aggression included: physical aggression (two items; "How often do you hit, kick, or punch each person?"; "How often do you push, shove, or trip each person?"; adapted from Bjorkqvist, Lagerspetz, & Kaukiainen, 1992; Crick & Grotpeter, 1995; Little et al., 2003), verbal aggression (two items; "How often do you say mean things to each person?"; "How often do you call mean names or yell at each person?"; adapted from Bjorkqvist et al., 1992; Crick & Grotpeter, 1995; Little et al., 2003), relational aggression (two items; "How often do you talk behind their back or spread rumors about each person?"; "How often do you leave out, ignore, or stop talking to each person?"; adapted from Bjorkqvist et al., 1992; Crick & Grotpeter, 1995; Little et al., 2003) and surrogate aggression (two items; "How often do you get *others* to physically hurt or say mean things to each person?"; "How often do you get *others* to spread

41

rumors, leave out, ignore, or stop talking to each person?"; developed for purposes of the present study). The two subtypes of prosocial behaviour included: public prosocial behaviour (two items; "How often are you nice to each person especially when other people are watching?"; "How often are you nice to each person especially in front of other people?"; adapted from Carlo et al., 2003) and altruistic prosocial behaviour (two items; "How often are you nice to each person even if you don't think you will get anything in return?"; "How often are you nice to each person without expecting them to be nice to you in the future?"; adapted from Carlo et al., 2003). These target-specific behaviours were measured as a participant's self-rated behaviour toward each grademate for each of the six behaviour subtypes.

2.3.3   Ratings of friendship and liking

Following the suggestion of Hinde and Stevenson-Hinde (1987), relationships were assessed using several measures including friendship and liking. The identification of friends has often been methodologically entwined with the identification of affective relationships (Bukowski et al., 2009). As Erdley, Nangle, Newman, and Carpenter (2001) have recognized, methodologies for identifying friendships depend on whether friendship is conceptualized as a categorical construct or a continuous construct. A categorical perspective defines friendship as a distinct type of relationship that is qualitatively different from other relationships. On the other hand, the continuous view asserts that examining different levels on a friendship continuum may be warranted (Berndt & McCandless, 2009; Hartup, 1996). The perspective taken in the present study was the latter, given that the positive and negative social experiences within relationships of differing degrees of closeness should be variable (Berndt & McCandless, 2009).

Often times, friendship is measured as high levels of liking between two peers (Bukowski et al., 2009) or liking is measured using friendship nominations (Veenstra et al., 2007), despite the fact that some researchers have cautioned against operationalizing friendship as equivalent to liking (e.g., Asher, Parker, & Walker, 1996). Moreover, researchers have demonstrated that it is possible to like a peer yet not identify them as a friend (Asher et al., 1996; Dijkstra, Cillessen, Lindenberg, & Veenstra, in press). Asher and colleagues (1996) have recommended

that researchers assess indices of friendship (with reference to the word "friend" in the measure) separate from liking (with reference to the word "like" in the measure) in order to distinguish friendship from liking and to obtain a better understanding of the social lives of children and adolescents. Thus, in the present study, continuous measures of both friendship and liking were utilized.

It is also important to note that researchers have advocated that reciprocity (i.e., mutual agreement between two individuals that their relationship is based on friendship/liking) be required to identify friendships/affective relationships (Bukowski et al., 2009; Rubin et al., 2006). However, similar to previous studies employing a target-specific methodological approach (Peets et al., 2008; Veenstra et al., 2007), reciprocity was not required in the present study given that youths' own perceptions of target peers have been associated with the social behaviours they use toward specific peers. Moreover, Peets et al. (2008) found no significant differences in predicting aggressive behaviours from unilateral versus reciprocal affective relationships.

Friendship. Viewing a list of the names of participating same-gender grademates, participants rated how close their relationship is with each student ("How would you describe your relationship with each person?") using a 5-point scale from "definitely not my friend" to "definitely my friend," with "maybe my friend/not sure" at the midpoint (Appendix H). A target's friendship score is the rating received by each actor and is specific to each rater (i.e., only the individual actor's perception is of interest). It is common practice for peer relations researchers to measure friendship by obtaining "best friend" nominations or liking ratings (Bukowski et al., 2009). However, in the present study, it was of interest to obtain a continuous measure of friendship in addition to a continuous measure of liking to determine whether these measures reflect the same construct (Bukowski et al., 2009) or two distinguishable constructs (Closson, 2009b; Dijkstra et al., in press; Hawley et al., 2007).

Liking. Similar to previous research (Gorman et al., 2002; Maassen et al., 2000; Schwartz et al., 2006), participants viewed the list of participating grademates and rated their

personal feelings of affection toward each student ("How much do you personally like each person in your grade?") using a 5-point scale from "dislike very much" to "like very much" with "neutral - do not like or dislike" at the midpoint indicating indifference (Appendix I). A target's liking score is the rating received by each actor and is specific to each rater (i.e., only the individual actor's perception is of interest). Similar to procedures described by Veenstra et al. (2007), this measure was also used to assess grade-wide social preference as described below. However, for purposes of assessing liking, only same-gender ratings were used.

2.3.4 Ratings of social status

Social preference. Using the same measure as described above, participants viewed the list of participating grademates and rated their personal feelings of affection toward each student ("How much do you personally like each person in your grade?") using a 5-point scale from "dislike very much" to "like very much" with "neutral or don't really care" at the midpoint indicating indifference (Appendix I). A participant's social preference score was computed as the mean ratings he or she received from grademates and reflects his/her likeability in the peer group. In their meta-analysis, Jiang and Cillessen (2005) reported that social preference ratings demonstrate good test-retest reliability over the short-term (i.e., < 3 months) and good stability over the long-term (i.e., > 3 months).

Perceived popularity. Similar to previous research (Gorman et al., 2002; Schwartz et al., 2006), participants viewed the list of participating grademates and rated the popularity of each student ("How popular is each person in your grade?") using a 5-point scale from "very unpopular" to "very popular," with "average – same as most" at the midpoint (Appendix J). A participant's perceived popularity score was computed as the mean ratings he or she received from grademates and reflects his/her reputation of popularity in the peer group. The level of an individual's perceived popularity has been found to be highly stable over the course of four years (i.e., grade five through grade nine) (Cillessen & Mayeux, 2004) with greater stability among higher grades and over shorter time intervals (Cillessen & Mayeux, 2004; Schwartz et al., 2006). In addition, Closson (2009a) found that early adolescents described popularity in a

manner that was more reflective of social prominence than likeability, providing construct validity for the measure of perceived popularity.

Social dominance. Based on previous measures (Closson, 2009b; Lease et al., 2002a, 2002b; Vaillancourt & Hymel, 2006), social dominance was assessed by instructing participants to view the list of participating grademates and rate each student ("How much influence, power, and control over the people in your grade does each person have?") using a 5-point scale from "no control" to "a whole lot of control," with "average – same as most" at the midpoint (Appendix K). A participant's social dominance score was computed as the mean ratings he or she received from grademates and reflects his/her reputation of social dominance in the peer group.

Identifying high-status, average-status, and low-status adolescents. For purposes of conducting the preliminary set of multilevel analyses (i.e., comparisons of the intraclass correlations), participants were classified as high status, average status, or low status using cutoff scores of one standard deviation for each index of social status (i.e., perceived popularity, social preference, and social dominance). Specifically, participants were classified as high status (n = 128) if they had scores that were one standard deviation above the mean for at least one index of status and participants were classified as low status (n = 111) if they had scores that were one standard deviation below the mean for at least one index of status. Finally, average status participants (n= 187) were identified as all remaining participants who were not classified as high status or low status (adapted from Closson, 2009a; LaFontana & Cillessen, 1999). For the primary set of multilevel analyses, each index of actors' social status was considered separately as a moderator and cross-level interactions were plotted at the 25th and 75th percentile of the moderating actor status variable (Aiken & West, 1991; Curran, Bauer, & Willoughby, 2004).

3 Results

3.1 Descriptive data

Means and standard deviations and intercorrelations for the study variables are presented in Table 3.1 and Table 3.2, respectively. As shown in table 3.1, mean scores for perceived popularity, social preference, social dominance, friendship, and liking were near the midpoint of the scale. Mean scores for prosocial behaviours fell in the "rarely" to "sometimes" range, whereas mean scores for aggression fell in the "never" to "rarely" range. As shown in Table 3.2, similar to previous studies (e.g., Hawley et al., 2007; Lease et al., 2002a; Vaillancourt & Hymel, 2006), perceived popularity, social preference, and social dominance were positively correlated with one another as were the four types of aggression, the two types of prosocial behaviour, and friendship and liking. In addition, perceived popularity, social preference, and social dominance were positively associated with prosocial behavior, whereas perceived popularity and social dominance were positively associated with aggression. Finally, friendship and liking were both positively related to prosocial behaviour, but friendship was also positively related to physical aggression and liking was also negatively related to relational aggression.

Table 3.1 Means, standard deviations, and ranges for study variables

Variable	Mean	Standard Deviation	Range
Perceived Popularity[1]	3.02	.93	1.09 – 4.93
Social Preference[1]	3.10	.56	1.59 – 4.58
Social Dominance[1]	2.66	.67	1.12 – 4.43
Friendship[1]	3.33	1.36	1.00 – 5.00
Liking[1]	3.34	1.25	1.00 – 5.00
Altruistic Prosocial Behaviour[2]	2.67	1.22	1.00 – 5.00
Public Prosocial Behaviour[2]	2.36	1.19	1.00 – 5.00
Physical Aggression[2]	1.55	.89	1.00 – 5.00
Verbal Aggression[2]	1.60	.87	1.00 – 5.00
Relational Aggression[2]	1.60	.84	1.00 – 5.00
Surrogate Aggression[2]	1.22	.56	1.00 – 5.00

_____

Note. [1] Means represent the average score received by peers. [2] Means represent the average level of prosocial (or aggressive) behaviour reported across all targets.

Table 3.2 Intercorrelations between study variables

	2	3	4	5	6	7	8	9	10	11
1. Perceived Popularity[1]	.66*	.86*	.49*	.55*	.17*	.18*	.24*	.25*	.23*	.21*
2. Social Preference[1]		.70*	.82*	.88*	.29*	.27*	.09	.12	.10	.12
3. Social Dominance[1]			.55*	.59*	.20*	.20*	.22*	.24*	.19*	.22*
4. Friendship[2]				.75*	.45*	.41*	.17*	.08	-.12	.04
5. Liking[2]					.43*	.38*	.15	.06	-.16*	.00
6. Altruistic Prosocial Behaviour[3]						.80*	.13	.08	.01	.15
7. Public Prosocial Behaviour[3]							.11	.08	.02	.14
8. Physical Aggression[3]								.77*	.37*	.42*
9. Verbal Aggression[3]									.45*	.48*
10. Relational Aggression[3]										.56*
11. Surrogate Aggression[3]										

_____

Note. [1] Based on peer-ratings received across all peers. [2] Based on peer-ratings received across same-gender peers. [3] Based on self-ratings across same-gender peers. * $p < .001$.

3.2 Overview of analyses

In order to examine whether higher status youth behave *differently* toward *specific types of peers* as compared to lower status youth, multilevel modeling (MLM; Bickel, 2007) was used to conduct all major analyses in the present study. MLM can be considered as a modeling technique to analyse a "sample of samples" with a regression line for each sample (Zumbo & Lloyd, 2005). Compared to OLS regression models where all factors are fixed, multilevel models can contain both fixed and random factors. Random factors, such as the intercepts and slopes, are allowed to vary from sample to sample, whereas fixed factors are variables with values that held constant and thus do not vary from sample to sample (Zumbo & Lloyd, 2005). In the present study, all predictor variables were set as random factors in order to account for measurement error and to account for the nesting (Zumbo & Lloyd, 2005).

In MLM, interconnected regressions are conducted where several regressions are solved simultaneously (Bickel, 2007). Specifically, a random effect regression is conducted at Level 1 and the resulting coefficients are used as outcome variables for regression analyses that are conducted using Level 2 variables as predictors (and so on if Level 3 variables are included in the model). In other words, these simultaneous multilevel regressions are interconnected because the b-weights at one level (e.g., Level 1) become the dependent variables at the next level (e.g., Level 2).

MLM was appropriate for the present study given that the data are hierarchical and individual observations are interdependent (Bickel, 2007). Most commonly, MLM is used to study individuals nested within groups (e.g., students nested within classrooms). However, in the present study, MLM was used to analyze a data structure where targets (Level 1) were nested within actors (Level 2) and both targets and actors were nested within their grade-level cohort (Level 3). The HLM software program (Raudenbush, Bryk, & Congdon, 2005) was used to analyse these data.

MLM partitions the variance in outcome variables into two parts: variance due to different types of targets within actors (target-level) and variance due to differences between actors

within grade-level cohorts (actor-level). Therefore, the targets represent the within-level (Level 1) and the actors represent the between-level (Level 2). For purposes of the present study, actors are the participants and their targets are those toward whom they direct their aggressive or prosocial behaviours. The actor-level takes into account each actor's mean level of target-specific behaviours, whereas the target-level represents the level of behaviours directed toward a particular target.

Of specific interest was the relation between actors' aggressive and prosocial behaviours toward particular targets (Level 1 outcome variables) and target social status and relationship (Level 1 predictor variables) and actor social status and gender (Level 2 predictor variables). Differences between grade-level cohorts were controlled for at Level 3. Model testing proceeded in two phases for each outcome variable: the unconditional (i.e., random intercept-only) model and the conditional model. The unconditional model and the conditional model were run separately for each of the six target-specific behaviour outcome variables. As recommended by Hayes (2006), all predictor variables were grand mean centered (denoted by italics below), whereby the sample mean is subtracted from each case's score on the predictor variable. Grand mean centering is a useful transformation procedure because it allows the intercept parameters to be interpreted more easily (Hayes, 2006).

Using the Raudenbush and colleagues' (2005) notation in the HLM software, the unconditional model was as follows:

Level 1 (targets): $Y_{ijk} = \pi_{0jk} + e_{ijk}$

Level 2 (actors): $\pi_{0jk} = \beta_{00k} + r_{0jk}$

Level 3 (grade-level cohorts): $\beta_{00k} = \gamma_{000} + \mu_{00k}$

The conditional model (in multilevel equation form) was as follows:

$$\text{Level 1: } Y_{ijk} = \pi_{0jk} + \pi_{1jk}(\textit{target friendship}) + \pi_{2jk}(\textit{target liking}) + \pi_{3jk}(\textit{target perceived}$$
$$\textit{popularity}) + \pi_{4jk}(\textit{target social preference}) + \pi_{5jk}(\textit{target social dominance}) + e_{ijk}$$

Where Y_{ijk} is the social behaviour variable (i.e., altruistic prosocial behaviour, public prosocial behaviour, physical aggression, verbal aggression, relational aggression, or surrogate aggression), π_{0jk} is the target-level intercept, π_{1jk}, π_{2jk}, π_{3jk}, π_{4jk}, and π_{5jk} are the target-level slopes for the relations between target friendship, target liking, target perceived popularity, target social preference, and target social dominance and the social behaviour variable, respectively, and e is the target-level residual;

$$\text{Level 2: } \pi_{0jk} = \beta_{00k} + \beta_{01k}(\textit{actor gender}) + \beta_{02k}(\textit{actor perceived popularity}) + \beta_{03k}(\textit{actor}$$
$$\textit{social preference}) + \beta_{04k}(\textit{actor social dominance}) + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + \beta_{11k}(\textit{actor gender}) + \beta_{12k}(\textit{actor perceived popularity}) +$$
$$\beta_{13k}(\textit{actor social preference}) + \beta_{14k}(\textit{actor social dominance}) + r_{1jk}$$

$$\dots \pi_{5jk} = \beta_{50k} + \beta_{51k}(\textit{actor gender}) + \beta_{52k}(\textit{actor perceived popularity}) +$$
$$\beta_{53k}(\textit{actor social preference}) + \beta_{54k}(\textit{actor social dominance}) + r_{5jk}$$

where β_{00k} (actor-level intercept), β_{01k}(slope for actor gender), β_{02k}(slope for actor perceived popularity), β_{03k}(slope for actor social preference), and β_{04k}(slope for actor social dominance) are actor-level coefficients in predicting π_{0jk}, and r_{0jk} is the actor-level residual (and so on for the other Level 2 regressions);

Level 3: $\beta_{00k} = \gamma_{000} + \mu_{00k}$

... $\beta_{54k} = \gamma_{540} + \mu_{54k}$

where γ_{000} is the cohort-level intercept in predicting β_{00k} and μ_{00k} is the cohort-level residual (and so on for the other Level 3 regressions). Please note that there are no Level 3 predictors, per se. The purpose of Level 3 is to account for any possible effects due to nesting within grade-level cohorts.

3.3   Intraclass correlations

Of initial interest was determining whether early adolescents' social behaviours, as reflected in their ratings of their own behaviour toward specific others, were more target-specific than consistent across targets. The unconditional model was tested for each target-specific behaviour variable, enabling intraclass correlations to be calculated to determine the amount of variance attributed to actor differences versus target differences (see Table 3.3). Following the example set by Peets et al. (2008), both the ICCs and the variance components are reported in Table 3.3. The variance components are used in the computation of the ICCs.

Table 3.3. Intraclass correlations and variance components for target-specific behaviour variables

Behaviour Variable	Entire Sample (N = 426)			High Status (n = 128)			Average Status (n = 187)			Low Status (n = 111)		
	ICC	T-VC	A-VC	ICC	T-VC	A-VC	ICC	T-VC	A-VC	ICC	T-VC	A-VC
Altruistic Prosocial Behaviour	.34***	.91	.47	.21***	1.04	.28	.29***	.96	.40	.47***	.70	.62
Public Prosocial Behaviour	.42***	.77	.56	.31***	.94	.43	.36***	.82	.47	.55***	.54	.67
Physical Aggression	.31***	.51	.23	.29***	.72	.30	.23***	.46	.14	.33***	.33	.16
Verbal Aggression	.33***	.50	.25	.27***	.74	.28	.32***	.45	.21	.44***	.31	.24
Relational Aggression	.36***	.45	.25	.33***	.59	.29	.30***	.43	.18	.38***	.31	.19
Surrogate Aggression	.30***	.22	.10	.25***	.40	.13	.24***	.17	.05	.43***	.10	.08

Note: ICC = intraclass correlation; T-VC = target-level (Level-1) variance component; A-VC = actor-level (Level-2) variance component; actor- and target-level variance parameter estimates were derived from unconditional models. ***$p < .001$.

An ICC (with a range of 0 to 1) specifies the proportion of total variance in a variable at the actor-level (i.e., proportion of variance attributable to individual differences) and is conceptually similar to effect sizes in regression (i.e., R^2) and ANOVA (i.e., η^2) (Peugh, 2010). An ICC of 0 would indicate that actors differentiate between targets but there are no differences between actors' average scores across targets, whereas an ICC of 1 would indicate that actors do not differentiate between targets but there are differences between actors' average scores across targets. Unconditional models were tested first for the entire sample. The ICCs for each variable ranged from .30 for surrogate aggression to .42 for public prosocial behaviour, indicating that between 30-42% of the variance was between actors and between 58-70% of the variance was at the target-level. Although variance existed at both the actor- and target-level, the results showed that early adolescents' social behaviours tend to be more target-specific than consistent across targets, as hypothesized.

The next set of analyses tested the hypothesis that, compared to their lower status peers, high status actors would be more likely to vary their behaviours toward different types of targets. Accordingly, unconditional models were tested for three actor status groups separately: high status (a score greater than 1 SD above the mean for at least one index of status), low status (a score less than -1 SD below the mean for at least one index of status), and average status (all remaining actors) (adapted from Closson, 2009a; LaFontana & Cillessen, 1999). The intraclass correlations and variance components for each status group are presented in Table 3.3. It is important to note that no reliable and powerful significance test currently exists to statistically compare differences in ICCs between groups (Zumbo, personal communication, January 24, 2011). Therefore, the findings presented below should be interpreted with caution.

As shown in Table 3.3, the ICCs for high status actors are all lower (ranging from .21 for altruistic prosocial behaviour to .33 for relational aggression) than the ICCs for low status actors (ranging from .33 for physical aggression to .55 for public prosocial behaviour). These ICCs indicate that between 67-79% of the variance in high status actors' behaviours is attributable to target differences and between 45-67% of the variance in low status actors' behaviours is

54

attributable to target differences. Thus, high status actors' social behaviours appear to be more target-specific than those of low status actors. However, as mentioned above, it is not clear whether these reflect statistically significant differences. When comparing the ICCs for high status actors with those for average status actors, high status actors do not appear to differ from average status actors in terms of their target-specific behaviours. Specifically, the ICCs for average status actors' altruistic and public prosocial behaviours (.29 and .36, respectively) were only slightly higher than the ICCs for high status actors' altruistic and public prosocial behaviours (.21 and .31, respectively). These ICCs indicate that between 69-79% of the variance in high status actors' prosocial behaviours is attributed to target differences and between 64-71% of the variance in average status actors' prosocial behaviours is attributed to target differences. For the aggression variables, the ICCs for average status actors are also at values that are comparable to those of high status actors. For example, the ICC for high status actors' surrogate aggression is .25, whereas the ICC for average status actors' surrogate aggression is .24. These findings indicate that average status actors are as likely as high status actors to vary their aggressive behaviours toward different types of targets. Importantly, variance was attributable to the target-level for all three status groups, indicating that adolescents of all levels of social status vary their behaviours toward different types of targets to some degree.

Given that variance was attributable to both levels of the data structure in the unconditional models, multilevel modeling was deemed necessary (Peugh, 2010). Accordingly, the conditional model was run for each behaviour variable with all predictors tested in the model simultaneously. These analyses were conducted to determine whether actors' social status moderates the relationship between their aggressive and prosocial behaviours and the degree of friendship and liking of the target in addition to the target's social status. Each index of actors' social status was considered as a moderator and cross-level interactions were plotted at the 25th and 75th percentile of the moderating actor social status variable (Aiken & West, 1991; Curran et al., 2004). Although six sets of analyses were conducted, a p-value of .05 was

maintained for these analyses. Given the exploratory nature of the present study, it was

deemed important to consider all significant interactions despite concerns of Type I error.

However, by taking into account dependencies in the data, MLM reduces the inflated Type I

error rate that occurs when OLS regression is used to analyse interdependent data (Bickel,

2007). The parameter estimates resulting from these analyses are presented in Table 3.4.

In Table 3.4, the intercept indicates the mean level of social behaviour across actors and

targets, each being significantly different from zero. The next two blocks of parameters indicate

the main effects followed by the cross-level interactions. Finally, the variance estimates at each

level of the model and the deviance statistics are displayed at the bottom of the table. The

deviance statistics are reported because they allow one to compare the unconditional and

conditional models (Hayes, 2006). Details of these results are presented below as they pertain

to each social behaviour variable. A summary table of the key findings is provided at the end of

this chapter in section 3.10.

Table 3.4. Parameter estimates for the conditional models examining the relationship between target-specific social behaviours and actor- and target-level predictor variables

	APRO	PPRO	PAGG	VAGG	RAGG	SAGG
Fixed components						
Intercept	2.649***	2.362***	1.674***	1.718***	1.704***	1.302***
ACTOR GENDER	.388***	.341***	-.234***	-.190***	.200***	.081*
ACTOR POPULARITY	.058	.115	.227***	.258***	.194**	.050
ACTOR PREFERENCE	.089	.031	-.168*	-.486***	-.118	-.142
ACTOR DOMINANCE	-.035	-.048	.004	.177*	.085	.200***
TARGET FRIENDSHIP	.437***	.382***	.189***	.143***	.010	.015
TARGET LIKING	.236***	.194***	.048***	-.002	-.184***	-.056***
TARGET POPULARITY	-.015	-.034	.090***	.101***	.102***	.097***
TARGET PREFERENCE	-.068**	-.121***	-.338***	-.428***	-.435***	-.224***
TARGET DOMINANCE	.129***	.160***	.136***	.203***	.158***	.081***
ACTOR GENDER X TARGET FRIENDSHIP	.029	.045*	-.091***	-.052*	-.021	-.001
ACTOR POPULARITY X TARGET FRIENDSHIP	-.001	-.004	.031	.015	.006	-.007
ACTOR PREFRENCE X TARGET FRIENDSHIP	.114***	.198***	.051	.050	.065*	.001
ACTOR DOMINANCE X TARGET FRIENDSHIP	-.075*	-.073*	-.027	-.010	-.048	.024
ACTOR GENDER X TARGET LIKING	.080**	.036	.012	.016	.022	.006
ACTOR POPULARITY X TARGET LIKING	.062*	.119***	.069**	.084**	-.050*	-.015
ACTOR PREFRENCE X TARGET LIKING	-.047	-.114***	-.072*	-.086**	-.082**	.010
ACTOR DOMINANCE X TARGET LIKING	.019	-.053	.007	-.002	.018	-.024

Table 3.4. Parameter estimates for the conditional models examining the relationship between target-specific social behaviours and actor- and target-level predictor variables

	APRO	PPRO	PAGG	VAGG	RAGG	SAGG
ACTOR GENDER X TARGET POPULARITY	.000	.001	.008	.018	.055	.035
ACTOR POPULARITY X TARGET POPULARITY	.067*	.085*	.109**	.094*	.160***	.076**
ACTOR PREFRENCE X TARGET POPULARITY	-.041	-.008	.065	.003	.026	.011
ACTOR DOMINANCE X TARGET POPULARITY	.008	-.044	-.016	.030	-.066	.091*
ACTOR GENDER X TARGET PREFRENCE	.024	-.010	.099	.010	-.048	-.168***
ACTOR POPULARITY X TARGET PREFRENCE	-.166**	-.188**	-.060	-.088	-.025	-.013
ACTOR PREFRENCE X TARGET PREFRENCE	.190**	.183**	.149*	.402***	.140*	.177***
ACTOR DOMINANCE X TARGET PREFRENCE	.125	.107	-.061	-.253**	-.137	-.244***
ACTOR GENDER X TARGET DOMINANCE	-.006	-.001	-.220***	-.149*	-.106	.016
ACTOR POPULARITY X TARGET DOMINANCE	.067	.071	-.078	.002	-.217***	-.104*
ACTOR PREFRENCE X TARGET DOMINANCE	-.169*	-.200**	-.143	-.273	-.056	-.084
ACTOR DOMINANCE X TARGET DOMINANCE	.017	.047	.226**	.265**	.330***	.219**

Table 3.4. Parameter estimates for the conditional models examining the relationship between target-specific social behaviours and actor- and target-level predictor variables

	APRO	PPRO	PAGG	VAGG	RAGG	SAGG
Variance of random components						
Actor-level variance estimate	.287***	.400***	.197***	.190***	.193***	.083***
Target-level variance estimate	.338***	.363***	.394***	.417***	.373***	.203***
Cohort-level variance estimate	.018**	.032***	.146***	.108***	.037***	.016***
Deviance statistics						
conditional, parameters = 33	12267.9	12823.8	13066.9	13392.1	12717.5	8753.4
unconditional, parameters = 4	18420.4	17490.8	14669.4	14600.6	13850.9	9398.0

Note. APRO = altruistic prosocial behaviour; PPRO = public prosocial behaviour; PAGG = physical aggression; VAGG = verbal aggression; RAGG = relational aggression; SAGG = surrogate aggression.

*p < .05. **p < .01. ***p < .001.

3.4 Altruistic prosocial behaviour

3.4.1 Main effects

For the target-level variables, the regression coefficient relating friendship to altruistic prosocial behaviour was positive and statistically significant (π = .437, *SE* = .011, *p* < .001), as was the regression coefficient relating liking to altruistic prosocial behaviour (π = .236, *SE* = .012, *p* < .001). Target social preference and target social dominance were significantly related to altruistic prosocial behaviour. Specifically, target social dominance was positively related to altruistic prosocial behaviour (π = .129, *SE* = .028, *p* = .001), whereas the relationship between target social preference and altruistic prosocial behaviour was negative (π = -.068, *SE* = .026, *p* = .009). Target perceived popularity was not significantly related to altruistic prosocial behaviour (π = -.015, *SE* = .020, *p* = .469).

For the actor-level variables, actor social status measures, including perceived popularity (β = .058, SE = .065, p = .376), social preference (β = .089, SE = .075, p = .241), and social dominance (β = -.035, SE = .091, p = .700), were not significantly related to altruistic prosocial behaviour. However, the regression coefficient relating actor gender to altruistic prosocial behaviour was positive and statistically significant (β = .388, SE = .056, p < .001), indicating that girls used more altruistic prosocial behaviour than boys.

To summarize the main effects observed, as the actor's reported level of friendship and liking toward the target increased, more altruistic prosocial behaviour was reported. As well, actors reported more altruistic prosocial behaviour toward individuals who were more dominant in the peer group, and less altruistic prosocial behaviour toward individuals who were generally well liked within the peer group. The perceived popularity of the target was unrelated to level of altruistic prosocial behaviour received. The social status of the actor, regardless of whether it was assessed in terms of perceived popularity, dominance or general likeability, was not significantly related to reported altruistic prosocial behaviour. Finally, girls reported more altruistic prosocial behaviour than boys.

3.4.2 Cross-level interactions: Actor perceived popularity

Three significant cross-level interactions were observed between actor perceived popularity and the target-level variables. Actor perceived popularity significantly moderated the relationship between liking and altruistic prosocial behaviour (β = .062, SE = .024, p = .012). As shown in Figure 3.1, the intersecting regression lines indicate that the positive relationship between altruistic prosocial behaviour and target liking was slightly stronger for actors with high levels of perceived popularity than for actors with low levels of perceived popularity. In other words, although adolescents generally reported more altruistic prosocial behaviour toward others who they liked more, this was somewhat more evident among high perceived popularity actors relative to low perceived popularity actors.

Figure 3.1. Moderation of actor perceived popularity in the relationship between altruistic prosocial behaviour toward target and target liking

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity significantly moderated the relationship between target perceived popularity and altruistic prosocial behaviour (β = .067, *SE* = .033, *p* = .041). As shown in Figure 3.2, the intersecting regression lines show a positive relationship between altruistic prosocial behaviour and target perceived popularity for actors with high levels of perceived popularity, whereas there was a negative relationship between altruistic prosocial behaviour and target perceived popularity for actors with low levels of perceived popularity. Thus, high perceived popularity actors reported more altruistic prosocial behaviour toward targets who were also perceived to be popular. In contrast, low perceived popularity actors reported less altruistic prosocial behaviour toward others who were perceived to be more popular.

