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ADOLESCENTS' PEER STATUS, SOCIAL BEHAVIORS, AND SOCIAL INFORMATION
PROCESSING FOR SOCIAL BEHAVIORS

A Dissertation
Presented in
Partial Fulfillment of the
Requirements for the Degree of
Doctorate of Philosophy
Proposal for a Dissertation

BY
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NOVEMBER, 2012

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VITA

The author was born in Orlando, Florida, on October 3, 1982. She graduated from Apopka High School, and received her Bachelor of Science degree in Psychology from the University of Central Florida in 2005. She received a Master of Science degree in 2008 from Auburn University Montgomery. Michelle has published several articles on adolescents' and young adults' peer relationships in both the nondigital and digital context.

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CHAPTER I

INTRODUCTION

Peer relationships have long been acknowledged by researchers as developmentally significant and as influencing adolescents' behaviors in both negative (e.g., peer pressure to engage in antisocial behaviors, substance use) and positive ways (e.g., encouraging the adolescent to take difficult classes and apply for college) (Hymel, Rubin, Rowden, & LeMare, 1990). Adolescents become increasingly concerned with what their peers think about them, leading some to desire peer acceptance and increased peer status (Eder, 1985). Peer status is the social position of an adolescent within their peer group and can either consist of lower levels of peer status (i.e., rejection), average levels of peer status, or higher levels of peer status (i.e., high perceived popularity, social preference).

The higher levels of peer status are associated with unique behavioral profiles. Specifically, perceived popularity is related to relational aggression, whereas both types of popularity (i.e., perceived popularity, social preference) are related to prosocial behavior (LaFontana & Cillessen, 2002; Prinstein & Cillessen, 2003; Rodkin, Farmer, Pearl, & Van Acker, 2000; Rubin, Bukowski, & Parker, 1998). These behavioral characteristics may in part result from popular adolescents making particular attributions about the intentions underlying their peers' aggressive and/or prosocial behaviors. These adolescents also may have different beliefs about what their peers expect and/or intend to be the result of their aggressive or prosocial behaviors (i.e., have different outcome expectancies). For example, perceived popularity may relate to making instrumental attributions (i.e., believing that the peer intends to increase their social status) about the

intentionality underlying aggressive behaviors. Furthermore, perceived popularity may also relate to positive outcome expectancies (i.e., believe that the peer wants to gain control over others) concerning the engagement in aggressive behaviors. On the other hand, high social preference may relate to instrumental attributions and positive outcome expectancies (e.g., peer status gains) regarding prosocial behaviors. Furthermore, instrumental attributions and positive outcome expectancies may relate to high status adolescents' subsequent engagement in these behaviors.

Coping strategies are used to deal with victimization from aggression and may also vary in terms of popularity type. Comparable to attributions and outcome expectancies, certain coping strategies are related to the perpetuation of aggressive behaviors (i.e., revenge), whereas others are unrelated to aggressive behaviors (i.e., talking to a friend/parent). Thus, perceived popularity may be correlated with coping strategies that serve to continue the progression of aggressive behaviors as would be predicted by past research findings indicating a connection between perceived popularity and relational aggression (Prinstein & Cillessen, 2003). Additionally, adolescents who are perceived as popular may believe their peers' aggressive behaviors threaten their peer status, which could also perpetuate aggressive behaviors. In contrast, social preference may be linked to more adaptive strategies unrelated to aggressive behaviors. This proposal is reasonable, given that social preference is associated with prosocial behavior only and not aggression (Cillessen & Mayeux, 2004).

The linkages between popularity type and social behaviors have been thoroughly researched. In contrast, the associations between popularity type and social cognitive processes, namely attributions, outcome expectancies, and coping intentions, have not

been given much consideration and consequently an understanding of these associations is limited. Nonetheless, some research is available corroborating the relationship of aggressive behavioral characteristics to social cognitive processes concerning peers' aggressive behaviors. For instance, aggressive adolescents believe their peers have hostile intentionality, even if their peers interpret the behaviors as neutral, expect positive outcomes for acting aggressively, and use revenge coping strategies to deal with actual and perceived victimization (Burgess, Wojslawowicz, Rubin, Rose-Krasnor, & Booth-LaForce, 2006; Perry, Perry, & Rasmussen, 1986; Wadsworth, Raviv, Compas, & Connor-Smith, 2005).

It is reasonable to hypothesize that various social cognitive processes concerning social behaviors may contribute to the distinctive behavioral profile associated with popularity types. Following this assertion, the proposed study will investigate peer status in relation to attributions, outcome expectancies, and coping intentions regarding adolescents' social behaviors, including overt aggression, relational aggression, and prosocial behavior. Coping intentions is the terminology used for the proposed study to indicate an anticipated coping strategy used to deal with aggressive behaviors. However, adolescents' coping intentions do not necessarily reflect how they will actually deal with aggressive behaviors.

The first section of this review examines the research on peer status by focusing on the measurement of peer status, the distinction between the two forms of high peer status, and the behavioral characteristics associated with these statuses. In the second section, the social information processing model (SIP) is reviewed. After this section, two components of the social information processing model, specifically attributions and

outcome expectancies, will be examined in more detail. Within this section, research on the associations among adolescents' behavioral characteristics, attributions, and outcome expectancies will be discussed. Based on this review, the relationship between high peer status and these social cognitive processes will be hypothesized. The final section reviews research on the coping strategies used to deal with victimization, the relationship between coping strategies and behavioral characteristics, and how these strategies may relate to both types of popularity.

Peer Status in Adolescence

Children are concerned with their social position among their peers and as they become adolescents this concern increases (Eder, 1985). Low peer status is associated with an assortment of both short-term and long-term adjustment consequences, such as aggression, internalizing symptoms (e.g., depression), externalizing symptoms (e.g., antisocial behaviors), and poor academic adjustment (Kraatz-Keily, Bates, Dodge, & Pettit, 2000; Ollendick, Weist, Borden, & Green, 1992; Rubin, Bukowski, & Parker, 2006). Similarly, high peer status, in particular perceived popularity, is related to short-term and long-term adjustment difficulties. For instance, adolescents who are perceived as popular and frequently engage in relational aggression also experience adjustment problems (i.e., depression) (Rose, Swenson, & Waller, 2004). In contrast, such relationships are not found between high social preference and adjustment difficulties. Social preference and perceived popularity represent two distinctive forms of high peer status and thus an investigation of the methodology used to assess both types of popularity is warranted.

Methodology to Assess High Peer Status

Many of the investigations on peer status have utilized and/or adapted the methodology created by Coie and colleagues (1982). Coie and colleagues had children list the names of children whom they “like most” and “like least.” The “like most” and “like least” nominations were aggregated and then standardized within grade/class to create a z-score for both nominations. A child’s social preference score, an indicator of likeableness, was calculated by subtracting the number of “like least” from the number of “like most” nominations he or she received. A child’s social impact score, an indicator of social visibility, was calculated by adding the number of “like most” and “like least” nominations together. Social preference is hypothesized to relate to better adjustment due to its associations with positive characteristics (i.e., leadership) (Rubin et al., 1998). On the other hand, social impact is linked to both negative characteristics (i.e., starting fights, being disruptive), and positive characteristics. Coie and colleagues created a two-dimensional grid formed by social preference scores on one axis and social impact scores on the other axis.

There are also five possible peer status groups that can be derived using Coie et al. (1982) peer nomination procedure. These include popular, rejected, neglected, controversial, and average children. The popular group (sociometric popularity) receives a social preference score greater than one, a like most score greater than zero, and a like least score of less than zero. The rejected group receives a social preference score of less than negative one, a “like least” score greater than zero, and a “like most” score less than zero. The controversial group receives a social impact score of greater than one and received “like most” and “like least” scores that were both greater than zero. The

neglected group receives a social impact score less than negative one and a “like most” score of zero. The average group receives a social preference score that was greater than -0.50 and less than 0.50.

Coie and colleagues’ (1982) method for identifying popular adolescents dichotomously classified adolescents as either sociometrically popular (receiving a “1”) or not sociometrically popular (receiving a “0”). Another way to assess popularity is to use social preference as a continuous variable. This alternative method also utilizes the social preference score based on the “like most” and “like least” nomination items but the variable is not dichotomized based on the mean (e.g., Andreou, 2006; Cillessen & Mayeux, 2007). By utilizing this method, higher scores indicate more preference by peers and lower levels indicate lower preference by peers. In the present research, continuous social preference scores (rather than dichotomous classification) will be used.

Perceived popularity refers to adolescents’ reputational labeling rather than their likeability. To assess perceived popularity, adolescents list the names of peers in their class/grade who fit the descriptions of “popular” and “unpopular” (rather than “most like” or “least like”) (Cillessen & Mayeux, 2004; Lafontana & Cillessen, 1999). These nominations are aggregated and then standardized within grade/class to create a z-score for both the popular and unpopular nominations. The standardized “unpopular” nominations are subtracted from the standardized “popular” nominations to generate a perceived popularity score. These are then restandardized within grade/class. The final score for perceived popularity is a continuous variable with higher scores indicating a higher reputation and lower scores indicating unpopularity among one’s peers (Cillessen & Mayeux, 2004).

Peer Status, Aggression, and Prosocial Behaviors

Peer status is differentiated with regard to the type of aggression in which the adolescent engages (Xie, Swift, Cairns, & Cairns, 2002). Researchers have consistently found positive relationships between perceived popularity and relational aggression as well as negative relationships between social preference and relational, social and overt aggressive behaviors (LaFontana & Cillessen, 2002; Prinstein & Cillessen, 2003; Rodkin et al., 2000; Rubin et al., 1998). Relational aggression is a type of aggression in which the adolescent causes harm to another individual through damaging their relationships or peer status, and it includes behaviors such as rumor spreading, friendship manipulation, and ostracism (Crick & Grotpeter, 1995). Social aggression is almost synonymous with relational aggression and it includes attacking another peers' reputation (Xie et al., 2002). Overt aggression is another type of aggression in which the adolescent causes physical harm (i.e., kicking/punching), verbal harm (i.e., calling the peer mean names, threatening to hurt the peer), and/or destruction of a peer's property (Crick & Grotpeter, 1995).

During adolescence, perceived popularity is associated with relational and social aggression but not overt aggression (Lafontana & Cillessen, 1999; Cillessen & Mayeux, 2004; Parkhurst & Hopmeyer, 1998; Xie et al., 2002). Overt aggression is associated with peer rejection in adolescence. Additionally, both perceived popularity and social preference are associated with prosocial behaviors. Prosocial behavior includes those behaviors that involve a concern for the welfare of others and include behaviors such as helping one's peers and cheering peers up when they feel down (Eisenberg & Miller, 1987; Crick, 1996). Therefore, both popularity types are related to similar behavioral

characteristics with regard to prosocial behavior but differential characteristics in terms of aggressive behaviors.

Investigations utilizing longitudinal research designs provide additional evidence for the behavioral characteristics associated with social preference and perceived popularity. For example, Cillessen and Mayeux (2004) examined 5th graders' peer status changes over four years as well as peer status in relation to overt aggression, relational aggression, and prosocial behaviors. Overt aggression was positively related to perceived popularity in 5th grade but by 9th grade the association between perceived popularity and overt aggression disappeared. On the other hand, across the four years, the relationship between overt aggression and social preference remained negative. Relational aggression was positively associated with perceived popularity across the four years and this relationships became stronger from middle childhood into adolescence. A negative association was found between social preference and relational aggression from 5th through 9th grade. Across the four years, prosocial behaviors were associated with both popularity types.

Few studies have been conducted with gender as a moderator in the relationship between high peer status and social behaviors. However, in two studies that did investigate such relationships, overt aggression was not related to perceived popularity for adolescent girls or boys (Cillessen & Mayeux, 2004; Rose et al., 2004). Gender did moderate the relationship between perceived popularity and relational aggression, indicating that this relationship is stronger among adolescent girls than boys (Cillessen & Mayeux, 2004). No moderations were found between social preference and either aggression type. In contrast, gender was found to moderate the relationship between both

popularity types and prosocial behavior. For instance, girls with either popularity type were rated as more prosocial than boys of similar status (Lease, Kenned, & Axelrod, 2002). These findings indicate the importance of examining the moderating role of gender in relation to peer status and adolescents' social behaviors.

Little is known about how peer status, in particular high peers status, relates to adolescents' attributions and outcome expectancies for their peers' social behaviors. As a result of this gap in the literature, research examining the relationship between different behavioral characteristics (i.e., aggressive, victimized) and these components of the social information processing model (i.e., attributions, outcome expectancies) will serve as a foundation for the present study. The social information processing model (Crick & Dodge, 1994) is a theoretical model proposing that the enactment of social behaviors is the result of processing social information through a number of steps. In the following section, the social information processing model is examined in detail along with a review of how this model relates to perceived popularity and social preference. Each step of the model will also be discussed with a detailed elaboration on attributions and outcome expectancies in the following section.

The Social Information Processing Model

Several social information processing models (e.g., Dodge, 1986; Crick & Dodge, 1994; Dodge, Pettit, McClaskey, & Brown, 1986; Huesmann, 1988; Rubin & Krasnor, 1986) have been proposed to advance our understanding of how children and adolescents may act when faced with social situational cues that require a response. These models have also furthered our understanding of the subsequent adjustment of children and adolescents following negative social interactions.

In one influential early model, Dodge (1986) proposed five-steps to account for how the processing of social cues influences children's social behaviors. These five steps included the encoding of situational cues, representation and interpretation of those cues, mental search for possible responses to the situation, selection of a response, and behavioral enactment. To illustrate, when children encounter a social situation, they encode the cues present in the situation and then use these cues to construct an interpretation of the social situation. During their interpretations, children make inferences about their peers' intentionality in the social situation. Once inferences are made, children access long-term memory for a response to the social situation. Responses are evaluated and then a favorable response is selected. Next, the favorable response is behaviorally enacted.

Dodge's (1986) model has been very successful at predicting the social adjustment of both children and adolescents (Crick & Dodge, 1994; Rubin & Krasnor, 1986). Furthermore, this model has increased our understanding about how certain steps, in particular encoding and interpretation, work together to influence social behavior (Dodge et al., 1986; Dodge & Somberg, 1987). This model also has served as a guide for intervention programs targeting socially maladjusted children. A limitation of this model is that it does not include social schemas, social knowledge, and goal orientation (i.e., goals designed to produce an expected outcome).

In another model, Huesmann (1988) proposed that social information processing relies on cognitive scripts which are stored in a person's memory. These cognitive scripts guide the processing of information across social situations and result in subsequent social behaviors. In the first step, children encounter a social problem and then evaluate

environmental cues (e.g., what other children are doing, facial expressions). Next, children search their memory and evaluate stored scripts (i.e., mental representations of similar situations that have been encountered before). If an appropriate script is not found, children will access their memory again and pick another script. After a script is deemed appropriate, children enact a behavior taken from the script. There are some limitations of this model including the lack of explanation for how a script is selected and how goal orientation influences social behaviors (Chung & Asher, 1996).

Subsequently, Crick and Dodge (1994) reformulated Dodge's (1986) social information processing model, incorporating goal selection which was previously ignored by both Dodge (1986) and Huesmann (1988). Goal selection/orientation was believed to be important to children's responses to immediate social stimuli and thus it was included in Crick and Dodge's model. In the rest of this section, each step of the model will be reviewed and examples of each step will be given. Similar to the previous models, Crick and Dodge's model also incorporates how past experiences influence children's social behaviors. When children perceive various environmental cues, their behavioral responses follow from the processing of the cues that they receive. This model proposes that children's processing of social information occurs through the following six steps: (1) encoding of external and internal cues, (2) interpretation and mental representation of those cues, (3) clarification or selection of a goal, (4) response access or construction, (5) response decision, and (6) behavioral enactment.

During the encoding of social situations, adolescents may selectively attend to situational and internal cues (step 1). Next, adolescents interpret the situation and the intent of the other peer in the situation (step 2). More specifically, interpretations involve

accessing relevant situational representations stored in long-term memory and then engaging in a causal analysis of the current social situation. Adolescents decide on the intentionality of the individual or individuals involved in the social situation and these inferences are influenced by previous experiences with the peer.

To exemplify steps 1 and 2, imagine a lunchroom full of adolescents. Garth walks by Clayton drinking a carton of milk and all of a sudden Garth spills milk all over Clayton's back. This is an ambiguous provocation situation because it is not clear whether Garth intended to spill the milk on Clayton's back or whether it was an accident. There are a few steps Clayton goes through when evaluating this situation. First, Clayton must encode this situation (Step 1) before interpreting it (Step 2). During the interpretation process, Clayton tries to decide why Garth spilled milk all over his back. Clayton may think that Garth is trying to make fun of him (hostile attribution), Garth tripped over something (neutral attribution), or Clayton may believe something about him (i.e., he's not cool) caused Garth to spill milk on his back (internal attribution). During interpretation, Clayton is influenced by an internal database of social schemata, scripts, and social knowledge. Let's imagine that Clayton believes Garth is trying to make fun of him (external attribution). However, changes or revisions may also occur to these processes as well. For example, Clayton may remember another time this happened to him with Garth and during this situation he remembered that Garth had tripped over something and subsequently apologized. Thus, Clayton may revise his interpretation and decide that Garth is somewhat clumsy and tripped (neutral attribution). As a result of this revision, Clayton may revise his internal database based on this experience.

Once the social situation is interpreted, adolescents then select a goal or

desired outcome for the situation (Step 3). In social situations, adolescents bring their specific goal orientations and tendencies as well as revise and construct new goals in response to the immediate social stimuli. Let's return to Garth and Clayton from the spilled milk incident in the lunchroom to demonstrate the process of goal selection.

Clayton may consider what the other adolescents in the lunchroom are thinking and may conclude that these adolescents also view Garth spilling milk on Clayton's back as an accident as well. After interpreting the situation, Clayton decides that he wants to maintain a good relationship with Garth and instead of revenge he wants a clean shirt (goal).

Next, adolescents access their memory for possible responses to social situations (Step 4). In novel situations, adolescents may construct new behaviors in response to the immediate social cues. Thus, adolescents may examine responses that have never been used before. To illustrate response access, think back to the hypothetical incident in which Garth spilled milk on Clayton's back in the lunchroom. Clayton previously decided that he wanted his shirt cleaned and now he must think of possible responses to this situation in order to achieve his goal (i.e., getting his shirt cleaned). To achieve his goal, Clayton recognizes that he should either ask Garth to get some paper towels or change his shirt (both possible responses).