Figure 3.2. Moderation of actor perceived popularity in the relationship between altruistic prosocial behaviour toward target and target perceived popularity
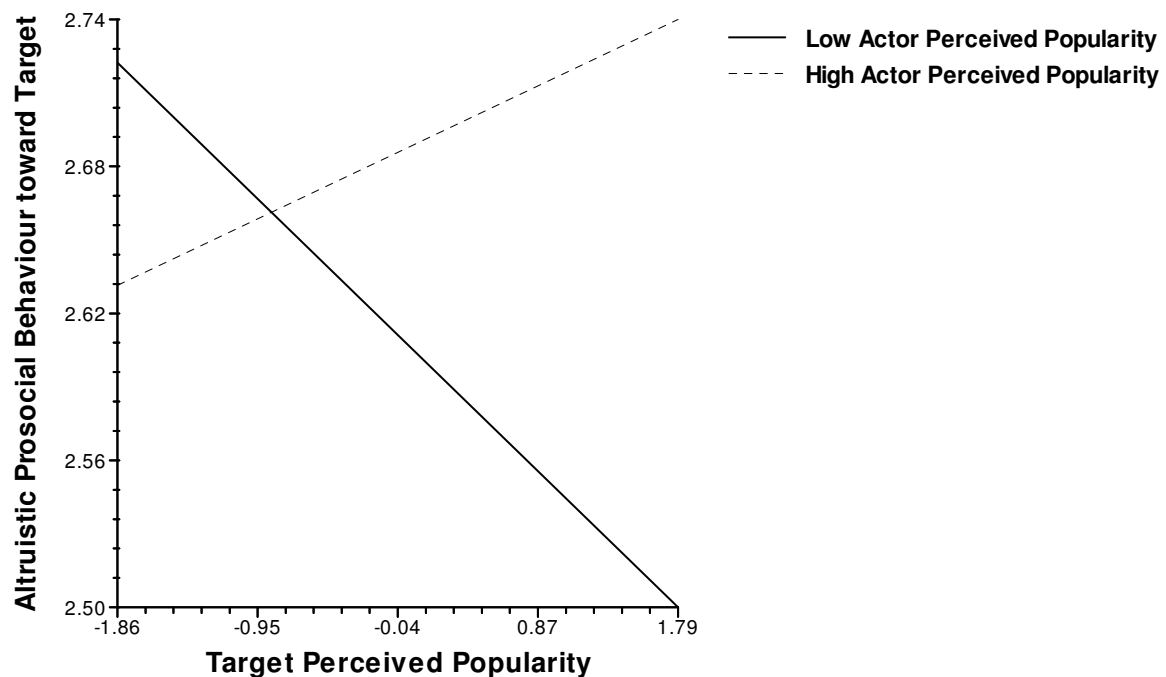
Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Results also showed that actor perceived popularity significantly moderated the relationship between target social preference and altruistic prosocial behaviour (β = -.166, *SE* = .054, *p* = .003). As shown in Figure 3.3, the intersecting regression lines show a positive relationship between reported altruistic prosocial behaviour and target social preference for actors with low levels of perceived popularity, whereas there was a negative relationship between altruistic prosocial behaviour and target social preference for actors with high levels of perceived popularity. Thus, high perceived popularity actors reported less altruistic prosocial behaviour toward others who were generally more accepted in the peer group. Conversely, low perceived popularity actors reported more altruistic prosocial behaviour toward targets who were generally more accepted in the peer group.

Figure 3.3. Moderation of actor perceived popularity in the relationship between altruistic prosocial behaviour toward target and target social preference

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interactions observed, high perceived popularity actors reported more altruistic prosocial behaviour toward others who they liked more relative to low perceived popularity actors. In addition, high perceived popularity actors reported more altruistic prosocial behaviour toward targets who were perceived to be popular and also reported less altruistic prosocial behaviour toward others who were generally more accepted in the peer group. In contrast, low perceived popularity actors reported less altruistic prosocial behaviour toward others who were perceived to be more popular and also reported more altruistic prosocial behaviour toward targets who were generally more accepted in the peer group.

3.4.3 Cross-level interactions: Actor social preference

Three significant cross-level interactions were found for actor social preference and the target-level variables. Actor social preference significantly moderated the relationship between friendship and altruistic prosocial behaviour (β = .114, *SE* = .027, *p* < .001). As shown in Figure 3.4, the intersecting regression lines indicate the positive relationship between altruistic prosocial behaviour and target friendship was slightly stronger for actors with high levels of social preference than for actors with low levels of social preference. In other words, actors reported more altruistic prosocial behaviour toward those with whom they reported having a closer friendship, and this was somewhat more the case for actors who were generally well liked or accepted by the peer group.

Figure 3.4. Moderation of actor social preference in the relationship between altruistic prosocial behaviour toward target and target friendship

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social preference also significantly moderated the relationship between target social preference and altruistic prosocial behaviour (β = .190, *SE* = .061, *p* = .002). As shown in Figure 3.5, the intersecting regression lines show a small positive relationship between altruistic prosocial behaviour and target social preference for actors with high levels of social preference, whereas there was a negative relationship between altruistic prosocial behaviour and target social preference for actors with low levels of social preference. Thus, for high social preference actors, more altruistic prosocial behaviour was reported toward others who were generally well liked within the peer group. Conversely, for low social preference actors, less altruistic prosocial behaviour was reported toward others who were generally well liked within the peer group.

Figure 3.5. Moderation of actor social preference in the relationship between altruistic prosocial behaviour toward target and target social preference
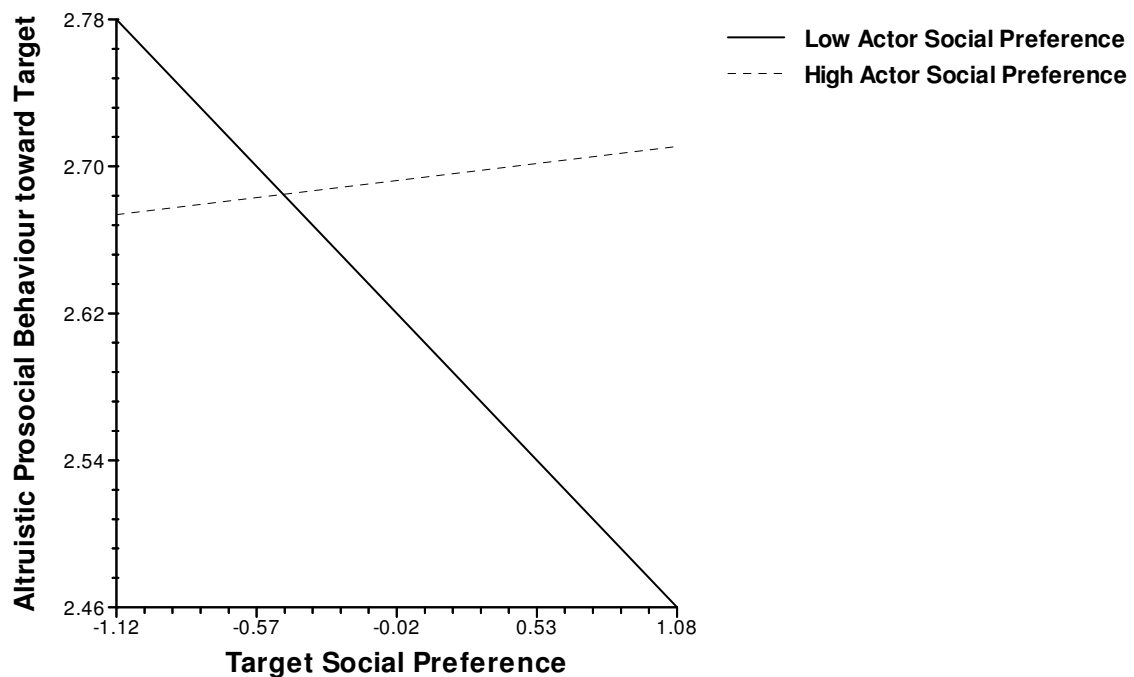
Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The results also revealed that the relationship between target social dominance and altruistic prosocial behaviour was significantly moderated by actor social preference (β = -.169, SE = .071, p = .017). As shown in Figure 3.6, the intersecting regression lines show that the positive relationship between altruistic prosocial behaviour and target social dominance was stronger for actors with low levels of social preference than for actors with high levels of social preference. As target social dominance increased the level of reported altruistic prosocial behaviour increased, especially for low social preference actors as compared with high social preference actors. In other words, adolescents who were less well liked or accepted by the peer group reported more altruistic prosocial behaviour toward targets who were more socially dominant; adolescents who were more generally liked or accepted reported comparatively less altruistic prosocial behaviour toward dominant peers.

Figure 3.6. Moderation of actor social preference in the relationship between altruistic prosocial behaviour toward target and target social dominance

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

66

To summarize the cross-level interactions observed, compared to those who were less well liked or accepted in the peer group, actors who were accepted by the peer group reported more altruistic prosocial behaviour toward those with whom they reported having a closer friendship and toward others who were generally well liked within the peer group. Additionally, adolescents generally reported more altruistic prosocial behaviour toward more dominant peers and this was especially the case for actors who were less accepted by the peer group.

3.4.4 Cross-level interactions: Actor social dominance

One significant cross-level interaction was found for actor social dominance and the target-level variables. Actor social dominance significantly moderated the relationship between target friendship and altruistic prosocial behaviour (β = -.075, *SE* = .034, *p* = .028). As shown in Figure 3.7, the intersecting regression lines signify that the positive relationship between altruistic prosocial behaviour and target friendship was slightly stronger for actors with low levels of social dominance than for actors with high levels of social dominance. Therefore, as target friendship increased the level of altruistic prosocial behaviour increased, especially for low (as compared to high) social dominance actors. In other words, although adolescents generally reported more altruistic prosocial behaviour toward others that they considered to be more friends than nonfriends, this difference was somewhat more likely among students who were low in dominance.

Figure 3.7. Moderation of actor social dominance in the relationship between altruistic prosocial behaviour toward target and target friendship

Note. Low Actor Social Dominance is at the 25th percentile; high Actor Social Dominance is at the 75th percentile. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.4.5   Cross-level interactions: Actor gender

Finally, there was one significant cross-level interaction for gender. Gender significantly moderated the relationship between target liking and altruistic prosocial behaviour (β = .080, *SE* = .023, *p* = .001). As shown in Figure 3.8, the regression lines indicate the positive relationship between altruistic prosocial behaviour and target liking was stronger for girls than for boys. Thus, as target liking increased the level of altruistic prosocial behaviour increased. However, this effect was larger for girls than for boys.

68

Figure 3.8. Moderation of actor gender in the relationship between altruistic prosocial behaviour toward target and target liking
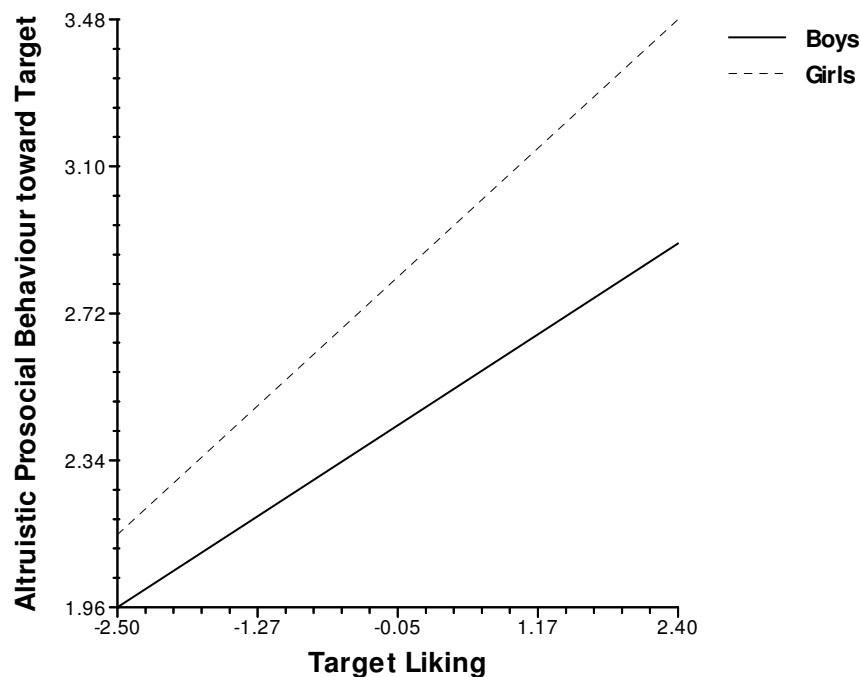
Note. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.5   Public prosocial behaviour

3.5.1   Main effects

For the target-level variables, the regression coefficient relating friendship to public prosocial behaviour was positive and statistically significant (π = .382, *SE* = .011, *p* < .001), as was the regression coefficient relating liking to public prosocial behaviour (π = .194, *SE* = .012, *p* < .001). Target social preference and target social dominance were significantly related to reports of public prosocial behaviour. Specifically, target's social dominance was positively related to public prosocial behaviour (π = .160, *SE* = .029, *p* = .001), whereas the relationship between target's social preference and reported public prosocial behaviour was negative (π = -.121, *SE* = .027, *p* < .001). Target perceived popularity was not significantly related to reported public prosocial behaviour (π = -.034, *SE* = .021, *p* = .104).

For the actor-level variables, actors' social status measures, including perceived popularity (β = .115, SE = .076, p = .132), social preference (β = .031, SE = .089, p = .732), and social dominance (β = -.048, SE = .11, p = .655), were not significantly related to reports of public prosocial behaviour. However, the regression coefficient relating actor gender to public prosocial behaviour was positive and statistically significant (β = .341, SE = .065, p < .001), indicating that girls reported more public prosocial behaviour than did boys.

To summarize the main effects observed, as the actor's reported level of friendship and liking toward target increased, more public prosocial behaviour was reported. As well, actors reported more public prosocial behaviour toward individuals who were more dominant in the peer group, and less public prosocial behaviour toward individuals who were generally well liked within the peer group. The perceived popularity of the target was unrelated to level of public prosocial behaviour received. The social status of the actor, regardless of whether it was assessed in terms of perceived popularity, dominance or general likeability, was not significantly related to reported public prosocial behaviour. Finally, girls reported more public prosocial behaviour than boys.

3.5.2 Cross-level interactions: Actor perceived popularity

Three significant cross-level interactions were found for actor perceived popularity and the target-level variables. Actor perceived popularity significantly moderated the relationship between liking and reported public prosocial behaviour (β = .119, SE = .025, p < .001). As shown in Figure 3.9, the intersecting regression lines indicate the positive relationship between public prosocial behaviour and target liking was stronger for actors with high levels of perceived popularity than for actors with low levels of perceived popularity. In other words, adolescents generally reported more public prosocial behaviour toward targets they personally liked and this was especially true for high perceived popularity actors.
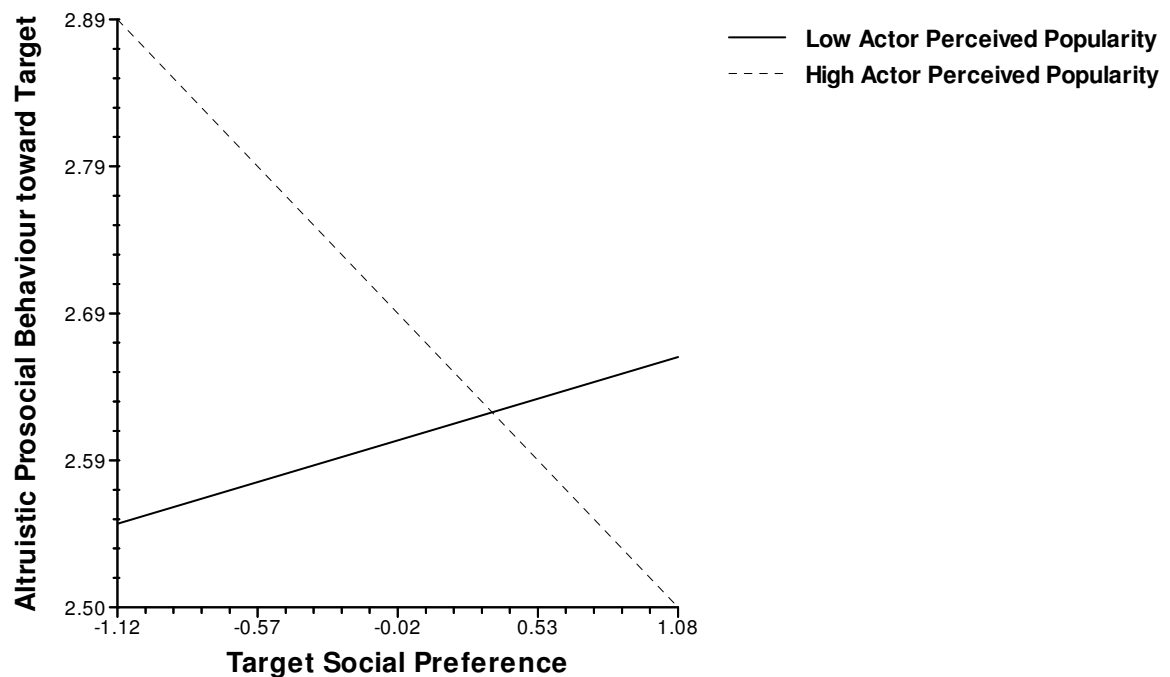
Figure 3.9. Moderation of actor perceived popularity in the relationship between public prosocial behaviour toward target and target liking
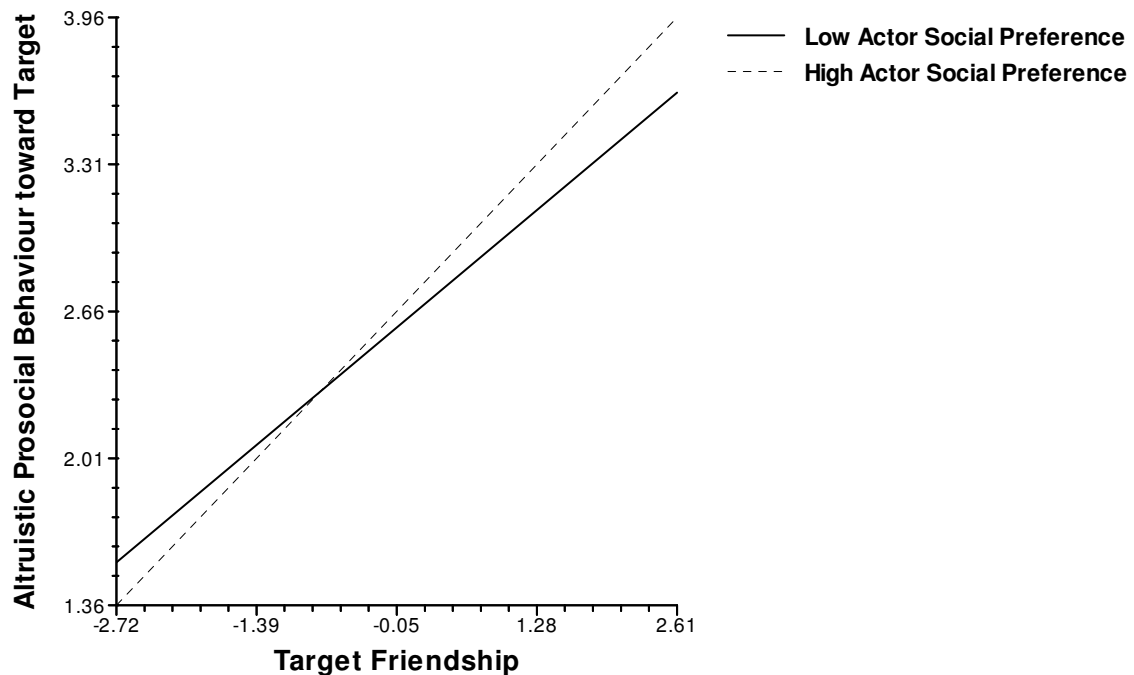

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity also significantly moderated the relationship between target perceived popularity and reports of public prosocial behaviour (β = .085, *SE* = .034, *p* = .013). As shown in Figure 3.10, the intersecting regression lines show a positive relationship between reported public prosocial behaviour and target perceived popularity for actors with high levels of perceived popularity, whereas there was a negative relationship between reported public prosocial behaviour and target perceived popularity for actors with low levels of perceived popularity. Thus, for high perceived popularity actors, as target perceived popularity increased so did reports of public prosocial behaviour. In contrast, for low perceived popularity actors, as target perceived popularity increased the level of reported public prosocial behaviour decreased. In other words, adolescents who were perceived to be highly popular reported more public prosocial behaviour toward others with high perceived popularity; adolescents who were less popular reported less public prosocial behaviour toward high popular peers.

Figure 3.10. Moderation of actor perceived popularity in the relationship between public prosocial behaviour toward target and target perceived popularity
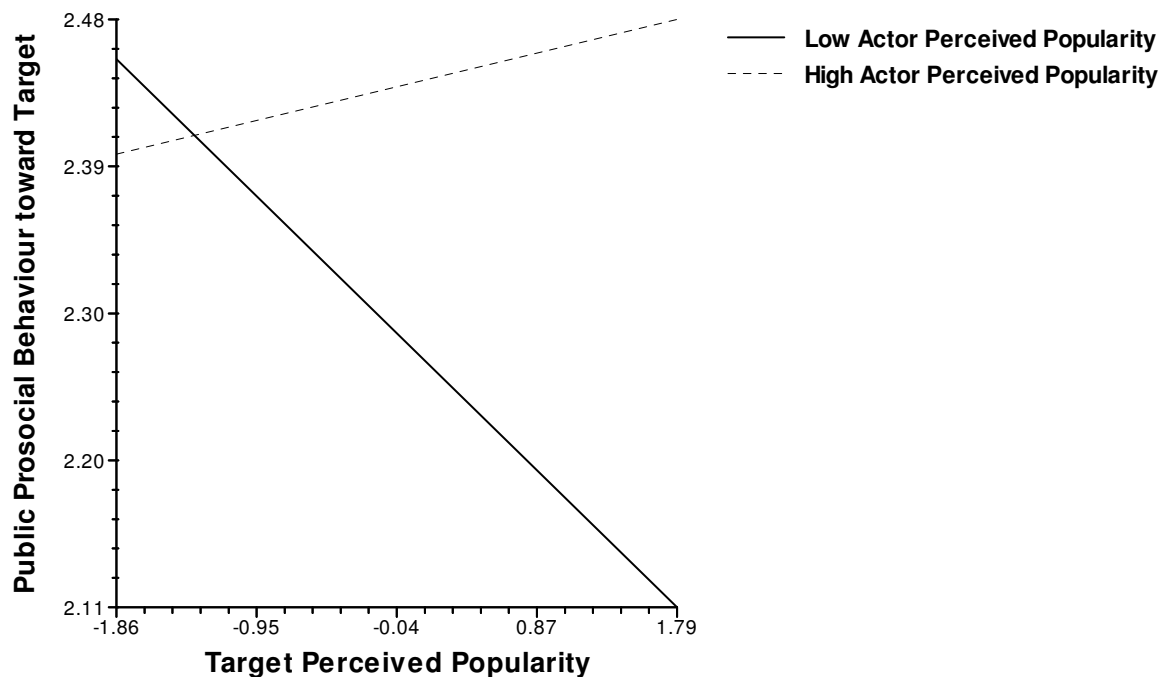
Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The relationship between target social preference and public prosocial behaviour was significantly moderated by actor perceived popularity (β = -.188, *SE* = .057, *p* = .001). As shown in Figure 3.11, the intersecting regression lines show no relationship between public prosocial behaviour and target social preference for actors with low levels of perceived popularity, whereas there was a negative relationship between public prosocial behaviour and target social preference for actors with high levels of perceived popularity. Thus, for high perceived popularity actors, as target social preference increased, reports of public prosocial behaviour decreased. However, for low perceived popularity actors, reported public prosocial behaviour was not related to target social preference. In other words, adolescents who were perceived to be popular reported less public prosocial behaviour toward well accepted peers; adolescents who were less popular did not differentiate their public prosocial behaviour as a function of the target's level of acceptance in the peer group.
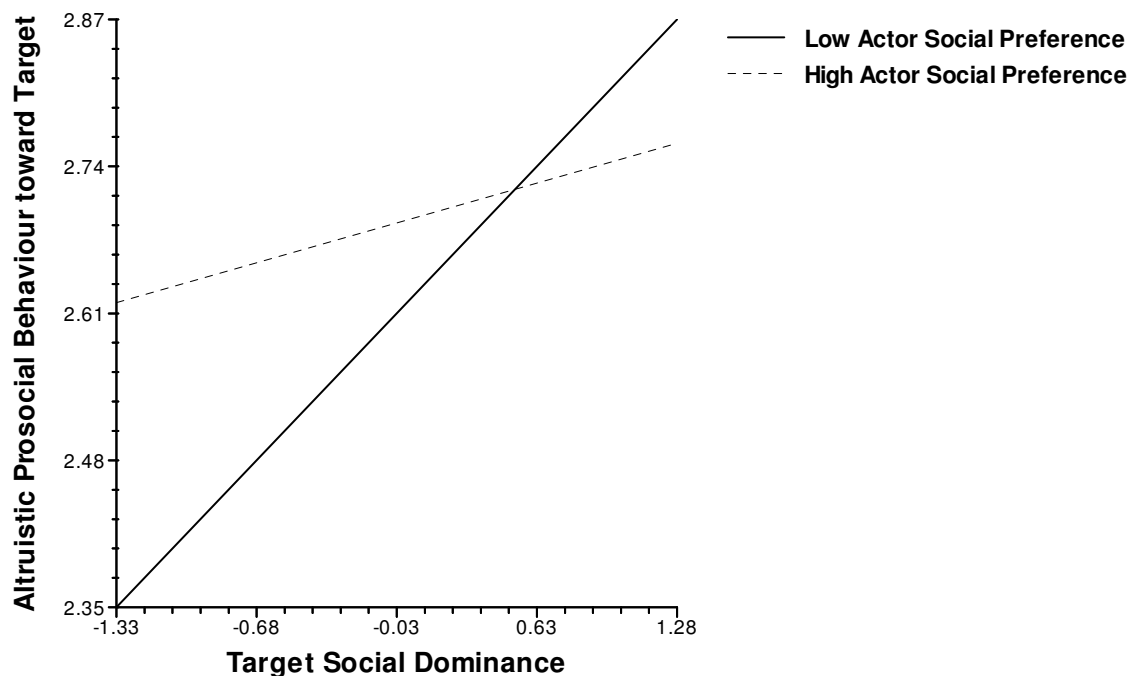
72

Figure 3.11. Moderation of actor perceived popularity in the relationship between public prosocial behaviour toward target and target social preference

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interactions observed, adolescents generally reported more public prosocial behaviour toward targets they personally liked than those they personally disliked, although this difference was especially pronounced for high perceived popularity actors. In addition, adolescents who were perceived to be highly popular reported more public prosocial behaviour toward others with high perceived popularity, whereas adolescents who were less popular reported less public prosocial behaviour toward high popular peers. Finally, adolescents who were perceived to be popular reported less public prosocial behaviour toward well-accepted peers. However, adolescents who were less popular did not differentiate their public prosocial behaviour depending upon the target's level of acceptance by peers.

3.5.3   Cross-level interactions: Actor social preference

Four significant cross-level interactions were found for actor social preference and the target-level variables. Actor social preference significantly moderated the relationship between friendship and reported public prosocial behaviour (β = .198, SE = .028, p < .001). As shown in Figure 3.12, the intersecting regression lines signify that the positive relationship between reports of public prosocial behaviour and target friendship was slightly stronger for actors with high levels of social preference than for actors with low levels of social preference. In other words, actors reported more public prosocial behaviour toward peers with whom they reported having a close friendship and this finding was especially the case for well-accepted actors as compared to less accepted actors.

Figure 3.12. Moderation of actor social preference in the relationship between public prosocial behaviour toward target and target friendship
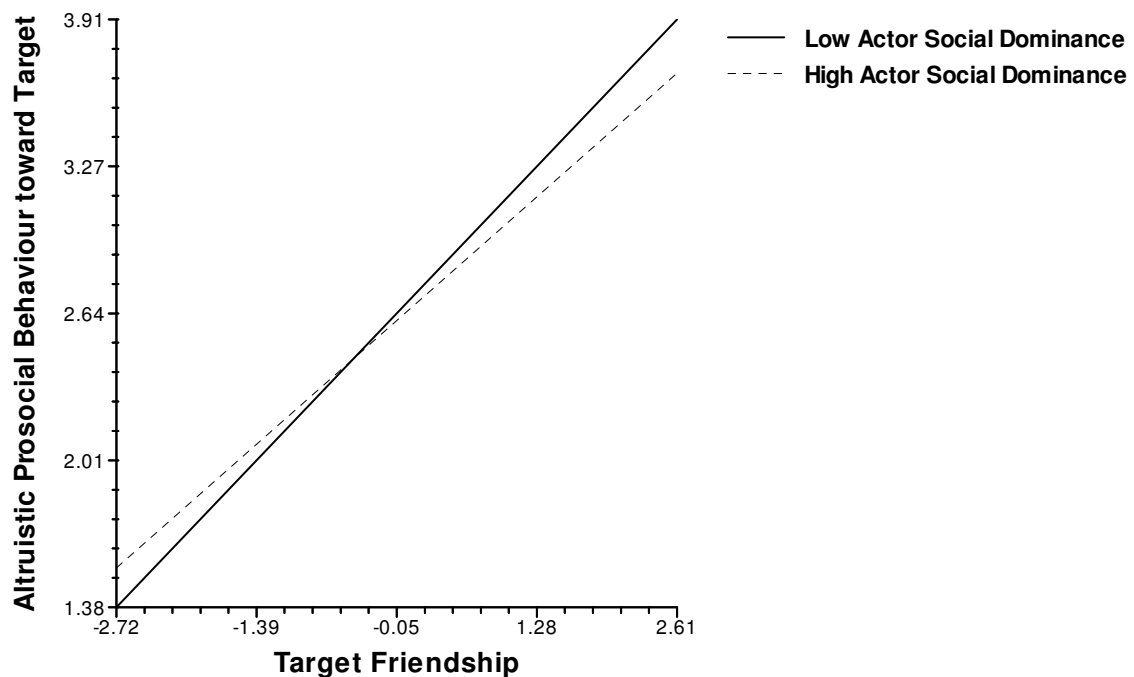

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social preference also significantly moderated the relationship between liking and reports of public prosocial behaviour (β = -.114, *SE* = .030, *p* < .001). As shown in Figure 3.13, the intersecting regression lines indicate the positive relationship between reported public prosocial behaviour and target liking was slightly stronger for actors with low levels of social preference than for actors with high levels of social preference. Therefore, as target liking increased the level of public prosocial behaviour increased. However, this effect was somewhat larger for low social preference actors than for high social preference actors. In other words, actors reported more public prosocial behaviour toward peers whom they personally liked and this finding was especially true for actors who were less accepted in the peer group as compared to actors who were well-accepted by peers.

Figure 3.13. Moderation of actor social preference in the relationship between public prosocial behaviour toward target and target liking
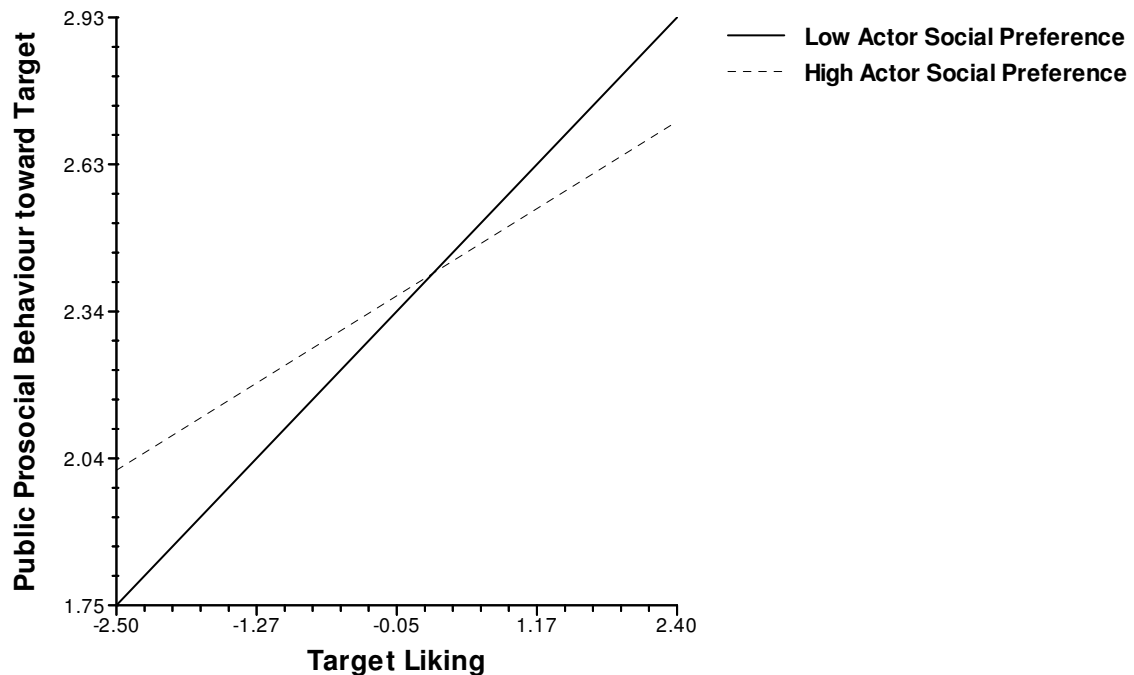
Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The results also showed that actor social preference significantly moderated the relationship between target social preference and reports of public prosocial behaviour (β = .183, SE = .064, p = .005). As shown in Figure 3.14, the intersecting regression lines indicate the negative relationship between reported public prosocial behaviour and target social preference was stronger for actors with low levels of social preference than for actors with high levels of social preference. As target social preference increased, reports of public prosocial behaviour decreased, especially among low social preference actors as compared with high social preference actors. In other words, although adolescents generally reported more public prosocial behaviour toward peers who were more rejected (widely disliked) than toward those who were more accepted (widely liked), this difference was more pronounced among actors who themselves were more rejected and less accepted among peers.