Next, previously accessed or constructed responses are evaluated and the response evaluated positively is used for behavioral enactment (Step 5). Adolescents evaluate their possible responses (response evaluation), decide on the type of outcome likely to happen as the result of each response (outcome expectancies), determine their ability to perform the response (response efficacy), and then select a response. The

chosen response is then behaviorally enacted by the adolescent (Step 6). Returning to the Garth and Clayton example, Clayton previously decided that he wanted to change or clean his shirt. Clayton then realizes that he will not be able to change his shirt because he does not have an extra shirt but if he gets his shirt cleaned right away it should not be stained too much. Clayton decides he should ask Garth to grab some paper towels to achieve his goal (i.e., having his shirt cleaned) (Step 5). Finally, Clayton must enact this behavior and to do so, he asks Garth to get paper towels from their teacher or the bathroom to clean his (Clayton) shirt (Step 6).

The impact of gender on social information processing is another important consideration. Crick and Dodge (1994) hypothesized that gender may moderate the relationship between social information processing and adjustment. However, they did not mention testable hypotheses. In the following section, the influence of gender on social information processing will be briefly reviewed.

Gender and the Social Information Processing Model

Gender is important to the investigation of social information processing for three reasons. First, the majority of studies (e.g., Burgess et al., 2006; Perry et al., 1986) examining the social information processing model have focused on overt aggression. Girls use other types of aggressive behaviors, namely relational aggression, and thus these previous investigations and findings may not necessarily apply to girls' social information processing (Archer, 2004; Crick & Grotpeter, 1995). Second, boys are typically examined in these studies. Investigating gender differences in social information processing is an important consideration because boys and girls both may exhibit the hostile attribution bias (i.e., tendency to perceive hostile intent in a situation involving an

ambiguous provocation by a peer) (Dodge & Crick, 1990). However, overtly aggressive boys attribute more hostility in ambiguous provocation situations when compared to overtly aggressive girls, supporting the importance of considering the influence of gender on social information processing.

The third reason is that gender differences have been found in aggressive behaviors. For example, overt aggression is more characteristic of boys than girls, whereas relational aggression is more characteristic of girls than boys (Crick & Grotpeter, 1995). To better understand girls and relational aggression, Crain and colleagues (2005) examined preadolescent girls in order to understand the relevance of the social information processing model for relational aggression. They found that girls' interpretation of intentionality, goal clarification, and response access were unrelated to peer-nominated and self-reported relational aggression. Crain and colleagues suggest that age may account for these findings because preadolescent girls are less relationally aggressive than adolescent girls (Archer, 2004). To reconcile these findings, the proposed study will investigate gender differences in adolescents' social information processing regarding both overt and relational aggression as well as prosocial behaviors.

In the next section, relevant literature regarding components of the social information processing model, in particular attributions and outcome expectancies, will be discussed. The definitions of attributions and outcome expectancies will also be given as well as research findings regarding the associations between behavioral characteristics and these social cognitive processes concerning adolescents' social behaviors. Additionally, gender differences will also be discussed when possible. Hypotheses will also be proposed within each section pertaining to the relationship between peer status

and the two social information processing components, attributions and outcome expectancies.

Attributions and Aggressive Behaviors

Being the target of aggressive behaviors may lead some adolescents to reflect on the reasons behind such behaviors as well as attempt to understand who is responsible for these behaviors. Attribution theory has been used to explain how people make decisions about the causes of aggressive behaviors. The attribution an individual assigns to aggressive behaviors influences their thoughts and their subsequent behaviors. In addition, adolescents' behavioral characteristics also influence the attributions they make. In this section, research findings will be discussed concerning the relationship of aggressive behavioral characteristics and gender to adolescents' attributions in regard to their peers' aggressive behaviors. These studies serve as the basis for hypotheses in the proposed study because few researchers have examined peer status in relation to adolescents' attributions.

Research relating adolescents' aggressive behavioral characteristics to biased attributional patterns has greatly improved our understanding of the specific processes and mechanisms involved in aggressive acts (e.g., Burgess et al., 2006; Dodge & Crick, 1990). These biases influence adolescents' perceptions, interpretations, and decisions concerning social situations (Burgess et al., 2006; Dodge, 1980; Dodge & Crick, 1990; Dodge & Tomlin, 1987; Sancilio, Plumert, & Hartup, 1989). Subsequent aggressive behaviors are influenced by adolescents' processing biases. In particular, overtly aggressive children and adolescents tend to assign hostile intent to ambiguous provocations and peer conflict situations, make decisions about intent impulsively, and

use available social information in a biased way (Dodge & Newman, 1981; Dodge et al., 1986). These processing deficits result in inaccurate interpretations of their peers' intentions, even when the peer is perceived as acting benignly by their nonaggressive peers. Furthermore, overtly aggressive boys are also more likely to make hostile attributions for ambiguous peer conflict situations when compared to overtly aggressive girls (Dodge & Crick, 1990). These findings again underscore the importance of examining gender differences in respect to attributional processes pertaining to aggressive behaviors.

Few researchers have investigated similar attributional patterns among relationally aggressive adolescents. Like overtly aggressive adolescents, relationally aggressive adolescents also exhibit the hostile attribution bias within ambiguous relationally provocative and peer conflict scenarios but not for overtly aggressive scenarios (Crick, Grotpeter, & Bigbee, 2002; Crick & Werner, 1998). Thus, attributional biases are specific to the particular form of aggressive behavior in which the individual engages. These results demonstrate the importance of examining different types of aggression in order to fully understand the attributional patterns associated with these behaviors.

Yeung and Leadbeater (2007) hypothesized that preadolescent girls (ages 9-11) would be more likely to exhibit the hostile attribution bias for relationally provocative scenarios when compared to boys. Their hypotheses were based on findings regarding girls engaging in more relationally aggressive behaviors in comparison to boys (Archer, 2004). However, Yeung and Leadbeater found no gender differences in hostile attribution biases in regard to relationally provocative scenarios. In contrast, Bailey and Ostrov

(2008) found that young women (ages 18-25) exhibited the hostile attribution bias for relationally provocative scenarios, whereas young men exhibited the bias for reactively aggressive (i.e., conscious effort to harm someone) scenarios. Age may account for these different findings. For instance, preadolescent girls are not as relationally aggressive as they may be in adolescence (beginning at age 11) (Archer, 2004; Rubin et al., 1998). Therefore, additional research focused on gender differences in adolescents' attributional patterns with respect to relational aggression is warranted.

Attributions and Prosocial Behavior

Limited attention has been given to investigations of adolescents' attributions concerning their peers' prosocial behavior. Hughes and colleagues (1991) assessed this topic among aggressive-rejected and nonaggressive boys. They asked these boys questions regarding the intentionality of other boys who were acting prosocially in hypothetical stories. After the boys read the hypothetical stories and answered questions about intentionality, they were told that the boy before them had left his prize for the boy to take home (real life assessment). The boys were then asked about the intentionality of the boy who had left his prize for him. Aggressive-rejected and nonaggressive boys did not differ in their beliefs about the intentionality of the other boys in the hypothetical story condition. However, the boys did differ in their beliefs about intentionality in the real life assessment condition. Specifically, aggressive-rejected boys did not believe the boy who had left his prize for him (the aggressive-rejected boy) had positive intentionality (i.e., they believed he was not being nice), whereas nonaggressive boys believed the boy had positive intentionality (i.e., was being nice). This study provides a foundation for understanding how aggressive behavioral characteristics relate to

attributions regarding prosocial behavior. A limitation of this study was the examination of boys only, and thus little is known about any possible gender differences. This latter point is especially intriguing, given that girls engage in more prosocial behaviors when compared to boys (Pursell, Laursen, Rubin, Booth-LaForce, & Rose-Krasnor, 2008).

No studies have examined perceived popularity and social preference in relation to attributions regarding their peers' prosocial behavior. This consideration is important because perceived popularity and social preference are both linked to prosocial behavior and adolescents may believe that such behaviors are carried out because of one's desire for peer status maintenance or attainment (Mayeux & Cillessen, 2008; Cillessen & Mayeux, 2007; Walcott, Upton, Bolen, & Brown, 2008). Some researchers (e.g., Long & Pellegrini, 2003; Pellegrini & Bartini, 2001) have concluded that high status adolescents use prosocial behavior for different reasons. For example, prosocial behavior among high status adolescents, particularly perceived popular adolescents, is used as a "backup strategy," i.e., a way to maintain status when relationally aggressive tactics do not work (Lease et al., 2002). On the other hand, prosocial behavior may be the only strategy used to maintain status by children who are trying to maintain high social preference. It is unclear how gender influences high status adolescents' attributions in regard to their peers' prosocial behavior. As a result of girls engaging in more prosocial behavior than boys, high status girls may expect prosocial behavior to be more instrumental toward status attainment when compared to high status boys (Pursell et al., 2008).

Outcome expectancies, another component of the social information processing model, also vary as a function of an adolescent's behavioral characteristics. In the following sections, research on the relationship between outcome expectancies and

behavioral characteristics will be discussed. The first section examines research on the outcome expectancies for aggressive behaviors. The second section includes research on the outcome expectancies for prosocial behavior. The influence of gender on outcome expectancies will also be reviewed within both of these sections.

Outcome Expectancies for Aggressive Behaviors

Outcome expectancies are the beliefs about the possible outcomes of behaviors and behavioral strategies (Crick & Dodge, 1994; Dodge & Schwartz, 1997). Adolescents may decide to engage in aggressive behaviors because they expect a positive outcome associated with acting aggressively and are unconcerned with the negative outcomes. For example, imagine Jim, an adolescent who believes engaging in aggressive behaviors will result in him having peer respect and obedience, both favorable outcomes according to Jim. After Jim engages in aggressive behaviors, a peer decides to give Jim his seat during lunch which Jim equates to having gained respect by acting aggressively. Thus, Jim's aggressive behaviors have resulted in what he expected and wanted. Jim continues to increase his aggressive behaviors in order to obtain more peer respect and obedience. Considering that outcome expectancies partly influence subsequent actions, namely aggressive behaviors, investigations of this social cognitive process are important.

Empirical research has provided support for the linkage between positive outcome expectancies and the engagement in aggressive behaviors (e.g., Cuddy & Frame, 1991; Dodge et al., 1986; Quiggle, Garber, Panak, & Dodge, 1992). For example, overtly aggressive adolescents expect positive outcomes concerning overt aggression and consequently these expectations are linked to aggressive behaviors in the future (Hubbard, Cillessen, Dodge, Coie, & Schwartz, 2001; Smithmyer, Hubbard, & Simons,

2000). In contrast, negative outcome expectancies (i.e., aggressive behaviors result in punishment) are linked to lower levels of overt aggression (Perry et al., 1986). Thus, outcome expectancies are associated with engaging in or not engaging in overtly aggressive behaviors. Gender differences are also found. For instance, girls are more likely to expect negative outcomes for overt aggression, whereas boys are more likely to expect positive outcomes (Perry et al., 1986; Slaby & Guerra, 1988). These findings could partly explain why girls engage in less overtly aggressive behaviors when compared to boys.

Few studies have been conducted on the outcome expectancies of relationally aggressive children and adolescents. In one of the few studies (i.e., Crick & Werner, 1998), children read hypothetical relational and instrumental aggression scenarios and then decided on the outcome expectancies pertaining to each scenario. Findings indicated that the aggressive characteristics of the children related to their outcome expectancies regarding the specific type of aggression in which they engaged. For instance, relationally aggressive children expected positive outcomes for relational aggression, whereas overtly aggressive children expected the same but for instrumental aggression. Gender differences were also found and indicated that girls evaluated relational aggression positively and boys evaluated overt aggression positively. Similar patterns are found among relationally aggressive adolescents (Goldstein & Tisak, 2004).

Outcome Expectancies for Prosocial Behavior

Few studies have investigated outcome expectancies for prosocial behavior. In addition, many of these examinations have focused on aggressive and nonaggressive boys only. Cuddy and Frame (1991) examined the outcome expectancies of male adolescents

who were nominated as rejected-aggressive, controversial-aggressive, or popular-nonaggressive. Popular-nonaggressive was calculated through “like most” and “like least” peer nominations, indicating that these adolescents would be considered sociometrically popular. Adolescents did not differ in their outcome expectancies (i.e., making someone feel glad) regarding prosocial behavior. Their findings, in particular those concerning sociometrically popular-nonaggressive male adolescents, is an important consideration for the proposed study. Taking their findings into account, future investigations should also examine perceived popularity in relation to outcome expectancies pertaining to prosocial behavior. The proposed study will investigate this proposal. Such an investigation is valuable because prosocial behavior may be considered instrumental to the maintenance of perceived popularity, especially when relational aggressive strategies do not work (Lease et al., 2002).

Similar to outcome expectancies and attributions, coping strategies may also be related to the perpetuation of aggressive behaviors. In this proposed study, coping intentions (i.e., how adolescents believe they would deal with victimization) are investigated with a focus on how adolescents deal with aggressive behaviors and how the strategies they use relate to relational and overt aggression. However, previous studies have used the term “coping strategies” interchangeably with “coping intention” and thus the latter will be used when reviewing their studies.

In the following section, coping strategies in relation to adolescents’ adjustment will be examined. Next, the associations between behavioral characteristics and coping strategies used to deal with overt and relational aggression will be reviewed. In the last part of this section, the hypothesized linkages between high peer status and coping

intentions will be discussed. Coping strategies used to deal with prosocial behaviors will not be reviewed because peers' positive behaviors are not considered to be a form of victimization.

Coping Strategies and Peers' Aggressive Behaviors

People use coping strategies to reduce or eliminate stressors or psychological distress (Folkman, 1984). Coping strategies can be organized into three categories: primary control engagement coping, secondary control engagement coping, and disengagement coping (Reid, Dubow, & Carey, 1995; Wadsworth & Compas, 2002). Primary control engagement, or efforts to directly change the stressor or one's emotions, includes problem-solving (e.g., trying to make things better), social support seeking (e.g., talking to a friend), emotional expression, and emotional modulation. Secondary control engagement are strategies in which adolescents attempt to adapt to the stressor by regulating attention or cognition and it includes cognitive restructuring, positive thinking, and acceptance. Disengagement is a type of coping in which adolescents attempt to get away from the stressor or emotions and it involves avoidance (e.g., telling self it doesn't matter), denial, internalizing (e.g., crying), externalizing (e.g., hitting something) and wishful thinking. Research on which coping strategies are used to deal with aggressive behaviors remains inconsistent. In particular, adolescents may primarily use avoidance coping strategies to deal with relational aggression in one study (i.e., Waasdorp, Bagdi, & Bradshaw, 2010), whereas adolescents may use social support seeking in another (i.e., Remillard & Lamb, 2005).

In terms of adjustment, primary and secondary control engagement coping strategies are associated with few behavioral problems, whereas disengagement coping

strategies are associated with poor adjustment, such as depression (Wadsworth et al., 2005). In addition, adolescents may use a combination of all three coping strategies within the same situation (Frydenberg & Lewis, 1994). Adolescents also adapt their coping strategies to the specific situation they encounter (Band & Weisz, 1988; Compas, Malcarne, & Fondacaro, 1988). Therefore, it is important to examine the coping strategies adolescents use in a variety of situations, such as when they experience overt and relational aggression.

An abundance of studies have been conducted on the coping strategies used to deal with overt aggression and these strategies vary with respect to age. Early adolescents typically seek help from an adult, whereas older adolescents rely on social-support seeking coping strategies to deal with overt aggression (Eslea & Rees, 2001). Gender differences are also found in the coping strategies used to deal with overt aggression. In particular, female adolescents more often seek help from an adult or friend in comparison to male adolescents, who rely on aggressive strategies, such as revenge (Hunter, Boyle, & Warden, 2007).

Behavioral characteristics are also associated with different coping strategies. Shy/withdrawn and aggressive preadolescents are more likely to use avoidant coping strategies (i.e., disengagement coping) to deal with instrumental aggression in scenarios involving acquaintances and unfamiliar peers when compared to preadolescents in the control group (i.e., nonaggressive and not shy) (Burgess et al., 2006). Furthermore, aggressive preadolescents used revenge coping strategies more often for unfamiliar peers than for their good friends, indicating that they give their friends the benefit of the doubt. Similarly, bully-victims of overt aggression also used revenge coping strategies when

compared to victims only (Pateraki & Houndounmadi, 2001). On the other hand, victims used social support seeking coping strategies to deal with overt aggression.

Coping strategies also vary with the type of aggressive behavior with which the adolescent is dealing. For example, Phelps (2001) found that adolescents endorsed internalizing coping strategies (i.e., self-blame) to deal with relational aggression more so than they did to deal with overt aggression. Additionally, physically victimized adolescents used internalizing coping strategies to deal with relational aggression, which is linked to continued victimization (Olweus, 1994). On the other hand, social support seeking coping strategies are linked to lower levels of victimization via relational aggression one year later (Hunter et al., 2007). However, social support seeking coping strategies are related to stable levels of victimization via overt aggression. By considering all of these findings, it may be reasonable to conclude that different coping strategies may be employed by adolescents, depending on their peers' social behaviors. Furthermore, the effectiveness of coping strategies also varies depending on their peers' behaviors.

Few investigations have been conducted on the associations between peer status and coping strategies. In one of the few studies (Sandstrom, 2004), sociometric popularity was examined in relation to active coping (i.e., talking to a friend), aggressive coping (i.e., getting into a fight), denial coping (i.e., pretending it did not happen), and ruminative coping (i.e., thinking about the situation over and over again) used to deal with peer rejection. Findings indicated that sociometric popularity was negatively related to aggressive coping strategies and not associated with any of the other coping strategies examined in the study. It is not expected that sociometric popularity would be related to aggressive coping strategies because sociometric popularity is not related to aggressive

behaviors and thus aggressive strategies would not be used to deal with peer rejection. In Sandstrom's study, only coping strategies regarding peer rejection were examined and thus additional investigations are needed in order to understand how sociometric popularity may relate to coping strategies used to deal with their peers' aggressive behaviors.

Rationale

Previous research has demonstrated some of the ways that adolescents' social cognitive processes influence their aggressive and prosocial behaviors. Overtly and relationally aggressive adolescents exhibit the hostile attribution bias in regard to the type of aggressive behavior in which they engage (Crick et al., 2002; Crick & Werner, 1998; Dodge & Crick, 1990). For attributions concerning prosocial behavior, aggressive boys are less likely to believe that other boys have prosocial intentions (i.e., wanted to be nice) when compared to nonaggressive boys (Hughes et al., 1991). Outcome expectancies also vary in terms of aggressive behavioral characteristics. For example, aggressive adolescents are more likely to expect positive outcomes pertaining to aggressive behaviors (Crick & Werner, 1998; Hubbard et al., 2001; Perry et al., 1986; Smithmyer et al., 2000). Additionally, children with various sociometric statuses, such as rejected-aggressive, controversial-aggressive, and popular-nonaggressive, all believe that prosocial behavior have positive outcomes (Cuddy & Frame, 1991). Aggressive adolescents are also more likely to use revenge coping strategies to deal with hypothetical and actual peer conflict situations when compared to their nonaggressive peers (Burgess et al., 2006). These studies illustrate how important attributions, outcome expectancies,

and coping intentions are to study because such social cognitive processes are linked to either engaging in or not engaging in aggressive behaviors.

The proposed study extends this research by providing a much needed investigation of the role of peer status in adolescents' social cognitive processes focusing in particular on high status adolescents. This is an important contribution because different forms of high status (i.e., high social preference, high perceived popularity) may be associated with different social cognitive processes that may differentially influence adolescents' social behaviors. The proposed study utilizes both closed and open-ended questions to assess adolescents' social cognitive processes. This methodology may provide a better understanding of these processes and how they relate to subsequent social behaviors. Furthermore, this proposed study adds to the literature on peer status by investigating how social cognitive variables moderate the relationship between peer status and social behaviors.

Statement of Hypotheses

To investigate the hypotheses of this study, three theoretical models will be examined. The first model will examine relationships among peer status (social preference, perceived popularity), and social behaviors, including overt and relational aggression as well as prosocial behavior. The second will examine relationships between peer statuses and the social cognitive processes of attributions, outcome expectancies, and coping intentions. The third is an integrative model representing relationships among peer statuses, social behaviors, and social cognitive processes.

The first set of hypotheses proposes relationships between peer status (social preference, perceived popularity) and social behaviors (aggressive and prosocial

behavior), and these are tested in the first model (see Figure 1). The second model (see Figure 2) provides a structure for testing hypotheses two through four. The second set of hypotheses proposes relationships among social preference, perceived popularity, and attributions pertaining to their peers' social behaviors (i.e., relational aggression, overt aggression, prosocial behaviors). The third set of hypotheses proposes relationships among social preference, perceived popularity, and outcome expectancies concerning their peers' social behaviors. The fourth set of hypotheses proposes relationships among social preference, perceived popularity, and coping intentions used to deal with aggressive behaviors. The fifth and sixth hypotheses will be tested in the third model (see Figure 3). The fifth set of hypotheses proposes how attributions serve as a moderator in the relationship between popularity type and social behaviors, whereas the sixth set of hypotheses uses outcome expectancies as the moderator. Gender differences were proposed in the first set of hypotheses but not for the second through sixth as there is a lack of research in this area.

The first model describes the associations between peer status and social behaviors (see Figure 1). Gender differences are also expected and in the model gender is expected to serve as a moderator between each of these associations. Hypothesis I details the expected relationship among each of these variables.

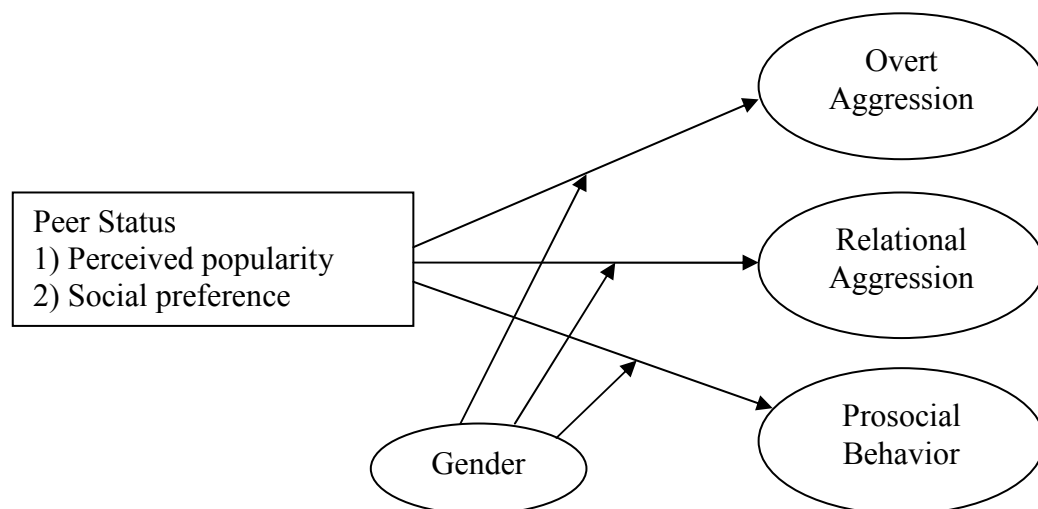


Figure 1: Representation of the Relationship between Popularity Types, Aggressive and Prosocial Behaviors, as well as Gender Moderations (Model 1)

Hypothesis I. Relations among Peer Status, Aggressive and Prosocial Behaviors

Ia. Overt aggression: A negative relationship is expected between perceived popularity and overt aggression. Similarly, a negative relationship is also expected between social preference and overt aggression.

Ib. Relational aggression: There will be a positive relationship between perceived popularity and relational aggression. A negative relationship will be found between social preference and relational aggression.

Ic. Prosocial behavior: A positive relationship is expected among both popularity types and prosocial behavior.

Id. Main effect of Gender: No gender differences are expected regarding the engagement in overt aggression. Girls will be more likely to engage in relational aggression and prosocial behavior when compared to boys.

Ie. Overt aggression and gender interaction: No interactions are expected between popularity type and gender.

If. Relational aggression and gender interaction: It is expected that the relationship between perceived popularity and relational aggression will be stronger for girls when compared to boys. No interaction will occur between gender and social preference.

Ig. Prosocial behavior and gender interactions: It is expected that the relationship between perceived popularity and prosocial behavior will be stronger for girls when compared to boys. Additionally, the relationship between social preference and prosocial behavior will be stronger for girls when compared to boys.

The second model represents the associations between peer statuses and social cognitive processes (see Figure 2). The social cognitive processes include attributions, outcome expectancies, and coping intentions. It is expected that these social cognitive processes may vary in terms of particular social behaviors and thus the social cognitive processes for each of these behaviors will be investigated separately. Gender is expected to moderate the relationship between high peer status and each of the social cognitive processes but no specific hypotheses were proposed regarding the moderating effect of gender. Hypotheses II through IV represent the relationship among each of these variables. The social cognitive processes in the hypotheses are the mostly likely but others may potentially emerge as a result of adolescents' responses to the open-ended questions.

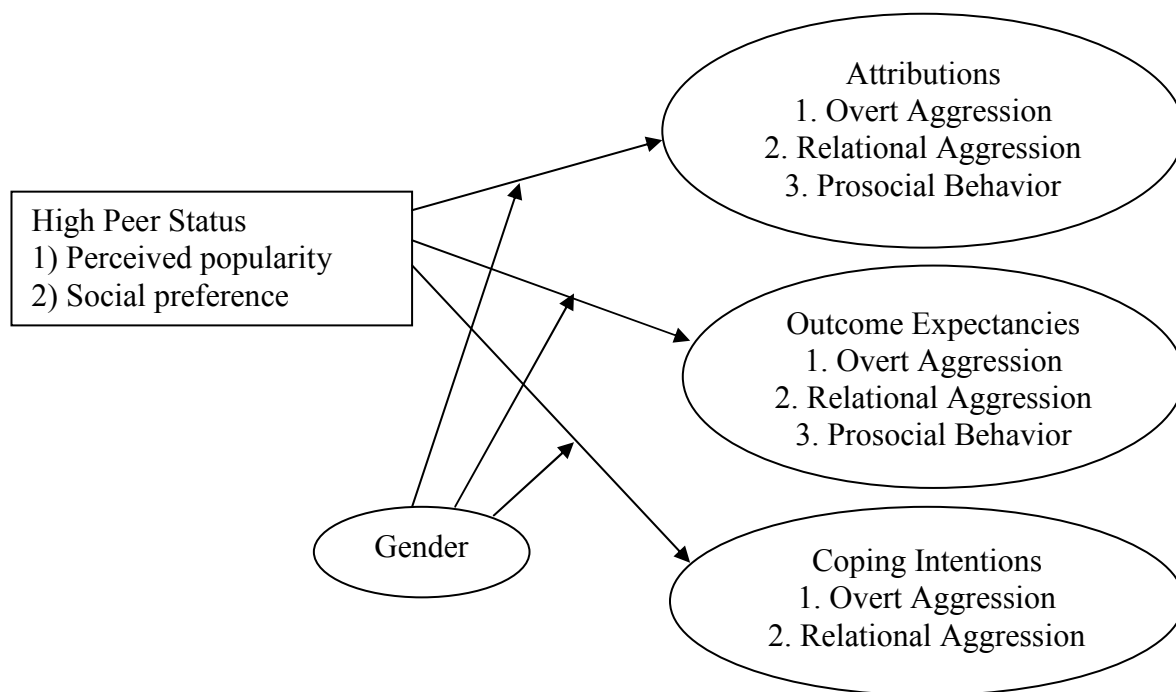


Figure 2: Representation of the Relationship between Popularity Types, Aggressive and Prosocial behaviors, as well as Gender Moderations (Model 2).

Hypothesis II. Relations between Peer Status and Attributions

Ila. Overt aggression: There will be positive associations between perceived popularity and believing overt aggression occurred because the aggressor is jealous of the other peer's status (i.e., aggressor's jealousy about status). There will be a positive association between social preferences and believing overt aggression occurred because the aggressor wants to harm their peers physically (i.e., proactive aggression).

Ilb. Relational aggression: A significant positive relationship will be found between perceived popularity and the attribution of status desires. Social preference will be positively related to believing relational aggression occurred because of an aggressor's bad characteristics (e.g., meanness).

IIC. Prosocial behavior: Both popularity types will believe prosocial behavior occurred because the adolescent wants to increase their peer status (i.e., status desires).

Hypothesis III. Relations between Peer status and Outcome Expectancies

IIIa. Overt aggression: Perceived popularity will be associated with believing that the aggressor wants to harm the victim's status. Social preference will be associated with believing that the aggressor wants to hurt the victim emotionally (i.e., emotional harm).

IIIb. Relational aggression: Perceived popularity will be related to believing that the aggressor wants to improve their peer status (i.e., status attainment). Social preference will be associated with emotional harm, such that the aggressor wants to harm the victim emotionally.

IIIc. Prosocial behavior: There will be a positive relationship found between both popularity types and status maintenance (i.e., desire to maintain one's peer status).

Hypothesis IV. Relations between Peer Status and Coping Intentions

Iva. Overt aggression: Both types of high peer status will be associated with social support seeking strategies to deal with overt aggression.

IVb. Relational aggression: Perceived popularity will be associated with revenge coping intentions, whereas social preference will be related to social support seeking strategies to deal with relational aggression.

The third model is an integrative model including the relationship between peer status and behaviors (Figure 1) as well as the association between peer status and social

cognitive processes (Figure 2). This model is used to explain relationships among peer status, aggression, and prosocial behavior using the social cognitive processes as moderators (Figure 3). This model will be used to test hypotheses V and VI. The social cognitive processes included in the hypotheses are the most occurring but others may potentially emerge based on adolescents' responses to the open-ended questions.

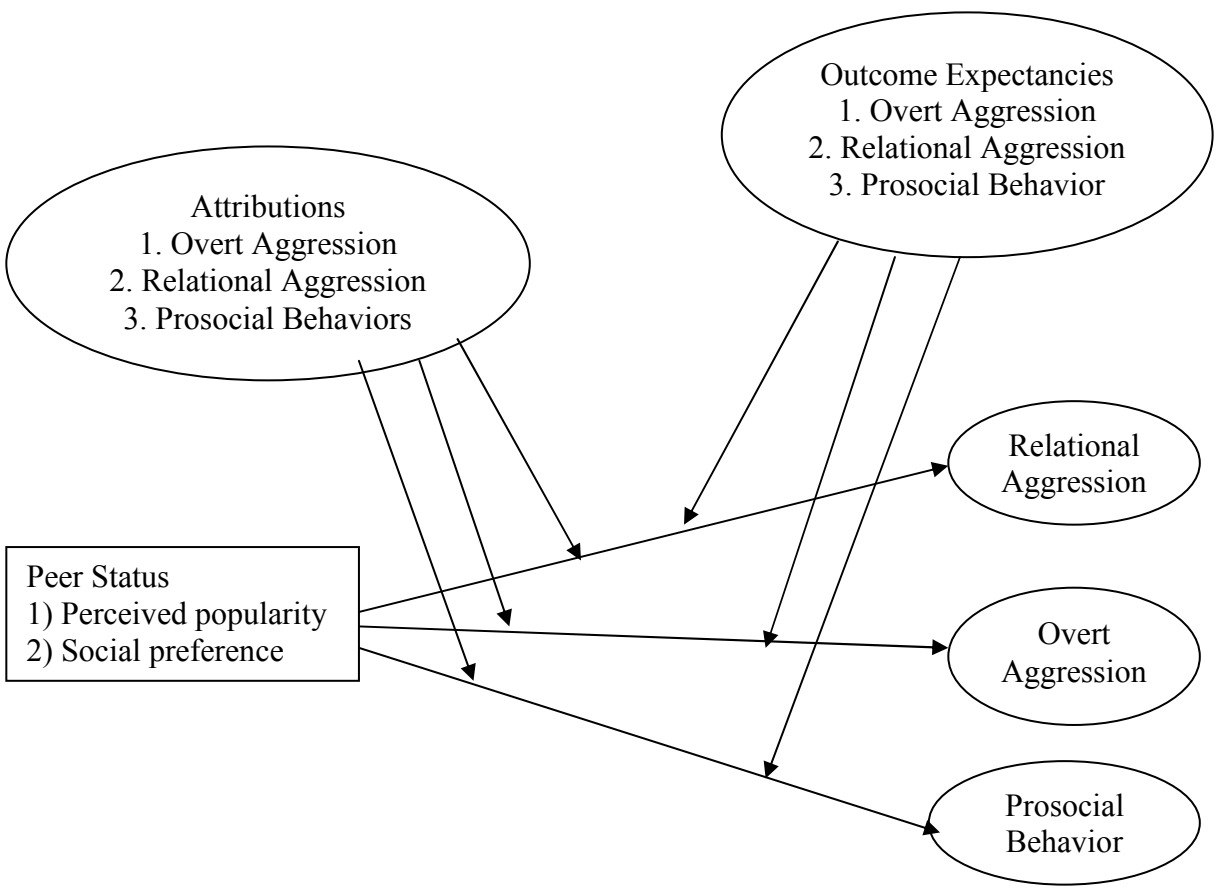


Figure 3: Representation of the Moderator Effect of Attributions and Outcome Expectancies (Model 3)

Hypothesis V. Interactions between Peer Status and Attributions

Va. Overt aggression: No interactions are expected for both types of high peer status.

Vb. Relational aggression: Perceived popularity will be more strongly related to relational aggression when the adolescent endorses higher levels of the aggressor's jealousy-about-status-attribution. No interactions are expected for social preference.

Vc. Prosocial behavior: At higher levels of the romantic-relationship-competition attribution, perceived popularity and prosocial behavior will be more strongly related. Social preference and prosocial behavior will be more strongly related when the adolescent endorses higher levels of the aggressor's-jealousy-about-status attribution.

Hypothesis VI. Interactions between Peer Status and Outcome Expectancies

Vla. Overt aggression: No interactions are expected for both types of high peer status.

Vlb. Relational aggression: At higher levels of the outcome expectancy of status attainment, perceived popularity will be more strongly related to relational aggression, whereas no interactions were expected for social preference.

Vlc. Prosocial behavior: Perceived popularity and social preference will each be more strongly related to prosocial behavior when the adolescents endorsed higher levels of the status-maintenance outcome expectancy.

CHAPTER II

METHOD

This section is broken into four subsections. In the first subsection, a description of research participants is given, including the percentages of adolescents in each grade, the location of schools, adolescents' ethnicity, and their parents' education. The second subsection provides the procedures involving the recruitment of schools, parental consent, child assent, peer nominations, and incentives offered to participants. The third subsection explains the order that the measures were administered as well as descriptions of each of the measures. The final subsection includes the development of documents used to code adolescents' responses to open-ended questions regarding their attributions, outcome expectancies, and coping intentions.

Participants

Participants were 405 (267 girls) 6th ($n = 60$), 7th ($n = 171$), and 8th ($n = 174$) graders from two suburban Midwestern and two suburban Southeastern middle schools (all were structured with grades 6th through 8th), with an average age of 12.92 years ($SD = .87$). The majority of adolescents self-identified as Caucasian (48.5%), followed by Latino/a (36.4%), Black/African American (11%), Asian (3.6%), American Indian/Alaskan Native (0.3%), or Native Hawaiian/Other Pacific Islander (0.3%). As reported by the adolescents, the majority of their mothers (35.1%) and fathers (35.3%) had a college education (at least an Associate's degree), followed by 19.4% of mothers and 18.9% of fathers who completed some college. The rest of parents had a high school education (31% of mothers; 32.5% of fathers) or did not complete high school (14.3% of

mothers; 13.2% of fathers). The demographics from the surrounding area of all four schools were lower to middle class.

Procedure

School principals were emailed a recruitment script (Appendix A) which explained the study, the procedures, and how their school could participate if they were interested. After receiving a response, a meeting was set up with the school principal and sixth through eighth grade teachers. At this meeting, the date and time of data collection was determined. After the meeting, a brief announcement was made in the classrooms. The announcement explained the study to the adolescents and how they could participate. After the announcement, all adolescents were given a parent permission slip (Appendix B) and an information sheet (Appendix C) to take home. The information sheet briefly summarized the parent permission slip as well as explained that in order for their child to participate the parent must return the slip back to their child's school. Only those adolescents with their parent's permission participated in the study. Adolescents who had their parent's permission also gave their own assent (Appendix D) to participate. Before giving their assent, adolescents were informed that their answers would be kept confidential and that they should not share their answers with any of their peers. Data collection took place over the course of a few weeks. Trained research assistants were present to answer any questions that the adolescents had. Adolescents worked independently with enough space between them and their neighbors to ensure confidentiality of their responses.