**Figure 3.14. Moderation of actor social preference in the relationship between public prosocial behaviour toward target and target social preference**

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The relationship between target social dominance and reported public prosocial behaviour was significantly moderated by actor social preference (β = -.200, SE = .074, p = .007). As shown in Figure 3.15, the intersecting regression lines show that the positive relationship between reports of public prosocial behaviour and target social dominance was stronger for actors with low levels of social preference than for actors with high levels of social preference. As target social dominance increased, reports of public prosocial behaviour increased. However, this effect was larger for low social preference actors than for high social preference actors. In other words, although adolescents generally reported more public prosocial behaviour toward more dominant peers than toward less dominant peers, this difference was more pronounced among adolescents who were themselves more rejected within the peer group.

Figure 3.15. Moderation of actor social preference in the relationship between public prosocial behaviour toward target and target social dominance
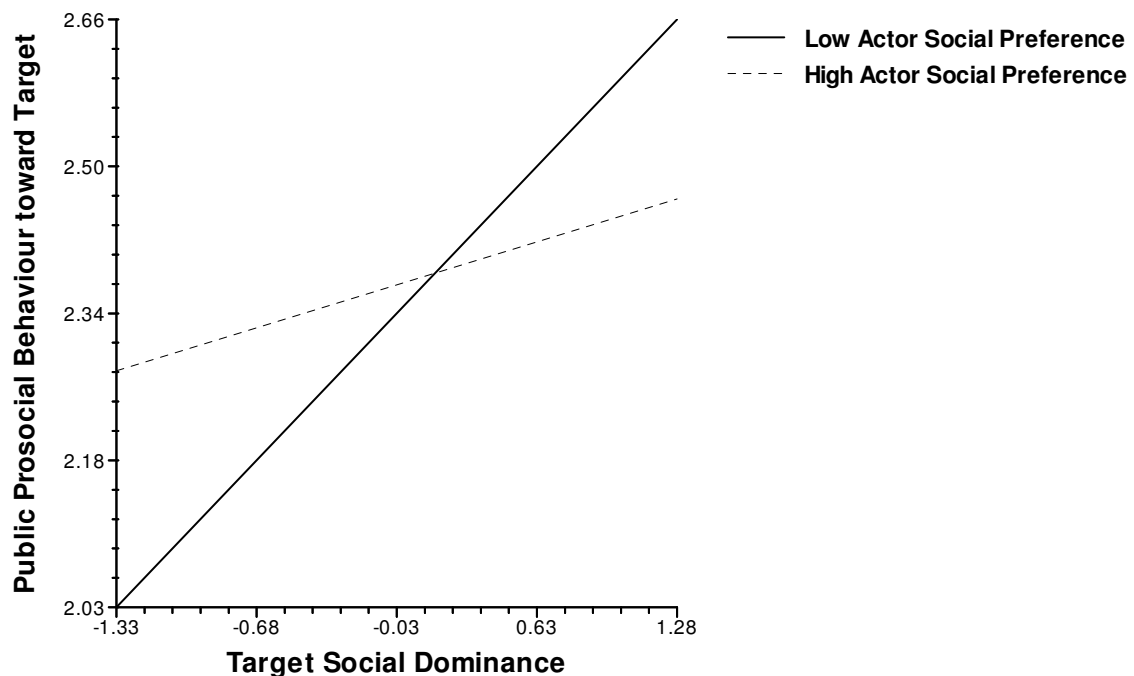
Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interaction effects observed, actors reported more public prosocial behaviour toward peers with whom they reported having a close friendship and this finding was especially the case for well-accepted actors as compared to less accepted actors. Although adolescents also generally reported more public prosocial behaviour toward peers whom they personally liked than toward those they personally disliked, this difference was more pronounced for adolescents who were less accepted in the peer group. Finally, adolescents generally reported more public prosocial behaviour toward peers who were more rejected than toward those who were more accepted and they also generally reported more public prosocial behaviour toward more dominant peers than toward less dominant peers. However, in each case, these differences were more pronounced among actors who themselves were more rejected by peers.

3.5.4 Cross-level interactions: Actor social dominance

One significant cross-level interaction was found for actor social dominance and the target-level variables. Actor social dominance significantly moderated the relationship between target friendship and reported public prosocial behaviour (β = -.073, SE = .035, p = .038). As shown in Figure 3.16, the intersecting regression lines indicate the positive relationship between reports of public prosocial behaviour and target friendship was slightly stronger for actors with low levels of social dominance than for actors with high levels of social dominance. As target friendship increased, reports of public prosocial behaviour increased. However, this effect was larger for low social dominance actors than for high social dominance actors. In other words, adolescents generally reported more public prosocial behaviour toward individuals they considered friends than those they considered to be nonfriends, but this difference was somewhat more pronounced among low dominant adolescents than among high dominant adolescents.

Figure 3.16. Moderation of actor social dominance in the relationship between public prosocial behaviour toward target and target friendship

Note. Low Actor Social Dominance is at the 25th percentile; high Actor Social Dominance is at the 75th percentile. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.5.5 Cross-level interactions: Actor gender

Finally, there was one significant cross-level interaction for gender. Gender significantly moderated the relationship between target friendship and reported public prosocial behaviour (β = .045, SE = .022, p = .036). As shown in Figure 3.17, the regression lines reveal that the positive relationship between reports of public prosocial behaviour and target friendship was stronger for girls than for boys. As target friendship increased, reports of public prosocial behaviour increased, especially among girls. Thus, compared to boys, girls reported more public prosocial behaviour toward friends than nonfriends.
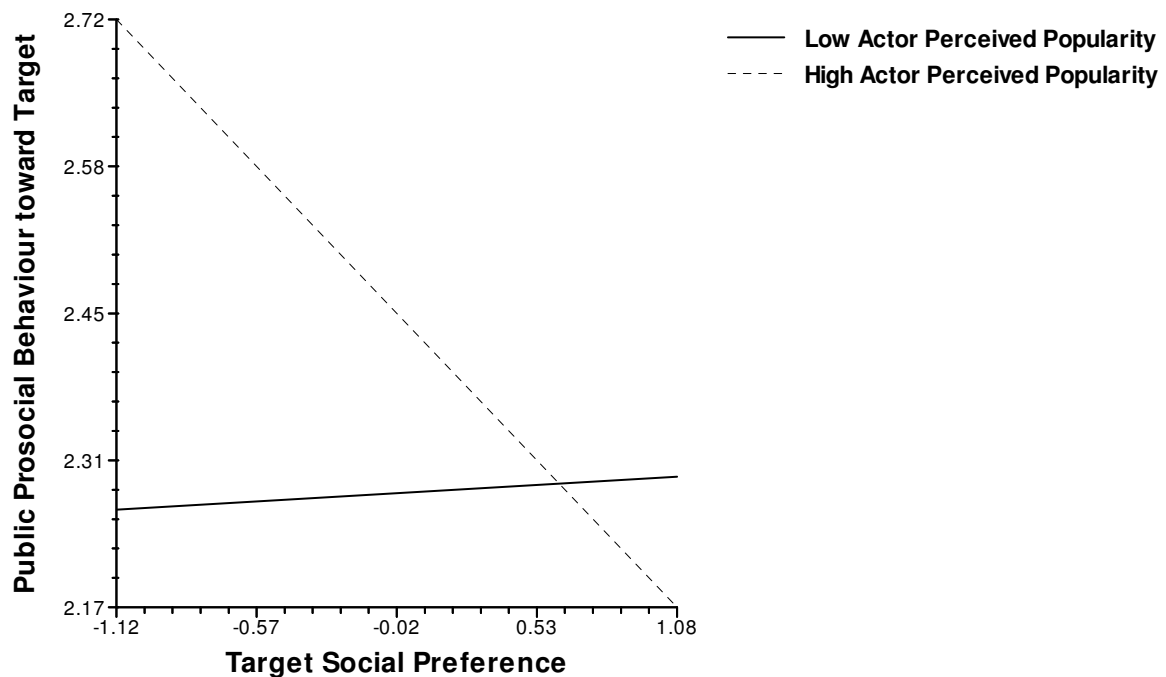
Figure 3.17. Moderation of actor gender in the relationship between public prosocial behaviour toward target and target friendship
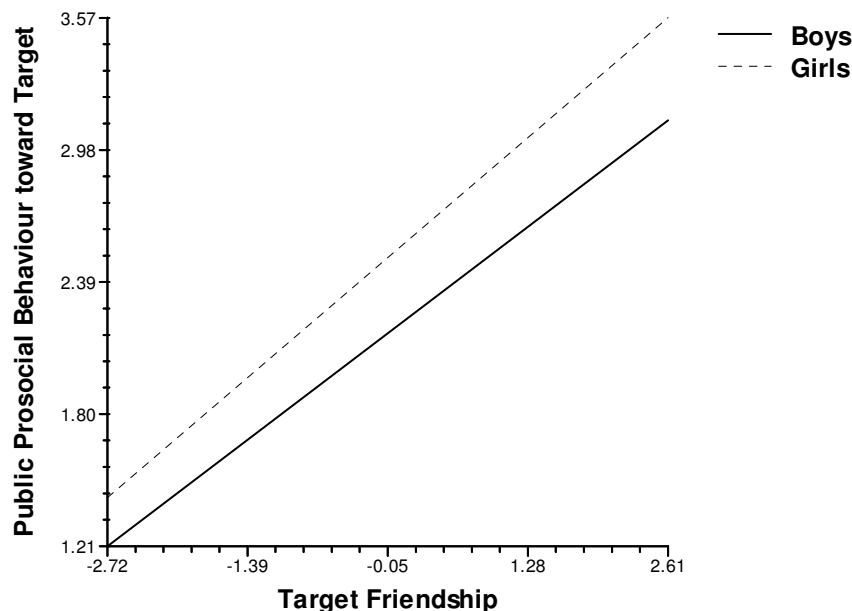
Note. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.6   Physical aggression

3.6.1   Main effects

For the target-level results, the regression coefficient relating friendship to reported physical aggression was positive and statistically significant (π = .189, *SE* = .012, *p* < .001) as was the regression coefficient relating liking to physical aggression (π = .048, *SE* = .012, *p* < .001). In addition, target social status measures were significantly related to physical aggression. Target perceived popularity was positively related to reports of physical aggression (π = .090, *SE* = .022, *p* < .001) as was target social dominance (π = .136, *SE* = .030, *p* = .001), whereas the relationship between target social preference and reported physical aggression was negative (π = -.338, *SE* = .028, *p* < .001).

For the actor-level results, actor perceived popularity was positively related to reported physical aggression (β = .227, *SE* = .058, *p* < .001), whereas actor social preference was negatively related to reports of physical aggression (β = -.168, *SE* = .071, *p* = .018). Actor

80

social dominance was not significantly related to reported physical aggression (β = .004, SE = .082, p = .958). Finally, the regression coefficient relating actor gender to reported physical aggression was negative and statistically significant (β = -.234, SE = .048, p < .001), indicating that boys reported more physical aggression than did girls.

To summarize the main effects observed, as the actor's reported level of friendship and liking toward target increased, more physical aggression was reported. As well, actors reported more physical aggression toward individuals who were more popular and dominant in the peer group, and less physical aggression toward individuals who were generally well liked within the peer group. In terms of actor social status, as the perceived popularity of the actor increased, more physical aggression was reported; as the social preference of the actor increased, less physical aggression was reported. However, the actor's level of social dominance was not significantly related to reported physical aggression. Finally, boys reported more physical aggression than girls.

3.6.2 Cross-level interactions: Actor perceived popularity

Two significant cross-level interactions were found for actor perceived popularity and the target-level variables. Actor perceived popularity significantly moderated the relationship between target liking and reported physical aggression (β = .069, SE = .026, p = .008). As shown in Figure 3.18, the regression lines show a positive relationship between target liking and reports of physical aggression for actors with high levels of perceived popularity, whereas there was no relationship between target liking and reported physical aggression for actors with low levels of perceived popularity. Thus, for high perceived popularity actors, as target liking increased, the level of reported physical aggression increased. In contrast, for low perceived popularity actors, as target liking increased, the level of reported physical aggression was low and did not change as a function of target liking. In other words, adolescents who were perceived to be highly popular reported more physical aggression toward peers they personally liked; adolescents who were less popular did not vary their reports of physical aggression across liked and disliked targets.

81

Figure 3.18. Moderation of actor perceived popularity in the relationship between physical aggression toward target and target liking
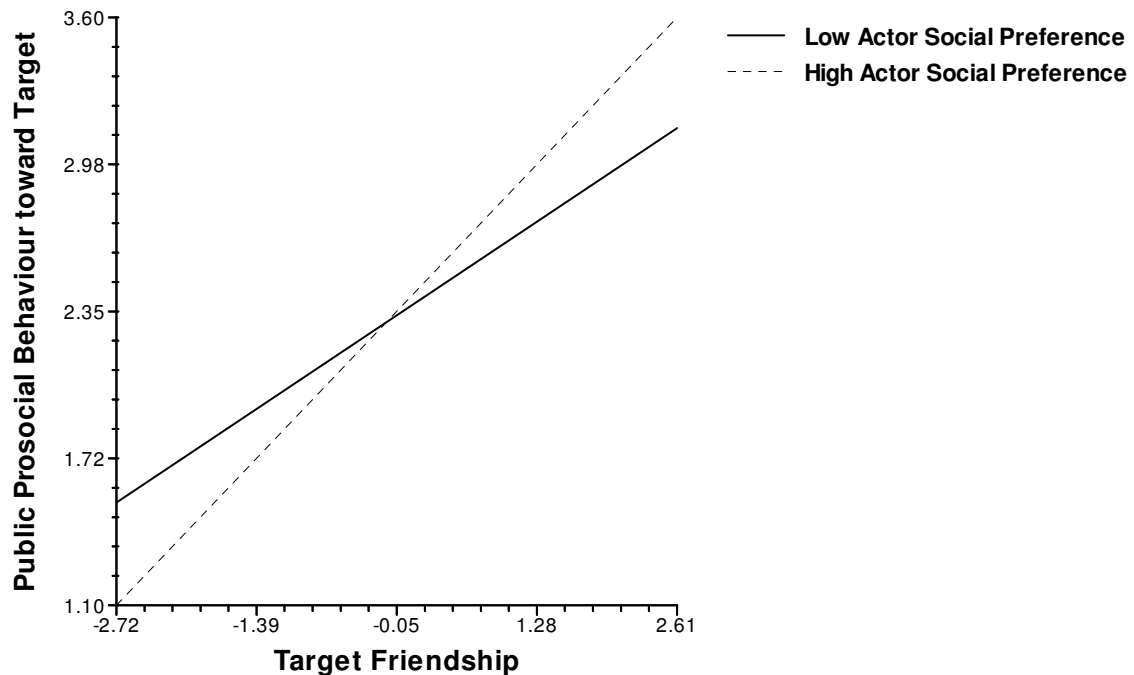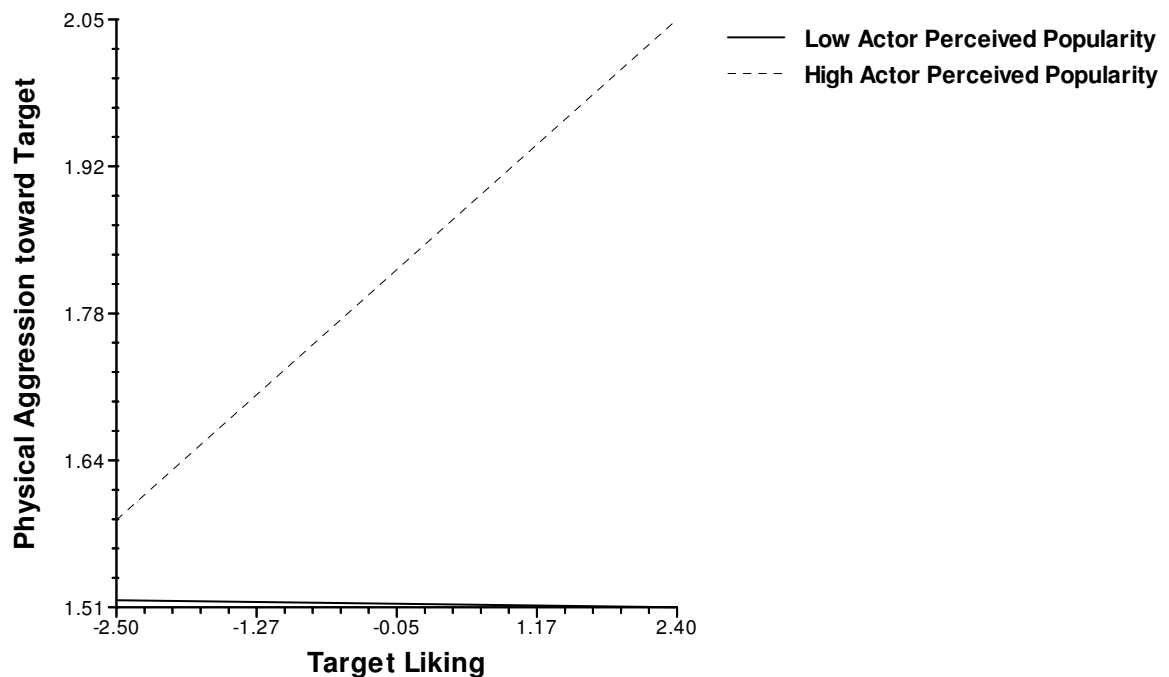

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity also was a significant moderator for the relationship between target perceived popularity and reported physical aggression (β = .109, *SE* = .035, *p* = .002). As shown in Figure 3.19, the regression lines show a positive relationship between target perceived popularity and reports of physical aggression for actors with high levels of perceived popularity and a small positive relationship between target perceived popularity and reported physical aggression for actors with low levels of perceived popularity. As target perceived popularity increased, the level of reported physical aggression increased. However, this effect was much larger for high perceived popularity actors. In other words, compared to adolescents who were less popular in the peer group, adolescents who were perceived to be highly popular reported much more physical aggression toward other popular peers than toward less popular peers.

Figure 3.19. Moderation of actor perceived popularity in the relationship between physical aggression toward target and target perceived popularity

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interaction effects observed, adolescents who were perceived to be highly popular reported more physical aggression toward peers they personally liked (than toward peers they personally disliked) and also reported more physical aggression toward other popular peers (than toward less popular peers). In comparison, adolescents who were less popular reported little variation in their physical aggression depending upon the level of perceived popularity of the target or whether they personally liked or disliked the target.

3.6.3 Cross-level interactions: Actor social preference

Two significant cross-level interactions were found for actor social preference. Actor social preference significantly moderated the relationship between target liking and reported physical aggression (β = -.072, *SE* = .030, *p* = .019). As shown in Figure 3.20, the intersecting regression lines indicate the positive relationship between reports of physical aggression and

83

target liking was stronger for actors with low social preference than for actors with high social preference. As target liking increased, the level of reported physical aggression increased. However, this difference was much larger for low social preference actors than for high social preference actors. In other words, compared to adolescents who were well accepted in the peer group, adolescents who were less accepted reported much more physical aggression toward peers they personally liked than toward peers they personally disliked.

Figure 3.20. Moderation of actor social preference in the relationship between physical aggression toward target and target liking

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social preference also was a significant moderator for the relationship between target social preference and reported physical aggression (β = .149, *SE* = .066, *p* = .023). As shown in Figure 3.21, the intersecting regression lines indicate the negative relationship between reports of physical aggression and target social preference was stronger for actors

84

with low social preference than for actors with high social preference. As target social

preference increased, the level of reported physical aggression decreased. However, this effect

was larger for low social preference actors than for high social preference actors. In other

words, adolescents generally reported more physical aggression toward targets who were more

rejected by the peer group, but this difference was more pronounced for well accepted actors

than less accepted actors.

Figure 3.21. Moderation of actor social preference in the relationship between physical

aggression toward target and target social preference
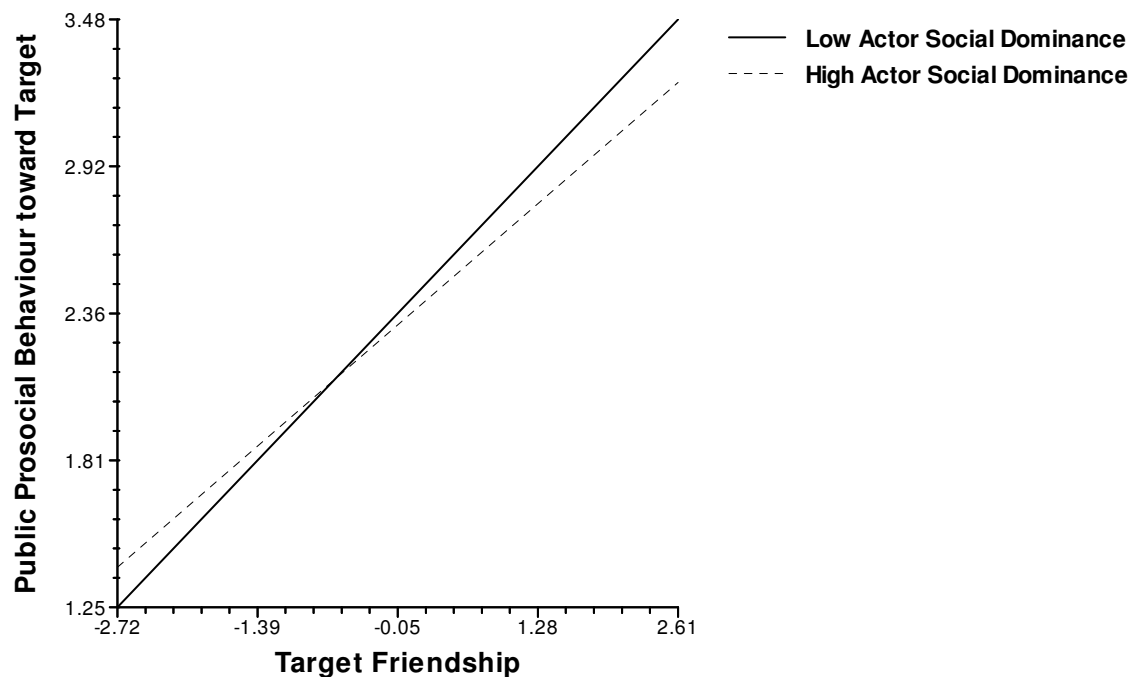

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th

percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score

below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interactions observed, compared to adolescents who were

well accepted in the peer group, adolescents who were less accepted reported much more

physical aggression toward peers they personally liked than toward peers they personally

disliked. As well, adolescents generally reported more physical aggression toward peers who

were less accepted within the peer group, although this difference was more distinct for well accepted than less accepted youth.

3.6.4 Cross-level interactions: Actor social dominance

One significant cross-level interaction was found for actor social dominance. Actor social dominance significantly moderated the relationship between target social dominance and reported physical aggression (β = .226, *SE* = .086, *p* = .009). As shown in Figure 3.22, the intersecting regression lines show a positive relationship between target social dominance and reports of physical aggression for actors with high levels of social dominance, whereas there was no relationship between target social dominance and reported physical aggression for actors with low levels of social dominance. Thus, for high social dominance actors, as target social dominance increased, the level of reported physical aggression increased. In contrast, for low social dominance actors, as target social dominance increased, the level of reported physical aggression did not change as a function of target social dominance. In other words, adolescents who were perceived to be highly dominant reported more physical aggression toward other more dominant peers; adolescents who were less dominant reported that they did not vary their physical aggression depending upon whether the target was more or less dominant.

Figure 3.22. Moderation of actor social dominance in the relationship between physical aggression toward target and target social dominance
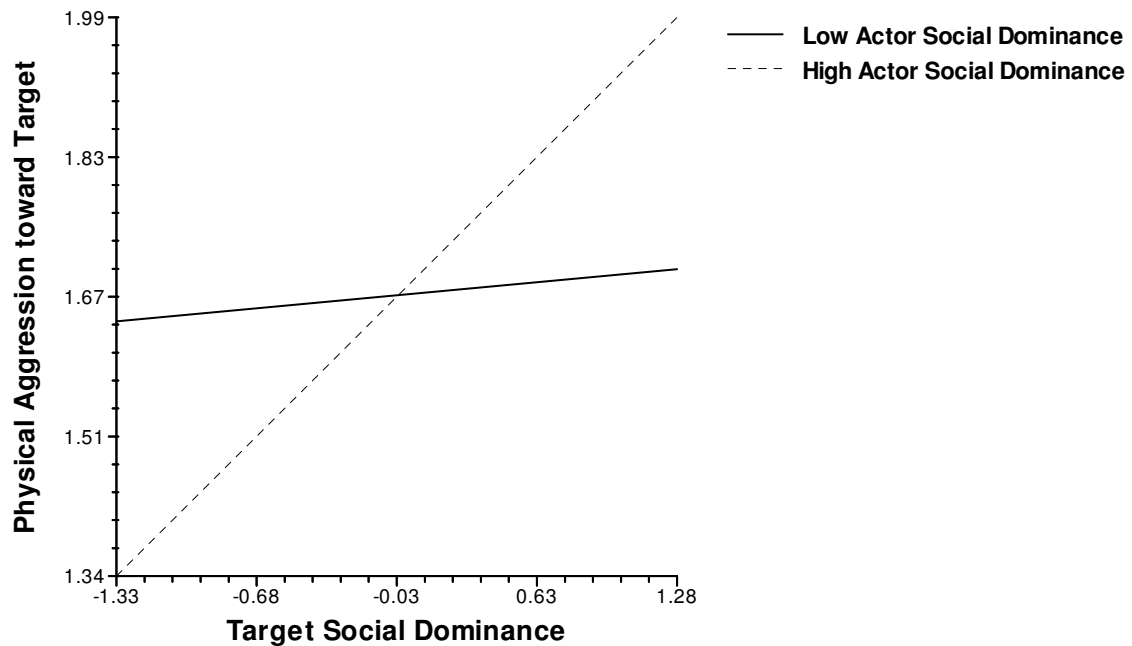
Note. Low Actor Social Dominance is at the 25th percentile; high Actor Social Dominance is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.6.5 Cross-level interactions: Actor gender

Finally, there were two significant cross-level interactions for gender. Gender significantly moderated the relationship between target friendship and reported physical aggression (β = -.091, SE = .022, p < .001). As shown in Figure 3.23, the regression lines indicate that the positive relationship between reports of physical aggression and target friendship was stronger for boys than for girls. As target friendship increased, the level of reported physical aggression increased, although this effect was larger for boys than for girls.

Figure 3.23. Moderation of actor gender in the relationship between physical aggression toward target and target friendship
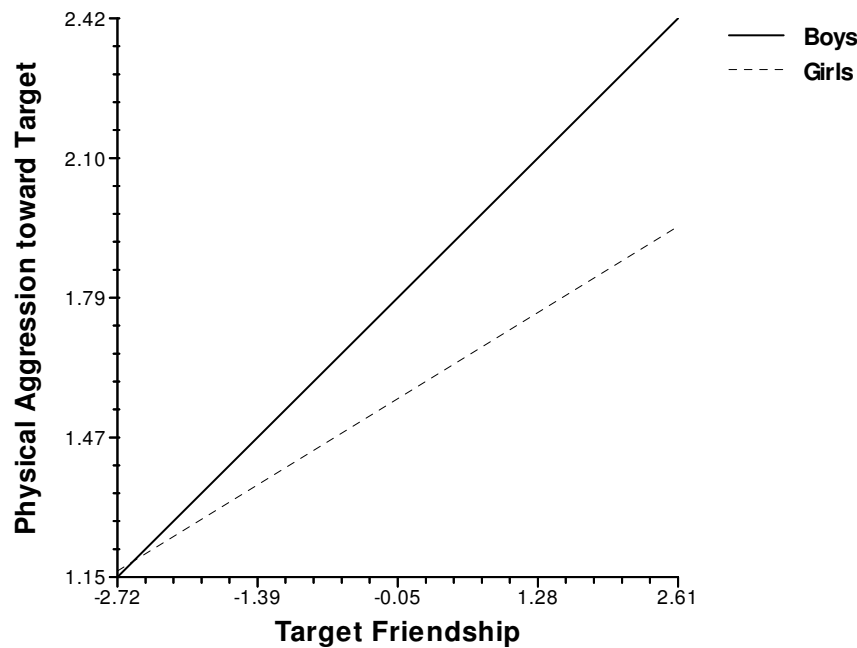
Note. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Gender also significantly moderated the relationship between target social dominance and reports of physical aggression (β = -.091, *SE* = .060, *p* < .001). As shown in Figure 3.24, the intersecting regression lines indicate the positive relationship between reported physical aggression and target social dominance was stronger for boys than for girls. Therefore, as target social dominance increased the level of reported physical aggression also increased. However, this effect was primarily evident for boys, not girls.

Figure 3.24. Moderation of actor gender in the relationship between physical aggression toward target and target social dominance
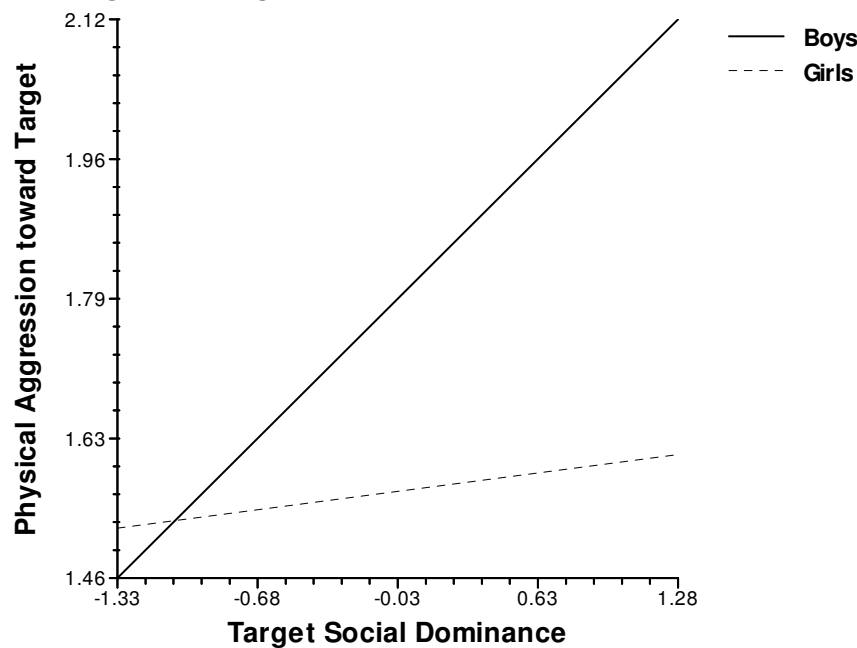
Note. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interaction effects observed, adolescents generally reported more physical aggression toward others they considered as friends than towards those they considered as nonfriends, although this difference was stronger for boys than for girls. In addition, adolescents generally reported more physical aggression toward more dominant peers, but this difference was especially evident for boys as compared to girls.

3.7   Verbal aggression

3.7.1   Main effects

The target-level findings showed that the regression coefficient relating friendship to reports of verbal aggression was positive and statistically significant (π = .143, *SE* = .012, *p* < .001), whereas liking was not significantly related to reported verbal aggression (π = -.002, *SE* = .013, *p* = .882). Target social status measures were significantly related to reported verbal aggression. Target perceived popularity was positively related to reported verbal aggression (π

= .101, *SE* = .022, *p* < .001) as was target social dominance (π = .203, *SE* = .031, *p* = .001), whereas the relationship between target social preference and reported verbal aggression was negative (π = -.428, *SE* = .029, *p* < .001).

The actor-level results revealed that actor perceived popularity (β = .258, *SE* = .057, *p* < .001) and actor social dominance (β = .177, *SE* = .081, *p* = .03) were both positively related to reports of verbal aggression, whereas actor social preference was negatively related to reported verbal aggression (β = -.486, *SE* = .070, *p* < .001). Finally, the regression coefficient relating actor gender to reported verbal aggression was negative and statistically significant (β = -.190, *SE* = .048, *p* < .001), indicating that boys reported more verbal aggression than did girls.

To summarize the main effects observed, as the actor's reported level of friendship with the target increased, more verbal aggression was reported. The actor's reported liking toward the target was not significantly related to reported verbal aggression. As well, actors reported more verbal aggression toward individuals who were more popular and dominant in the peer group, and less verbal aggression toward individuals who were generally well liked within the peer group. In terms of actor social status, as both the perceived popularity and social dominance of the actor increased, more verbal aggression was reported; as the social preference of the actor increased, less verbal aggression was reported. Finally, boys reported more verbal aggression than girls.

3.7.2 Cross-level interactions: Actor perceived popularity

Two significant cross-level interactions were found for actor perceived popularity and the target-level variables. Actor perceived popularity significantly moderated the relationship between target liking and reports of verbal aggression (β = .084, *SE* = .027, *p* = .002). As shown in Figure 3.25, the regression lines show a positive relationship between reported verbal aggression and target liking for actors with high levels of perceived popularity, whereas there was a negative relationship between reports of verbal aggression and target liking for actors with low levels of perceived popularity. Thus, for high perceived popularity actors, as target liking increased, the level of reported verbal aggression increased. In contrast, for low

perceived popularity actors, as target liking increased, the level of reported verbal aggression decreased. In other words, adolescents who were perceived to be highly popular reported more verbal aggression toward others they personally liked; adolescents who were less popular reported less verbal aggression toward others they personally liked.
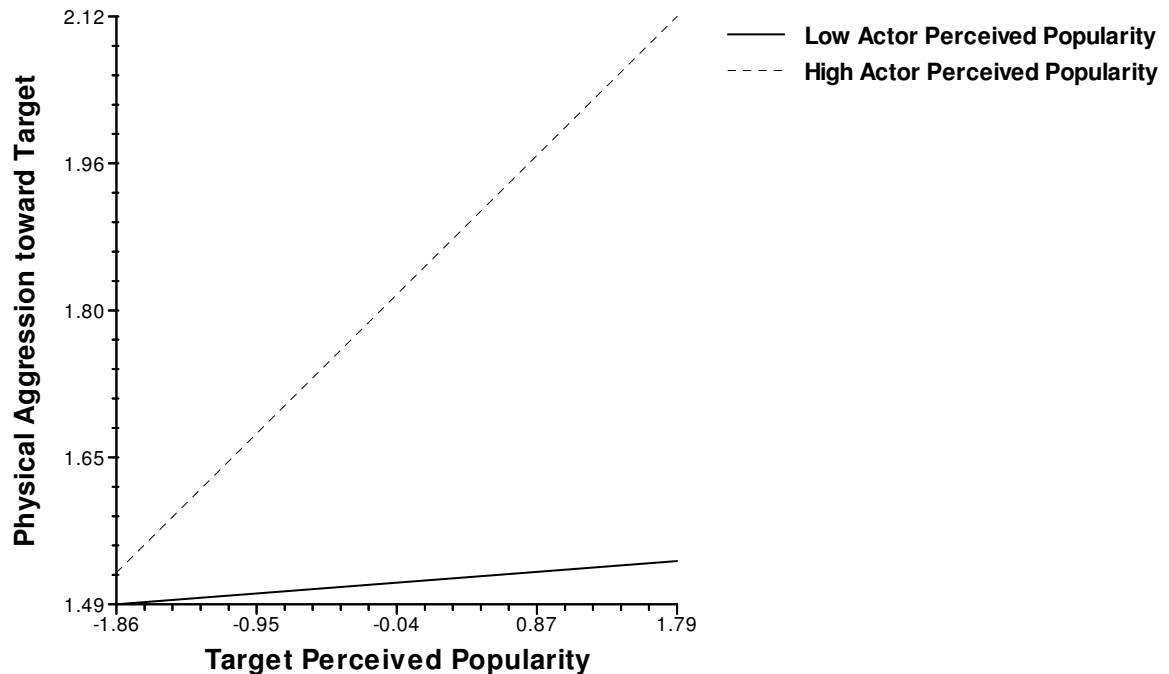
Figure 3.25. Moderation of actor perceived popularity in the relationship between verbal aggression toward target and target liking

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity also significantly moderated the relationship between target perceived popularity and reports of verbal aggression (β = .094, *SE* = .036, *p* = .010). As shown in Figure 3.26, the regression lines show that the positive relationship between reported verbal aggression and target perceived popularity was stronger for actors with high levels of perceived popularity than for actors with low levels of perceived popularity. As target perceived popularity increased, the level of reported verbal aggression increased, but this was especially

evident among actors who were seen as highly popular as compared to unpopular actors. In other words, adolescents generally reported more verbal aggression toward peers with high perceived popularity, although this was especially true for highly popular adolescents as compared to unpopular adolescents.

Figure 3.26. Moderation of actor perceived popularity in the relationship between verbal aggression toward target and target perceived popularity
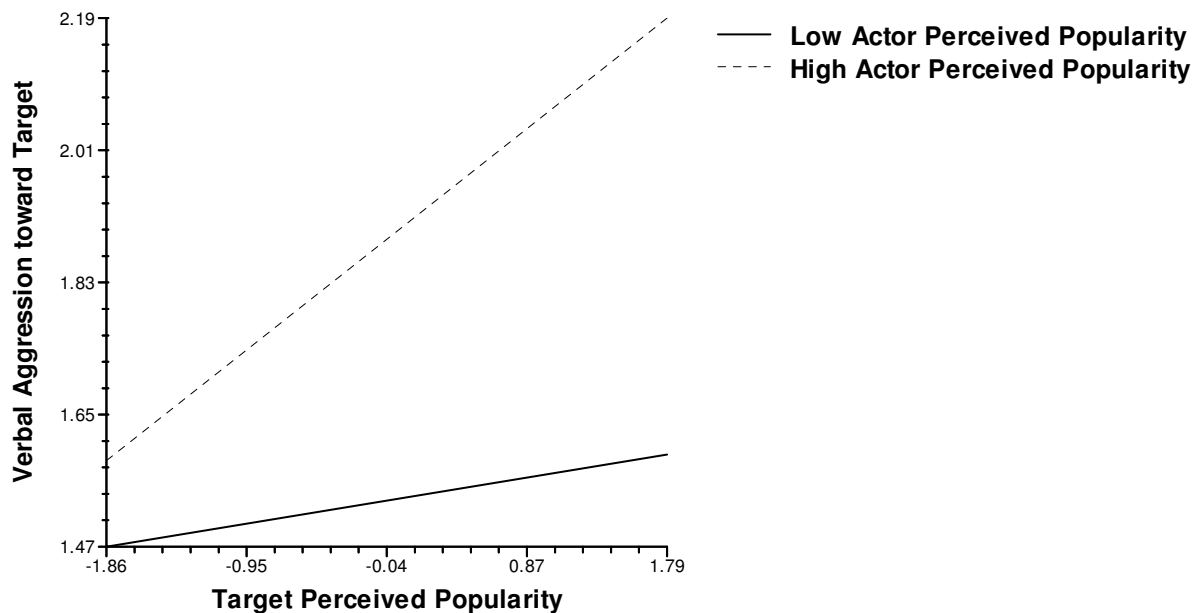
Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.
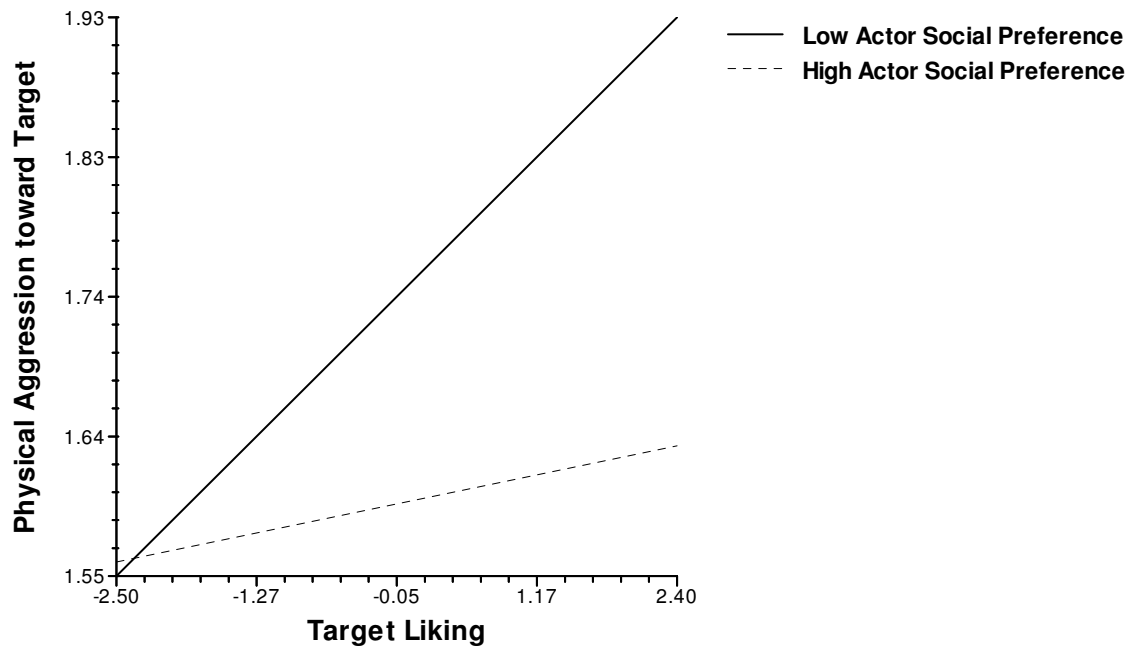
To summarize the significant cross-level interactions observed, highly popular adolescents reported more verbal aggression toward peers they personally liked, whereas unpopular adolescents reported less verbal aggression toward others they personally liked. As well, adolescents generally reported more verbal aggression toward highly popular peers, although this was especially evident for popular as compared to unpopular youth.

3.7.3 Cross-level interactions: Actor social preference

Three significant cross-level interactions were found for actor social preference. Actor social preference significantly moderated the relationship between target liking and reports of

verbal aggression (β = -.086, SE = .031, p = .006). As shown in Figure 3.27, the regression lines reveal a positive relationship between reported verbal aggression and target liking for actors with low levels of social preference, whereas there was a negative relationship between reported verbal aggression and target liking for actors with high levels of social preference. For low social preference actors, as target liking increased, the level of reported verbal aggression increased. In contrast, for high social preference actors, as target liking increased, the level of reported verbal aggression decreased. In other words, adolescents who were less accepted in the peer group reported more verbal aggression toward others they personally liked; adolescents who were more accepted in the peer group reported less verbal aggression toward others they personally liked.

Figure 3.27. Moderation of actor social preference in the relationship between verbal aggression toward target and target liking
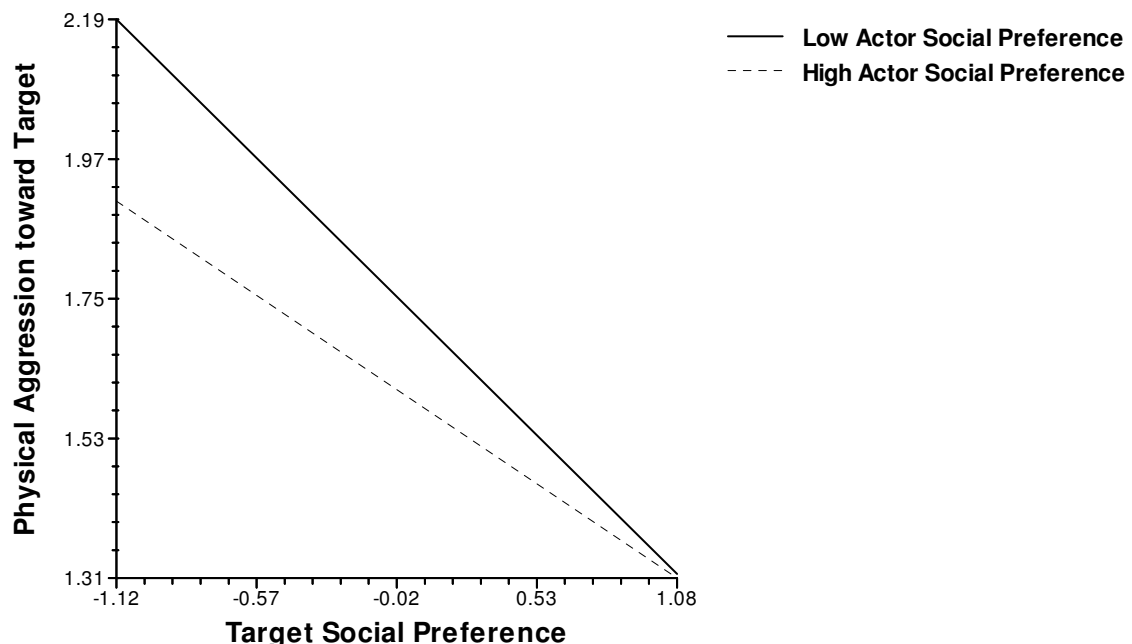

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social preference also significantly moderated the relationship between target social preference and reports of verbal aggression ($\beta = .402$, $SE = .067$, $p < .001$). As shown in Figure 3.28, the regression lines indicate the negative relationship between reported verbal aggression and target social preference was stronger for actors with low levels of social preference than for actors with high levels of social preference. As target social preference increased, the level of reported verbal aggression decreased, especially among low social preference actors as compared with high social preference actors. In other words, adolescents generally reported more verbal aggression toward others who were less accepted by peers, although this was especially the case for adolescents who were rejected by peers as compared to well accepted adolescents.

Figure 3.28. Moderation of actor social preference in the relationship between verbal aggression toward target and target social preference
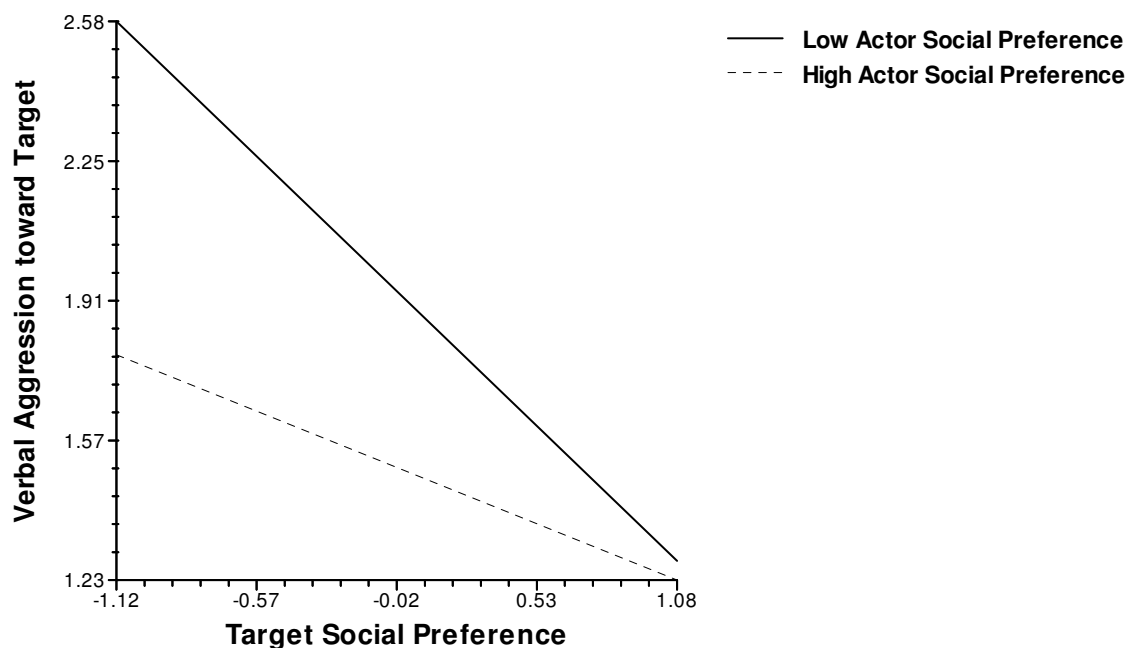
Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The results indicated that actor social preference also significantly moderated the relationship between target social dominance and reports of verbal aggression (β = -.273, *SE* = .078, *p* = .001). As shown in Figure 3.29, the regression lines specify that the positive relationship between reported verbal aggression and target social dominance was stronger for actors with low levels of social preference than for actors with high levels of social preference. As target social dominance increased, the level of reported verbal aggression increased. However, this effect was larger for low social preference actors than for high social preference actors. In other words, adolescents generally reported more verbal aggression toward others who were more dominant in the peer group, although this was especially the case for adolescents who were rejected by peers as compared to well accepted adolescents.

Figure 3.29. Moderation of actor social preference in the relationship between verbal aggression toward target and target social dominance

Note. Low Actor Social Preference is at the 25th percentile; high Actor Social Preference is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the significant cross-level interactions observed, adolescents who were less accepted in the peer group reported more verbal aggression toward others they personally liked, whereas adolescents who were more accepted in the peer group reported less verbal aggression toward others they personally liked. In addition, adolescents generally reported more verbal aggression toward others who were less accepted by peers and toward others who were more dominant in the peer group, although these findings were especially evident for adolescents who were rejected by peers as compared to well accepted adolescents.

3.7.4 Cross-level interactions: Actor social dominance

Two significant cross-level interactions were found for actor social dominance. Actor social dominance significantly moderated the relationship between target social preference and reports of verbal aggression ($\beta = -.253$, *SE* = .085, *p* = .003). As shown in Figure 3.30, the intersecting regression lines indicate the negative relationship between reported verbal aggression and target social preference was stronger for actors with high levels of social dominance than for actors with low levels of social dominance. For high social dominance actors, as target social preference increased, the level of reported verbal aggression decreased. However, this effect was less pronounced among low social dominance actors. In other words, adolescents generally reported more verbal aggression toward others who were less accepted by peers, although this was especially the case for highly dominant adolescents as compared to adolescents who were less dominant in the peer group.

Figure 3.30. Moderation of actor social dominance in the relationship between verbal aggression toward target and target social preference


Note. Low Actor Social Dominance is at the 25th percentile; high Actor Social Dominance is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social dominance also significantly moderated the relationship between target social dominance and reports of verbal aggression (β = .265, *SE* = .088, *p* = .003). As shown in Figure 3.31, the intersecting regression lines show that the positive relationship between reported verbal aggression and target social dominance was stronger for actors with high levels of social dominance than for actors with low levels of social dominance. For high social dominance actors, as target social dominance increased, the level of reported verbal aggression increased. However, this effect was larger for high social dominance actors than for low social dominance actors. In other words, adolescents generally reported more verbal aggression toward others who were more dominant in the peer group, although this was especially the case for highly dominant adolescents as compared to less dominant adolescents.

Figure 3.31. Moderation of actor social dominance in the relationship between verbal aggression toward target and target social dominance

Note. Low Actor Social Dominance is at the 25th percentile; high Actor Social Dominance is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the significant cross-level interactions observed, adolescents generally reported more verbal aggression toward others who were less accepted by peers and toward others who were more dominant in the peer group, although these findings were especially evident for highly dominant adolescents as compared to adolescents who were less dominant in the peer group.

3.7.5 Cross-level interactions: Actor gender

Finally, there were two cross-level interactions for gender. Gender significantly moderated the relationship between target friendship and reports of verbal aggression (β = -.052, SE = .023, p = .024). As shown in Figure 3.32, the regression lines indicate the positive relationship between reported verbal aggression and target friendship was stronger for boys

than for girls. Thus, as target friendship increased the level of reported verbal aggression increased, especially among boys.

Figure 3.32. Moderation of actor gender in the relationship between verbal aggression toward target and target friendship
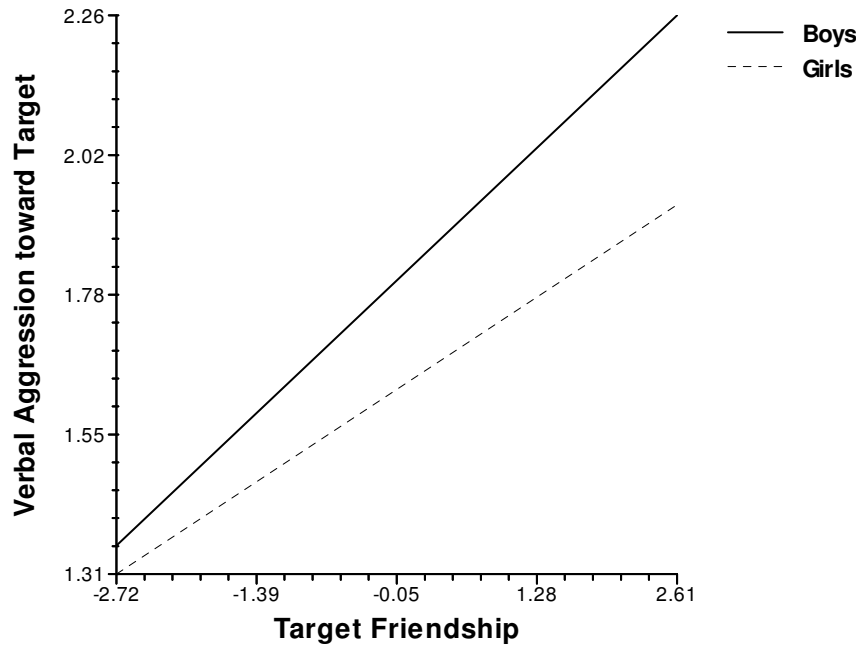
Note. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Gender also significantly moderated the relationship between target social dominance and reports of verbal aggression (β = -.149, *SE* = .062, *p* = .016). As shown in Figure 3.33, the regression lines reveal that the positive relationship between reported verbal aggression and target social dominance was stronger for boys than for girls. As target social dominance increased, the level of reported verbal aggression increased, especially among boys.

Figure 3.33. Moderation of actor gender in the relationship between verbal aggression toward target and target social dominance
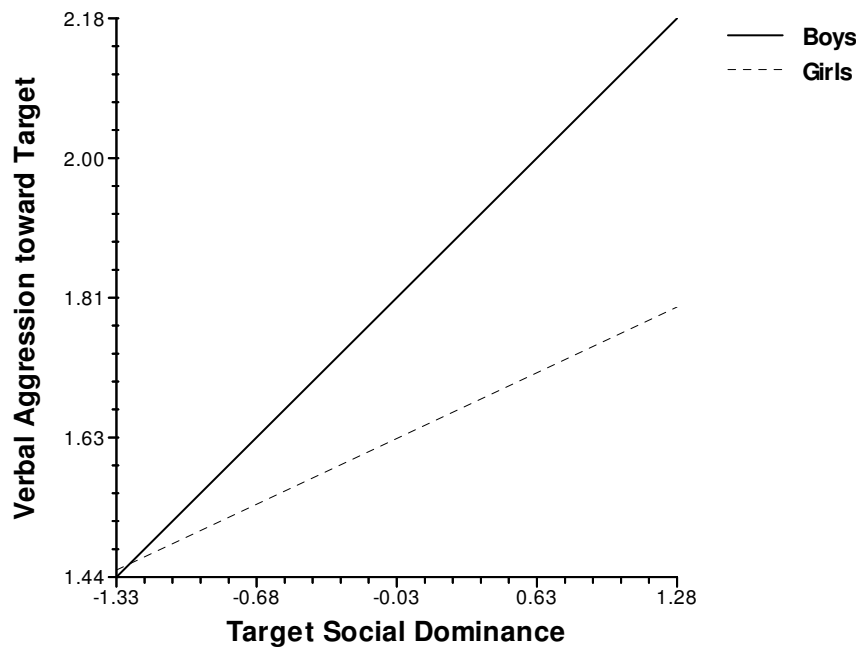
Note. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the significant cross-level interactions observed, adolescents reported more verbal aggression toward friends than toward nonfriends and reported more verbal aggression toward highly dominant than subordinate peers, although these differences were particularly evident among boys.

3.8   Relational aggression

3.8.1   Main effects

The target-level findings showed that the regression coefficient relating liking to reports of relational aggression was negative and statistically significant (π = -.184, *SE* = .012, p < .001). Although friendship was not significantly related to reported relational aggression (π = .010, *SE* = .011, p = .380), target social status measures were. Specifically, target perceived popularity (π = .102, *SE* = .021, p < .001) and target social dominance (π = .158, *SE* = .029, p < .001)

were both positively related to reports of relational aggression, whereas the relationship between target's social preference and reported relational aggression was negative (π = -.435, SE = .027, p < .001).

The actor-level results indicated that actor perceived popularity was positively related to reports of relational aggression (β = .194, SE = .056, p = .001), whereas the relationship between actor's social preference and reported relational aggression was non-significant (β = -.118, SE = .067, p = .079), as was the relationship between actor's social dominance and reported relational aggression (β = .085, SE = .079, p = .287). Finally, the regression coefficient relating actor gender to reports of relational aggression was positive and statistically significant (β = .200, SE = .047, p < .001), indicating that girls reported more relational aggression than did boys.

To summarize the main effects observed, as actors' reports of liking the target increased, less relational aggression was reported. Actors' reported level of friendship with the target was not significantly related to reported relational aggression. However, actors reported more relational aggression toward individuals who were more popular and dominant in the peer group, and less relational aggression toward individuals who were generally well liked within the peer group. In terms of actor social status, as the perceived popularity of the actor increased, more relational aggression was reported. Reports of relational aggression were not significantly related to the actor's level of acceptance or dominance in the peer group. Finally, girls reported more relational aggression than boys.

3.8.2 Cross-level interactions: Actor perceived popularity

Three significant cross-level interactions were found for actor perceived popularity and the target social status variables. Actor perceived popularity significantly moderated the relationship between target liking and reports of relational aggression (β = -.050, SE = .025, p = .048). As shown in Figure 3.34, the regression lines indicate the negative relationship between reported relational aggression and target liking was stronger for actors with high levels of perceived popularity than for actors with low levels of perceived popularity. As target liking

increased the level of reported relational aggression decreased. However, this effect was larger

for high perceived popularity actors than for low perceived popularity actors. In other words,

adolescents generally reported more relational aggression toward peers they personally disliked

than toward peers they personally liked, although this difference was especially pronounced for

highly popular adolescents as compared to unpopular adolescents.

Figure 3.34. Moderation of actor perceived popularity in the relationship between

relational aggression toward target and target liking

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the

75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below

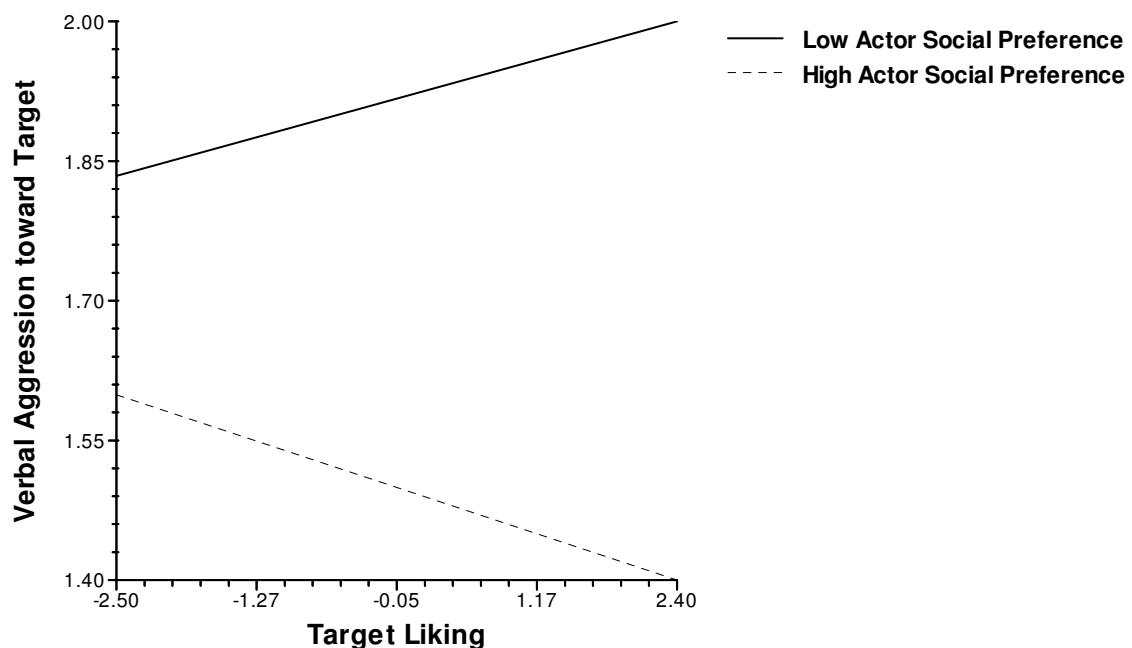the mean and a positive value indicates a score above the mean.

Actor perceived popularity also significantly moderated the relationship between target

perceived popularity and reports of relational aggression ($\beta = .160$, $SE = .034$, $p < .001$). As

shown in Figure 3.35, the intersecting regression lines show a positive relationship between

reported relational aggression and target perceived popularity for actors with high levels of

perceived popularity. In comparison, the slope of the regression line for actors with low levels of

perceived popularity is relatively flat. Thus, for high perceived popularity actors, as target

perceived popularity increased, the level of reported relational aggression increased. In

contrast, for low perceived popularity actors, there was no relationship between reported

relational aggression and target perceived popularity. In other words, adolescents who were

perceived to be highly popular reported more relational aggression toward other more popular

peers; adolescents who were unpopular reported that they did not vary their relational

aggression depending upon whether the target was more or less popular in the peer group.

Figure 3.35. Moderation of actor perceived popularity in the relationship between relational aggression toward target and target perceived popularity

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the 75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity was also a significant moderator for the relationship between

target social dominance and reports of relational aggression (β = -.217, *SE* = .060, *p* < .001).

As shown in Figure 3.36, the intersecting regression lines show a positive relationship between

reported relational aggression and target social dominance for actors with low levels of perceived popularity. In comparison, the slope of the regression line for actors with high levels of perceived popularity is relatively flat, although their level of relational aggression is fairly high across targets. For low perceived popularity actors, as target social dominance increased, the level of reported relational aggression increased. For high perceived popularity actors, there was no relationship between reported relational aggression and target social dominance. In other words, adolescents who were perceived to be unpopular reported more relational aggression toward highly dominant peers; adolescents who were perceived to be popular reported that they did not vary their relational aggression depending upon whether the target was more or less dominant in the peer group.