After adolescents gave their assent, they were given a roster listing all students in their grade. The names of students were listed in alphabetical order according to first

name and then the names were preceded by a unique ID code. Participants were asked to find their name on the roster and then write the ID code next to their name at the top of the background information questionnaire, which included questions about age, gender, ethnicity, and their parent's education. Once adolescents recorded their ID, they were told that the roster would be used for the peer nominations measure. Rosters were collected at the end of data collection and then shredded. All measures were administered in the following order: peer nominations for peer status and behaviors (Appendix E), self-reported behaviors (including overt aggression, relational aggression, prosocial behaviors) (Appendix F), social cognitions for relational aggression (Appendix G), social cognitions for overt aggression (Appendix H), and social cognitions for prosocial behaviors (Appendix I).

Two types of incentives were offered to participating adolescents and the choice of incentive was decided by teachers and school principals. The first option involved entering participating students in a drawing to win a \$25.00 gift card to a place of their choice. On a separate sheet of paper (Appendix J), participants wrote down their first and last names along with where they wanted the gift card from. This information was stored separately from the adolescents' data and there was no way to link their data with their gift card choice. The number of gift cards available was determined by the number of participating students (approximately one gift card per 20 participating students). Gift cards were presented to the winners in their classes and the debriefing (Appendix K) forms were given to all participants. The second option involved a pizza party during their lunch period. When participants were leaving the pizza party, they were given a debriefing form (Appendix K). Of the four participating schools, three decided to have

their students receive incentives. Two of the three schools decided to have a pizza party for participating students, whereas the third school agreed on the gift card drawing. For the third school, there were approximately 67 participating students from 6th through 8th grade, and thus 3 gift cards were available for the drawing. The fourth school decided to have their students participate on a voluntary basis, receiving no compensation for their participation.

Measures

Adolescents completed five questionnaires. The first questionnaire was the Peer Nominations for Peer Status and Behaviors which measured perceived popularity (Mayeux & Cillessen, 2008), social preference (Coie et al., 1982; Mayeux & Cillessen, 2008), and peer-nominated social behaviors (Crick & Grotpeter, 1995) (Appendix E). The second questionnaire, Self-Report for Overt Aggression, Relational Aggression, and Prosocial Behavior, is a measure that asked adolescents to report how often they engaged in overt and relational aggression as well as prosocial behaviors (Crick & Grotpeter, 1995; Appendix F). The third, Social Cognitions for Relational Aggression, and fourth, Social Cognitions for Overt Aggression, questionnaires assessed adolescents' attributions, outcome expectancies, and coping intentions regarding overt and relational aggression (Appendix G for relational aggression; Appendix H for overt aggression). The fifth questionnaire, Social Cognitions for Prosocial Behaviors, assessed adolescents' attributions and outcome expectancies concerning prosocial behavior (Appendix I).

Peer Nominations for Peer Status

This measure assessed both perceived popularity and social preference using peer nominations (Coie et al., 1982; Mayeux & Cillessen, 2008) (Appendix E). There were

two items used to assess perceived popularity (i.e., peers who are popular, peers who are unpopular). Additionally, there were also two items used to assess social preference (i.e., peers you like the most, peers you like the least). Adolescents used the roster given to them at the beginning of data collection to answer these questions. After reading the description, adolescents thought of someone who fit that description, found the person's name on the roster, and then wrote the ID code next to the description on the measure. All nominations were grade wide, cross-gender, and unlimited such that adolescents could nominate as many peers as they wanted for each description.

Both perceived popularity and social preference were treated as continuous variables. To calculate these scores, the total number of nominations each participant received on each item was aggregated first and then standardized within grade using z-scores with a mean of zero and a standard deviation of one. To obtain the social preference score, the standardized "liked least" nomination was subtracted from the standardized "liked most" nomination for each adolescent. The subtracted score was restandardized according to grade and school (e.g., Mayeux & Cillessen, 2008; Prinstein & Cillessen, 2003). Perceived popularity scores for each adolescent were obtained by subtracting the number of standardized "unpopular" nominations from the number of standardized "popular" nominations. The subtracted score was restandardized according to grade and school (e.g., Walcott et al., 2008).

Peer Nominations for Aggression and Prosocial Behavior

This measure assessed overt aggression, relational aggression, and prosocial behavior using peer nominations (Crick & Grotpeter, 1995) (Appendix E). Overt aggression was measured by three items (i.e., "peers who start fights," "peers who hit,

push others,” “peers who start fights”). Relational aggression was assessed by four items (i.e., “peers who when mad, get even by keeping the person from being in their group of friends,” “peers who when mad at a person, ignore them or stops talking to them,” “peers who tell friends they will stop liking them unless friends do what they say,” “peers who try to keep certain people from being in their group during an activity”). Prosocial behavior was also assessed by four items (i.e., “peers who do nice things for others,” “peers who help others,” “peers who cheer up others,” “peers who are good leaders”). To calculate the peer nominated social behaviors, all nominations received for each participant were tallied for each item and standardized within grade. Afterwards, items representing the respective behaviors (i.e., overt aggression, relational aggression, prosocial behavior) were averaged to form a final score (Cillessen & Mayeux, 2007; Mayeux & Cillessen, 2008). Cronbach’s alphas were .94, .83, and .91 for overt aggression, relational aggression, and prosocial behaviors from Crick and Grotpeter’s (1995) study, indicating acceptable reliabilities for each social behavior. For the current study, Cronbach’s alphas were acceptable for each variable ($\alpha = .73$ for overt aggression; $\alpha = .85$ for relational aggression; $\alpha = .84$ for prosocial behaviors).

Self-Reported Aggression and Prosocial behavior

This measure assessed adolescents’ self-reported overt aggression (three items), relational aggression (five items), and prosocial behavior (four items), which was adapted from the peer nomination measure (Crick & Grotpeter, 1995) (Appendix F). Adolescents were asked how often they acted as described in the items according to a scale of 1 (*never*) to 5 (*all the time*). Examples of overt aggression included “how often do you start fights with others” and “how often do you say mean things to other kids.” Examples of

relational aggression included “how often do you keep another kid out of the group of peers because you are mad at them” and “how often do you ignore or stop talking to another kid when you are mad at them.” Examples of prosocial behavior included “how often do you help, cooperate, or share with others” and “how often do you say something nice to your peers.” Cronbach’s alphas were acceptable for each of the self-reported social behaviors ($\alpha = .65$ for overt aggression; $\alpha = .79$ for relational aggression; $\alpha = .69$ for prosocial behaviors).

Attributions for Aggression

Attributions were assessed for relational aggression (see Appendix G) and overt aggression (see Appendix H). Adolescents were presented with a short description of relationally aggressive acts (i.e., saying mean things about others behind their back, ignoring someone, excluding someone from a group), and overtly aggressive acts (i.e., calling others mean names, hitting, kicking, punching, or slapping someone, damaging another peer’s property). After the descriptions of the behaviors, adolescents were then presented with two sections to assess attributions. The first section included an open-ended question (i.e., “Describe the possible reasons or causes that may make a peer do any of these behaviors”). The open-ended responses were coded independently by two different coders and reliability was assessed using Cohen’s Kappa (Cohen, 1968). The possible coding categories regarding the open-ended questions about attributions are included in the final part of this section (see page 47).

After the open ended question, a close-ended question including eight possible attributions was presented. Adolescents were instructed to read a statement (i.e., “Below are some reasons why Student A does these behaviors to Student B”) and then rate

different attribution items on a scale of 1 (*very unlikely*) to 5 (*very likely*). These attributions include aggressor's jealousy about status (i.e., "Student B is getting more popular in the class"), aggressor's jealousy about status attainment (i.e., "Student B has a higher status in the class"), aggressor's jealousy about preference (i.e., "Student B gets teachers' attention and preference"), aggressor's jealousy about academics (i.e., "Student B gets better grades"), aggressor as a victim (i.e., "Student B does not treat Student A nicely"), egocentric victim (i.e., "Student B brags"), victim characteristics (i.e., "Student B cares too much about their looks"), and romantic relationship competition (i.e., "Student A and B like the same boy/girl in the same way"). Based on prior research on attributions (e.g., Graham & Juvonen, 1998; Wright, Li, & Shi, 2012), different attributions were combined to form separate categories. The attributions regarding aggressor's jealousy about status and aggressor's jealousy about status attainment were combined to form a final "Aggressor's Jealousy about Status" attribution for both relational and overt aggression. Cronbach's alphas were .73 for relational aggression and .74 for overt aggression. Aggressor's jealousy about preference and aggressor's jealousy about academics were combined to form a final "Aggressor's Jealousy about Academics" attribution for both relational and overt aggression, with Cronbach's alphas of .62 for relational aggression and .75 for overt aggression. The attributions of aggressor as a victim, egocentric victim, and victim's characteristics were combined to form a final "Victim-blame" attribution for both types of aggressive behaviors. The Cronbach's alphas were lower than desirable ($\alpha = .59$ for relational aggression; $\alpha = .62$ for overt aggression) but the items were moderately correlated ($r_s = .25$ to $.45$, $p_s < .001$), indicating similarities among all three items. One item regarding romantic relationship

competition was retained as a separate attribution for both relational and overt aggression because of the uniqueness of the item as it did not fit with any of the other categories.

Attributions for Prosocial Behavior

The design of this measure was similar to that of the “Attributions for Aggression” measure. Adolescents were presented with a short description of prosocial behavior (i.e., cheering another peer up, showing they care, saying something nice to another peer, sharing, and cooperating with other peers, helping others out) (Appendix I). After reading the short description, adolescents answered an open-ended question about why they believed a peer would act prosocial toward another peer (i.e., “Describe the possible reasons or causes that may make a peer do any of these behaviors”). The possible coding categories regarding the open-ended question are included in the final part of this section (see the “Development of the Coding Categories for Social Cognitive Processes Regarding Aggressive and Prosocial Behaviors” section on page 47).

Adolescents were instructed to read a statement (i.e., “Below are some reasons why Student A does these behaviors to Student B”), which was followed by five attributions rated on a scale of 1 (*very unlikely*) to 5 (*very likely*). The list of attributions was similar to the attributions for aggression, except for a few differences. There were five attribution statements including giver’s jealousy about status (i.e., “Student B is getting more popular in the class”), giver’s jealousy about status attainment (i.e., “Student B has a higher status in the class”), giver’s jealousy about academics (i.e., “Student B gets better grades”), giver’s jealousy about preference (i.e., “Student B gets teachers’ attention and preference”) and romantic relationship competition (i.e., “Student A and B like the same boy/girl in the same way”). Three attributions, “Student B brags,” “Student B cares too

much about their looks or appearance,” and “Student B does not treat Student A nicely,” were not included because it was not expected that adolescents would use these attributions to explain prosocial behaviors. Giver’s jealousy about status and giver’s jealousy about status attainment were combined to form a final “Giver’s Jealousy about Status” attribution with a Cronbach’s alpha of .73. Furthermore, giver’s jealousy about academics and giver’s jealousy about preference were combined to form the category of “Giver’s Jealousy about Academics” attribution ($\alpha = .71$). The romantic relationship competition attribution was left as a separate category.

Outcome Expectancies for Aggression

The outcome expectancy questions followed the attribution questions on the social cognitions measures for aggression. Participants were asked about what the aggressor expects to happen after being relationally aggressive (see Appendix G) and overtly aggressive (see Appendix H). Similar to the questions on attributions, there were open-ended and closed-ended questions to assess outcome expectancies. For the open-ended question, participants answered the question “What effects or changes does a peer expect by doing these behaviors to another peer?” The possible coding categories pertaining to the open-ended questions are included in the final part of this section (see the “Development of the Coding Categories for Social Cognitive Processes Regarding Aggressive and Prosocial Behaviors” on page 47). After the open-ended question, a closed-ended question (i.e., “How likely do you think the following is an expected outcome?”) was included for both overt and relational aggression. After the question, adolescents read statements about outcome expectancies and rated all outcome expectancies on a five point likert scale of 1 (*definitely would not think*) to 5 (*definitely*

would think). Statements included emotional harm (i.e., “This peer wants to inflict emotional harm”), status gain (i.e., “This peer wants to gain increased popularity”), harm victim’s status (i.e., “This peer wants to hurt my popularity and influence”), maintaining personal control (i.e., “This peer wants to maintain control and power”), increasing likeability (i.e., “This peer wants to get others to like them”), and hurt victim’s likeability (i.e., “The peer wants to make others dislike me”). Emotional harm was retained as a separate category for both relational and overt aggression. “Harm victim’s status” and “hurt victim’s likability” were combined to form a variable called “Harm Victim’s Status.” Cronbach’s alphas were .68 for relational aggression and .72 for overt aggression. The “status gain” and “increasing likeability” items were combined into the variable of “Status Attainment,” forming final scores about relational aggression ($\alpha = .72$) and overt aggression ($\alpha = .76$).

Outcome Expectancies for Prosocial Behavior

The outcome expectancy questions follow the attribution questions on the social cognitions measures for prosocial behaviors. Participants read a question about what the peer expects to happen after being prosocial (see Appendix I). For the open-ended question, participants answered the following question: “What effects or changes does a peer expect by doing these behaviors to another peer?” The possible coding categories regarding the open-ended questions are included in the final part of this section (see the “Development of the Coding Categories for Social Cognitive Processes Regarding Aggressive and Prosocial Behavior” on page 47). After the open-ended question, participants were presented with a closed-ended question (i.e., “How likely are you to think the following is an expected outcome?”), which was followed by six outcome

expectancies rated on a scale of 1 (*definitely would not think*) to 5 (*definitely would think*). The statements included status gain (i.e., “This peer wants to gain increased popularity”), maintaining personal control (i.e., “This peer wants to maintain control and power”), increasing likeability (i.e., “This peer wants to get others to like them”), relationship maintenance with others (i.e., “This peer wants to maintain other relationships by acting this way”), relationship maintenance with the peer (i.e., “The peer wants to maintain a friendship with me”), and relationship initiation (i.e., “The peer wants to start a friendships with me”). The outcome expectancies about status gain, maintaining personal control, and increasing likeability are the same as those for both the overt and relational aggression measures. “Relationship maintenance with others,” “relationship maintenance with the peers,” and “relationship initiation” were combined into a category called “Relationship Maintenance,” with a Cronbach’s alpha of .74. The items of “status gain,” “increasing likeability,” and “maintaining personal control” were combined to form a final category called “Status Maintenance.” Cronbach’s alpha was .77 for “Status Maintenance.”

Coping Intentions for Aggression

Two open-ended questions asked adolescents to describe how they would deal with relational (see Appendix G) and overt (see Appendix H) aggression, if it were to happen to them. Adolescents answered the following question: “What would you do to make yourself feel better if you had been treated this way?” The possible coding categories regarding the open-ended questions are included below (see the “Development of the Coding Categories for Social Cognitive Processes Regarding Aggressive and

Prosocial Behaviors” section). No closed-ended questions were used to assess adolescents’ coping intentions used to deal with their peers’ social behaviors.

Development of the Coding Categories for Social Cognitive Processes Regarding Aggressive and Prosocial Behaviors

The coding themes were borrowed from a project on relational aggression among Chinese adolescents with a similar design (see Wright et al., 2012 for attribution coding). These coding themes were modified by adding and removing categories if necessary in order to fit the American adolescents’ responses. Two coders independently coded each response. All categories were dummy coded (i.e., 0 and 1). If the response applied to a category, then a “1” was given to that category. If not, then a “0” was applied. Multiple codes were also given if a participant’s response included more than one category. Thus, a participant may have received two or more codes for his/her response. Cohen’s Kappas were used to calculate interrater reliability to determine the agreement between two raters on the coding categories for attributions, outcome expectancies, and coping intentions. All disagreement between the two coders was resolved through discussion. Kappa was calculated by (1) subtracting the number of expected agreement from observed agreement, (2) subtracting the expected agreement from 1 ($1 - \text{expected agreement}$), and (3) then dividing 1 minus the expected agreement from the value obtained by subtracting the expected agreement from the observed agreement (Landis & Koch, 1977).

Attribution coding document. An initial coding scheme (see Appendix L) was developed based on the responses of adolescents in the current study and the coding document from the project on Chinese adolescents (see Wright et al., 2012). The coding scheme included major attribution categories based on adolescents’ responses. After the

development of the coding scheme, a coding document was developed concerning relational aggression (48 categories; see Appendix M), overt aggression (40 categories; see Appendix M), and prosocial behavior (discussed on page 51 in new paragraph; 30 categories, see Appendix M). The original coding document (from the project on Chinese adolescents) regarding relational aggression included the following codes: dislike the victim, arrogant aggressor, threatened peer status, self-centered aggressor, aggressor's jealousy, aggressor is mad at the victim, revenge, impulsive aggressor, aggressor enjoys hurting others, the victim has bad characteristics, the victim lacks social skills, the victim is aggressive against others, the victim has poor academic performance, conflict due to poor communication or misunderstanding, gender differences, boredom, and the desire to gain attention. These original codes were combined into nine final codes (discussed below) for both relational and overt aggression, which were adapted from Burgess and colleagues (2006), Graham and Juvonen (1998), and Wright and colleagues (2012) (see Appendix N for final combinations and the frequency of the codes). The final nine codes included 1) "Aggressor's Jealousy" was a code given when adolescents attributed aggression to the perpetrator's jealousy. It was created from aggressor's jealousy and threatened peer status (relational aggression only) (18.1% of adolescents for relational aggression; 14.4% of adolescents for overt aggression); 2) "Proactive Aggression" was the code given when the adolescent attributed aggression to the aggressor's motivations, or behaviors. This code included overt aggression, make victim look bad (overt aggression only), social aggression (relational aggression only), displaced aggression, start fight (relational aggression only), normative beliefs (relational aggression only), and dislike victim (given by 16.1% of adolescents for relational

aggression; 21.7% for overt aggression); 3) “Reactive Aggression” was a code given when the adolescent attributed aggressive behaviors to provocation or retaliation to perceived provocation. This code consisted of revenge, environmental aggression, not get what they want (overt aggression only), angry at victim (overt aggression only), angry aggressor, and upset aggressor categories, and it was given by 19.6% of adolescents to explain relational aggression and by 25% of adolescents to explain overt aggression; 4) “Romantic Relationship Competition” was a code given when the adolescent attributed aggression to rivalry over romantic partners. This code was created from the categories of fight over boyfriend/girlfriend, problem with boyfriend/girlfriend, and like the victim (relational aggression only) (given by 12.6% of adolescents for relational aggression; 6.3% of adolescents for overt aggression); 5) “Aggressor’s Characteristics” was a code given when the adolescent attributed aggression to the perpetrator’s characteristics. It included the categories of non-specific aggressor’s characteristic (i.e., “That is just how he/she is”), defensiveness (overt aggression only), aggressor mean, impulsive (relational aggression only), self centered, rude (relational aggression only), egotistical, low self-esteem (relational aggression only), immature (relational aggression only), insecure, racist (relational aggression only), bored, negative humor, and emotional problems (relational aggression only), and it was given by 21.4% of adolescents for relational aggression and by 14% of adolescents for overt aggression; 6) “Status Desires” was a code given when the adolescent attributed aggression to the perpetrator’s desire for peer status. It included the categories of increase status, dominance gain, get attention, want to be cool, have more friends (relational aggression only), the aggressor is popular, strong aggressor (overt aggression only), peer pressure (overt aggression only), the aggressor is

trying to obtain a goal (overt aggression only), and please a friend (relational aggression only) (8.2% of adolescents for relational aggression; 17.3% of adolescents for overt aggression); 7) “Conflict” was a code given when adolescents attributed aggression to a neutral cause such as a problem between the aggressor and the victim. This code included the following categories: general conflict (i.e., They are in a fight with each other), mad at each other (overt aggression only), talking about each other, not friends with each other (relational aggression only), and hate/dislike each other, which was used by 18.2% of adolescents to explain relational aggression and by 10.6% of adolescents for overt aggression; 8) “Bad Behavior of Victim” was a code given when adolescents attributed aggression to the victim’s behaviors. It was created from the categories of annoying/obnoxious, bad appearance (relational aggression only), low status, boy/girl difference (relational aggression only), boy trait (overt aggression only), and girl trait (13.8% of adolescents used this attribution to explain relational aggression; 9.1% for overt aggression); and 9) “Bad behavior of the victim” was a code given when adolescents attributed aggression to the aggressor’s behaviors. This code included bad habit and disrespect, which was given by 7% of the adolescents to explain relational aggression and by 3.8% of adolescents for overt aggression. The bad behavior of the victim has relatively low frequencies for both relational and overt aggression. This code was kept separate from the code of “Bad characteristics of the victim” for theoretical considerations. In particular, Graham and Juvonen (1998) found differential adjustment by victims of aggression depending on whether they made characterological and/or behavioral self-blaming attributions. Endorsing either type of attribution may relate to different levels of aggression, and therefore the codes should be kept separate. Other

codes, including the romantic relationship competition attribution for overt aggression and the status desires attribution for relational aggression, were kept as separate codes despite low frequencies because a goal of the study was to create similar attributional codes for both relational and overt aggression. Additionally, both relational and overt aggressions represent distinctive behaviors and thus it is reasonable to expect that attributions may be endorsed with different frequency among adolescents, depending on the behavior they are evaluating.