Figure 3.36. Moderation of actor perceived popularity in the relationship between relational aggression toward target and target social dominance

Note. Low Actor Perceived Popularity is at the 25th percentile and High Actor Perceived Popularity is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

104

To summarize the cross-level interactions observed, adolescents generally reported more relational aggression toward peers they personally disliked than toward peers they personally liked, although this difference was especially pronounced for highly popular adolescents as compared to unpopular adolescents. As well, adolescents who were perceived to be highly popular reported more relational aggression toward other more popular peers, whereas adolescents who were unpopular reported that they did not vary their relational aggression as a function of the target's level of popularity in the peer group. Finally, unpopular adolescents reported more relational aggression toward highly dominant peers. In comparison, popular adolescents reported that they did not vary their relational aggression as a function of the target's level of dominance in the peer group; nevertheless, their relational aggression was fairly high across targets of varying levels of dominance

3.8.3 Cross-level interactions: Actor social preference

Three significant cross-level interactions were found for actor social preference. Actor social preference significantly moderated the relationship between target friendship and reports of relational aggression (β = .065, SE = .028, p = .018). As shown in Figure 3.37, the intersecting regression lines show a positive relationship between reported relational aggression and target friendship for actors with high social preference, whereas a negative relationship between reported relational aggression and target friendship was found for actors with low social preference. For high social preference actors, as target friendship increased, the level of reported relational aggression increased. Conversely, for low social preference actors, as target friendship increased, the level of reported relational aggression decreased. In other words, adolescents who were well accepted in the peer group reported more relational aggression toward others they considered as friends than toward others they considered as nonfriends; adolescents who were less accepted in the peer group reported more relational aggression toward others they considered as nonfriends than towards others they considered as friends.

Figure 3.37. Moderation of actor social preference in the relationship between relational aggression toward target and target friendship
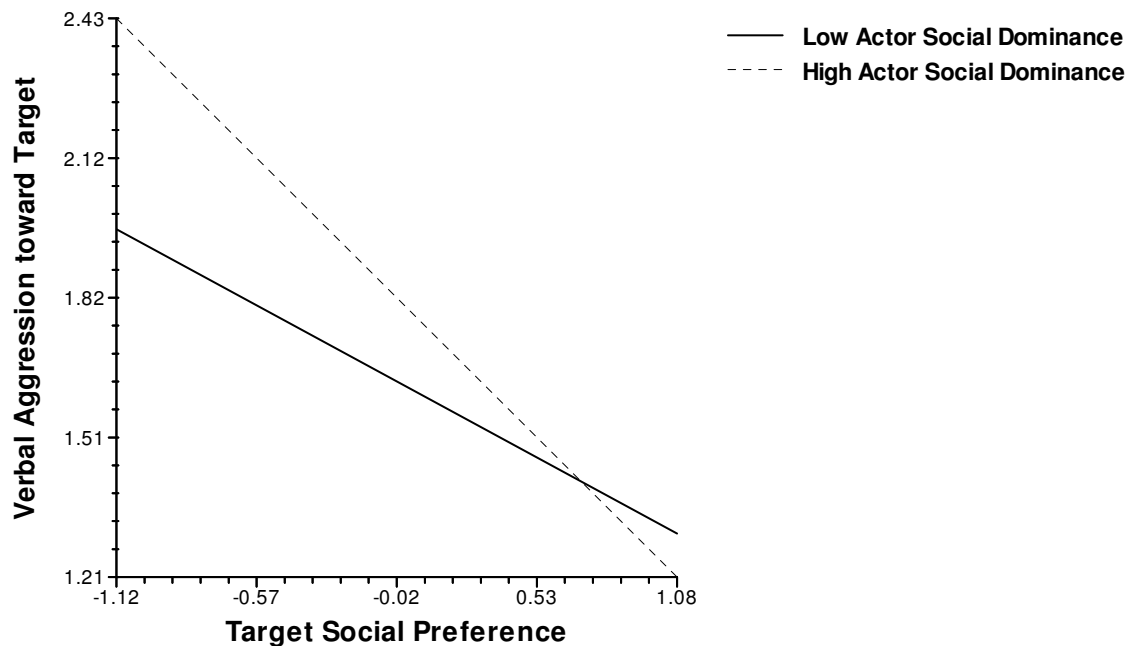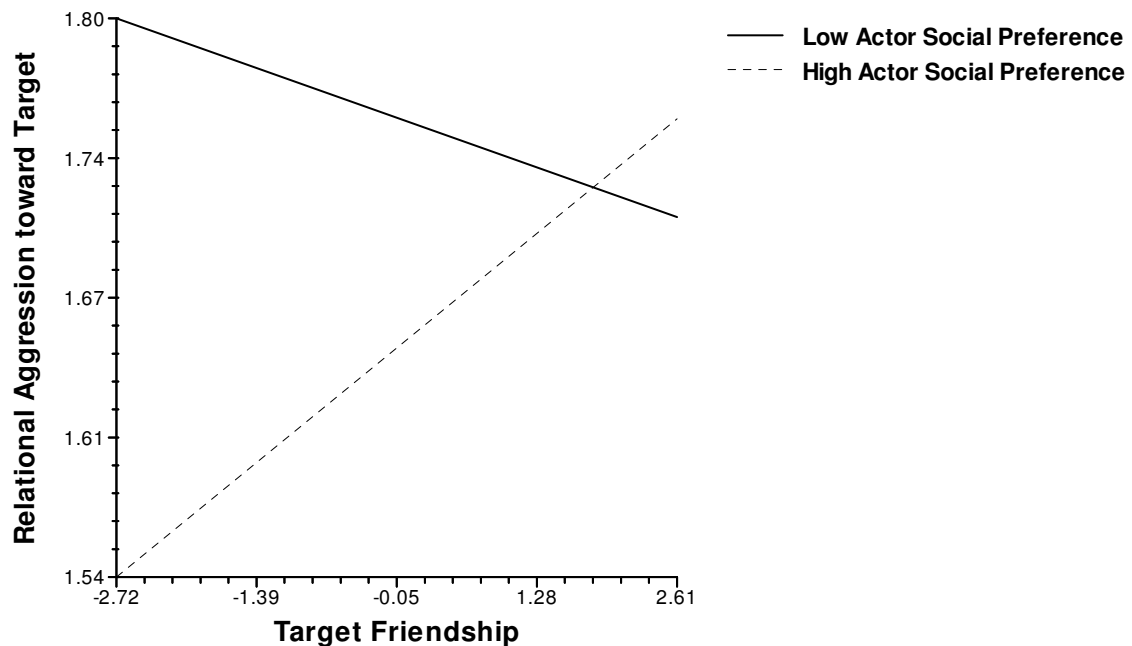

Note. Low Actor Social Preference is at the 25th percentile and High Actor Social Preference is at the 75th percentile. Target Friendship is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

The findings also showed that actor social preference significantly moderated the relationship between target liking and reports of relational aggression (β = -.082, *SE* = .030, *p* = .006). As shown in Figure 3.38, the regression lines indicate the negative relationship between reported relational aggression and target liking was slightly stronger for actors with high social preference than for actors with low social preference. As target liking increased, the level of reported relational aggression decreased. However, this effect was somewhat larger for high social preference actors than for low social preference actors. In other words, adolescents generally reported more relational aggression toward peers they personally disliked than toward peers they personally liked, although this difference was somewhat more pronounced for well accepted adolescents as compared to rejected adolescents.

Figure 3.38. Moderation of actor social preference in the relationship between relational aggression toward target and target liking

Note. Low Actor Social Preference is at the 25th percentile and High Actor Social Preference is at the 75th percentile. Target Liking is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social preference also was a significant moderator for the relationship between target social preference and reports of relational aggression (β = .140, *SE* = .064, *p* = .028). As shown in Figure 3.39, the intersecting regression lines reveal that the negative relationship between reported relational aggression and target social preference was somewhat stronger for actors with low social preference than for actors with high social preference. As target social preference increased, the level of reported relational aggression decreased. However, this effect was slightly larger for low social preference actors than for high social preference actors. In other words, adolescents generally reported more relational aggression toward peers who were rejected within the peer group than toward peers who were well accepted within the peer group, although this difference was somewhat more pronounced for rejected adolescents as compared to well accepted adolescents.
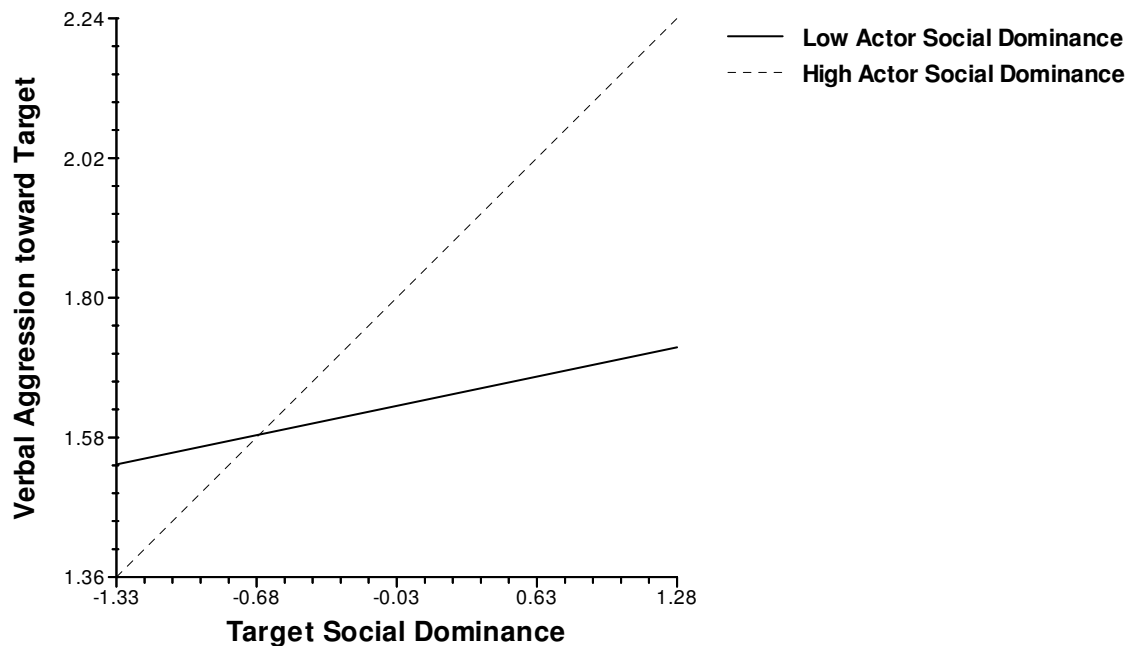
Figure 3.39. Moderation of actor social preference in the relationship between relational aggression toward target and target social preference

Note. Low Actor Social Preference is at the 25th percentile and High Actor Social Preference is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the significant cross-level interactions observed, adolescents who were well accepted in the peer group reported more relational aggression toward friends than toward nonfriends. In contrast, adolescents who were less accepted in the peer group reported more relational aggression toward nonfriends than towards friends. Adolescents generally reported more relational aggression toward peers they personally disliked than toward peers they personally liked, although this difference was especially pronounced for well accepted adolescents as compared to rejected adolescents. Finally, adolescents generally reported more relational aggression toward rejected peers than toward well accepted peers. However, this difference was especially evident for adolescents who were rejected by peers as compared to adolescents who were well accepted by peers.

3.8.4 Cross-level interactions: Actor social dominance

One significant cross-level interaction was found for actor social dominance. Actor social dominance significantly moderated the relationship between target social dominance and reports of relational aggression ($β$ = .330, SE = .083, p < .001). As shown in Figure 3.40, the intersecting regression lines show a positive relationship between reported relational aggression and target social dominance for actors with high levels of social dominance. In contrast, the slope of regression line for actors with low levels of social dominance was flat. Thus, for high social dominance actors, as target social dominance increased, the level of reported relational aggression increased. However, for low social dominance actors there was no relationship between reported relational aggression and target social dominance. In other words, adolescents who were highly dominant in the peer group reported more relational aggression toward other dominant peers; adolescents who were less dominant reported that they did not vary their relational aggression depending upon whether the target was more or less dominant in the peer group.

Figure 3.40. Moderation of actor social dominance in the relationship between relational aggression toward target and target social dominance
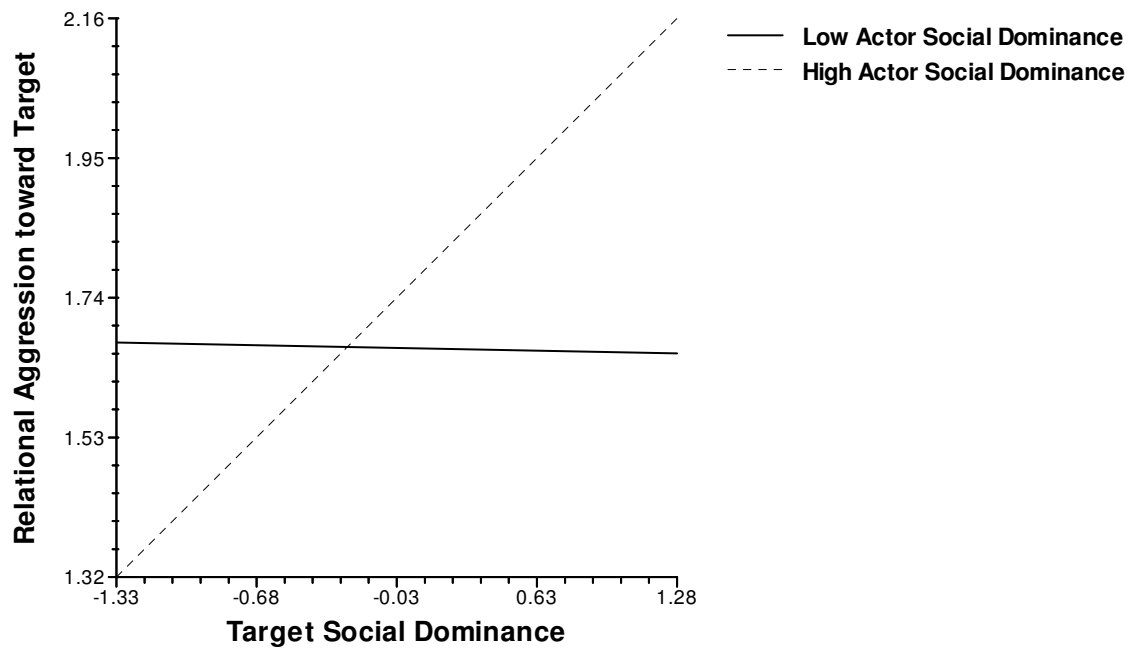
Note. Low Actor Social Dominance is at the 25th percentile and High Actor Social Dominance is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.8.5   Cross-level interactions: Actor gender

There were no significant cross-level interactions between actor gender and the target-level variables.

3.9   Surrogate aggression

3.9.1   Main effects

For the target-level findings, the regression coefficient relating liking to reports of surrogate aggression was negative and statistically significant (π = -.058, *SE* = .009, *p* < .001). However, friendship was not significantly related to reported surrogate aggression (π = .015, *SE* = .08, *p* = .076). In addition, target social status measures were significantly related to reports of surrogate aggression. Specifically, target perceived popularity was positively related to

reported surrogate aggression (π = .095, *SE* = .015, *p* < .001), as was target social dominance (π = .084, *SE* = .021, *p* = .001), whereas the relationship between target's social preference and reported surrogate aggression was negative (π = -.223, *SE* = .020, *p* < .001).

For the actor-level results, actor social preference was negatively related to reports of surrogate aggression (β = -.125, *SE* = .045, *p* = .006) and actor social dominance was positively related to reported surrogate aggression (β = .174, *SE* = .053, *p* = .001), whereas the relationship between actor perceived popularity and reports of surrogate aggression was non-significant (β = .057, *SE* = .037, *p* = .125). Finally, the regression coefficient relating actor gender to reported surrogate aggression was positive and statistically significant (β = .070, *SE* = .032, *p* = .027), indicating that girls reported more surrogate aggression than boys.
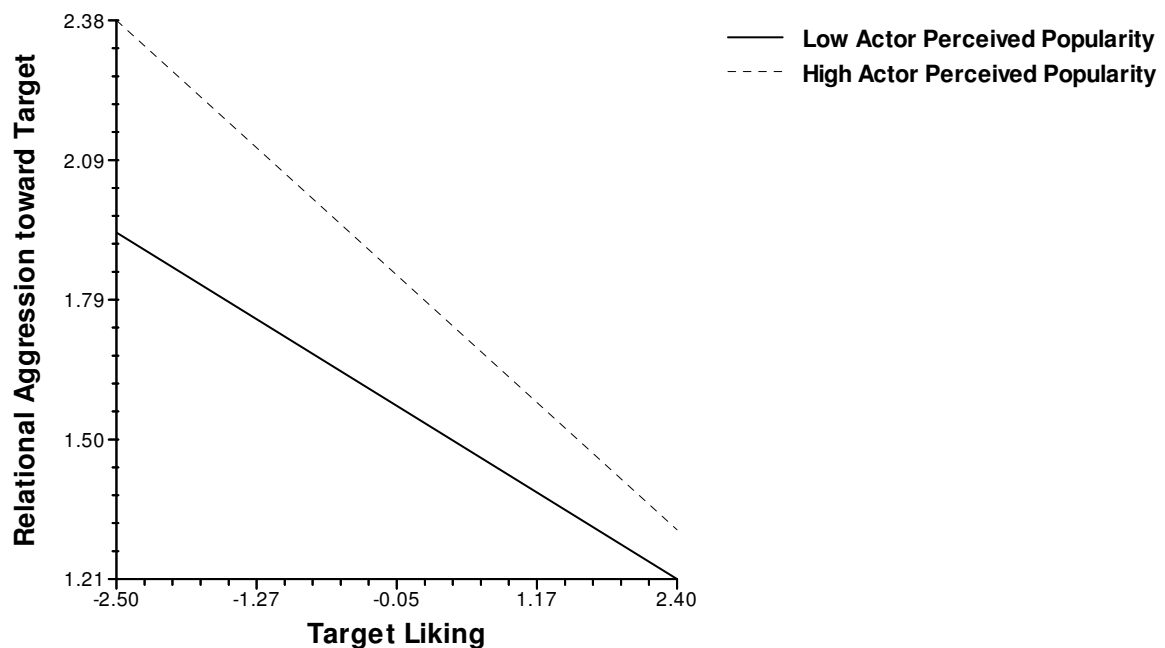
To summarize the main effects observed, as the actor's reports of liking the target increased, less surrogate aggression was reported. The actor's reported level of friendship with the target was not significantly related to reported surrogate aggression. As well, actors reported more surrogate aggression toward individuals who were more popular and dominant in the peer group, and less surrogate aggression toward individuals who were generally well liked within the peer group. In terms of actor social status, as the social dominance of the actor increased, more surrogate aggression was reported; as the social preference of the actor increased, less surrogate aggression was reported. Reports of surrogate aggression were not significantly related to the actor's level of perceived popularity in the peer group. Finally, girls reported more surrogate aggression than boys.

3.9.2 Cross-level interactions: Actor perceived popularity

Two significant cross-level interactions were found for actor perceived popularity and the target social status variables. Actor perceived popularity significantly moderated the relationship between target perceived popularity and reports of surrogate aggression (β = .076, *SE* = .025, *p* = .003). As shown in Figure 3.41, the intersecting regression lines indicate the positive relationship between reported surrogate aggression and target perceived popularity was stronger for actors with high levels of perceived popularity than for actors with low levels of

perceived popularity. As target perceived popularity increased, the level of reported surrogate

aggression increased. However, this effect was larger for high perceived popularity actors than

for low perceived popularity actors. In other words, adolescents generally reported more

surrogate aggression toward peers who were perceived to be popular within the peer group

than toward peers who were perceived to be unpopular within the peer group, although this

difference was especially pronounced for popular adolescents as compared to unpopular

adolescents.

Figure 3.41. Moderation of actor perceived popularity in the relationship between

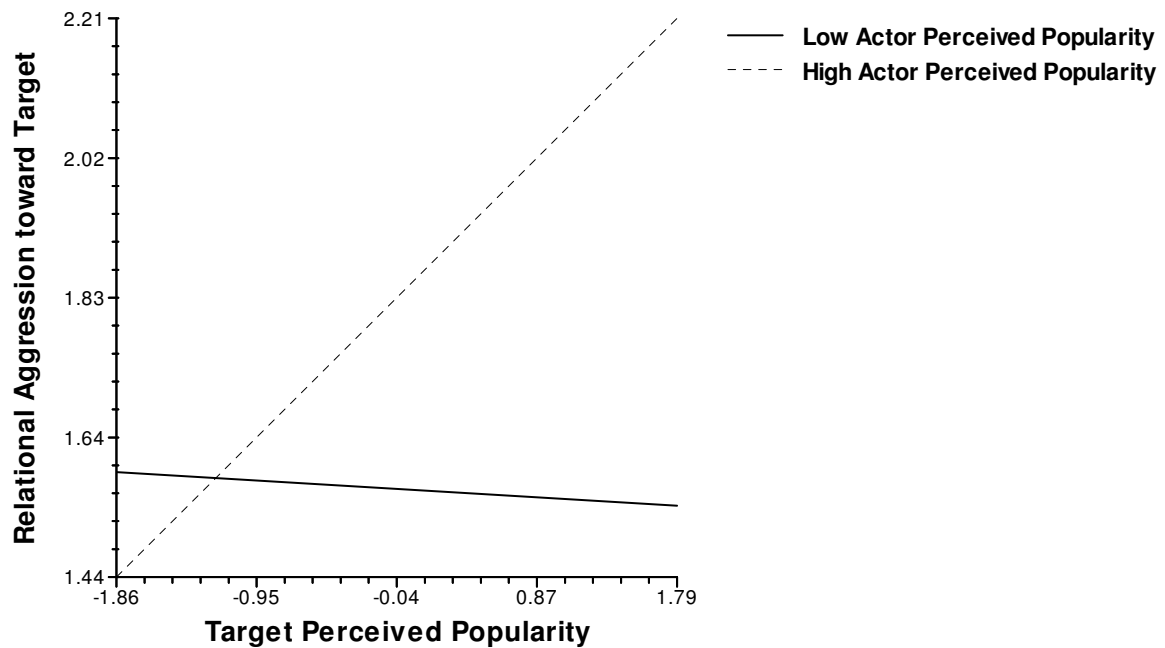**surrogate aggression toward target and target perceived popularity**

Note. Low Actor Perceived Popularity is at the 25th percentile; high Actor Perceived Popularity is at the

75th percentile. Target Perceived Popularity is grand mean centered at 0; thus, a negative value indicates

a score below the mean and a positive value indicates a score above the mean.

Actor perceived popularity was also a significant moderator for the relationship between

target social dominance and reports of surrogate aggression ($\beta = -.101$, *SE* = .044, *p* = .022).

As shown in Figure 3.42, the intersecting regression lines show a positive relationship between

reported surrogate aggression and target social dominance for actors with low levels of perceived popularity. In contrast, the slope of regression line for actors with high levels of perceived popularity was relatively flat, although their level of surrogate aggression remained consistently high across targets. For low perceived popularity actors, as target social dominance increased, the level of reported surrogate aggression increased. However, for high perceived popularity actors, there was no relationship between reported surrogate aggression and target social dominance. In other words, unpopular adolescents reported more surrogate aggression toward highly dominant peers; popular adolescents reported that they did not vary their surrogate aggression depending upon whether the target was more or less dominant in the peer group.

Figure 3.42. Moderation of actor perceived popularity in the relationship between surrogate aggression toward target and target social dominance
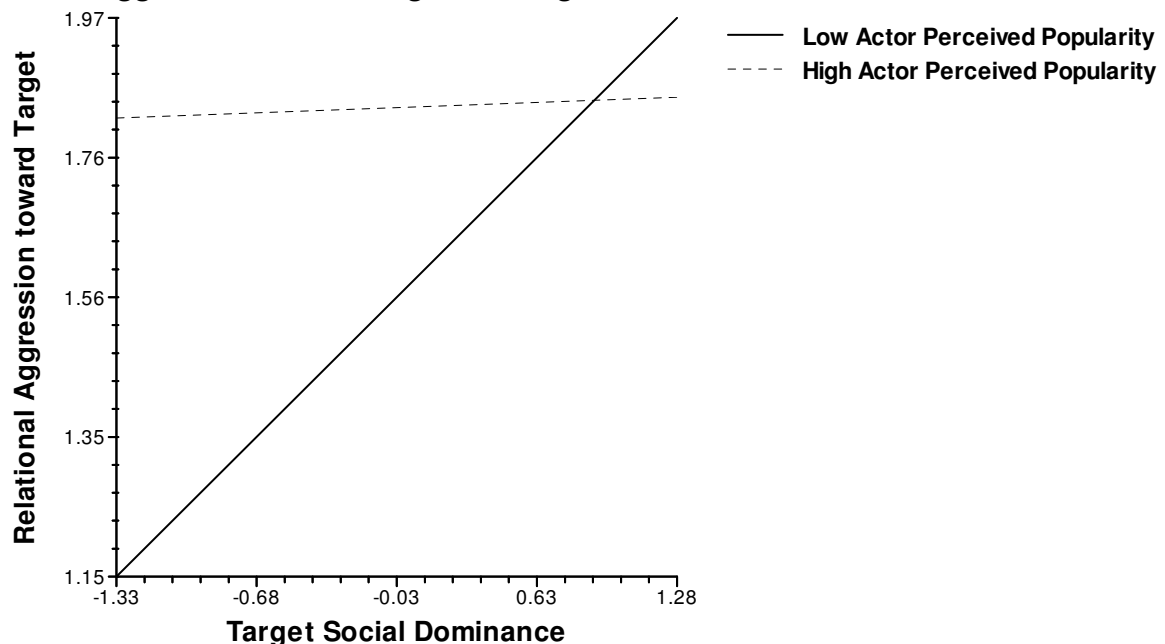

Note. Low Actor Perceived Popularity is at the 25th percentile and High Actor Perceived Popularity is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interactions observed, adolescents generally reported more surrogate aggression toward popular peers than toward unpopular peers, although this difference was especially evident for popular adolescents as compared to unpopular adolescents. In addition, unpopular adolescents reported more surrogate aggression toward highly dominant peers. In comparison, popular adolescents reported that they did not vary their surrogate aggression as a function of the target's level of social dominance in the peer group; nevertheless, their level of surrogate aggression was consistently fairly high across targets of varying levels of dominance.

3.9.3 Cross-level interactions: Actor social preference

One significant cross-level interaction was found for actor social preference. Actor social preference significantly moderated the relationship between target social preference and reports of surrogate aggression (β = .181, SE = .046, p < .001). As shown in Figure 3.43, the intersecting regression lines signify that the negative relationship between reported surrogate aggression and target social preference was stronger for actors with low social preference than for actors with high social preference. Therefore, as target social preference increased, the level of reported surrogate aggression decreased, especially among low social preference actors as compared with high social preference actors. In other words, adolescents generally reported more surrogate aggression toward peers who were rejected within the peer group than toward peers who were well accepted within the peer group, although this difference was especially pronounced for rejected actors as compared to well accepted actors.

Figure 3.43. Moderation of actor social preference in the relationship between surrogate aggression toward target and target social preference
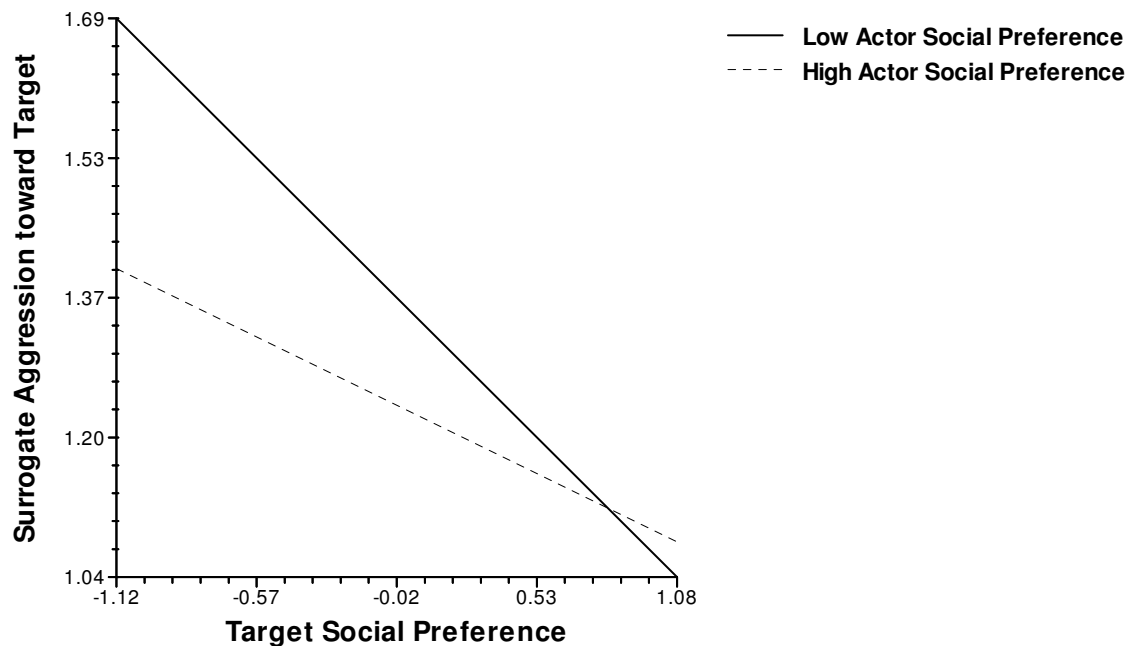
Note. Low Actor Social Preference is at the 25th percentile and High Actor Social Preference is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.9.4   Cross-level interactions: Actor social dominance

Two significant cross-level interactions were found for actor social dominance. Actor social dominance significantly moderated the relationship between target social preference and reports of surrogate aggression (β = -.253, *SE* = .059, *p* < .001). As shown in Figure 3.44, the intersecting regression lines revealed that the negative relationship between reported surrogate aggression and target social preference was stronger for actors with high levels of social dominance than for actors with low levels of social dominance. As target social preference increased, the level of reported surrogate aggression decreased, especially among high social dominance actors as compared with low social dominance actors. In other words, adolescents generally reported more surrogate aggression toward peers who were rejected within the peer

group than toward peers who were well accepted within the peer group, although this difference was especially pronounced for highly dominant actors as compared to less dominant actors.

Figure 3.44. Moderation of actor social dominance in the relationship between surrogate aggression toward target and target social preference

Note. Low Actor Social Dominance is at the 25th percentile and High Actor Social Dominance is at the 75th percentile. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

Actor social dominance also significantly moderated the relationship between target social dominance and reports of surrogate aggression ($\beta = .246$, $SE = .061$, $p < .001$). As shown in Figure 3.45, the intersecting regression lines show a positive relationship between reported surrogate aggression and target social dominance for actors with high levels of social dominance, whereas a negative relationship between reported surrogate aggression and target social dominance was found for actors with low levels of social dominance. For high social dominance actors, as target social dominance increased, the level of reported surrogate aggression increased. In contrast, for low social dominance actors, as target social dominance increased, the level of reported surrogate aggression decreased. In other words, adolescents

116

who were highly dominant in the peer group reported more surrogate aggression toward other dominant peers than toward subordinate peers; adolescents who were less dominant in the peer group reported more surrogate aggression toward other subordinate peers than toward highly dominant peers.