A separate coding scheme was developed for prosocial behavior (see Appendix L). From these coding schemes, a revised coding document was created, which included an original 30 categories (see Appendix M). These 30 categories were further combined into 8 final codes (see Appendix N for final combinations and the frequency of the codes). The following eight codes included 1) “Receiver’s Characteristics” was the code given when adolescents attributed prosocial behaviors to the receiver’s behavioral and personal characteristics. It included the categories of receiver being nice and the receiver’s appearance (i.e., being attractive), and it was given as an attribution by 6.7% of adolescents; 2) “Event” was a code given when adolescents attributed prosocial behaviors to a negative and distressing event in the receiver’s life. It was created from the categories of family issues, negative emotions, had a bad day, and having a problem with a boyfriend or girlfriend, and it was given by 4.3% of adolescents; 3) “Giver Characteristics” was a code given when the adolescent attributed prosocial behaviors to the giver’s behavioral and personal characteristics. This attribution included the categories of the giver is nice, the giver feels bad for the receiver, girl trait, the giver is empathetic, the giver is concerned about the receiver, and prosocial behaviors is

normative to the giver (used as an attribution by 29.2% of adolescents); 4) “Selfish Motivations” was an attribution representing the giver’s motivations to improve his/her status, academics, or emotions by acting prosocially. This code included the categories of the giver wanting to present himself or herself in a positive way (i.e., selfish presentation), gain respect, improve giver’s academic performance, giver wants to make other’s jealous, improve the giver’s self-esteem, the giver wants to alleviate guilt, the giver wants to be treated prosocially in return, and the giver wants to boost his/her status. This code (i.e., selfish motivations) was used as an attribution by 11.5% of adolescents; 5) “Friendship Expectations” was a code given when adolescents attributed prosocial behaviors to what is expected among friends. This code included the categories of friendship expectations, they (i.e., giver and receiver) trust each other as friends, and characteristic of supportive friendships; given by 14.6% of adolescents); 6) “Friendship Establishment” was a code given when adolescents attributed prosocial behaviors to the desire to establish a friendship with the receiver. It included the category of the giver wanting to establish a friendship with the receiver, and it was given by 9.8% of adolescents; 7) “Romantic Relationship Establishment” represented adolescents’ belief that the giver wanted to start a relationship with the receiver. This code included the category of the giver wanting to establish a romantic relationship with the receiver (given by 9.4% of adolescents); and 8) “Desire to Help” was a code given when adolescents attributed prosocial behaviors to the giver’s desire to improve the receiver’s emotions. It was created from the categories of the giver wanting to help the receiver, make the receiver happy, make the receiver feel better, and wanting to cheer the receiver up, which was made by 18.1% of adolescents. The “Receiver’s Characteristics” and “Event” codes

had low frequencies. Because these codes represented unique explanations for prosocial behaviors in comparison to the other codes (i.e., giver characteristics, selfish motivations, friendship expectations, friendship establishment, romantic relationship establishment, desire to help), they were retained as possible attributions regarding prosocial behaviors. Kappas were between .77 and .89 for each social behavior, indicating adequate reliability (listed in Appendix L) (Landis & Koch, 1977). The Kappas were of acceptable standards from previously published studies (e.g., Craig, D’Mello, Witherspoon, & Graesser, 2008; Ives, Samuel, Psaty, & Kuller, 2009).

Outcome expectancies coding document. A coding scheme was developed based on previous research by Crain and colleagues (2005), Cuddy and Frame (1991), and Smithmyer and colleagues (2000) (see Appendix O for the coding scheme). Developed from the coding scheme, the coding document included 26 categories for relational aggression (see Appendix P) and 23 categories regarding overt aggression (see Appendix P as well). The coding document for prosocial behaviors is included in the next section. These categories were further combined into five final codes for relational aggression and four final codes concerning overt aggression (see Appendix Q for final combinations and the frequency of the codes). The revised coding categories included: 1) “Harm Victim Emotionally” was a code given when adolescents believed that the aggressor expected to harm the victim emotionally. It included the categories of make the victim sad/cry, make the victim angry, embarrass the victim (overt aggression only), make the victim cry (overt aggression only), and make the victim fearful/afraid (given by 16.3% of adolescents for relational aggression; 18.8% of adolescents for overt aggression); 2) “Harm Victim’s Status and Friendships” was a code given when adolescents believed that

the aggressor expected to harm the victim's peer status and academic performance. It was created from the categories of damage relationships/lose friends, damage their life (relational aggression only), hurt victim's status (relational aggression only), academic harm (overt aggression only), hurt them (overt aggression only), and harm the self-esteem of the victim (overt aggression only), which was given by 10.1% of adolescents gave the for relational aggression, and 17.2% for overt aggression; 3) "Gain Status" was a code given when adolescents believed that the aggressor wanted to improve his/her peer status. This code was created from the codes of improve aggressor's status, gain additional status, gain respect, become cooler, be seen as tough, create additional relationships (overt aggression only), satisfy status desires (overt aggression only), gain attention, gain control, get what he/she wants, and become well-liked (relational aggression only), which was given by 17.2% of adolescents concerning relational aggression and by about a quarter (approximately 24.8%) of adolescents for overt aggression; 4) "Create Aggression" was a code given when adolescents believed that the aggressor wanted to start conflict with the victim, specifically aggression. This was a code that encompassed the desire to create conflicts between the victim and aggressor, and this code included the categories of making the victim get the aggressor back (i.e., revenge), create conflict, create drama (relational aggression only), become enemies (relational aggression only), create additional rumors (relational aggression only), ignore each other (relational aggression only), create a fight (relational aggression only), and create verbal aggression (relational aggression only), which was given by about one quarter (approximately 24.4%) of adolescents for relational aggression and 13.4% for overt aggression; and 5) "Change Victim" was a code given when adolescents believed that the aggressor wanted

to change the victim's attitudes or behaviors. This was a category created for relational aggression only, and this code included make the victim leave the aggressor alone and change the victim's attitude (used by 5.9% of adolescents).

Based on the Chinese adolescent project, a coding scheme was developed using the adolescents' responses for prosocial behaviors (see Appendix O). After modifying the original coding scheme, a revised coding document was created for outcome expectancies regarding prosocial behaviors, which included an original 15 categories (see Appendix P). These 15 categories were further combined into five final codes (see Appendix Q for final combinations and the frequency of the codes). The final five categories included: 1) "Help the Receiver" was a code given when adolescents believed that the giver wanted to help or improve the receiver's emotions. This code was created from the categories of improving the receiver's mood, helping the receiver, changing the receiver's outlook, and improving the receiver's self-esteem, which was given as an outcome expectancy by 30.1% of adolescents; 2) "Selfish Motivations" was given when adolescents believed that the giver wanted to improve his/her academic performance or receive recognition for their prosocial behaviors. This code included self-serving expectations and academic expectations, which was given by 9.1% of adolescents; 3) "Gain Status" was a code given when adolescents believed that the giver wanted to improve his/her peer status. This code was created from the categories of gain popularity, gain trust, gain likeability, gain attention, and gain respect, which was given by 12.4% of adolescents; 4) "Develop & Maintain Relationships" was given when adolescents believed that the giver wanted to develop or maintain a relationship with the receiver. It included the categories of develop relationships, maintain relationships, and the giver is showing they care, and it was given

by 19.4% of adolescents; and 5) “Develop Romantic Relationship” was given as a code when adolescents believed that the giver wanted to develop a romantic relationship with the receiver. This code included the desire to develop a romantic relationship category and it was given by 3.7% of adolescents. The “Selfish Motivation” and “Develop Romantic Relationship” codes had low frequencies but they did not fit into any of the other codes, and thus they represented unique and independent codes. Kappas were .91 (prosocial behaviors), .94 (relational aggression), and .93 (overt aggression), indicating adequate reliabilities (listed in Appendix N) (Landis & Koch, 1977).

Coping intentions coding document. Based on adolescents’ responses, a coding scheme was developed based on previous research (e.g., Connor-Smith et al., 2000; Reid et al., 1995; Wadsworth, & Compas, 2002) on coping intentions (see Appendix R). From the coding scheme, a coding document was created which included 28 categories concerning relational aggression (see Appendix S) and 22 categories for overt aggression (see Appendix S as well). The categories were further combined into seven codes regarding relational aggression and five codes pertaining to overt aggression (see Appendix T for final combinations and the frequency of the codes). The final five codes included: 1) “Problem-Solving” was given when adolescents explained that they would utilize adaptive coping intentions to deal with aggression. This code was created from the categories of problem-solving, ask the aggressor to stop, and stay away from the aggressor (overt aggression only), and it was given by 4.3% of adolescents to deal with relational aggression and 6.7% of adolescents for overt aggression; 2) “Social Support Seeking” represented coping intentions in which the adolescent would talk to or hang out with a friend or adult as a means to deal with aggression. This code included talk to

someone, talk to sibling, talk to boyfriend/girlfriend (relational aggression only), talk to an adult, talk to friends, hang out with friends, be with friends, talk to parents, talk to teacher, and talk to a pastor/minister (overt aggression only) (given by 31.4% of adolescents for relational aggression; 38.1% for overt aggression); 3) “Distancing” was a coping intention given in which adolescents would deal with aggressive behaviors by forgetting about the problem. It was given by 11.2% of adolescents for relational aggression and 17.9% of adolescents to deal with overt aggression; 4) “Revenge” was a code given when adolescents to deal with aggression by retaliating against the perpetrator. It included the categories of overt aggression (relational aggression only), get revenge, relational aggression (relational aggression only), and general aggression (overt aggression only), and it was given by 7.3% of adolescents for relational aggression and 19% for overt aggression; 5) “Distraction” was a coping intention used when adolescents would deal with aggression by focusing on something else. It included the codes of distraction and remain calm (relational aggression only), and it was given as a coping intention by 23.8% of adolescents to deal with relational aggression, and 7.3% of adolescents for overt aggression; 6) “Do Nothing” was given as a coping intention when adolescents would deal with aggression by not doing anything. It was created from the categories of do nothing, not care, and pretend it didn’t happen, and it was given by 10.6% of adolescents for relational aggression; 7) “Dissolve Relationship” was given as a coping intention when adolescents would deal with aggression by ending their relationship with the perpetrator. It included the categories of end friendship, find new friends, and end interaction, which was given by 12.3% of adolescents for relational aggression. “Problem-Solving” coping intention had a low frequency, previous research

(e.g., Reid et al., 1995; Wadsworth, & Compas, 2002) demonstrates that these are coping strategies that are commonly used by adolescents to deal with aggression, especially relational aggression. The “Revenge” coping intention used to deal with relational aggression also had low frequencies. However, this coping intention had a higher frequency for overt aggression, and thus in order to keep the coping intentions similar across each aggressive behavior, this coping intention was retained as a code for relational aggression. Kappas were .86 (relational aggression), and .97 (overt aggression), indicating adequate reliabilities (listed in Appendix Q) (Landis & Koch, 1977).

CHAPTER III.

RESULTS AND ANALYSIS

This section describes the results of hypothesis testing. It is organized according to the six sets of hypotheses. The first section begins with descriptive statistics detailing information about gender, ethnicity, and age groups as well as correlational analyses among peer nominated behaviors, self-reported behaviors, peer status, and closed-ended attributions and outcome expectancies responses. The second section details the analyses for hypotheses one through six. Appendix U lists all Tables 1 through 35 in numerical order.

Preliminary Analyses

Means and standard deviations were calculated for continuous variables in the study (see Table 1 in Appendix U). Bivariate Pearson Correlations were conducted for the whole sample but also for girls and boys separately in order to examine the effect of gender on associations among perceived popularity, social preference, and social behaviors. Regarding the whole sample (Table 2), perceived popularity was positively related to social preference, self-reported prosocial behavior, peer-nominated relational aggression, and peer-nominated prosocial behavior, but negatively related to peer-nominated overt aggression. Social preference was negatively associated with self-reported and peer-nominated relational and overt aggression as well as positively related to self-reported and peer-nominated prosocial behavior. Concerning the correlations calculated for boys and girls separately (Table 3), girls' perceived popularity was positively associated with social preference, and peer-nominated relational aggression and prosocial behavior, but negatively related to peer-nominated overt aggression. In

addition, for girls, social preference was negatively associated with self-reported and peer-nominated relational and overt aggression, as well as positively correlated with peer-nominated prosocial behavior. Boys' perceived popularity was positively associated with social preference, and peer-nominated relational aggression and prosocial behavior, whereas their social preference was negatively related to both self-reported and peer-nominated overt aggression but positively related to peer-nominated prosocial behavior.

Another set of Pearson Correlations were conducted for the whole sample and then for girls and boys separately in order to examine the relationships among perceived popularity, social preference, attributions (see Table 4 for the whole sample and Table 5 for boys and girls separately; each is included in Appendix U) and outcome expectancies (see Table 6 for the whole sample and Table 7 for the analyses separated by gender; each is included in Appendix U). Regarding the whole sample, perceived popularity was positively correlated with the attribution of victim-blame for overt aggression, whereas social preference was not significantly associated with any attribution across all social behaviors. For girls, perceived popularity was not significantly associated with any attributions or outcome expectancies regarding all social behaviors, but social preference was negatively correlated with attributing prosocial behavior to the aggressor's academic jealousy. Boys' perceived popularity was negatively related to attributing overt aggression to aggressor's academic jealousy, whereas social preference was not associated with any attributions. Regarding outcome expectancies, social preference was positively correlated with the outcome expectancy of emotional harm for overt aggression. Girls' and boys' perceived popularity and social preference were not related to any outcome expectancies across all social behaviors.

Primary Analyses

Hierarchical multiple regressions were conducted to test the hypotheses with the social behaviors, closed-ended attributions, and closed-ended outcome expectancies as the dependent variables. Logistic and/or poisson regression analyses were conducted when the dependent variables included the open-ended attributions, outcome expectancies, and coping intentions. Both poisson and logistic regression coefficients can be interpreted as the change in the log odds of an event (for logistic regression) or the log of expected counts (for poisson regression) as a function of increases in a predictor variable (Cohen, Cohen, West, & Aiken, 2003). For logistic regression, the odds are multiplied by the value of the e^B for one unit increase in X . Similarly for poisson regression, the expected count is multiplied by the value e^B for each one unit increase in X . By exponentiating the B , the odds ratio or rates ratio is obtained. In all regression analyses, independent variables included gender, perceived popularity, and social preference. As continuous predictors, perceived popularity and social preference were centered according to Aiken and West's (1991) recommendations in order to protect against multicollinearity. The variance inflation factor (VIF) was examined for the predictors of all multiple regression analyses. VIF ranged from 1.000 to 1.326 (without interactions) and from 10.02 to 13.02 (with the three-way interaction terms in the analyses). Typically a VIF greater than 10 indicates a problem with multicollinearity; however, a cutoff VIF value of 15 has also been proposed by researchers (e.g., Echambadi & Hess, 2007; Ethington, Thomas, & Pike, 2002; Farrar & Glauber, 1967; Slinker & Glantz, 2008). Ethington and colleagues (2002) acknowledge that VIF values greater than 10 may not indicate the existence of high multicollinearity, and thus they

propose that researchers should utilize other mechanism for detection, such as examining the eigenvalues and/or condition indices (Freund & Littell, 2000). The rule of thumb is that eigenvalues close to zero, around .01, or greater than 50 indicate problems with multicollinearity. For the present study, eigenvalues were as low as .04 and as high as 1.95 for the multiple regression analyses. The condition indices were also examined to assess multicollinearity. Generally a condition index over 30 indicates possible multicollinearity issues. For all multiple regression analyses included in this study, the condition index did not exceed 9.603, indicating that multicollinearity was unlikely. Therefore, two out of three assessments revealed that multicollinearity was unlikely for the hierarchical multiple regression analyses. For logistic and poisson regression, a standard error larger than two for the unstandardized coefficients indicates problems with multicollinearity (Tabachnick & Fidell, 2007; Zidek, Wong, Le, & Burnett, 1996). None of the independent variables had standard errors higher than .56 (for logistic regression) and .64 (for poisson regression).

For Hypotheses I through IV, two-way interactions were included between gender and both popularity types. Two-way interactions between both popularity types and attributions or outcome expectancies were included in the analyses for Hypotheses V and VI, along with three-way interactions among popularity types, gender, and attributions or outcome expectancies. When an interaction between gender and one of the popularity types was significant, separate analyses were conducted for boys and girls, and these results were reported within the appropriate section. Significant two-way interactions without gender were examined with the “Interaction” program which tests the significance of the unstandardized simple slopes of the regression and provides graphical

representation of the simple slopes (Soper, 2011). Significant three-way interactions with gender were examined further by conducting analyses for boys and girls separately and then testing significant two-way interactions with the “Interaction” program.

Hypothesis I (Model 1; see Figure 1)

It was expected that perceived popularity and social preference would each negatively relate to overt aggression. Perceived popularity was expected to positively relate to relational aggression, whereas social preference was hypothesized to be negatively associated with relational aggression. In addition, prosocial behaviors were expected to positively relate to both types of popularity. Gender differences regarding social behaviors were also hypothesized. In particular, girls were expected to be more relationally aggressive and prosocial in comparison to boys. On the other hand, no gender differences were hypothesized for overt aggression. Significant interactions were expected for the dependent variables of relational aggression and prosocial behavior. More specifically, the relationship between perceived popularity and relational aggression would be stronger for girls as would the relationship between social preference and prosocial behavior. To test these hypotheses, six hierarchical multiple regression analyses were conducted with the dependent variables of self-reported and peer-nominated overt aggression, relational aggression, and prosocial behavior. Independent variables included gender, social preference, and perceived popularity. Block 1 included gender, Block 2 included social preference and perceived popularity, and Block 3 included the two-way interactions between gender and perceived popularity as well as between gender and social preference.

Boys self-reported more overt aggression in comparison to girls, $\beta = .12, p < .05$, $\Delta R^2 = .06, p < .001$ (see Table 8 in Appendix U). However, no gender differences were found for self-reported relational aggression, $\Delta R^2 = .05, p < .001$. On the other hand, boys self-reported less prosocial behavior when compared to girls, $\beta = -.35, p < .001$, $\Delta R^2 = .02, p < .05$. Perceived popularity was positively related to self-reported overt ($\beta = .15, p < .01$) and relational ($\beta = .14, p < .01$) aggression, whereas social preference was negatively associated with both self-reported overt ($\beta = -.24, p < .001$) and relational ($\beta = -.22, p < .001$) aggression.

Gender differences were not found for peer-nominated overt aggression and prosocial behavior (see Table 8 in Appendix U). Boys were nominated as less relationally aggressive when compared to girls, $\beta = -.18, p < .001$, $\Delta R^2 = .09, p < .001$. Perceived popularity was negatively related to peer-nominated overt aggression ($\beta = -.73, p < .001$) but positively associated with relational aggression ($\beta = .27, p < .001$). In addition, social preference was negatively associated with peer-nominated relational aggression ($\beta = -.24, p < .001$), but positively associated with peer-nominated prosocial behavior ($\beta = .46, p < .001$; $\Delta R^2 = .22, p < .001$). Significant two-way interactions were found between gender and social preference ($\beta = -.49, p < .01$) and between gender and perceived popularity ($\beta = .75, p < .001$) when predicting peer-nominated overt aggression, $\Delta R^2 = .06, p < .001$. To probe the interaction between gender and popularity type further, analyses were conducted for boys and girls separately. In each of the analyses, perceived popularity and social preference were included as independent variables with peer-nominated overt aggression as the dependent variable. For girls, perceived popularity ($\beta = -.19, p < .01$) and social preference ($\beta = -.17, p < .01$) were each negatively associated with peer-

nominated overt aggression, $R^2 = .08$, $p < .001$. On the other hand, peer-nominated overt aggression was positively associated with boys' perceived popularity ($\beta = .34$, $p < .001$), but negatively related to boys' social preference ($\beta = -.50$, $p < .001$), $R^2 = .22$, $p < .001$. The negative association between peer-nominated overt aggression and social preference was stronger for boys in comparison to girls.

Hypothesis II (Model 2; see Figure 2)

It was hypothesized that perceived popularity would be associated with believing overt aggression occurred because the aggressor is jealous of the victim's status (i.e., aggressor's jealousy about status), whereas social preference would be related to believing the aggressor wants to physically harm the peer in order to achieve a goal (i.e., proactive aggression). Additionally, perceived popularity was expected to positively relate to believing relational aggression occurred because the peer wants to gain additional status (i.e., status desires). Social preference was expected to relate to believing relational aggression occurred because of the aggressor's bad characteristics (e.g., being mean). Both types of popularity were hypothesized to positively relate to believing prosocial behavior occurred because the adolescent wants to increase their peer status (i.e., status desires). Similar to Hypothesis I, hierarchical multiple regression analyses were performed for closed-ended dependent variables, including aggressor's/giver's jealousy about status, aggressor's/giver's jealousy about academics, victim-blame, and romantic relationship competition regarding both overt and relational aggression. For prosocial behavior, the dependent variables were the same, except victim-blame was not included as an attribution. Independent variables included gender, social preference and perceived popularity. Block 1 included gender, Block 2 included social

preference and perceived popularity, and Block 3 included two-way interactions between gender and both popularity types.

The model predicting romantic relationship competition as an attribution for the relational aggression vignette was significant, $\Delta R^2 = .04$, $p < .001$ (see Table 9 in Appendix U). Boys were less likely to attribute relational aggression to romantic relationship competition when compared to girls, $\beta = -.21$, $p < .001$.

The remaining closed-ended attributions pertaining to the overt and relational aggression vignettes were not significant as well as the attribution of romantic relationship competition regarding the overt aggression vignette (see Table 9 in Appendix U). For the prosocial behavior vignette, there were no significant findings regarding any of the attributions (see Table 9).

Open-ended questions. Poisson and logistic regression analyses were conducted for the coding categories from the open-ended questions. Logistic regression was used when the dependent variables remained as the original dichotomous categories (i.e., 0s, 1s) including: aggressor's jealousy (relational and overt aggression), bad behavior of the victim (relational and overt aggression), bad characteristics of the victim (overt aggression), receiver's characteristics (prosocial behavior), friendship establishment (prosocial behavior), and romantic relationship establishment (prosocial behavior). Poisson regression was used when the dependent variables consisted of count variables (i.e., 0s, 1s, 2s) as a result of combined attribution codes (Cohen et al., 2003). The following attribution categories were analyzed with poisson regression: proactive aggression (relational and overt aggression), reactive aggression (relational and overt aggression), romantic relationship competition (relational and overt aggression),

aggressor's characteristics (relational and overt aggression), status desires (relational and overt aggression), conflict (relational and overt aggression), bad characteristics of the victim (relational aggression), event (prosocial behavior), giver's characteristics (prosocial behavior), selfish motivations (prosocial behavior), friendship expectations (prosocial behavior), and desire to help (prosocial behavior). Independent variables for both types of regressions included gender, perceived popularity, social preference and interactions between gender and popularity types.

Concerning the overt aggression vignette, the overall model for predicting aggressor's jealousy from both types of popularity was significant, $\chi^2 (df = 3) = 6.85, p < .05$ (see Table 10 in Appendix U). With each unit increase in social preference, the odds that an adolescent made the attribution of aggressor's jealousy concerning the overt aggression vignette increased by 31% (odds ratio = 1.31). In addition, the expected count of a boy attributing relational aggression to romantic relationship competition decreased by 90% (rates ratio = .10) when compared to girls, $\chi^2 (df = 5) = 18.62, p < .01$ (see Table 11). The results concerning the open-ended romantic relationship competition attribution replicated those pertaining to the closed-ended attribution.

The overall model for predicting the friendship-establishment attribution regarding the prosocial behavior vignette from both popularity types was significant, $\chi^2 (df = 5) = 6.12, p < .05$ (see Table 12 in Appendix U). More specifically, with a one unit increase in perceived popularity, the odds (odds ratio = .18) that an adolescent endorsed the friendship establishment attribution for prosocial behavior decreased by 82%. There was also a significant gender by perceived popularity interaction effect for this attribution, odds ratio = 2.49, $p < .05$. To examine the significant interaction further,

separate analyses were conducted for boys and girls with popularity types as the independent variables and the friendship establishment attribution as the dependent variable. The overall model for boys was not significant, but it was significant for girls. Specifically, with a one unit increase in girls' perceived popularity, the odds of making the friendship establishment attribution regarding prosocial behavior decreased by 56% (odds ratio = .44), $\chi^2 (df = 2) = 12.65, p < .01$. Social preference was not significantly related to the attribution of friendship establishment. In addition, the expected count of boys making the desire to help attribution regarding the prosocial behavior vignette decreased by 65% (rates ratio = .35) when compared to girls, $\chi^2 (df = 5) = 13.18, p < .05$ (see Table 13).

The overall models for the other open-ended attributions regarding the overt aggression, relational aggression, and prosocial behavior vignettes were not significant (see Table 11 for overt and relational aggression; see Table 13 for prosocial behavior; each table is included in Appendix U).

Hypothesis III (Model 2; see Figure 2)

The following analyses pertain to outcome expectancies. It was hypothesized that perceived popularity would be associated with the outcome expectancy of harm victim's status for overt aggression. On the other hand, it was expected that social preference would be associated with believing that the aggressor wants to hurt the victim emotionally by acting overtly aggressive. With regard to relational aggression, perceived popularity would relate to believing that the aggressor wants to improve their peer status (i.e., status attainment), whereas social preference would be associated with the outcome expectancy of wanting to hurt the victim emotionally. For prosocial behaviors, it was also

hypothesized that both perceived popularity and social preference would each relate to the outcome expectancy of status attainment. Similar to the previous hypotheses, hierarchical multiple regressions were conducted for the closed-ended questions, and logistic and poisson regressions were used to analyze the open-ended questions. With respect to the overt and relational aggression vignettes, dependent variables included emotional harm, harm victim's status, and status attainment for the multiple regression analyses. For the prosocial behavior vignette, the dependent variables included relationship maintenance and status maintenance. Independent variables included gender, perceived popularity, and social preference. Two-way interactions were included between gender and both popularity types. Block 1 included gender, Block 2 included perceived popularity and social preference, and Block 3 included the interaction between gender and both popularity types.

The multiple regression results show that only two gender effects emerged in participants' close-ended outcome expectancies (see Table 14 for overt and relational aggression vignettes in Appendix U). Specifically, boys were less likely to believe the aggressor wanted to harm the victim emotionally by acting overtly aggressive when compared to girls, $\beta = -.25, p < .001, \Delta R^2 = .06, p < .001$. In regards to the relational aggression vignette, boys were also less likely to believe the aggressor wanted to harm the victim's status by acting relationally aggressive in comparison to girls, $\beta = -.20, p < .001, \Delta R^2 = .04, p < .001$. The models with the other closed-ended outcome expectancies regarding the overt aggression, relational aggression, and prosocial behavior vignettes were not significant (see Table 14 for overt and relational aggression; Table 15 for prosocial behaviors).

Open-ended questions. Logistic regression was used when outcome expectancy categories remained as the original dichotomous categories (i.e., 0s, 1s). Therefore, logistic regression analyses were used for the following dependent variables: harm the victim's status and friendships (relational and overt aggression), change the victim (relational aggression), create aggression (overt aggression), selfish motivations (prosocial behavior), develop and maintain friendships (prosocial behavior), and develop romantic relationship (prosocial behavior). On the other hand, Poisson regression was used when the outcome expectancy categories consisted of count variables (i.e., 0s, 1s, 2s) including harm victim emotionally (relational and overt aggression), gain status (relational aggression, overt aggression, prosocial behavior), create aggression (relational aggression), and help the receiver (prosocial behavior). Independent variables included gender, perceived popularity, and social preference. Interactions between gender and popularity types were also included. The overall models for all dependent variables were not significant (see Tables 16 and 17 for overt and relational aggression vignettes; Tables 18 and 19 for prosocial behavior vignettes; see Appendix U for each of these tables).

Hypothesis IV (Model 2; see Figure 2)

This section includes the analyses regarding coping intentions. It was expected that both types of popularity would be associated with using social support seeking strategies to deal with overt aggression. In addition, for relational aggression, perceived popularity was expected to be positively associated with revenge coping intentions, whereas social preference would positively relate to social support seeking strategies. Poisson and logistic regression analyses were utilized for these hypotheses. The following dependent variables were used for the logistic regression analyses, including

problem solving (relational aggression), distraction (overt aggression), and distancing (relational and overt aggression). Poisson regression analyses were utilized concerning the dependent variables of social support seeking (relational and overt aggression), problem solving (overt aggression), revenge (relational and overt aggression), distraction (relational aggression), do nothing (relational aggression), and dissolve relationship (relational aggression). Independent variables included gender, perceived popularity, and social preference. Two-way interactions between gender and popularity types were also included.

The estimated count of coping with relational aggression using social support decreased by 52% for boys in comparison to girls, rates ratio = .48, $\chi^2 (df = 5) = 12.99$, $p < .05$ (see Table 21 in Appendix U). Thus, boys were less likely to use social support to deal with the relational aggression vignette when compared to girls. In addition, for a one point increase in perceived popularity, the estimated count of an adolescent using social support to deal with the relational aggression increased by 1.67 (rates ratio = 1.67, $p < .05$). A two-way interaction between gender and perceived popularity was also significant, rates ratio = .64, $p < .05$. To examine this interaction, separate analyses were conducted for boys and girls with the coping intention of social support seeking as the dependent variable and both popularity types as the independent variables. The overall model for girls was not significant. For a one unit increase in boys' perceived popularity, the estimated count that a boy would utilize social support to deal with the relational aggression vignette decreased by 31% (rates ratio = .69), $\chi^2 (df = 2) = 5.25$, $p < .05$.

With regard to the overt aggression vignette, none of the models with the coping intentions as dependent variables were significant (see Table 20 for logistic regression

results; Table 21 for poisson regression results; each table is included in Appendix U). For the relational aggression vignette, the remaining coping intentions were not significant.

Hypothesis V (Model 3; see Figure 3)

With regard to the integrative model, no interactions were hypothesized regarding how attributions may change the relations between both types of high peer statuses and overt aggression. However, it was hypothesized that perceived popularity would more strongly relate to relational aggression when the adolescent endorsed higher levels of the aggressor's-jealousy-about-status attribution. No interactions were expected for social preference when predicting relational aggression. In addition, it was also hypothesized that higher levels of perceived popularity would be more strongly related to prosocial behavior when the adolescent made the attribution of romantic relationship competition. It was also hypothesized that higher levels of social preference would more strongly relate to prosocial behavior when the adolescent made the attribution of aggressor's jealousy about status. Hierarchical multiple regression analyses were conducted to test Hypothesis V, and the dependent variables included self-reported and peer-nominated relational aggression, overt aggression, and prosocial behavior. The independent variables were gender, popularity type (i.e., perceived popularity, social preference), and the closed-ended or open-ended (for binary categories only) attributions. Interactions were also examined between popularity types and attributions as well as between gender, popularity types, and attributions. Block 1 included gender, Block 2 included perceived popularity and social preference, Block 3 included closed-ended or open-ended attributions, Block 4 included the two-way interactions between attributions and

popularity types, and Block 5 included the three-way interactions between gender, attribution, and popularity type.

Self-reported social behaviors. As shown in Tables 22 and 23 (see Appendix U), and as previously reported in the Hypothesis I section, social preference was negatively associated with self-reported overt aggression, whereas perceived popularity was positively associated with this behavior. Boys also self-reported more overt aggression when compared to girls as reported in the Hypothesis I section. In addition, the model using aggressor's jealousy about status to predict self-reported overt aggression yielded a two-way interaction between aggressor's jealousy about status and social preference ($\beta = -.56, p < .001$), a three-way interaction among aggressor's jealousy about status, social preference, and gender ($\beta = .67, p < .001$), and another three-way interaction among jealous about status, perceived popularity, and gender ($\beta = -.63, p < .01$), $\Delta R^2 = .05, p < .01$ (see Table 22 in Appendix U). Only the three-way interactions were probed further by conducting analyses for boys and girls separately. Block 1 included perceived popularity and social preference, Block 2 included aggressor's-jealousy-about-status attribution, and Block 3 included two-way interactions between popularity type and the aggressor's jealousy-about-status attribution. No interactions were found between girls' popularity type and the attribution of aggressor's jealousy about status when predicting self-reported overt aggression. For boys, two-way interactions were found between aggressor's jealousy about status and perceived popularity, $\beta = -.44, p < .001$, and between aggressor's jealousy about status and social preference, $\beta = .38, p < .01$, $\Delta R^2 = .14, p < .01$. At lower levels of the aggressor's jealousy about status attribution, boys' self-reported overt aggression and perceived popularity were more strongly related (simple

slopes: $B = -.08$, $SE = .07$, $p = n.s.$ at +1 SD; $B = .05$, $SE = .06$, $p = n.s.$ at mean; $B = .18$, $SE = .08$, $p < .05$ at -1 SD; see Figure 4). In addition, boys' self-reported overt aggression and social preference were more negatively related at lower levels of the aggressor's jealousy-about-status attribution (simple slopes: $B = -.04$, $SE = .06$, $p = n.s.$ at +1 SD; $B = -.11$, $SE = .05$, $p < .05$ at the mean; $B = -.17$, $SE = .07$, $p < .01$ at -1 SD; see Figure 5 on the next page). No other interactions were found for the other closed-ended and open-ended attributions when predicting self-reported overt aggression.