Figure 3.45. Moderation of actor social dominance in the relationship between surrogate aggression toward target and target social dominance

Note. Low Actor Social Dominance is at the 25th percentile and High Actor Social Dominance is at the 75th percentile. Target Social Dominance is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

To summarize the cross-level interactions observed, adolescents generally reported more surrogate aggression toward rejected peers than toward well accepted peers, although this difference was especially pronounced for dominant adolescents as compared to subordinate adolescents. As well, dominant adolescents reported more surrogate aggression toward others who were highly dominant in the peer group than toward subordinate peers, whereas adolescents who were less dominant in the peer group reported more surrogate aggression toward other subordinate peers than toward highly dominant peers.

117

3.9.5 Cross-level interactions: Actor gender

Finally, there was one significant cross-level interaction for gender. Gender significantly moderated the relationship between target social preference and reports of surrogate aggression (β = -.175, SE = .038, $p < .001$). As shown in Figure 3.46, the intersecting regression lines indicate the negative relationship between reported surrogate aggression and target social preference was stronger for girls than for boys. Thus, as target social preference increased, the level of reported surrogate aggression decreased, especially among girls as compared with boys.

Figure 3.46. Moderation of actor gender in the relationship between surrogate aggression toward target and target social preference
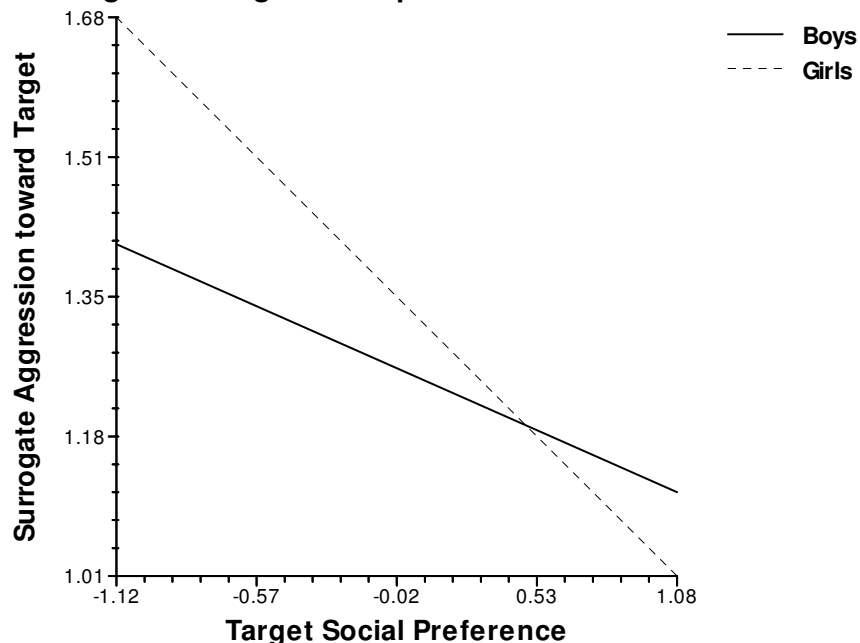
Note. Target Social Preference is grand mean centered at 0; thus, a negative value indicates a score below the mean and a positive value indicates a score above the mean.

3.10 Summary of significant effects

Table 3.5 displays a summary of all significant main effects and cross-level interaction effects. This table allows the reader to identify where significant effects were found across each of the six social behaviour variables. For the main effects, positive associations are denoted by

(+) and negative associations are denoted by (-). For the cross-level interactions, significant

effects are denoted by X. These interactions indicate that the associations between the social

behaviour variable and the type of target were significantly different for certain types of actors

(e.g., boys differed from girls; high perceived popular actors differed from low perceived popular

actors).

Table 3.5. Summary of significant effects across target-specific behaviour variables

_____

	Prosocial Behaviour		Aggressive Behaviour			
Main Effects	Altruistic	Public	Physical	Verbal	Relational	Surrogate
Target Friendship	(+)	(+)	(+)	(+)		
Target Liking	(+)	(+)	(+)		(-)	(-)
Target Perceived Popularity			(+)	(+)		(+)
Target Social Preference	(-)	(-)	(-)	(-)		(-)
Target Social Dominance	(+)	(+)	(+)	(+)		(+)
Actor Gender	G>B	G>B	B>G	B>G	G>B	G>B
Actor Perceived Popularity			(+)	(+)	(+)	
Actor Social Preference			(-)	(-)		(-)
Actor Social Dominance				(+)		(+)
Cross-level Interaction Effects						
Actor Gender X Target Friendship		X	X	X		
Actor Perceived Popularity X Target Friendship						
Actor Social Preference X Target Friendship	X	X			X	
Actor Social Dominance X Target Friendship	X	X				
Actor Gender X Target Liking	X					
Actor Perceived Popularity X Target Liking	X	X	X	X	X	
Actor Social Preference X Target Liking		X	X	X	X	
Actor Social Dominance X Target Liking						
Actor Gender X Target Perceived Popularity						
Actor Perceived Popularity X Target Perceived Popularity	X	X	X	X	X	X
Actor Social Preference X Target Perceived Popularity						
Actor Social Dominance X Target Perceived Popularity						
Actor Gender X Target Social Preference						X
Actor Perceived Popularity X Target Social Preference	X	X				
Actor Social Preference X Target Social Preference	X	X	X	X	X	X
Actor Social Dominance X Target Social Preference		X		X		X
Actor Gender X Target Social Dominance			X	X		
Actor Perceived Popularity X Target Social Dominance					X	X
Actor Social Preference X Target Social Dominance	X			X		
Actor Social Dominance X Target Social Dominance			X	X	X	X

Note. (+) indicates positive association; (-) indicates negative association; G denotes girls; B denotes boys; X indicates significant interaction.

4 Discussion

The overall purpose of the present study was to obtain a better understanding of why some early adolescents have a higher social position in the peer group than others. Previous researchers have argued that youths' general use of aggressive and/or prosocial behaviours toward peers enables them to secure high social status (e.g., Puckett et al., 2008). However, upon close examination of the literature, it becomes evident that high status youths' general behavioural tendencies may not fully explain their social success (Vaillancourt & Hymel, 2006), particularly given that some studies have found that lower status youth also engage in aggressive and prosocial behaviours toward peers (Hymel et al., 1993; LaFontana & Cillessen, 2002; Lease et al., 2002b; Prinstein & Cillessen, 2003; Xie et al., 2006). In addition, the majority of previous studies examining the status-behaviour link have used a methodology that measures behaviours as directed toward unidentifiable "others." Such a method is limited because it does not allow researchers to determine whether the identity of the target contributes to our understanding of youths' social behaviours among peers. Indeed, the present study and other recent research (Card & Hodges, 2007, 2010; Peets et al., 2007, 2008; Rodkin & Berger, 2008; Veenstra et al., 2007) have begun to highlight the importance of identifying who the "others" are, by going beyond the study of behaviours as general tendencies to the study of behaviours directed toward particular targets.

Hawley (1999; see also Asher, 1983) suggested that the ability to consider the social context in guiding the use of prosocial or aggressive behaviours with certain interaction partners serves an adaptive function in the peer group. The present study extended Hawley's ideas by proposing that, compared to lower status youth, high status youth interact with peers in a more socially skilled manner and thus, vary their behaviour toward particular types of peers in socially appropriate ways. The present study tested this hypothesis by considering early adolescents' social behaviours as target-specific (i.e., prosocial and aggressive behaviours directed toward specific types of peers). In undertaking this task, participants were asked to provide ratings of their aggressive and prosocial behaviours toward each same-gender grademate, ratings of their

relationship with each same-gender grademate, and ratings of each grademate's social status in the peer group. The information participants provided revealed that actors' aggressive and prosocial behaviours were related to their relationship with their targets and their targets' social status. Indeed, all early adolescents, regardless of their own social status, varied their behaviours toward different types of peers to some degree. However, high and low status youth often behaved differently toward certain types of peers and a distinct pattern of findings was apparent for each index of actors' social status. Details of these results are described in the sections to follow.

The results of the present study have provided evidence that simultaneously considering several levels of social complexity, such as attributes of the individual, different types of relationships, and group-based information, is valuable for furthering our understanding of interpersonal behaviour (Hinde & Stevenson-Hinde, 1987). Only one previous study has considered all levels simultaneously (Veenstra et al., 2007). Specifically, Veenstra and colleagues (2007) examined how target-specific bullying was related to gender, general aggressiveness toward peers and general vulnerability among peers (individual level), dyadic liking between bullies and victims (relationship level), and acceptance/rejection in the peer group (group level). The present study has extended the existing literature by considering several variables at each level of social complexity and assessing the target-specific nature of four types of aggressive behaviour and two types of prosocial behaviour. In doing so, this study has provided a more comprehensive understanding of the nuances involved in peer relationships.

The primary purpose of the present study was to determine whether higher status youths' target-specific behaviours differed from those of lower status youth. Therefore, the results involving the moderating effects of actors' social status are the focus of this discussion.

4.1 Are high status early adolescents' behaviours more target-specific than lower status early adolescents'?

In the present study, there were two general hypotheses relating to the variability of early adolescents' social behaviours. First, it was expected that early adolescents' reports of prosocial and aggressive behaviours toward peers would vary across targets. However, drawing upon arguments put forward by Hawley (1999), it was expected that high status actors' behaviours would be more target-specific than those of average status and low status actors. Consistent with the findings by Peets et al. (2008), results from the ICC computations for the entire sample revealed that adolescents' social behaviours had variance at both the actor- and target-level. Nevertheless, a greater proportion of the variance in aggressive and prosocial behaviours was attributed to differences across targets than to differences across actors. As hypothesized, early adolescents' social behaviours were more target-specific than consistent across targets.

These findings extend the research by Peets et al. (2008) who demonstrated that children's proactive and reactive aggression was more target-specific than consistent across targets. Specifically, the present results demonstrated that different forms of aggression and prosocial behaviour were reported by early adolescents in a target-specific manner. Thus, for the most part, early adolescents' aggressive and prosocial behaviours are determined more by the context than by consistent patterns of behaviour across interaction partners. These findings underscore the benefits of utilizing new methodological approaches that can distinguish targets of youths' aggressive and prosocial behaviours which may be necessary to provide a deeper, more nuanced, understanding of peer relationships than can be uncovered using more traditional measures of social behaviours.

As mentioned above, it was expected that high status actors' behaviours would be more target-specific than those of lower status actors. This hypothesis was not clearly supported. Results from the ICC computations showed that a greater proportion of the variance in youths' aggressive and prosocial behaviours was attributable to the target-level than to the actor-level

for high, average, and low status youth. Thus, early adolescents of all levels of status tend to vary their social behaviours across different types of peer targets. "Higher" ICCs were found for low status youth as compared to average and high status youth, suggesting that low status youths' social behaviours are less target-specific than those of average and high status youth. However, since no reliable and powerful statistical test is currently available to examine whether these differences are indeed significant, definitive conclusions cannot be drawn from comparing the ICCs across status groups. Nevertheless, it is interesting to note that the results from the ICC calculations suggested that high status early adolescents cannot be easily distinguished from average status early adolescents in terms of the target specificity of their social behaviours. Comparing the ICCs observed, high and average status early adolescents were relatively comparable in their tendency toward varying their level of prosocial behaviour and aggression when interacting with different peers. Contrary to hypotheses, high status and average status early adolescents were equally likely to vary their behaviours across different types of peer targets. Perhaps high status early adolescents possess a greater number of peer-valued characteristics (Vaillancourt & Hymel, 2006) than do average status early adolescents, thereby distinguishing them in this regard. Additional research is needed to more closely examine how high status youth differ from youth with average levels of status in the peer group.

Taken together, the results showed that early adolescents of all levels of social status vary their aggressive and prosocial behaviours as a function of the identity of the target to some degree. Therefore, Hawley's (1999) idea that it is an adaptive social skill to vary one's behaviours as a function of the identity of their interaction partners is called into question. Indeed, youth of all levels of social status varied their behaviours in different relational contexts, yet the ability to vary behaviour was not adaptive for low status youth, given their low social position in the peer group. Instead, whether social behaviours are adaptive or maladaptive may be better understood by comparing how high versus low status youth behave toward certain types of peers.

4.2 Do high status early adolescents direct their behaviours toward certain types of peers in ways that differ from lower status early adolescents?

Presumably, high status youths' behaviours reflect socially appropriate or adaptive behaviours, whereas low status youths' behaviours reflect socially inappropriate or maladaptive behaviours (Coie, 1990; Hawley, 1999). Thus, comparing how high versus low status youth vary their aggressive and prosocial behaviours across different types of peer targets may help explain why high status youth are more socially successful in the peer group as compared to low status youth. Drawing upon Hawley's resource control theory, it was expected that high status youth would behave differently toward specific types of peer targets as compared to low status youth. As hypothesized, comparisons of the cross-level interactions revealed that high and low status youth reported that they often interact with certain types of peers in different ways.

In the sections to follow, it is important to note that all other variables in the model were held constant for the multilevel analyses examining the moderating role of the actor's social preference, perceived popularity, social dominance, and gender. For example, the findings for the moderating role of actor perceived popularity in the relationship between prosocial behaviour and target friendship are interpreted with the understanding that all other actor-level variables (i.e., actor social preference, actor social dominance, actor gender) and target-level variables (i.e., target perceived popularity, target social preference, target social dominance, target liking) are held constant. Therefore, the effects of these other variables are partialled out, statistically.

The present findings provide additional support for using a multidimensional approach to studying social status given that all three indices were related, yet distinguishable (Lease et al., 2002a). Importantly, the current research has demonstrated a distinct pattern of findings for the target-specific behaviours associated with early adolescents' social preference, perceived

popularity, and social dominance, suggesting that different social processes are involved for each type of social status.

Indeed, the current study revealed findings that contribute to our understanding of group dynamic processes. First, accepted youth reported engaging in prosocial behaviours toward a variety of peers and relational aggression toward friends. Not surprisingly, very few early adolescents reported that they direct aggression toward accepted youth. However, only accepted youth as well as unpopular youth reported engaging in higher levels of prosocial behaviour toward accepted peers. These findings possibly suggest that accepted youth may not be viewed as key players in the social game. In other words, given that accepted youth are prosocial toward a variety of peers and report relatively little aggression, most of their peers may not view them as keen social competitors (Hawley, 1999).

In contrast, the results suggest that popular and dominant youth may play a more prominent role in the peer group's social dynamics. For instance, popular youth reported engaging in both aggressive and prosocial behaviours toward other popular peers. In comparison, dominant youth reported the highest levels of aggression toward other dominant peers. Given that early adolescents prioritize having popularity and control in the peer group (LaFontana & Cillessen, 2010; Merten, 2004), these findings may reflect popular and dominant adolescents' efforts in competing with one another for high status positions (Hawley, 1999). Interestingly, the results also showed that dominant early adolescents reported verbal and surrogate aggression toward rejected peers, whereas popular early adolescents reported engaging in prosocial behaviour toward rejected targets. Thus, rejected youth are treated differently by popular and dominant peers. Taken together, these findings suggest that accepted, popular, and dominant early adolescents interact with peers in several different ways, illustrating the complexities of the group dynamic processes during early adolescence.

In attempting to understand the differences observed in the present study, one possible explanatory mechanism concerns the notion of social power that was proposed by La Freniere and Charlesworth (1983; see also Vaillancourt & Hymel, 2006). According to these

researchers, children hold social power in the peer group in two ways: (1) explicit power which is gained explicitly and forcefully or (2) implicit power which is the result of peer admiration and, thus, is dependent upon being seen favorably by peers. Essentially, explicit power is taken; implicit power is granted. In the paragraphs below, the concept of social power is considered (post hoc) as one way to explain the current results regarding social preference, social dominance, and perceived popularity.

By examining the findings across the cross-level interactions, several relational contexts are apparent where (1) opposite patterns of target-specific behaviours of high versus low status youth emerged and (2) one status group's behaviours varied as a function of the target while the other status group's behaviours were consistent. Differences between high and low status early adolescents' target-specific behaviours were most pronounced across five particular relational contexts. Findings relating to each of these relational contexts are discussed in turn in the sections to follow.

4.2.1 Variations in prosocial and aggressive behaviours as a function of the target's perceived popularity

Popular youth made much more of a distinction than unpopular youth in their reports of directing prosocial and aggressive behaviours toward popular (or unpopular) peers. Popular youth varied their aggressive and prosocial behaviours as a function of the target's perceived popularity, whereas unpopular youths' behaviours were relatively consistent or were directed toward the "opposite" types of peers. Specifically, popular youth reported more prosocial behaviours and aggression toward other popular peers than toward unpopular peers; unpopular youth reported more prosocial behaviours toward other unpopular peers than toward popular peers and reported little variation in their aggression as a function of the target's level of perceived popularity.

The results support the contention that prosocial and aggressive behaviours of popular youth are employed in an effort to maintain their high social position in the peer group (Adler & Adler, 1998; Merten, 1997; Puckett et al., 2008). Popular youth may use aggression toward

other popular peers in an effort to compete for the highest social positions in the peer group (explicit power), while at the same time, they may use prosocial behaviours to offset their aggressiveness (Merten, 1997). Furthermore, since high status peers are those who determine the social norms for the peer group (Pellegrini, 2002), popular youth likely engage in prosocial behaviours toward other popular youth to maintain positive relationships and garner favour with those who hold the most status and prestige in the peer group (implicit power).

In contrast, unpopular early adolescents' reports of physical, verbal, and relational aggression were not related to the target's level of perceived popularity. However, unpopular actors reported more surrogate aggression toward popular targets than toward unpopular targets. Unpopular youth may lack the assertiveness required for direct forms of aggression and may prefer surrogate aggression because it is an indirect approach to harm a popular peer. Moreover, unpopular youth may use surrogate aggression toward popular targets as an attempt to increase their status, but they may not be effective in doing so given their limited social connections in the peer group (Adler & Adler, 1998; LaFontana & Cillessen, 2002; Xie et al., 2006). In addition, unpopular youth more frequently reported prosocial behaviours toward other unpopular peers than toward popular peers. This is not surprising, given that unpopular youth often affiliate with other unpopular peers (Adler & Adler, 1998). Nevertheless, unpopular youths' prosocial behaviours may not be socially adaptive in the sense that unpopular youth do not attempt to ingratiate themselves among more popular peers who have the potential to accept them into the higher ranks of the peer group (Adler & Adler, 1998).

4.2.2 Variations in prosocial behaviours as a function of the target's social preference

Opposite patterns of findings emerged for associations between prosocial behaviours and the target's level of social preference. Surprisingly, popular actors more frequently targeted rejected peers with their altruistic and public prosocial behaviours, whereas unpopular actors more frequently targeted accepted peers with their altruistic prosocial behaviours. Perhaps popular youth may use prosocial behaviour toward rejected targets to prevent being victimized

by them, as rejected youth are often aggressive toward peers (LaFontana & Cillessen, 2002; Newcomb et al., 1993; Vaillancourt & Hymel, 2006). Since accepted youth tend to be more prosocial than aggressive generally (LaFontana & Cillessen, 2002), popular youth may not perceive much social benefit in directing high levels of prosocial behaviours toward accepted peers. Finally, popular youth may use prosocial behaviours toward rejected peers in order to please the teachers, as some teachers may be likely to encourage popular youth to provide support to rejected youth, both academically and socially. Regardless of their motivation, directing prosocial behaviours toward rejected peers should foster implicit power among popular youth. By behaving prosocially toward rejected peers, popular youth are able to maintain their reputation of being "nice" (Merten, 1997), and receive the admiration of lower status peers.

Accepted and rejected early adolescents were also distinguishable in terms of their target-specific prosocial behaviours toward targets of varying levels of social preference. Rejected actors more frequently targeted other rejected peers, whereas the social preference of the target made very little impact on the frequency of accepted actors' prosocial behaviours. Thus, in this case, the hypothesis that high status early adolescents would vary their behaviours more toward certain types of peers was not supported. The finding that accepted early adolescents reported similar levels of prosocial behaviours, particularly public prosocial behaviour, across targets of varying levels of social preference provides insight into why accepted youth are generally well liked by the majority of their peers. Accepted individuals behaved prosocially toward accepted as well as rejected peers, whereas rejected individuals behaved prosocially more often toward other rejected peers. Behaving prosocially toward peers of all status levels may contribute to accepted youths' implicit power because they are more likely to be viewed positively by a greater number of peers than are rejected youth.

4.2.3 Variations in prosocial and aggressive behaviours as a function of the target's social dominance

Clear distinctions in the target-specific behaviours of popular (versus unpopular) and dominant (versus subordinate) early adolescents were apparent in their reports of aggression toward targets of varying levels of social dominance. In particular, unpopular youth reported more often targeting dominant rather than subordinate peers with relational and surrogate aggression. Unpopular youth may perceive these forms of aggression as "safer" methods to harm dominant peers because they may feel intimidated to do so overtly due to a fear of retaliation. According to Pellegrini (2002), the peer group sanctions the appropriateness and inappropriateness of aggression, where aggression directed "up" the status hierarchy from a lower status peer toward a higher status peer is unacceptable. Therefore, unpopular youths' violation of this peer group norm may partially account for their low status in the peer group. In comparison, popular youth did not vary their relational and surrogate aggression as a function of the target's level of social dominance. However, contrary to what was expected, popular youth used higher levels of relational and surrogate aggression toward subordinate targets than did unpopular youth. Where unpopular youth may be inclined to use aggression reactively, popular youth may be more likely to use aggression instrumentally (Prinstein & Cillessen, 2003) and may target dominant and subordinate youth equally to serve different purposes. Perhaps popular youth use relational and surrogate aggression toward dominant youth because these forms of aggression are less detectable (Bjorkqvist et al., 1992; Crick & Grotpeter, 1995; Underwood, 2002). Since dominant youth hold power and control in the peer group (Hawley, 1999), popular youth may use relational and surrogate aggression toward dominant peers to keep their aggression hidden so that dominant peers will not be able to identify them as culpable thereby justifying "taking away" their status. In addition, popular youth may use these types of aggression toward subordinate peers as a method to "keep them in their place" (Adler & Adler, 1998).

Distinctions in the target-specific behaviours of dominant and subordinate early

adolescents were also apparent in their reports of aggression toward targets of varying levels of

social dominance. Specifically, subordinate youth reported little variation in their aggression as

a function of the target's level of social dominance. In light of previous research showing that

subordinate youth have difficulty attending to social cues (Hawley, 2003; Hawley et al., 2002;

Lease et al., 2002b), this potentially is an indication that subordinate youth are not as socially

savvy as their peers (Hawley, 2003; Lease et al., 2002b; Savin-Williams, 1979; Savin-Williams

& Freedman, 1977); thus, they may not be skilled enough to vary their aggression when

interacting with peers of differing levels of social dominance. Furthermore, dominant actors

reported more aggression toward dominant targets and less aggression toward subordinate

targets as compared to subordinate actors. This finding provides support for the ethological

perspective of social dominance where alpha group members are said to use aggression most

often toward other closely ranked individuals because they are perceived as being the greatest

threats to their own status (La Frenerie & Charlesworth, 1983; Savin-Williams, 1979).

Importantly, the results suggest that social dominance reflects explicit power that may be

maintained through aggressive competition with other high ranking peers. Peers who witness

the aggressive interactions of dominant youth may be fearful and submissive as a result,

thereby contributing to the explicit power of dominant youth (La Freniere & Charlesworth, 1983).

Finally, distinctions in the target-specific behaviours of accepted and rejected early

adolescents were apparent in their reports of prosocial behaviour and aggression toward targets

of varying levels of social dominance. Both accepted and rejected youth reported verbal

aggression more frequently toward dominant than subordinate peers, although rejected youth

did so much more frequently than did accepted youth. For prosocial behaviours, both accepted

and rejected youth reported using prosocial behaviours more often toward dominant peers than

toward subordinate peers, although accepted youth reported more prosocial behaviours toward

subordinate peers than did rejected youth. Even though rejected youths' prosocial behaviours

toward dominant peers should, theoretically, be an adaptive method to increase their status in

131

the peer group (Adler & Adler, 1998), perhaps they are not effective because they are not perceived as behaving prosocially by peers (Hymel, 1986). Moreover, rejected youths' verbal aggression may be perceived more negatively than those of accepted youth, given that disliked peers are seen as more responsible for their negative behaviours than are liked peers (Hymel, 1986).

4.2.4 Variations in physical and verbal aggression as a function of liking or disliking the target

Striking differences in the target-specific behaviours of popular (versus unpopular) early adolescents were apparent in their reports of physical and verbal aggression toward targets whom they personally liked or disliked. Specifically, popular youth more frequently targeted personally liked peers with physical and verbal aggression, whereas unpopular youth were relatively non-aggressive toward personally liked peers. Thus, popular and unpopular early adolescents interact with peers they personally like differently. Popular youths' use of highly visible overt aggression toward liked targets may afford them status in the peer group because their noticeable behaviours ensure they receive the attention of their peers (explicit power). Indeed, aggressive youth can be viewed as attractive social partners (Bukowski, Sippola, & Newcomb, 2000), particularly popular-aggressive youth (Rodkin et al., 2000).

Distinctions in the target-specific behaviours of accepted and rejected early adolescents were also evident in their reports of physical and verbal aggression toward targets whom they personally liked or disliked. Rejected youth more frequently reported physical aggression toward personally liked peers, as did accepted youth but to a much lesser degree. Although rejected youth reported more verbal aggression overall compared to accepted youth, rejected youth targeted personally liked peers and accepted youth more frequently targeted personally disliked peers. Previous research has suggested that rejected youth may be widely disliked because they tend to be highly aggressive toward peers, whereas accepted youth may be widely liked because they to be less aggressive toward peers (e.g., Coie, 1990; Coie et al., 1982; Newcomb et al., 1993). The present findings extend this research by demonstrating that

132

accepted youth reported less overt aggression toward personally liked targets than did rejected youth. These findings suggest that, compared to rejected youth, accepted youth have better developed social skills and may realize the social benefit of having amicable personal relationships which enables them to have implicit social power in the peer group.

4.2.5 Variations in relational aggression as a function of the reported level of friendship with the target

For the most part, early adolescents' social behaviours toward friends or nonfriends varied little as a function of the actor's level of social status in the peer group. However, there was one obvious exception. The degree to which individuals were accepted versus rejected in the peer group clearly impacted reports of relational aggression toward friends versus nonfriends. Whereas accepted youth reported more frequently targeting friends than non-friends using relational aggression, rejected youth more often reported using relational aggression toward non-friends than friends. Aggression used within friendships, particularly relational aggression, may be easily hidden from the peer group. Thus, accepted youth may be afforded status in the peer group because the majority of their peers may not be aware that they are relationally aggressive toward their friends and they are still able to be seen favorably by many peers (implicit power). For those in the peer group who are aware of accepted youths' relational aggression, they may still afford status to accepted youth since adolescents often view aggressive acts as deserved (Hymel, Rocke-Henderson, & Bonanno, 2005). Moreover, despite using relational aggression toward friends, accepted youth may have higher quality friendships than rejected peers (Parker & Asher, 1993). Indeed, accepted youth reported higher levels of prosocial behaviour toward friends than did rejected youth. This heightened level of prosocial behaviour toward friends may enable accepted youth to be better able to resolve conflicts in their friendships than rejected youth (Parker & Asher, 1993) and maintain positive peer relationships. In contrast, for rejected youth who reported greater relational aggression toward non-friends than toward friends, their aggressiveness may simply be more noticeable. Since rejected youth tend to have fewer friends than accepted youth (Parker & Asher, 1993), their use

of relational aggression may be more readily noticed, since it would be directed toward a larger proportion of their peer group, none of whom have reason to justify, rationalize or minimize such behaviour. Moreover, rejected youth are not likely to be afforded status by those whom they victimize, limiting their potential to have implicit power in the peer group.

4.3   Summary: How are high and low status youth's target-specific aggressive and prosocial behaviours most distinct?

In light of the current findings, high social preference appears to reflect implicit power which is related to interacting with certain peers in a manner that enables them to be viewed favorably by the majority of their peers. The target-specific behaviours of accepted youth differed from lower status peers' in several ways. Specifically, accepted youth reported using prosocial behaviours toward peers of varying levels of social status. In addition, accepted youth were generally less aggressive than rejected youth, particularly in terms of overt aggression. However, accepted youth reported more relational aggression toward friends than nonfriends. Compared with accepted youth, rejected youth reported more prosocial behaviour toward other rejected peers and dominant peers, more physical and verbal aggression toward peers they personally like, and more relational aggression toward nonfriends. These findings demonstrate that differences in early adolescents' levels of social preference are not only related to their aggression versus prosocial behaviours generally (e.g., Newcomb et al., 1993), but differences in their acceptance or rejection by peers can be explained by how they differ in their prosocial and aggressive behaviours directed toward certain types of peers. Importantly, accepted and rejected youth reported that they engaged in both aggressive and prosocial behaviours, but they directed some of their behaviours toward different types of peers.

In contrast, the findings suggest that high social dominance may reflect explicit power that is "taken" through aggressive interactions with other dominant peers. The results confirmed previous research showing that social dominance is associated with the use of overt and relational aggression and prosocial behaviour toward peers (Lease et al., 2002a). The present

134

study has extended previous research by illustrating that dominant and subordinate youths' reported prosocial behaviours toward certain types of targets did not differ for the most part. However, dominant youth reported more aggression toward other dominant peers, whereas subordinate youths' aggression varied little as a function of the target's social dominance. These findings support the notion that dominant individuals compete aggressively with other high ranking peers for control over resources (La Frenerie & Charlesworth, 1983; Savin-Williams, 1979). The present results indicate that, although dominant youth reported engaging in prosocial behaviours, it was their target-specific use of aggression that differentiated their behaviours from subordinate youth. Recent research on the prosocial and aggressive behaviours of preschoolers supports this conclusion. Specifically, Roseth and colleagues (2011) found that the rate of increase in prosocial behaviour over time was similar for dominant and subordinate children. However, the trajectory for aggression was different for dominant and subordinate children: the rate of aggression for dominant children varied over time but the rate of aggression for subordinate children was comparatively more consistent. Thus, it appears that aggression may play a particularly important role in the social processes relating to social dominance. Dominant youths' use of aggression toward other high ranking peers may enable them to explicitly take control over the peer group.

Finally, the results from the present study suggest that high perceived popularity may reflect both explicit and implicit power. The current findings have extended previous research showing that individuals who engage in high levels of both aggression and prosocial behaviour toward peers generally are perceived to be popular (Adler & Adler, 1998; Merten, 1997; Puckett et al., 2008). Although Hawley (1999) hypothesized that these "bistrategic" individuals would direct prosocial behaviours toward a certain set of peers (e.g., friends) and direct aggression toward a different set of peers (e.g., enemies), the current results demonstrated that perceived popular youth often directed both aggression and prosocial behaviours toward the same set of peers. Specifically, popular youth reported more prosocial and aggressive behaviours toward other popular peers than toward unpopular peers. Popular youth also reported more prosocial

and overtly aggressive behaviours toward those they personally liked than toward those they personally disliked. In contrast, unpopular youth reported more prosocial behaviours toward unpopular peers and varied their aggression little as a function of the target's perceived popularity or how much they personally liked or disliked the target. Early adolescents' desire to affiliate with popular peers (Dijkstra et al., in press; LaFontana & Cillessen, 2010; Merten, 2004) may enable popular youth to "get away with" aggression toward popular and liked peers. Alternatively, popular early adolescents' aggressive behaviours may be easily forgiven or may be more readily accepted, given that peers may focus more on their prosocial abilities than their aggression (LaFontana & Cillessen, 1998). Thus, popular early adolescents may have explicit power through their aggression toward popular and liked peers, yet they may also have implicit power given that their prosocial behaviours may enable them to be viewed positively by these same peers.