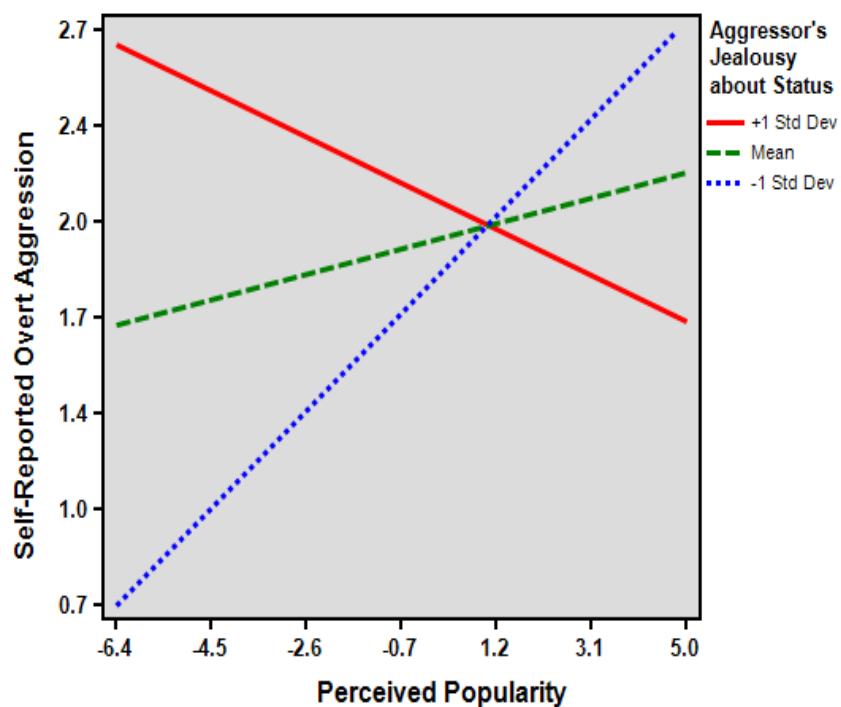


Figure 4: Graphical Depiction of the Interaction between Boys' Perceived Popularity and Aggressor's Jealousy about Status when Predicting Self-Reported Overt Aggression

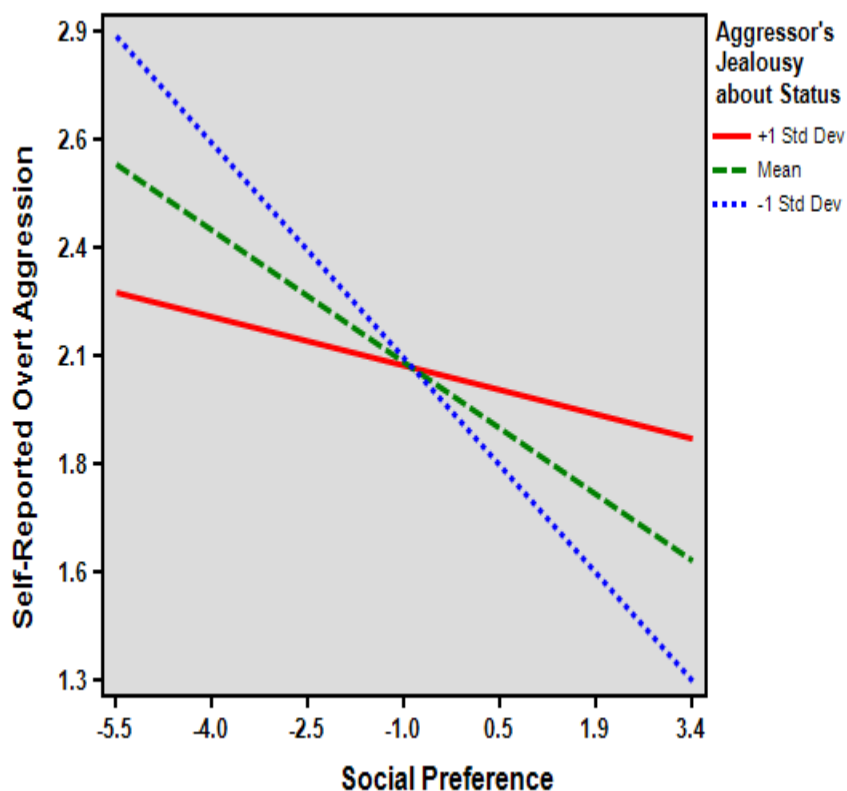


Figure 5: Graphical Depiction of the Interaction between Boys' Social Preference and Aggressor's Jealousy about Status when Predicting Self-Reported Overt Aggression

As previously reported in the Hypothesis I section, self-reported relational aggression was positively associated with perceived popularity and negatively related to social preference (see Tables 22 and 23 in Appendix U). A two-way interaction between aggressor's jealousy about status and social preference ($\beta = -.52, p < .001$), and a three-way interaction among aggressor's jealousy about status, social preference, and gender ($\beta = .58, p < .001$) were found when predicting self-reported relational aggression, $\Delta R^2 = .04, p < .001$ (see Table 22). Only the three-way interaction was probed further by conducting analyses for boys and girls separately with self-reported relational aggression

as the dependent variable. Block 1 included perceived popularity and social preference, Block 2 included the aggressor's jealousy about status attribution, and Block 3 included a two-way interaction between aggressor's jealousy about status and social preference. No interactions were found between girls' social preference and the attribution of aggressor's jealousy about status when predicting self-reported relational aggression. A significant two-way interaction was found between the attribution of aggressor's jealousy about status and social preference when predicting boys' self-reported relational aggression, $\beta = .35, p < .01, \Delta R^2 = .11, p < .01$. In particular, boys' self-reported relational aggression and social preference were more negatively related when they endorsed less aggressor's-jealousy-about-status-attribution (simple slopes: $B = .06, SE = .06, p = n.s.$ at +1 SD; $B = -.10, SE = .05, p < .05$. at mean; $B = -.27, SE = .08, p < .001$ at -1 SD; see Figure 6 on the next page).

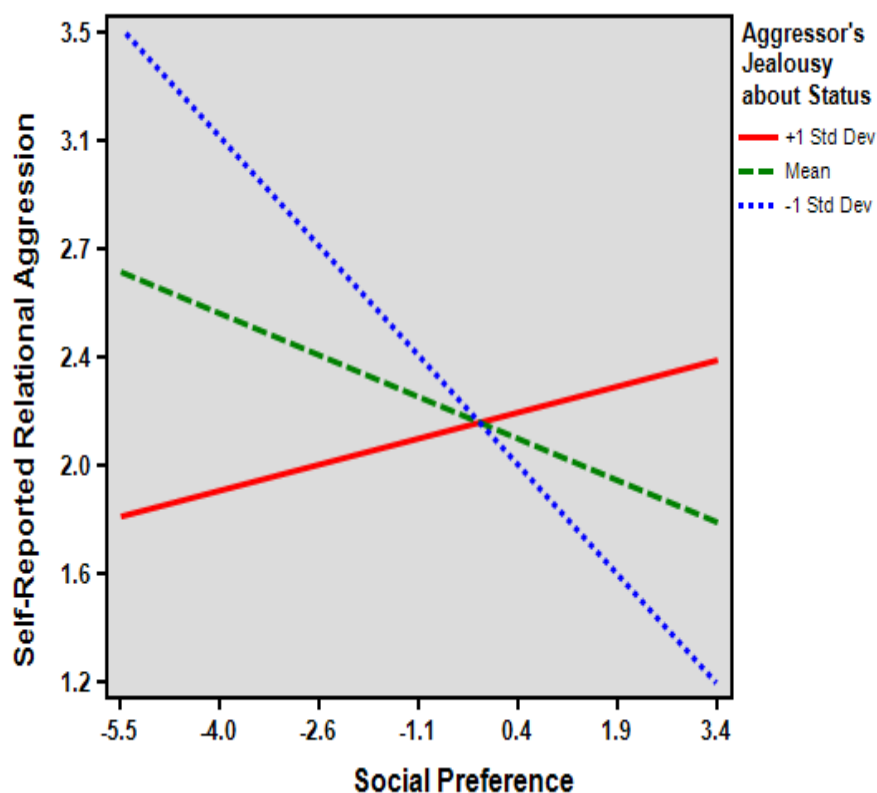


Figure 6: Graphical Depiction of the Interaction between Boys' Social Preference and Aggressor's Jealousy about Status when Predicting Self-Reported Relational Aggression

Additionally, a two-way interaction between social preference and the attribution of romantic relationship competition was found when predicting self-reported relational aggression, $\beta = -.38$, $p < .05$, $\Delta R^2 = .02$, $p < .05$ (see Table 22 in Appendix U).

Additionally, a three-way interaction among social preference, romantic relationship competition, and gender was also found, $\beta = .47$, $p < .05$, and thus only the three-way interaction was probed further. To do this, separate analyses were conducted for boys and girls with perceived popularity and social preference in Block 1, romantic relationship competition attribution in Block 2, and the two-way interactions between social

preference and romantic relationship competition in Block 3. Interactions were not found between girls' social preference and the attribution of romantic relationship competition when predicting self-reported relational aggression. For boys, a two-way interaction between social preference and the attribution of romantic relationship competition was found, $\beta = .32, p < .05, \Delta R^2 = .07, p < .05$. At lower levels of the romantic relationship competition attribution, boys' self-reported relational aggression and their social preference were more negatively related (simple slopes: $B = .08, SE = .07, p = n.s.$ at +1 SD; $B = -.05, SE = .05, p = n.s.$ at mean; $B = -.18, SE = .06, p < .05$ at -1 SD; see Figure 7). No other interactions were found for the other closed-ended and open-ended attributions when predicting self-reported relational aggression.

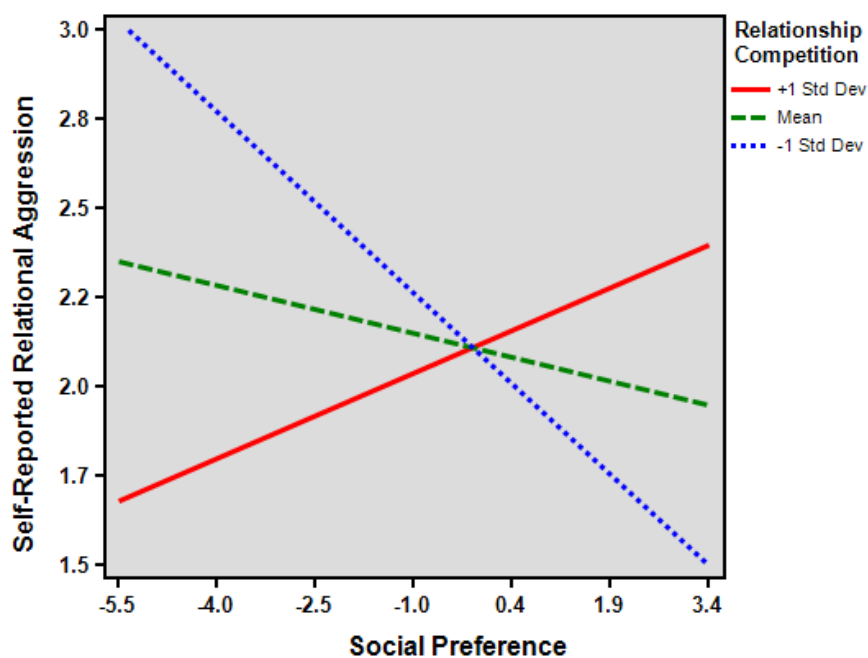


Figure 7: Graphical Depiction of the Interaction between Boys' Social Preference and Romantic Relationship Competition when Predicting Self-Reported Relational Aggression

When predicting prosocial behavior, no interactions were found for any of the closed-ended and open-ended attributions (see Tables 22 and 24 in Appendix U).

However, girls self-reported more prosocial behavior in comparison to boys, which was reported in the Hypothesis I section.

Peer-nominated social behaviors. As previously reported in the Hypothesis I section, perceived popularity was positively related to peer-nominated overt aggression, whereas social preference was negatively associated with peer-nominated overt aggression (see Tables 25 and 26 in Appendix U). Additionally, the open-ended attribution of bad characteristics of the victim was positively related to peer-nominated overt aggression, $\beta = .21, p < .01, \Delta R^2 = .04, p < .01$ (see Table 26). A two-way interaction was found between social preference and the attribution of bad behavior of the victim (open-ended) when predicting peer-nominated overt aggression, $\beta = .38, p < .001, \Delta R^2 = .09, p < .001$. Peer-nominated overt aggression and social preference were negatively related when the adolescent did not endorse the bad behavior of the victim attribution (simple slope: $B = -.08, SE = .02, p < .001$; see Figure 8 on the next page). In contrast, when the adolescent made the attribution of bad behavior of the victim, peer-nominated overt aggression and social preference were positively associated (simple slope: $B = .34, SE = .10, p < .001$; see Figure 8 on the next page). No other interactions were found for the other closed-ended and open-ended attributions when predicting peer-nominated overt aggression.

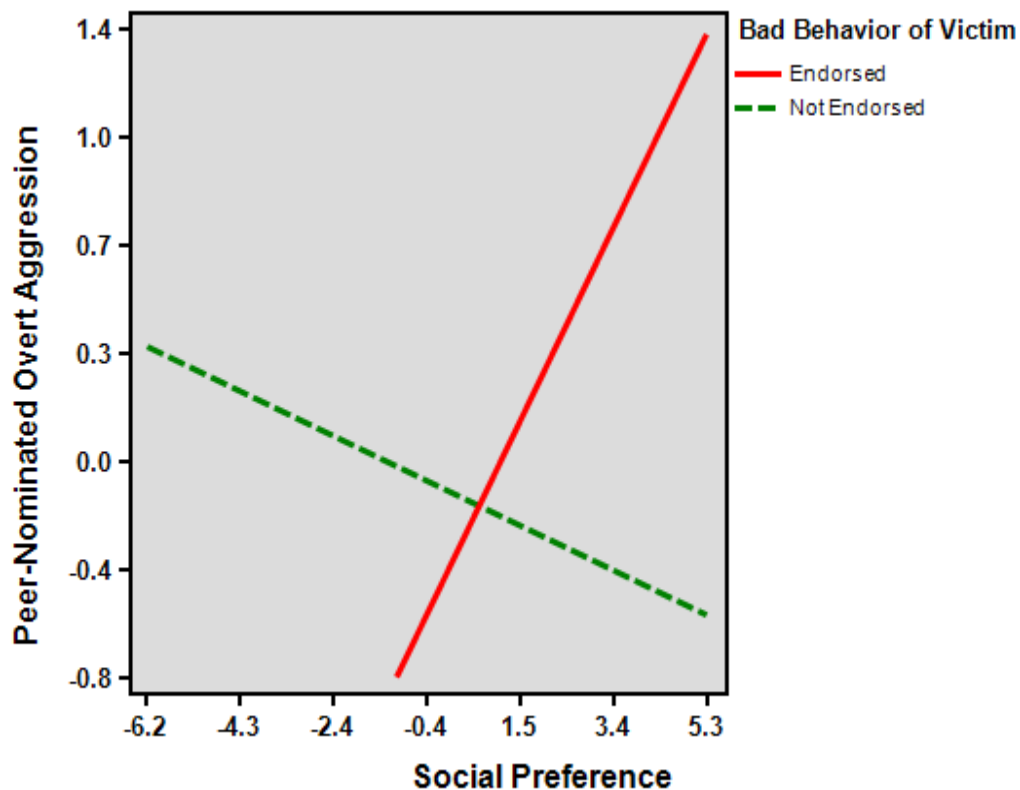


Figure 8: Graphical Depiction of the Interaction between Social Preference and Bad Behavior of Victim when Predicting Peer-Nominated Overt Aggression

As shown in Tables 25 and 26 (see Appendix U), and as previously reported, boys were nominated as being less relationally aggressive in comparison to girls. In addition, peer-nominated relational aggression was positively associated with perceived popularity, whereas social preference was negatively related to peer-nominated relational aggression as reported in the Hypothesis I section. There were two-way interactions between victim-blame and both popularity types ($\beta = -.12, p < .05$ for social preference; $\beta = .10, p < .05$ for perceived popularity) found when predicting peer-nominated relational aggression, $\Delta R^2 = .02, p < .05$ (see Table 25). At higher levels of the victim-blame attribution, peer-nominated relational aggression and perceived popularity were more strongly related (see

Figure 9; simple slopes: $B = .20$, $SE = .05$, $p < .001$ at +1 SD; $B = .14$, $SE = .03$, $p < .001$ at mean; $B = .30$, $SE = .22$, $p = n.s.$ at -1 SD). In addition, peer-nominated relational aggression and social preference were more negatively related at higher levels of the victim-blame attribution (simple slopes: $B = -.58$, $SE = .19$, $p < .001$ at +1 SD; $B = -.29$, $SE = .13$, $p < .01$ at the mean; $B = -.01$, $SE = .18$, $p = n.s.$ at -1 SD; see Figure 10 on the next page).

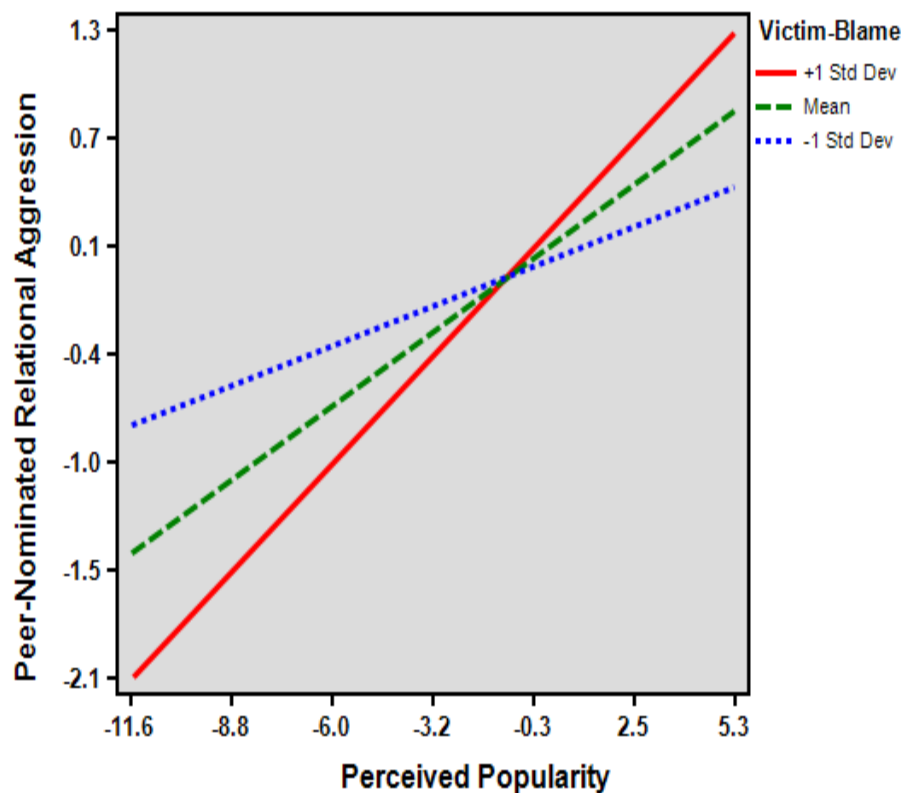


Figure 9: Graphical Depiction of the Interaction between Perceived Popularity and Victim-Blame when Predicting Peer-Nominated Relational Aggression