Taken together, the findings have illustrated that the status-behaviour link is much more complicated than previously understood. First, the results suggest that differences between high and low status youth are not only attributed to their general behavioural tendencies, but are apparent in the differences in how high and low status youth behave toward certain types of peers. Second, social preference, perceived popularity, and social dominance each appear to reflect different social processes that relate to social power in distinct ways. Specifically, high social preference may reflect implicit power, high social dominance may reflect explicit power, whereas high perceived popularity may reflect both implicit and explicit power. It is important to note that, although the notion of social power provided one possible lens through which to interpret the findings, this conceptual framework was employed post-hoc. Thus, the conclusions relating to social power beg empirical validation in future studies.

4.4 Pattern of findings for actor gender

For the most part, the patterns of results observed were similar for boys and girls. Nevertheless, some gender differences emerged in the present study. Similar to many previous

studies (Archer, 2004; Crick & Grotpeter, 1995; Hyde, 1984; Maccoby & Jacklin, 1974; Underwood, 2002, 2003), boys more frequently reported using physical and verbal aggression and girls more frequently reported using relational and surrogate aggression. In addition, girls reported more altruistic and public prosocial behaviours as compared to boys. Several studies have shown that girls engage in higher levels of prosocial behaviour than boys generally (e.g., Closson, 2009b; Hawley, 2003; Lease et al., 2002a; Savin-Williams, 1979). However, when subtypes of prosocial behaviour were considered, Carlo et al. (2003) found that adolescent girls used more altruistic prosocial behaviours than boys, whereas boys used more public prosocial behaviours than girls. No such gender difference was observed in the present study. The participants in the study by Carlo and colleagues were slightly older (mean age of 15.8 years) than those in the present study (age range of 11 to 15 years); thus, this discrepant finding may reflect developmental differences. Further research is needed regarding gender differences in the subtypes of prosocial behaviour.

Gender was found to moderate the relationship between early adolescents' social behaviours and the target of those behaviours in some relational contexts. Although both boys and girls reported public prosocial behaviour more often toward friends than nonfriends and reported using altruistic prosocial behaviour more often toward personally liked than personally disliked targets, girls reported higher levels of public prosocial behaviour toward friends and higher levels of altruistic prosocial behaviour toward personally liked peers than did boys. Girls are often faced with pressure to conform to gender role expectations of being nice and maintaining high quality, intimate personal relationships (Block, 1983) and report having friendships that reflect these expectations (Parker & Asher, 1993). Thus, it was not surprising that whether the target was a friend or a liked peer, girls reported more prosocial behaviour than boys.

Both boys and girls reported physical and verbal aggression (i.e., overt aggression) more frequently toward friends than nonfriends, although boys reported higher levels of overt aggression toward friends than did girls. This finding was not surprising, given that boys have

been found to use higher levels of overt aggression toward peers (Archer, 2004; Hyde, 1984; Maccoby & Jacklin, 1974) and likely use overt aggression within their friendships given that they frequently interact with friends. Similarly, both boys and girls reported using overt aggression more often toward dominant than subordinate targets, although boys reported higher levels of overt aggression toward dominant targets than did girls. Given dominant youths' propensity toward aggressiveness (Closson, 2009b; La Freniere & Charlesworth, 1983; Lease et al., 2002a; Pellegrini, 2002; Strayer & Strayer, 1976; Strayer & Trudel, 1984), it is likely that boys and girls often use overt aggression in reaction to being victimized by dominant peers. Nevertheless, boys may report more overt aggression toward dominant targets than do girls because boys tend to be more confrontational than girls (Archer, 2004; Block, 1983).

Finally, both boys and girls reported using surrogate aggression more frequently toward rejected targets than toward accepted targets, although this association was stronger for girls. As was the case with boys and girls' reports of prosocial behaviours, this finding is also reflective of the gender role expectation placed upon girls to behave prosocially with their peers. Girls may employ more social forms of aggression (Bjorkqvist et al., 1992; Crick & Grotpeter, 1995; Underwood, 2002) in order to keep their aggression hidden so as to maintain the appearance of being nice (Merten, 1997). Use of surrogate aggression toward rejected peers may allow girls to easily meet their own needs while appearing to be non-aggressive. Girls may target rejected peers in particular because it may be easier to recruit others to use aggression toward widely disliked peers. As often may be the case with relational aggression (Owens, Shute, & Slee, 2000), it is likely that surrogate aggression creates a similar social bond among those who are involved, thereby meeting girls' need to form close personal relationships. Future research will be needed to determine what types of peers are recruited through the use of surrogate aggression to test this hypothesis.

In summary, gender differences in early adolescents' social behaviours reported across peer targets were similar to those found in previous research. When considering boys' and girls' aggressive and prosocial behaviours toward particular types of peers, relatively few

138

gender differences emerged. Thus, in most relational contexts, boys and girls vary their behaviours in similar ways when interacting with certain types of peers.

4.5 Implications

The findings of the present study have several important implications. First, the results suggest that parents, educators, and professionals should be made aware that early adolescents engage in prosocial behaviours toward their friends but they also report aggression toward their friends, particularly overt aggression. Given their mix of prosocial and aggressive interactions with friends, it may be difficult for adults to determine whether friends are causing harm to one another or if they are simply engaging in playful teasing. Indeed, Peets and colleagues (2008) suggested that aggression used within friendships may represent how youth learn to handle conflicts with friends, given that they may feel "safer" to be aggressive toward friends. Future research is needed to determine whether aggression within friendships is indicative of conflict or more serious acts causing harm.

Salmivalli, Karna, and Poskiparta (2009) suggested that it may be helpful for teachers to encourage prosocial (non-aggressive), high status students to support children who are victimized by peers. However, it is important that teachers are cautious when approaching high status youth, given that they are often more aggressive than the teacher may be aware of (Hawley, 2003). Indeed, the results from the present study revealed that generally "non-aggressive" accepted youth reported more relational aggression toward friends than nonfriends. Moreover, the present findings showed that popular and dominant youth reported using more aggression toward other popular and dominant youth, rather than toward unpopular or subordinate youth. Thus, it may be difficult for teachers to recruit high status students to support victims who are not themselves being targeted by other high status peers' aggression or are engaging in aggressive behaviours themselves. Perhaps, it may be more effective for teachers to recruit students outside of the immediate peer group (e.g., students from higher grade levels) as impartial mediators.

The current findings also have important implications for intervention and prevention initiatives. Broad approaches focusing on all students might not be the most effective given that the results showed that early adolescents directed more of their aggression toward certain peers than others. Early adolescents, particularly popular and dominant youth, directed more of their aggression toward rejected, popular, and dominant peers than toward accepted, unpopular, and subordinate peers. In addition, physical and verbal aggression were more often reported toward friends than nonfriends and relational and surrogate aggression were more often reported toward personally disliked peers than personally liked peers. Therefore, programs should be designed to address students' specific needs. For example, efforts to reduce aggression among high status youth could focus on enhancing empathy skills as opposed to social skills training. Providing social skills training to such highly sociable students would be in vain. Instead, high status students would benefit from understanding that their aggressive behaviours can cause harm to others and are not acceptable methods to attain their goals. Other positive and appropriate outlets that foster high status students' desire to demonstrate their social prominence, such as encouraging them to organize a talent show, fundraise for a worthy cause, or create a group of students dedicated to promoting kindness and respect in their school, should be encouraged. Also of great importance is to ensure students are taught that enduring aggressive behaviours that originate from anyone, including one's friends, should not be tolerated. Finally, social emotional learning initiatives should be designed to help students understand their biases in how they interact prosocially with different types of peers.

4.6   Limitations and future directions

Although the present study has contributed to our understanding of the processes involved in early adolescents' social interactions, there were limitations that should be noted. First, the sample in the present study included predominantly Caucasian early adolescents living in small cities consisting mostly of middle socio-economic status families. Although there

is no theoretical reason to assume the findings would not be universal (Hawley, 1999), it is important for future research to replicate this study using more diverse samples of early adolescents living in larger urban centres to determine the generalizability of the findings.

This study focused exclusively on self-reports of aggression and prosocial behaviour. Given the present study's lack of additional sources of information on youths' social interactions, the validity of the self-reported behaviours may be called into question. Indeed, it is not clear to what extent the present findings are indicative of observable dyadic behaviour. However, in a study similar to the present research, Peets and colleagues (2008) demonstrated moderate levels of agreement between self-reported target-specific aggression and peer-reported aggression. In addition, the few studies that have compared observed- and self-reported aggression have shown the two to be consistent (Frey, Hirschstein, Edstrom, & Snell, 2009; Hanish & Guerra, 2004). Nevertheless, it will be important for future research to use peer- and teacher-reports and observational methods to address the validity of the self-report measure used in the present study.

In addition, assessments of social behaviours involved two items per construct. Although studies using a target-specific methodology are very time consuming, future research should attempt to measure target-specific behaviours using multiple items to increase the reliability and validity of the measures. Since findings were relatively similar for altruistic and public prosocial behaviours, it may be important to study other types of prosocial behaviours (e.g., compliant, anonymous, dire, and emotional; Carlo et al., 2003) in order to determine whether variations in target-specific use of certain types of prosocial behaviours emerge.

In the present study, the behaviour of the target toward the actor and the target's perception of his/her relationship with the actor were not taken into account due to the high number of constructs under investigation in the study. Future research should consider this type of dyadic approach (Card & Hodges, 2007, 2010; Coie et al., 1999; Veenstra et al., 2007) to better understand multiple influences on the behaviours of youth of varying levels of social status. It also will be important for future studies to consider additional group-level influences

141

on early adolescents' use of target-specific behaviours such as accounting for the norms within youths' friendship groups, social networks, and the classroom (Bukowski & Sippola, 2001; Cillessen, 2007; Dijkstra, Lindenberg, & Veenstra, 2008).

Same-gender ratings were used for the measures of friendship, liking, and social behaviours given that, during early adolescence, other-gender friendships may serve different functions than same-gender friendships and liking may be confounded with romantic feelings (Berndt & McCandless, 2009). Nevertheless, previous studies have shown that cross-gender bullying is quite possible across grades 4 through 7 (Closson et al., 2007; Rodkin & Berger, 2008; Veenstra et al., 2007). Moreover, Veenstra and colleagues (2007) found that, for preadolescents, the gender composition of the bully-victim dyad was not related to the probability that a bully-victim relationship would occur. In other words, same-gender dyads were not more likely than were other-gender dyads. These previous studies suggest that it is important for future studies to examine youths' behaviours toward other-gender peers to determine whether the present findings vary as a function of the gender of the target.

The present study demonstrated that differences between high and low status early adolescents' target-specific aggressive and prosocial behaviours may help explain why some youth have higher social status in the peer group than others. Nevertheless, previous research has also shown that possessing peer-valued characteristics such as attractiveness, athleticism, and being funny also differentiate high and low status peers (LaFontana & Cillessen, 2002; Vaillancourt & Hymel, 2006; Xie et al., 2006). Future research involving assessments of both peer-valued characteristics and target-specific behaviours will provide a more complete understanding of how high social status youth differ from their lower status peers.

A new construct, surrogate aggression, was examined in the present study. Although early adolescents reported lower levels of surrogate aggression compared to other types of aggression, several interesting findings emerged. Of interest in the present study was whether surrogate and relational aggression are redundant constructs. As expected, the findings for surrogate and relational aggression were similar in several ways. Indeed, both relational and

142

surrogate aggression were more common among girls than boys, which was not surprising given that girls tend to have more socially advanced skills as compared to boys (e.g., Cohn, 1991; LaFontana & Cillessen, 1999). In addition, the main effect results pertaining to the target-level variables were similar for relational and surrogate aggression. Specifically, both relational and surrogate aggression were negatively related to target liking and preference and were also positively related to target perceived popularity and dominance.

Despite the similarities in associations found for surrogate and relational aggression, there were several notable differences. First, surrogate and relational aggression were moderately correlated (r = .56), thus, only 31% of the variance was explained. Moreover, surrogate and relational aggression showed a different pattern of findings with respect to the actor's relationship with the target. Specifically, actors' status moderated the association between relational aggression and the degree of friendship and liking toward the target, whereas there was no moderation effect for surrogate aggression. In addition, surrogate and relational aggression showed some similar patterns of findings with respect to the target's status, yet they also showed some different patterns. For example, unpopular youth did not vary their relational aggression as a function of the target's perceived popularity, whereas they reported more surrogate aggression toward popular than unpopular targets.

It is also interesting to note that surrogate aggression (used across targets) was positively related to actors' social dominance, whereas relational aggression (used across targets) was positively related to actors' perceived popularity. This finding is a testament to the level of sophistication required to engage in surrogate aggression and may reflect an instrumental use to maintain power and control over the peer group. In contrast, previous longitudinal research has shown that relational aggression is a particularly useful tool to attain and maintain perceived popularity, particularly for girls (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003; Rose et al., 2004b). Thus, future research using longitudinal designs may show that surrogate aggression is an effective tool to attain and maintain social dominance. Taken together, the results suggest that surrogate aggression and relational aggression are distinguishable, yet

overlapping constructs. Nevertheless, given that surrogate aggression is a new construct, future studies are needed to determine if relational and surrogate can be distinguished in other samples.

Longitudinal studies will also be necessary to determine whether socially appropriate, target-specific behaviours help early adolescents ascend the status hierarchy or whether they are primarily useful to maintain high social status. For example, if lower status individuals modeled their target-specific behaviours after high status peers, would such modeling result in an increase in social standing in the peer group? Or, does high social status afford certain individuals with liberties in how they are allowed to interact with peers? Answers to these questions will help researchers to clarify the group dynamic processes involved in status-behaviour link.

Finally, many of the specific hypotheses put forth regarding the moderating role of actor social status in the relationship between their aggressive and prosocial behaviours toward different types of targets were not supported. These hypotheses addressed predictions in how higher status actors were expected to differ from lower status actors in terms of which types of peers they targeted with which types of social behaviours. Given the exploratory nature of the study and little relevant extant literature upon which to base predictions, it was not surprising that few of these hypotheses received support. Many of the hypotheses were based on previous ethnographic research (Adler & Adler, 1998; Merten, 1997) and the study by Closson (2009b) in which social status was operationalized in terms of group membership (e.g., an individual was deemed to be popular if he/she affiliated with the popular clique) and friendship was operationalized in terms of friendship cliques or groups of friends. In contrast, in the present study social status was measured as an individual marker of status in the peer group and friendship was measured as dyadic affection. It is possible that these methodological and conceptual differences may explain why the majority of the hypotheses in the present study were not supported. Future research is needed to clarify whether group-level conceptions of

social status and friendship translate to individual measures of social status and dyadic measures of friendship.

4.7   Conclusions

This study sought a deeper understanding of why some early adolescents have higher social positions in the peer group than others by testing the hypothesis that high status youth use their aggressive and prosocial behaviours in a more adaptive manner compared to their lower status peers. In doing so, this study highlighted the value of using a target-specific approach where the identity of the target was considered. Along with recent previous research (e.g., Peets et al., 2008), the present study showed that youths' social behaviours are comparatively more variable than consistent across interaction partners, calling into question the merit in labeling individuals as "aggressive" or "prosocial." Previous studies using measures assessing general tendencies toward certain behaviours may fail to capture the complete picture. As Fabes and colleagues (2009) have argued, such methods may only capture high impact or salient behaviours.   Previous peer-reports may have missed other actor-target interactions that the larger peer group may not be aware of. Moreover, previous self-reports may be biased when asking youth to report on their aggressive or prosocial behaviours toward "others." For example, if an individual tends to interact aggressively with a few peers, they may not be inclined to report that they use aggression toward "others." However, by asking early adolescents to consider their behaviour toward each grademate, the present study was able to ensure that participants acknowledge that they may in fact use aggression, although only toward certain peers.

Using a multidimensional approach to social status, the present study has shown that targets may often be either high or low status, depending upon how status is defined. Moreover, a different pattern of findings emerged for each of the three types of actor social status. Extending previous research demonstrating that social preference, perceived popularity, and social dominance are all related yet distinguishable constructs (e.g., Lease et al., 2002a),

145

the present study has demonstrated the merit in considering the role of each of these types of social status in the target-specific behaviours of early adolescents. Much like the measures of social status, the results also indicate that friendship and liking, often methodologically intertwined in previous research, may in fact be best considered as related, but distinguishable constructs, given that some different patterns of finding emerged for each.

The work of Hawley and colleagues (Hawley, 1999; Hawley, 2003; Hawley et al., 2007) and others (Bukowski & Abecassis, 2007; Closson, 2009b; Lease et al., 2002b; Puckett et al., 2008) has shown that youth who use both prosocial and aggressive behaviours toward peers, tend to be those individuals who experience the highest levels of social success in the peer group. The results from the present study qualified these previous findings in several ways. Indeed, the current findings extend the research cited above by highlighting that popular early adolescents' social success may be related to engaging in both prosocial and aggressive behaviour toward the same type of peer, as popular youth reported using prosocial behaviour and aggression toward other popular targets and targets they personally liked. Accepted youths' social success may be related to their engagement in prosocial behaviours toward a variety of peers and relational aggression in their dyadic relationships. Finally, dominant youths' social success may not be largely associated with how they direct their prosocial behaviours toward certain peers; rather, it may be primarily related to their reported aggression toward other dominant peers. The present study has demonstrated that examining multiple indices of social status, in addition to both aggressive and prosocial behaviours in a single study, provides a better evaluation of the social processes within the early adolescent peer group.

Perhaps more importantly, the findings also have shown the value in considering who youth target with their aggressive and prosocial behaviours. Hawley (1999) proposed that an adaptive social skill is the ability to consider one's own characteristics in relation to the characteristics of interaction partners in guiding the use of prosocial or aggressive behaviour. The results from the present study have shown that, although all early adolescents vary their behaviours toward different types of peers, high and low status youth do so in different ways.

146

These findings indicate that the ability to vary behaviours is not necessarily adaptive. Rather,

varying behaviours in a particular way is associated with having high social status in the peer

group. By undertaking a target-specific approach to studying the status-behaviour link, this

study has uncovered important details regarding early adolescents' adaptation (and

maladaptation) in the peer group.

References

Adler, P. A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity.* New
    Brunswick, NJ: Rutgers University Press.

Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and interpreting interactions.*
    Newbury Park, CA: Sage.

Andreou, E. (2006). Social preference, perceived popularity, and social intelligence. Relations to
    overt and relational aggression. *School Psychology International, 27(3),* 339-351.

Archer, J. (2001). A strategic approach to aggression. *Social Development, 10(2),* 267-271.

Archer, J. (2004). Sex differences in aggression in real-world settings: A meta-analytic review.
    Review of General Psychology, 8(4), 291-322.

Asher (1983). Social competence and peer status: Recent advances and future directions. *Child
    Development, 54(6):* 1427-1434.

Asher, S., & Hymel, S. (1981). Children's social competence in peer relations: Sociometric and
    behavioral assessments. In J. Wine & M. Smye, *Social competence* (pp.125-157). New
    York, NY: Guilford Press.

Asher, S. R., & McDonald, K. L. (2009). The behavioral basis of acceptance, rejection, and
    perceived popularity. In K. H. Rubin, W. M. Bukowksi, & B. Laursen (Eds.), *Handbook of
    peer interactions, relationships, and groups* (pp.232-248). New York, NY: Guilford Press.

Asher, S. R., Parker, J. G., & Walker, D. L. (1996). Distinguishing friendship from acceptance:
    Implications for intervention and assessment. In W. M. Bukowski, A. F. Newcomb, & W.
    W. Hartup (Eds.), *The company they keep: Friendships in childhood and adolescence*
    (pp. 366-405). Cambridge, MA: Cambridge University Press.

Atwood, M. (1988). *Cat's eye.* Toronto: Seal Books.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of
    Psychology, 52,* 1-26.

Bagwell, C.L., Newcomb, A.F., & Bukowski, W.M. (1998). Preadolescent friendship and peer
    rejection as predictors of adult adjustment. *Child Development, 69(1),* 140-153.

Batson, C. D., Batson, J. G., Griffitt, C. A., Barrientos, S., Brandt, J. R., Sprengelmeyer, P., & Bayly, M. J. (1989). Negative-state relief and the empathy-altruism hypothesis. *Journal of Personality and Social Psychology, 56(6),* 922-933.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117(3),* 497-529.

Bell-Dolan, D., Foster, S. L., & Sikora, D. M. (1989). Effects of sociometric testing on children's behavior and loneliness in school. *Developmental Psychology, 25(2),* 306-311.

Berndt, T. J., & McCandless, M. A. (2009). In K. H. Rubin, W. M. Bukowksi, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp.63-81). New York, NY: Guilford Press.

Bickel, R. (2007). *Multilevel analysis for applied research*. New York: Guilford Press.

Bierman, K. L., Smoot, D. L., & Aumiller, K. (1993). Characteristics of aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) boys. *Child Development, 64,* 139-151.

Bjorkqvist, K., Lagerspetz, K. M. J., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior, 18,* 117-127.

Block, J. H. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. *Child Development, 54*, 1335-1354.

Bowker, A. (2004). Predicting friendship stability during early adolescence. *The Journal of Early Adolescence, 24(2),* 85-112.

Boxer, P., Tisak, M. S., & Goldstein, S. E. (2004). Is it bad to be good? An exploration of aggressive and prosocial behavior subtypes in adolescence. *Journal of Youth and Adolescence, 33(2),* 91-100.

Brendgen, M., Bowen, F., Rondeau, N., & Vitaro, F. (1999). Effects of friends' characteristics on children's social cognitions. *Social Development, 8(1)*, 41–51.

Brown, B. B. (1990). Peer groups and peer cultures. In S. S. Feldman & G. R. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 171-196). Cambridge, MA: Harvard University Press.

Bukowski, W. M. (2003). What does it mean to say that aggressive children are competent or incompetent? *Merrill-Palmer Quarterly, 49(3),* 390-400.

Bukowski, W. M., & Abecassis, M. (2007). Self, other, and aggression: The never-ending search for the roots of adaptation. In P. H. Hawley, T. D. Little, & P. C. Rodkin (Eds.), *Aggression and adaptation: The bright side to bad behavior* (pp. 185-207). Mahwah, NJ: Lawrence Erlbaum Associates.

Bukowski, W. M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre- and early adolescence: The development and psychometric properties of the friendship qualities scale. *Journal of Social and Personal Relationships, 11(3)*, 471–484.

Bukowski, W. M., Motzoi, C., & Meyer, F. (2009). Friendship as process, function, and outcome. In K.H. Rubin, W. M. Bukowski, & B. Laursen (Eds.), *Handbook of peer interactions, relationships and groups* (pp. 217-231). New York, NY: Guilford Press.

Bukowski, W. M., & Sippola, L. K. (2001). Groups, individuals, and victimization: A view of the peer system. In J. Juvonen, & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 355–377). New York, NY: Guilford Press.

Bukowski, W. M., Sippola, L., Hoza, B., & Newcomb, A. F. (2000). Pages from a sociometric notebook: An analysis of nomination and rating scale measures of acceptance, rejection and social preference. In A. H. N. Cillessen & W. M. Bukowski, (Eds.), Recent advances in the measurement of acceptance and rejection in the peer system (pp. 11-26), *New Directions for Child and Adolescent Development, 88.* San Francisco, CA: Jossey-Bass.

Bukowski, W. M., Sippola, L. K., & Newcomb, A. F. (2000). Variations in patterns of attraction to same- and other-sex peers during early adolescents. *Developmental Psychology, 36,* 147-154.

Cabot, M. (2006). *How to be popular.* New York, NY: HarperCollins.

Card, N. A., & Hodges, E. V. E. (2007). Victimization within mutually antipathetic peer

    relationships. *Social Development, 16,* 479–496.

Card, N. A., & Hodges, E. V. E. (2010). It takes two to fight in school, too: A social relations model

    of the psychometric properties and relative variance of dyadic aggression and victimization in

    middle school. *Social Development, 19(3),* 447-469.

Carlo, G., Hausmann, A., Christiansen, S., & Randall, B. A. (2003). Sociocognitive and

    behavioral correlates of a measure of prosocial tendencies in adolescents. *Journal of*

    Early Adolescence, 23(1), 107-134.

Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors for

    late adolescents. *Journal of Youth and Adolescence, 31(1),* 31-44.

Chung, T. & Asher, S. R. (1996). Children's goals and strategies in peer conflict situations.

    Merrill-Palmer Quarterly, 42, 125–147.

Cillessen, A. H. N. (2007). New perspectives on social networks in the study of peer relations. In

    P. C. Rodkin & L. D. Hanish (Eds.), *New Directions for Child and Adolescent*

    Development: No. 118. Social network analysis and children's peer relationships, (pp. 91-

    100). San Francisco, CA: Jossey-Bass.

Cillessen, A. H. N. (2009). Sociometric methods. In K. H. Rubin, W. M. Bukowski, & B. Laursen

    (Eds.), *Handbook of peer interactions, relationships and groups* (pp. 82-99). New York, NY:

    Guilford Press.

Cillessen, A. H. N., & Borch, C. (2006). Developmental trajectories of adolescent popularity: A

    growth curve modeling analysis. *Journal of Adolescence, 29,* 935-959.

Cillessen, A. H. N, & Bukowski, W. M. (2000). Conceptualizing and measuring peer acceptance

    and rejection. In A. H. N. Cillessen & W. M. Bukowski, (Eds.), *New Directions for Child*

    and Adolescent Development: No. 88. Recent advances in the measurement of

    acceptance and rejection in the peer system, (pp. 3-10). San Francisco, CA: Jossey-

    Bass.

Cillessen, A. H. N., Jiang, X. L., West, T. V., & Laszkowski, D. K. (2005). Predictors of dyadic

friendship quality in adolescence. *International Journal of Behavioral Development, 29,* 146-155.

Cillessen, A. H. N., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development, 75(1),*147-163.

Cillessen, A. H. N., van Ijzendoorn, H., van Lieshout, C., Hartup, W. W. (1992). Heterogeneity among peer-rejected boys: Subtypes and stabilities. *Child Development, 63(4)*, 893–905.

Closson, L. M. (2009a). Status and gender differences in early adolescents' descriptions of popularity. *Social Development, 18(2),* 412-426.

Closson, L. M. (2009b). Aggressive and prosocial behaviors within early adolescent friendship cliques: What's status got to do with it? *Merrill-Palmer Quarterly, 55(4),* 406-435.

Closson, L. M., Daniels, T., & Spence, L. (2006, June). Victimization within dyadic friendships: Associations with teacher-rated social behavior and peer-rated social preference. Poster presented at the CPA 67th Annual Convention, Calgary, AB, Canada.

Closson, L. M., Hymel, S., Konishi, C., & Darwich, L. (2007, May). *Bullying at school: Differences in students' personal and academic self-perceptions*. Poster presented at the 10th annual Investigating Our Practices Conference, University of British Columbia, Vancouver, BC, Canada.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.), Hillsdale, NJ: Erlbaum.

Cohn, L. D. (1991). Sex differences in the course of personality development: A meta-analysis. *Psychological Bulletin, 109*, 252–266.

Coie, J. D. (1990). Toward a theory of peer rejection. In S. R. Asher, & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 365–401). Cambridge, MA: Cambridge University Press.

Coie, J. D., Cillessen, A. H. N., Dodge, K. A., Hubbard, J. A., Schwartz, D., Lemerise, E. A. et al. (1999). It takes two to fight: A test of relational factors and a method for assessing aggressive dyads. *Developmental Psychology*, *35*, 1179–1188.

152

Coie, J. D., & Dodge, K. A., (1998). Aggression and antisocial behavior. In W. Damon (Series

    Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3 Social, emotional,*

    and personality development (5th ed., pp. 779-862). New York, NY: Wiley.

Coie, J. D., Dodge, K. A. & Coppotelli, H. (1982). Dimensions and types of social status: A

    cross-age perspective. *Developmental Psychology, 18*, 557-570.

Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information

    processing mechanisms in children's social adjustment. *Psychological Bulletin, 115,* 74-

    101.

Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological

    adjustment. *Child Development, 66,* 710-722.

Crick, N. R., Murray-Close, D., Marks, P. E. L., & Mohajeri-Nelson, N. (2009). In K. H. Rubin,

    W. M. Bukowksi, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and*

    groups (pp. 287-302). New York, NY: Guilford Press.

Curran, P. J., Bauer, D. J, & Willoughby, M. T. (2004). Testing main effects and interactions in

    hierarchical linear growth models. *Psychological Methods*, *9*, 220-237.

Dijkstra, J. K., Cillessen, A. H. N., Lindenberg, S., & Veenstra, R. (in press). Basking in

    reflected glory and its limits: Why adolescents hang out with popular peers. *Journal of*

    Research on Adolescence.

Dijkstra, J. K., Lindenberg, S., & Veenstra, R. (2008). Beyond the class norm: Bullying behavior

    of popular adolescents and its relation to peer acceptance and rejection. *Journal of*

    Abnormal Child Psychology, 36, 1289-1299.

Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and

    problem behavior. *American Psychologist, 54*(9), 755–764.

Eder, D. (1985). The cycle of popularity: Interpersonal relations among female adolescents.

    Sociology of Education, 58(3), 154-165.

Eder, D., Evans, C. C., & Parker, S. (1995). *School talk: Gender and adolescent culture.* New

    Brunswick, NJ: Rutgers University Press.

Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In W. Damon (Series Ed.) & N.

    Eisenberg (Vol. Ed.), *Handbook of child psychology, vol. 3: Social, emotional, and*

    personality development (5th ed., pp. 701-778). New York, NY: Wiley.

Eisenberg, N., Lundy, T., Shell, R., & Roth, K. (1985). Children's justifications for their adult

    and peer-directed compliant (prosocial and nonprosocial) behaviors. *Developmental*

    Psychology, 21, 325–331.

Eisenberg, N., & Mussen, P. H. (1989). *The roots of prosocial behavior in children.* Cambridge,

    MA: Cambridge University Press.

Erdley, C. A., & Asher, S. R. (1996). Children's social goals and self-efficacy perceptions as

    predictors of their responses to ambiguous provocation. *Child Development*, *67*, 1329–

    1344.

Erdley, C. A., & Asher, S. R. (1999). A social goals perspective on children's social

    competence. *Journal of Emotional and Behavioral Disorders, 7(3),* 156-167.

Erdley, C. A., Nangle, D. W., Newman, J. E. & Carpenter, E. M. (2001). Children's friendship

    experiences and psychological development: Theory and research. *New Directions for*

    Child and Adolescent Development, 91, 5-24.

Fabes, R. A., Eisenberg, N., Smith, M. C., & Murphy, B. C. (1996). Getting angry at peers:

    Associations with liking of the provocateur. *Child Development, 67(3),* 942-956.

Fabes, R. A., Martin, C. L., & Hanish, L. D. (2009). In K. H. Rubin, W. M. Bukowksi, & B.

    Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 45-62).

    New York, NY: Guilford Press.

French, D. C. (1988). Heterogeneity of peer-rejected boys: Aggressive and nonaggressive

    subtypes. *Child Development, 59*, 976-985.

French, D. C. (1990). Heterogeneity of peer-rejected girls. *Child Development, 61*, 2028-2031.

Frey, K. S., Hirschstein, M. K., Edstrom, L. V., & Snell, J. L. (2009). Observed reductions in

    school bullying, nonbullying aggression, and destructive bystander behavior: A

    longitudinal evaluation. *Journal of Educational Psychology, 101(2),* 466-481.

Galen, B. R., & Underwood, M. K. (1997). A developmental investigation of social aggression

among children. *Developmental Psychology, 33(4),* 589-600.

Golombok, S., & Hines, M. (2002). Sex differences in social behavior. In P. K. Smith & C. H.

Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 117-136). London,

UK: Blackwell.

Gorman, A. H., Kim, J., & Schimmelbusch, A. (2002). The attributes adolescents associate with

peer popularity and teacher preference. *Journal of School Psychology, 40(2),* 143-165.

Grotpeter, J. K., & Crick, N. R. (1996). Relational aggression, overt aggression and friendship.

Child Development, 67, 2328-2338.

Grusec, J. E., Davidov, M., & Lundell, L. (2002). Prosocial and helping behavior. In P. K. Smith

& C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 457-474).

London, UK: Blackwell.

Hanish, L. D., & Guerra, N. G. (2004). Aggressive victims, passive victims, and bullies:

Developmental continuity or developmental change? *Merrill-Palmer Quarterly, 50,* 17-38.

Harris, J. R. (1998). *The nurture assumption.* New York, NY: The Free Press.

Hartup, W. W. (1996). The company they keep: Friendships and their developmental

significance. *Child Development, 67*, 1-13.

Hartup, W. W. (2003). Toward understanding mutual antipathies in childhood and adolescence.

In E. V. E. Hodges, & N. A. Card (Eds.), *Enemies and the darker side of peer relations:

New directions for child and adolescent development* (Vol. 102, pp. 111–123). San

Francisco, CA: Jossey-Bass.

Hartup, W. W. (2009). Critical issues and theoretical viewpoints. In K. H. Rubin, W. M.

Bukowksi, & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups*

(pp. 3-19). New York, NY: Guilford Press.

Hartup, W. W., Laursen, B., Stewart, M. I., & Eastenson, A. (1988). Conflict and the friendship

relations of young children. *Child Development, 59,* 1590-1600.

Hawley, P. H. (1999). The ontogenesis of social dominance: A strategy-based evolutionary

perspective. *Developmental Review, 19,* 97-132.

Hawley, P. H. (2003). Prosocial and coercive configurations of resource control in early

   adolescence: A case for the well-adapted Machiavellian. *Merrill-Palmer Quarterly, 49(3),*

   279-309.

Hawley, P. H., & Little, T. D. (2002). Evolutionary and developmental perspectives on the

   agentic self. In D. Cervone & W. Mischel (Eds.), *Advances in personality science, vol. 1.*

   (pp. 177- 195). New York, NY: Guilford Press.

Hawley, P. H., Little, T. D., & Card, N. A. (2007). The allure of a mean friend: Relationship

   quality and processes of aggressive adolescents with prosocial skills. *International*

   Journal of Behavioral Development, 31(2), 170-180.

Hawley, P. H., Little, T. D., & Pasupathi, M. (2002). Winning friends and influencing peers:

   Strategies of peer influence in late childhood. *International Journal of Behavioral*

   Development, 26(5), 466-474.

Hayes, A. F. (2006). A primer on multilevel modeling. *Human Communication Research, 32,*

   385-410.

Hayvren, M. & Hymel, S. (1984). Ethical issues in sociometric testing: Impact of sociometric

   measures on interaction behavior. *Developmental Psychology, 20(5):* 844-849.

Hinde, R. A., & Stevenson-Hinde, J. (1987). Interpersonal relationships in child development.

   Developmental Review, 7, 1-21.

Hodges, E., Boivin, M., Vitaro, F., & Bukowski, W. (1999). The power of friendship: Protection

   against an escalating cycle of peer victimization. *Developmental Psychology, 35(1),* 94-

   101.

Hopmeyer, A., & Asher, S. R. (1997). Children's responses to peer conflicts involving a rights

   infraction. *Merrill-Palmer Quarterly, 43,* 235-254.

Hyde, J. S. (1984). How large are gender differences in aggression: A developmental meta-

   analysis. *Developmental Psychology, 20,* 722-736.

Hymel, S. (1986). Interpretations of peer behavior: Affective bias in childhood and adolescence.

Child Development, 57, 431–445.

Hymel, S., Bowker, A., & Woody, E. (1993). Aggressive versus withdrawn unpopular children: Variations in peer and self-perceptions in multiple domains. *Child Development, 64(3),* 879-896.

Hymel, S., Closson, L. M., Caravita, S. C. S., & Vaillancourt, T. (2010). Social status among peers: From sociometric attraction to peer acceptance to perceived popularity. In P. K. Smith & C. Hart (Eds.), *Handbook of childhood social development (2nd Edition).* New York, NY: Wiley-Blackwell.

Hymel, S., Rocke-Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences Special Issue No. 8,* 33-43.

Hymel, S., Vaillancourt, T., McDougall, P., & Renshaw, P. (2002). Acceptance and rejection by the peer group. In P. Smith & C. Hart (Eds.), *Blackwell handbook of childhood social development* (pp.265-284). London, UK: Blackwell.

Hymel, S., Wagner, E., & Butler, L. J. (1990). Reputational bias: View from the peer group. In S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood* (pp. 156-186)*.* Cambridge, MA: Cambridge University Press.

Jiang, X. L., & Cillessen, A. H. N. (2005). Stability of continuous measures of sociometric status: A meta-analysis. *Developmental Review, 25,* 1-25.

Kaukiainen, A., Bjorkqvist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Forsblom, S., & Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior, 25,* 81-89.

Kingsbury, S. A. (1978). Self-esteem of victim and the intent of third-party aggression in the reduction of hostile aggression. *Motivation and Emotion, 2(2),* 177-189.

Košir, K. & Pečjak, S. (2005). Sociometry as a method for investigating peer relationships: what does it actually measure? *Educational Research, 47(1),* 127-144.

LaFontana, K. M., & Cillessen, A. H. N. (1998). The nature of children's stereotypes of

popularity. *Social Development, 7(3),* 301-320.

LaFontana, K. M., & Cillessen, A. H. N. (1999). Children's interpersonal perceptions as a

> function of sociometric and peer-perceived popularity. *Journal of Genetic Psychology,*
> *160,* 225-242.

LaFontana, K. M., & Cillessen, A. H. N. (2002). Children's perceptions of popular and

> unpopular peers: A multimethod assessment. *Developmental Psychology, 38(5),* 635-
> 647.

LaFontana, K. M., & Cillessen, A. H. N. (2010). Developmental changes in the priority of

> perceived status in childhood and adolescence. *Social Development, 19(1),* 130-147.

La Freniere, P., & Charlesworth, W. R. (1983). Dominance, attention, and affiliation in a

> preschool group: A nine-month longitudinal study. *Ethology and Sociobiology, 4,* 55-67.

Langbein, J., & Puppe, B. (2004). Analysing dominance relationships by sociometric methods –

> a plea for a more standardized and precise approach in farm animals. *Applied Animal*
> *Behavior Science, 87,* 293-315.

Little, T. D., Jones, S. M., Henrich, C. C., & Hawley, P. H. (2003). Disentangling the "whys"

> from the "whats" of aggressive behavior. *International Journal of Behavioral*
> *Development, 27(2),* 122-133.

Lease, A. M., Kennedy, C. A., & Axelrod, J. L. (2002a). Children's social constructions of

> popularity. *Social Development, 11(1),* 87-109.

Lease, A. M., Musgrove, K. T., & Axelrod, J. L. (2002b). Dimensions of social status in

> preadolescent peer groups: likability, perceived popularity, and social dominance. *Social*
> *Development, 11(4),* 508-533.

Maassen, G., van der Linden, J., Goossens, F. & Bokhorst, J. (2000). A rating-based approach to

> two-dimensional sociometric status determination. In A.H.N. Cillessen & W. Bukowski, (Eds.),
> *Recent advances in the measurement of acceptance and rejection in the peer system*: *New*
> *directions for child and adolescent development* (Vol. 88, pp. 55-73). San Francisco, CA:
> Jossey-Bass.

Maccoby, E. E., & Jacklin C. N. (1974). *The Psychology of Sex Differences.* Stanford, CA:

    Stanford University Press.

Mayeux, L., & Cillessen, A. H. N. (2008). It's not just being popular, it's knowing it, too: The

    role of self-perceptions of status in the associations between peer status and aggression.

    Social Development, 14(4), 871-888.

Mayeux, L., Sandstrom, M., & Cillessen, A.H.N. (2008). Is being popular a risky proposition?

    Journal of Research on Adolescence, 18(1), 49-74.

Mayeux, L., Underwood, M. K., & Risser, S. D. (2007). Perspectives on the ethics of sociometric

    research with children: How children, peers, and teachers help to inform the debate. *Merrill-*

    Palmer Quarterly, 53(1): 53-78.

McGinley, M., & Carlo, G. (2007). Two sides of the same coin? The relations between prosocial and

    physically aggressive behaviors. *Journal of Youth and Adolescence, 36,* 337-349.

Merten, D. E. (1997). The meaning of meanness: Popularity, competition, and conflict among

    junior high school girls. *Sociology of Education, 70,* 175-191.

Merten, D. E. (2004). Securing her experience: Friendship versus popularity. *Feminism &*

    Psychology, 14(3), 361-365.

Moreno, J. L. (1934). Who shall survive? A new approach to the problem of human interrelations.

    Washington, DC: Nervous and Mental Disease Publishing Company.

Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic

    review. *Psychological Bulletin, 117,* 306-347.

Newcomb, A.F., Bukowski, W.M., & Pattee, L. (1993). Children's peer relations: A meta-

    analytic review of popular, rejected, neglected, controversial, and average sociometric

    status. *Psychological Bulletin, 113,* 99-128.

Ojanen, T., Grönroos, M., & Salmivalli, C. (2005). An interpersonal circumplex model of

    children's social goals: Links with peer-reported behavior and sociometric status.

    Developmental Psychology, 41(5), 699-710.

Orobio de Castro, B., Veerman, J. W., Koops, W., Bosch, J. D., & Monshouwer, H. J. (2002).

Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Development,*
73(3), 916–934.

Owens, L., Shute, R., & Slee, P. (2000). 'I'm in and you're out…' Explanations for teenage girls'
indirect aggression. *Psychology, Evolution & Gender, 2.1,* 19-46.

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood:
Links with peer group acceptance and feelings of loneliness and social dissatisfaction.
Developmental Psychology, 29(4), 611-621.

Peets, K., Hodges, E. V. E., Kikas, E., & Salmivalli, C. (2007). Hostile attributions and
behavioral strategies in children: Does relationship type matter? *Developmental*
Psychology, 43, 889-900.

Peets, K., Hodges, E. V. E., & Salmivalli, C. (2008). Affect-congruent social-cognitive
evaluations and behaviors. *Child Development, 79(1),* 170-185.

Pellegrini, A. D. (2002). Affiliative and aggressive dimensions of dominance and possible
functions during early adolescence. *Aggression and Violent Behavior, 7*, 21-31.

Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental*
Psychology, 24(6), 807-814.

Perry, D. G., Perry, L. C., & Kennedy, E. (1992). Conflict and the development of antisocial
behavior. In C. U. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent*
development (pp. 301-329). New York, NY: Cambridge University Press.

Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology, 48,*
85-112.

Pope, A. W. (2003). Developmental risk associated with mutual dislike in elementary school
children. In E. V. E. Hodges, & N. A. Card (Eds.), *Enemies and the darker side of peer*
relations: New directions for child and adolescent development (Vol. 102, pp. 89–110).
San Francisco, CA: Jossey-Bass.

Poulin, F., & Dishion, T. J. (2008). Methodological issues in the use of peer sociometric
nominations with middle school youth. *Social Development, 17(4),* 908-921.

Prinstein, M. J., & Cillessen, A. H. N. (2003). Forms and functions of adolescent peer

    aggression associated with high levels of peer status. *Merrill-Palmer Quarterly, 49(3),*

    310-342.

Prinstein, M. J., Meade, C. S., & Cohen, G. L. (2003). Adolescent oral sex, peer popularity, and

    perceptions of best friends' sexual behavior. *Journal of Pediatric Psychology, 28(4),* 243-

    249.

Puckett, M. B., Aikins, J. W., & Cillessen, A. H. N. (2008). Moderators of the association

    between relational aggression and perceived popularity. *Aggressive Behavior, 34,* 1-14.

Raudenbush, S., Bryk, A., & Congdon, R. (2005). *HLM: Hierarchical linear and nonlinear*

    modeling for Windows (Version 6.02a). Scientific Software International.

Rodkin, P. C., & Berger, C. (2008). Who bullies whom? Social status asymmetries by victim

    gender. *International Journal of Behavioral Development, 32(6),* 473-485.

Rodkin, P. C., Farmer, T. W., Pearl, R., & Van Acker, R. (2000). Heterogeneity of popular boys:

    Antisocial and prosocial configurations. *Developmental Psychology, 36,* 14-24.

Rodkin, P.C., Farmer, T.W., Pearl, R., & Van Acker, R. (2006). They're cool: Social status and peer

    group supports for aggressive boys and girls. *Social Development, 15,* 175-204.

Rose, A. (2002). Co-rumination in the friendships of girls and boys. *Child Development, 73,*

    1830–1843.

Rose, A. J., Swenson, L. P., & Carlson, W. (2004a). Friendships of aggressive youth.

    Considering the influences of being disliked and of being perceived as popular. *Journal of*

    Experimental Child Psychology, 88, 25-45.

Rose, A. J., Swenson, L. P., & Waller, E. M. (2004b). Overt and relational aggression and

    perceived popularity: Developmental differences in concurrent and prospective relations.

    Developmental Psychology, 40(3), 378-387.

Roseth, C. J., Pellegrini, A. D., Dupuis, D. N., Bohn, C. M., Hickey, M. C., Hilk, C. L., &

    Peshkam, A. (2011). Preschoolers' bistrategic resource control, reconciliation, and peer

    regard. *Social Development, 20(1),* 185-211.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In W. Damon & R. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional and personality development* (6th ed., pp. 571-645.) New York, NY: Wiley.

Rubin, K. H., Coplan, R., Nelson, L., Cheah, C., & Lagace-Seguin, D. G. (1999). Peer relationships in childhood. In M.A. Bornstein & M.E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (pp. 451-502). Hillsdale, NJ: Erlbaum.

Salmivalli, C., Karna, A., & Poskiparta, E. (2009). From peer putdowns to peer support: A theoretical model and how it translated into a national anti-bullying program. In S. Shimerson, S. Swearer & D. Espelage (Eds.), *The handbook of bullying in schools: An international perspective* (pp. 441–454). New York, NY: Routledge.

Savin-Williams, R. C. (1979). Dominance hierarchies in groups of early adolescents. *Child Development, 50(4),* 923-935.

Savin-Williams, R. C., & Freedman, D. G. (1977). Bio-social approach to human development. In S. Chevalier-Skolnikoff & F. E. Poirier (Eds.), *Primate bio-social development: biological, sociological, and ecological determinants.* New York, NY: Garland.

Schwartz, D., Gorman, A., Nakamoto, J., & McKay, T. (2006). Popularity, social acceptance, and aggression in adolescent peer groups: Links with academic performance and school attendance. *Developmental Psychology, 42(6),* 1116-1127.

Sijtsema, J.J., Veenstra, R., Lindenberg, S., & Salmivalli, C. (2008). Empirical test of bullies' status goals: Assessing direct goals, aggression, and prestige. *Aggressive Behavior, 34,* 1-11.

Simmons, R. (2004). *Odd girl speaks out.* New York, NY: Harcourt.

Simpkins, S. D., & Parke, R. D. (2002). Do friends and nonfriends behave differently? A social relations analysis of children's behavior. *Merrill-Palmer Quarterly, 48(3),* 263-283.

Statistics Canada (2007). *2006 Community Profiles.* 2006 Census. Statistics Canada Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007.

Strayer, F. F., & Strayer, J. (1976). An ethological analysis of social agonism and dominance

relations among preschool children. *Child Development, 47,* 980-989.

Strayer, F. F., & Trudel, M. (1984). Developmental changes in the nature and function of social dominance among young children. *Ethology and Sociobiology, 5,* 279-295.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry.* New York, NY: Norton.

Tomada, G., & Schneider, B. H. (1997). Relational aggression, gender, and peer acceptance: Invariance across culture, stability over time, and concordance among informants. *Developmental Psychology, 33,* 601-609.

Tremblay, R. E. (2000). The development of aggressive behavior during childhood: What have we learned in the past century? *International Journal of Behavioral Development, 24,* 129-141.

Trivers, R. L. (1971). The evolution of reciprocal altruism. *Quarterly Review of Biology, 46,* 35-57.

Terry, R. (2000). Recent advances in measurement theory and the use of sociometric techniques. In W. Damon (Series Ed.) and A. H. N. Cillessen & W. Bukowski (Vol. Eds.), *New directions for child and adolescent development: No. 88. Recent advances in the measurement of acceptance and rejection in the peer system* (pp. 27-54). San Francisco, CA: Jossey-Bass.

Underwood, M. K. (2002). Sticks and stones and social exclusion: Aggression among girls and boys. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 532-548). London, UK: Blackwell.

Underwood, M. K. (2003). *Social aggression among girls.* New York, NY: Guilford.

Vaillancourt, T., & Hymel, S. (2004). The social context of children's aggression. In M. M. Moretti, C. L. Odgers, & M. A. Jackson (Eds.), *Girls and aggression: Contributing factors and intervention principles* (pp. 57-73). New York, NY: Kluwer Academic.

Vaillancourt, T., & Hymel, S. (2006). Aggression and social status: The moderating role of sex and peer-valued characteristics. *Aggressive Behavior, 32,* 396-408.

Veenstra, R., Lindenberg, S., Zijlstra, B. J. H., De Winter, A. F., Verhulst, F. C., & Ormel, J. (2007). The dyadic nature of bullying and victimization: Testing a dual-perspective theory.

Child Development, 78(6), 1843-1854.

Vitaro, F., Boivin, M., & Bukowski, W. M. (2009). The role of friendship in child and adolescent

psychosocial development. In K.H. Rubin, W. M. Bukowski, & B. Laursen (Eds.),

Handbook of peer interactions, relationships and groups (pp. 568-585). New York, NY:

Guilford Press.

Xie, H., Li, Y., Boucher, S., Hutchins, B., & Carins, B. (2006). What makes a girl (or a boy) popular

(or unpopular)? African American children's perceptions and developmental differences.

Developmental Psychology, 42(4), 599-612.

Zumbo, B. D., & Lloyd, J. E. V. (2005, August). *Linear mixed effects and HLM models: Overview

and description of recent findings.* Invited lectures. Greensboro, NC.

(Date)

Dear Parents/Guardians,

We are writing to request your permission for your son or daughter to participate in a research project we are conducting at (_____ school name _____) entitled, "Understanding Early Adolescents' Social Behaviours and Relationships with Peers." This project is part of a doctoral dissertation by Leanna Closson. The study has been approved by the (_____ school board's name _____), Principal (_____ principal's name____), and the University of British Columbia Behavioural Research Ethics Board.

Purpose of the Study:
This study will explore students' social experiences with peers, some of which are positive (e.g., help and support) as well as those that are sometimes problematic (e.g., fighting and conflict). The purpose of the study is to learn whether students tend to interact with all of their peers similarly or whether students interact differently with some of their peers. For example, we are interested in whether students are more helpful toward classmates they like than other classmates, or whether students are more likely to encounter conflict with friends than with other classmates. In the questionnaires, students will be asked to tell us about their thoughts and feelings about each of their peers that are participating in the study and will also tell us about how they get along (or do not get along) with each of their peers. In order to better understand why students behave the way they do with one another, we will also explore how students' interactions relate to their thoughts about what they think would help them to be socially successful at school.

Study Procedures:
Students who participate in the study will be asked to fill out questionnaires during a group session in their regular classrooms at a time chosen by the school principal and homeroom teacher. The questionnaires will take approximately one hour to complete. Students who do not receive parent permission to participate in the study will work on a task chosen by their teacher while the other students complete the questionnaires.

Prize Draw:
All students who promptly return their consent forms (regardless of whether parent permission is given or not) will be entered in a draw to win a pair of tickets to (movie theatre name). There will be one winner in each grade. The draw will take place immediately after all students participating in the study have completed the questionnaires.

Confidentiality:
The identity of students will be kept strictly confidential. Study results will be entered into a password protected computer file that only the researchers can access. In this computer file, only code numbers will be used (not names).   All completed questionnaires will be kept secured in a locked filing cabinet. Participants will not be identified by name in any reports of the completed study.

Confidentiality:
Study results will not appear in any school records. Only Dr. Hymel and Leanna Closson will have access to the data. Individual results will <u>not</u> be made available to anyone. A general group report of the results will be available to school officials and interested parents at the end of the study.

Potential Risks/Benefits:
Completing questionnaires will provide students with a chance to take a closer look at their own experiences with peers at school. Students normally enjoy participating in this type of research, although some students may feel uncomfortable about being evaluated by their classmates. Before completing the questionnaires, students will be instructed not to answer any questions that may make them feel uncomfortable and will be encouraged to speak to a trusted adult if they wish to talk about their thoughts and feelings that may come about as a result of participating in the study. Although the researchers will use a variety of strategies to minimize the possibility of students discussing their responses to the questionnaires, there is still a chance that some students will share their responses with each other. However, it is important to note that previous studies have found that students' discussions tend to be positive or neutral. In addition, other studies have also shown that participating in this type of research does not affect how students are treated by each other.

Contact:
If you have any questions about the study, please use the information provided below to contact Dr. Shelley Hymel or Leanna Closson. If you would like to view a copy of the questionnaire with the researcher, please contact Leanna Closson. If you have any concerns about your child's treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services by phone at 604-822-8598 or send e-mail to RSIL@ors.ubc.ca.

Consent:
Participation in this study is completely voluntary and your child may withdraw at any time during the study without any impact on his/her schoolwork. Questionnaires collected from students who withdraw from the study will be shredded and discarded. Whether or not you wish to have your child participate in this study, please complete the attached form and have your child return it to his/her homeroom teacher as soon as possible. Thank you for your cooperation in this research project.

Sincerely,

Dr. Shelley Hymel, Professor   Leanna Closson, Ph.D. Candidate

PARENT CONSENT FORM

Study Title: "Understanding Early Adolescents' Social Behaviours
and Relationships with Peers"

Principal Investigator: Shelley Hymel, Ph.D.   Co-Investigator: Leanna Closson, M.A.
Professor   Ph.D. Candidate

Department of Educational &
Counselling Psychology & Special Education
University of British Columbia
_____

Your decision regarding your son or daughter's participation in the study is:

_____ **Yes**, my son/daughter has my permission to participate

_____ **No**, my son/daughter does not have my permission to participate

Signing this form indicates that you have received the attached letter regarding the study entitled "Understanding Early Adolescents' Social Behaviours and Relationships with Peers." Please keep the letter for your own records and have your child return this form to his/her homeroom teacher as soon as possible.

Son or Daughter's Name: _____ Grade:_____

Parent's Name (please print): _____

Parent or Guardian's Signature: _____

Date: _____

Please have your child return this signed consent form to his/her homeroom teacher as soon as possible. Thank you.

Student Consent Form

Study Title: "Understanding Early Adolescents' Social Behaviours and Relationships with Peers"

Principal Investigator: Shelley Hymel, Ph.D.   Co-Investigator: Leanna Closson, M.A.

Department of Educational &
Counselling Psychology & Special Education
University of British Columbia
_____

Purpose of the Study:
The purpose of the study is to learn about how students get along with each other and why students sometimes do nice things for each other, but other times might do some "not-so-nice" things. We are also interested in learning about how you feel about the people in your grade and what sorts of things are important to you.

Study Procedures:
Students who participate will fill out questionnaires during a group session in their regular classrooms. The questionnaires will take approximately one hour to complete. In the questionnaires, students will be asked to tell us about their thoughts and feelings about each of their peers that are participating in the study and will also tell us about how they get along (or do not get along) with each of their peers. Students who do not receive parent permission to participate in the study will work on a task chosen by their teacher while the other students complete the questionnaires.

Confidentiality:
The identity of students will be kept strictly confidential. Answers will be entered into a password protected computer file and only the researchers will have access to your answers. In this computer file, only code numbers will be used (not names). All completed questionnaires will be kept secured in a locked filing cabinet. Your answers will not appear in any school records. Individual answers will not be made available to anyone.

Risks/Benefits:
Students normally enjoy participating in this type of research, although some students may feel uncomfortable about being evaluated by their classmates. Even though students will be asked to keep their answers private, there is a chance that some students will share their responses with each other. But, it is important to note that other studies have also shown that participating in this type of research does not affect how students are treated by each other.

Consent:
Participation in this study is completely voluntary and you can choose to withdraw anytime or not answer any questions that make you feel uncomfortable.

Your decision regarding your participation in the study is:

_____ **Yes**, I want to participate

_____ **No**, I do not want to participate

Student's Name (print): _____ Grade:_____

Student's Signature: _____ Date: _____

Introduction

Hello. My name is Leanna Closson. I came here today to ask your help with a project I am working on at my school. I would like to find out about how kids your age think about different things, and how you get along with the people in your grade. I am going to ask you to help me by filling out some questionnaires.

Non-Participating Students

Before we start, I have to tell you a few things. First, some of you will not be filling out the questionnaires. Do you remember those letters you brought home to your parents last week or the week before? Some of you didn't bring them back but most of you did. Only those students who brought them back with your parents marking "yes" – that it is okay for you to do this – only those students will fill out the questionnaires. I'll read off a list of those students who can fill out the questionnaires. If I don't read your name, I'd like you to take out a book or some other work to do while the rest of us are filling out the questionnaires (or go to the library if the teacher permits). OK?

Confidentiality

One thing you should know is this is <u>not</u> a test. You won't be graded. In fact, there are no right or wrong answers to any of the questions. I think you'll find it kind of fun and interesting and it won't take up too much time. Now, for those of you filling out the questionnaires, I want you to know that all of your answers are confidential. That means that I won't show them to any of your classmates, parents, or teachers. So you can be honest when you write your answers. Because your answers are private, you should not talk to your classmates or look at other people's answers while you are filling out these questionnaires. And, just to be safe, you can use a piece of paper to cover your answers as you go along. If there are any questions that you don't feel comfortable answering, you don't have to answer them.

Here's how things will work. Before each questionnaire, we will read through the instructions together. At the end of each questionnaire there will be a picture of a stop sign. When you see the stop sign – stop and wait. We will continue to the next questionnaire once everyone has finished. We will do this for all of the questionnaires until the end. If anyone has any questions at any time, please raise your hand. We will be about one hour.

OK. Is everybody ready to begin?

(Proceed to read instructions as written on each questionnaire.)

I would like to thank you very much for helping me with my study today. I want to remind you that all of the answers you wrote down are confidential. That means that I'm not going to share your answers to these questions with your teachers, parents, or other students. 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 if you don't want to. We need to be sensitive to everybody's feelings and respect their privacy. But sometimes we all need to talk about the way that we feel. So, if you want to talk to someone about the questions you were asked today, or if you feel that you are having problems with other students at school, please talk to your parents, teachers, or school counselor about it.

I would like to give you a little bit more information about my study. As you know, hanging out with people at school can be a lot of fun. But sometimes we can be hurtful to one another. 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. If researchers can find some answers to these questions then maybe we can find a way to help students when they have problems with their classmates, and help them to have better relationships. The answers that you have given us will help us to do this. So, I want to thank you very much for sharing your thoughts and opinions with me.

Does anyone have any questions about the survey we did today?

O.K. Thanks very much for your help.

The Friends and Groups Survey

Thank you for participating in this study. The following package contains questions that will help the researcher better understand students' relationships with each other.

This is NOT a test. Your answers are COMPLETELY PRIVATE and will not be shared with anyone. YOUR PARENTS, TEACHERS, AND CLASSMATES WILL <u>NOT</u> SEE YOUR ANSWERS SO PLEASE KNOW THAT IT IS SAFE TO ANSWER HONESTLY.

Even though some of the questions may look the same, it is important that you read and answer every question carefully.

Please complete the following information before you begin:

Age:_____

Birthday:_____

(**Month**, **day**, and **year** you were born)

School:_____

Grade:_____

Gender (check one):

___Boy
___Girl

Racial/ethnic background (check all that apply):

___White (Caucasian, European)
___Asian (Chinese, Japanese, Korean, Cambodian, Taiwanese, Thai, Vietnamese, Filipino)
___South Asian (East-Indian, Indo-Canadian, Pakistani, Sri Lankan)
___Latin American (Mexican, Portuguese, South American, Spanish)
___Aboriginal (First Nations, Metis, Inuit, North American Indian)
___Black (African, Caribbean)
___Middle Eastern (Arabic, Iranian, Kuwaiti, Persian, Turkish, Israeli, Palestinian)
___Don't Know
___Other (please describe):_____

WAIT FOR INSTRUCTIONS

ID #

YOUR ACTIONS TOWARD OTHERS

Using this list of students in your grade, **rate how often you help or share with each person without expecting them to be nice to you in the future** by marking one bubble beside each person's name.

*How often do you **help or share with each person without expecting them to be nice to you in the future**?*

	Never	Rarely	Sometimes	Often	Always
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you yell or swear at each person (to their face)** by marking one bubble beside each person's name.

How often do you **yell or swear at each person (to their face)***?*

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you talk behind their back or spread rumors about each person** by marking one bubble beside each person's name.

How often do you **talk behind their back or spread rumors about each person***?*

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you help or share with each person _especially when other people are watching_** by marking one bubble beside each person's name.

_How often do you **help or share with each person _especially when other people are watching_?**_

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you hit, slap, kick or punch each person** by marking one bubble beside each person's name.

How often do you **hit, slap, kick, or punch each person?**

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you call mean names or say mean things to each person (to their face)** by marking one bubble beside each person's name.

How often do you **call mean names or say mean things to each person (to their face)?**

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you compliment or do favours for each person <u>even if you don't think you will get anything in return</u>** by marking one bubble beside each person's name.

*How often do you **compliment or do favours for each person <u>even if you don't think you will get anything in return</u>**?*

	Never	Rarely	Sometimes	Often	Always
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you push, shove, or trip each person** by marking one bubble beside each person's name.

*How often do you **push, shove, or trip each person?***

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you leave out, ignore, or stop talking to each person** by marking one bubble beside each person's name.

How often do you **leave out, ignore, or stop talking to each person?**

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you compliment or do favours for each person especially in front of other people** by marking one bubble beside each person's name.

*How often do you **compliment or do favours for each person especially in front of other people?***

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you get <u>others</u> to physically hurt or say mean things to each person (to their face)** by marking one bubble beside each person's name.

*How often do you **get <u>others</u> to physically hurt or say mean things to each person (to their face)**?*

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

Using this list of students in your grade, **rate how often you get <u>others</u> to spread rumors, leave out, ignore, or stop talking to each person** by marking one bubble beside each person's name.

*How often do you **get <u>others</u> to spread rumors, leave out, ignore, or stop talking to each person?***

	Never	**Rarely**	**Sometimes**	**Often**	**Always**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

WHO ARE YOUR FRIENDS?

Using this list of students in your grade, rate how close your relationship is with each person by marking one bubble beside each person's name.

How would you describe your relationship with each person in your grade?

	Definitely not my friend	**Not my friend**	**Maybe my friend/not sure**	**My friend**	**Definitely my friend**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

DESCRIBING THE STUDENTS IN YOUR GRADE

Using the list of students in your grade, rate how much each person fits each description by marking one bubble beside each person's name.

*How much do you personally **like** each person in your grade?*

	Dislike very much	Dislike	Neutral (do not like or dislike)	Like	Like very much
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

How **_popular_** is each person in your grade?

	Very unpopular	**Sort of unpopular**	**Average (same as most)**	**Sort of popular**	**Very popular**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O

How much **_influence , power, and control over the people in your grade_** does each person have?

	No control	**Little (less than most)**	**Average (same as most)**	**Some (more than most)**	**A whole lot of control**
Name 1 here	O	O	O	O	O
Name 2 here	O	O	O	O	O
Name 3 here	O	O	O	O	O
Etc.	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O
	O	O	O	O	O