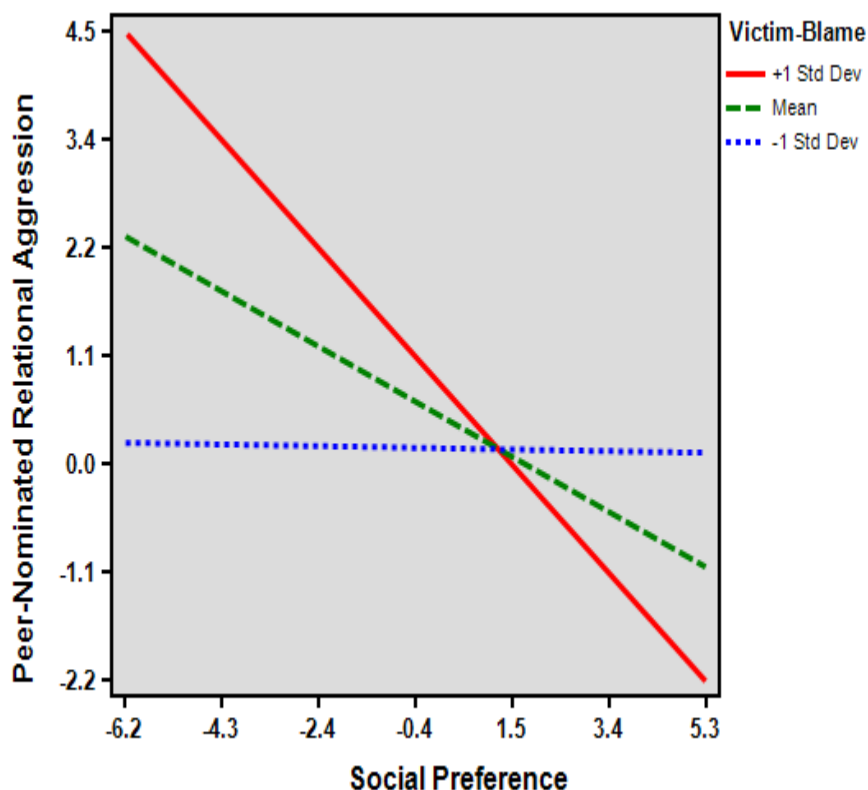


Figure 10: Graphical Depiction of the Interaction between Social Preference and Victim-Blame when Predicting Peer-Nominated Relational Aggression

Furthermore, a two-way interaction was also found between perceived popularity and the open-ended attribution of aggressor's jealousy when predicting peer-nominated relational aggression, $\beta = -.29$, $p < .001$, $\Delta R^2 = .29$, $p < .001$. For adolescents who did not make the aggressor's-jealousy attribution, the association between perceived popularity and peer-nominated relational aggression was stronger (simple slope: $B = .21$, $SE = .12$, $p < .001$; see Figure 11 on the next page). On the other hand, peer-nominated relational aggression and perceived popularity were negatively related when an adolescent endorsed the attribution of aggressor's jealousy (simple slope: $B = -.12$, $SE =$

.07, $p < .05$; see Figure 11). No other interactions were found for the other closed-ended and open-ended attributions when predicting peer-nominated relational aggression.

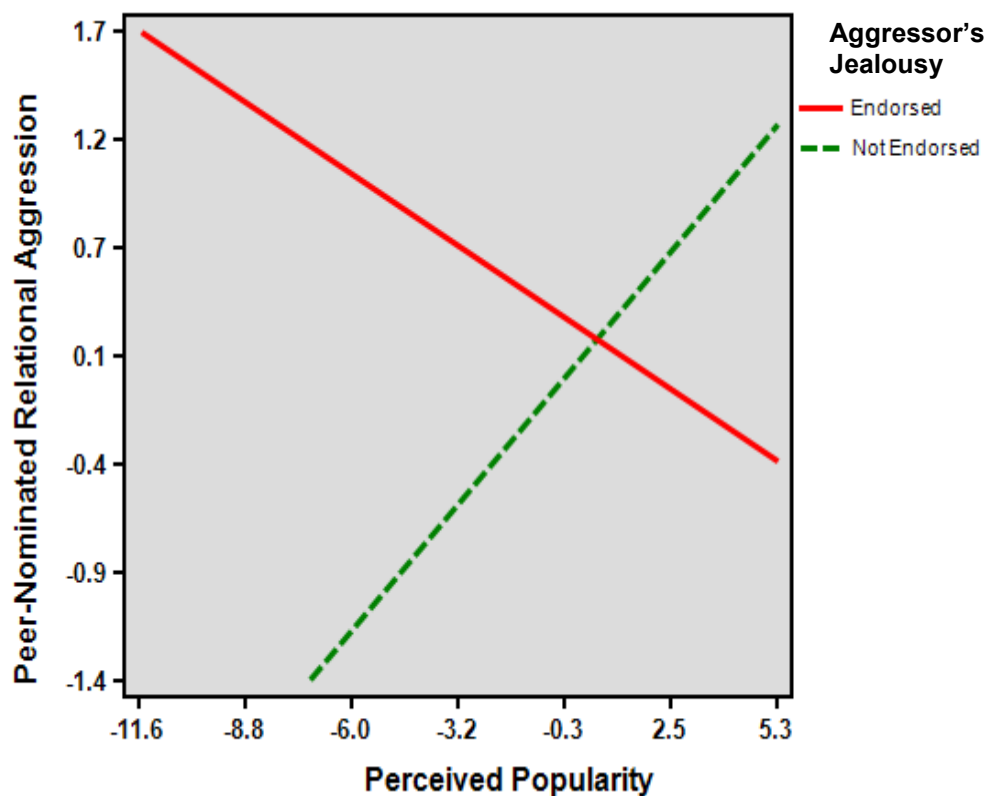


Figure 11: Graphical Depiction of the Interaction between Perceived Popularity and Aggressor's Jealousy when Predicting Peer-Nominated Relational Aggression

With regard to peer-nominated prosocial behavior, perceived popularity and social preference were each positively associated with these behaviors as previously reported in Hypothesis I section (see Tables 25 and 27 in Appendix U). A two-way interaction between aggressor's jealousy about academics and social preference was found, $\beta = -.15$, $p < .01$, $\Delta R^2 = .02$, $p < .05$ (see Table 25). At lower levels of the aggressor's jealousy about academics attribution, peer-nominated prosocial behavior and

social preference were more strongly associated (simple slopes: $B = .23$, $SE = .05$, $p < .001$ at +1 SD; $B = .33$, $SE = .04$, $p < .001$ at the mean; $B = .42$, $SE = .20$, $p < .001$ at -1 SD; see Figure 12).

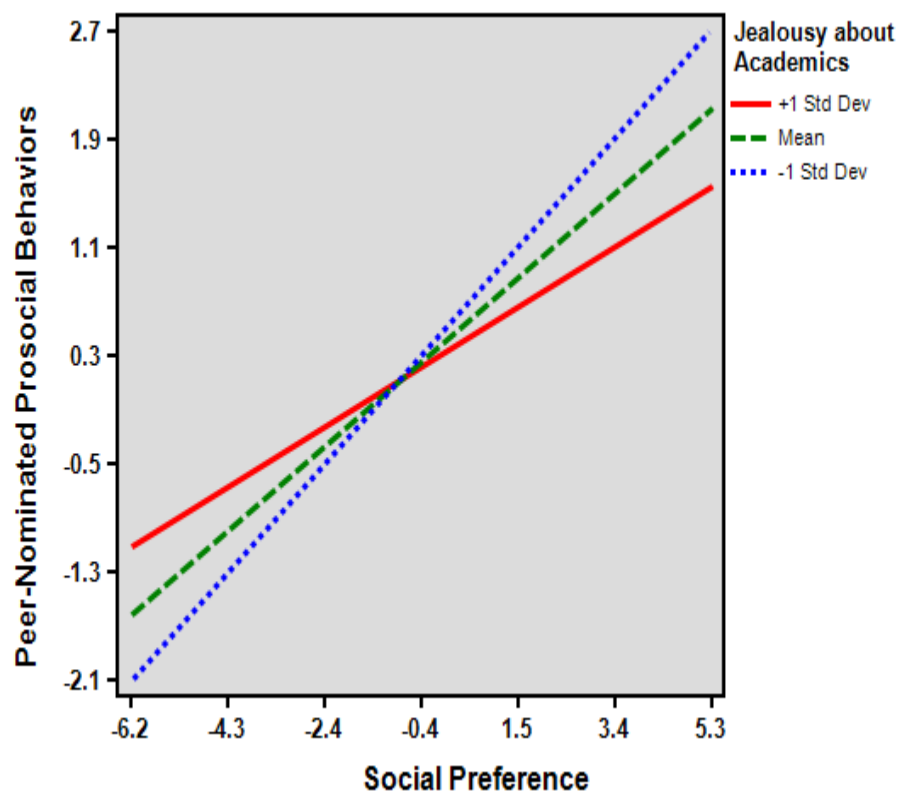


Figure 12: Graphical Depiction of the Interaction between Social Preference and Giver's Jealousy about Academics when Predicting Peer-Nominated Prosocial Behavior

In addition, a two-way interaction was found between social preference and the open-ended attribution of romantic relationship establishment when predicting peer-nominated prosocial behavior, $\beta = -.14$, $p < .05$, $\Delta R^2 = .02$, $p < .05$ (see Table 27 in Appendix U). When adolescents did not endorse the romantic relationship establishment attribution, peer-nominated prosocial behavior and social preference were positively related ($B = .38$, $SE = .04$, $p < .001$ for did not endorse the attribution; $B = -.02$, $SE = .21$, p

= *n.s.* for those who endorsed the attribution; see Figure 13). On the other hand, when adolescents endorsed the romantic relationship establishment attribution, peer-nominated prosocial behavior and social preference were not related. No other interactions were found for the other closed-ended and open-ended attributions when predicting peer-nominated prosocial behavior.

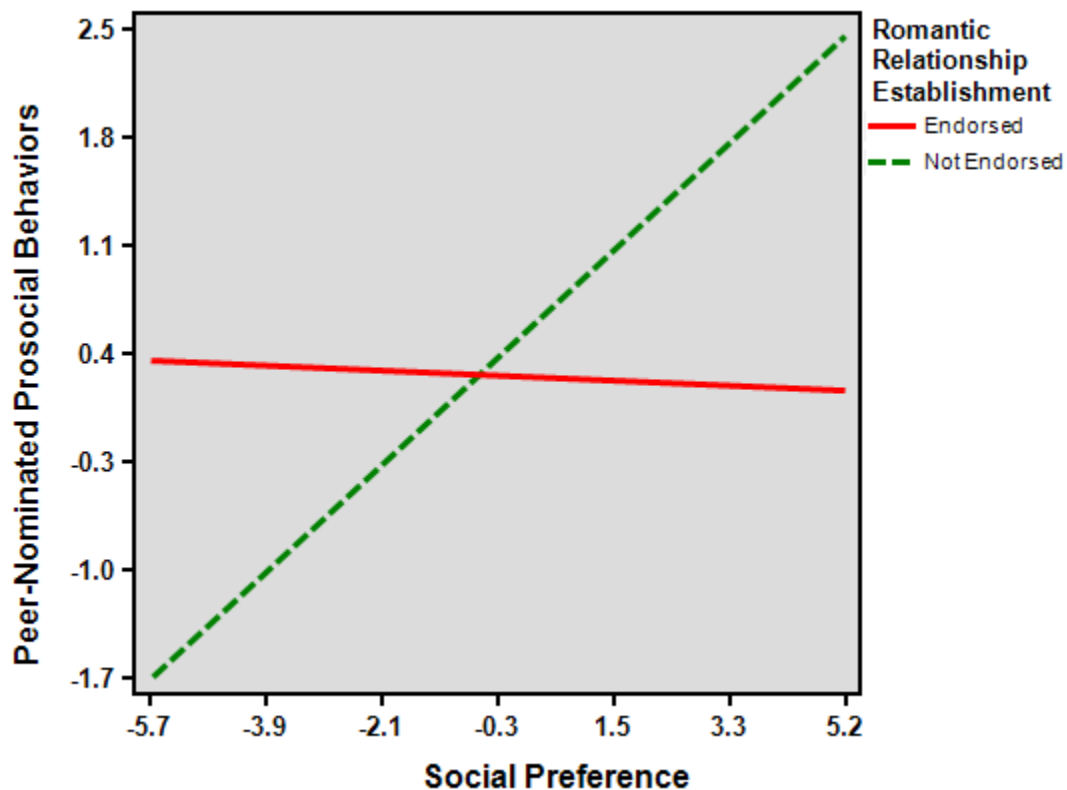


Figure 13: Graphical Depiction of the Interaction between Social Preference and Romantic-Relationship-Establishment Attribution when Predicting Peer-Nominated Prosocial Behavior

Hypothesis VI (Model 3; see Figure 3)

There were no interactions expected for either popularity type when predicting overt aggression from outcome expectancies. On the other hand, it was hypothesized that perceived popularity and relational aggression would be more strongly related at higher levels of the status attainment outcome expectancy. No interactions were expected for social preference when predicting relational aggression. It was also expected that at higher levels of the outcome expectancy of status maintenance, perceived popularity and prosocial behaviors would be more strongly related as would social preference and prosocial behaviors. To test Hypothesis VI, multiple regression analyses were conducted with the dependent variables of self-reported and peer nominated overt aggression, relational aggression, and prosocial behaviors. Independent variables included gender, perceived popularity, and social preference. Two-way interactions were also included between both popularity types and outcome expectancies, including emotional harm (relational and overt aggression), harm victim's status (relational and overt aggression), status attainment (relational and overt aggression), harm the victim (open ended; relational and overt aggression), change victim (open-ended; relational aggression), create aggression (open-ended; overt aggression), relationship maintenance (prosocial behavior), status maintenance (prosocial behavior), selfish motivations (open-ended; prosocial behavior), develop and maintain friendships (open-ended; prosocial behavior), and romantic relationship establishment (open-ended; prosocial behavior). Three-way interactions were also included among popularity types, outcome expectancies, and gender. Block 1 included gender, Block 2 included perceived popularity and social preference, Block 3 included outcome expectancies (either closed-ended or open-ended),

Block 4 included two-way interactions between outcome expectancies and popularity types, and Block 5 included three-way interactions among outcome expectancies, popularity types, and gender.

Self-reported social behaviors. As previously reported in the Hypothesis I section, boys self-reported more overt aggression in comparison to girls (see Tables 28 and 29 in Appendix U). In addition, perceived popularity was positively related to self-reported overt aggression, whereas social preference was negatively associated with this behavior. There was a two-way interaction between perceived popularity and the outcome expectancy of status attainment found when predicting self-reported overt aggression, $\beta = -.21, p < .01, \Delta R^2 = .04, p < .05$ (see Table 28). At higher levels of the outcome expectancy of status attainment, self-reported overt aggression and perceived popularity were more strongly associated (simple slopes: $B = 1.39, SE = .47, p < .001$ at +1 SD; $B = 1.31, SE = .33, p < .001$ at mean; $B = .87, SE = .04, p < .001$ at -1 SD; see Figure 14 on the next page). No other interactions were found for the other closed-ended and open-ended outcome expectancies when predicting self-reported overt aggression.

As reported in the Hypothesis I section, girls self-reported more relational aggression in comparison to boys (see Tables 28 and 29 in Appendix U). In addition, self-reported relational aggression was positively associated with perceived popularity, but negatively related to social preference. Furthermore, the outcome expectancy of status attainment was positively associated with self-reported relational aggression, $\beta = .17, p < .01$ (see Table 28). No interactions were found when predicting self-reported relational aggression.

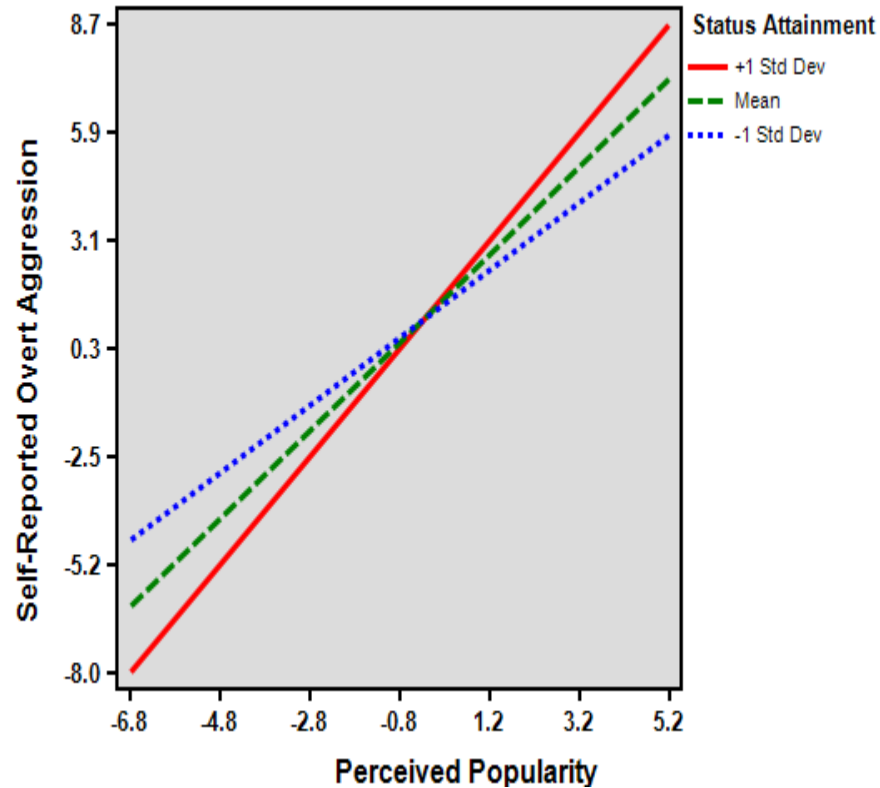


Figure 14: Graphical Depiction of the Interaction between Perceived Popularity and Outcome Expectancy of Status Attainment when Predicting Self-Reported Overt Aggression

Girls self-reported more prosocial behavior in comparison to boys, which was reported in the Hypothesis I section (see Tables 30 and 31 in Appendix U). A significant two-way interaction was found between perceived popularity and the outcome expectancy of status maintenance when predicting self-reported prosocial behavior, $\beta = -.16, p < .01, \Delta R^2 = .03, p < .01$ (see Table 30). At lower levels of the status maintenance outcome expectancy, self-reported prosocial behavior and perceived popularity were more positively associated (simple slopes: $B = -.02, SE = .05, p = \text{n.s.}$ at +1 SD; $B = .04,$

$SE = .03$, $p = n.s.$ at the mean; $B = .11$, $SE = .04$, $p < .01$ at -1 SD; see Figure 15). No other interactions were found for the other closed-ended and open-ended outcome expectancies when predicting self-reported prosocial behavior.

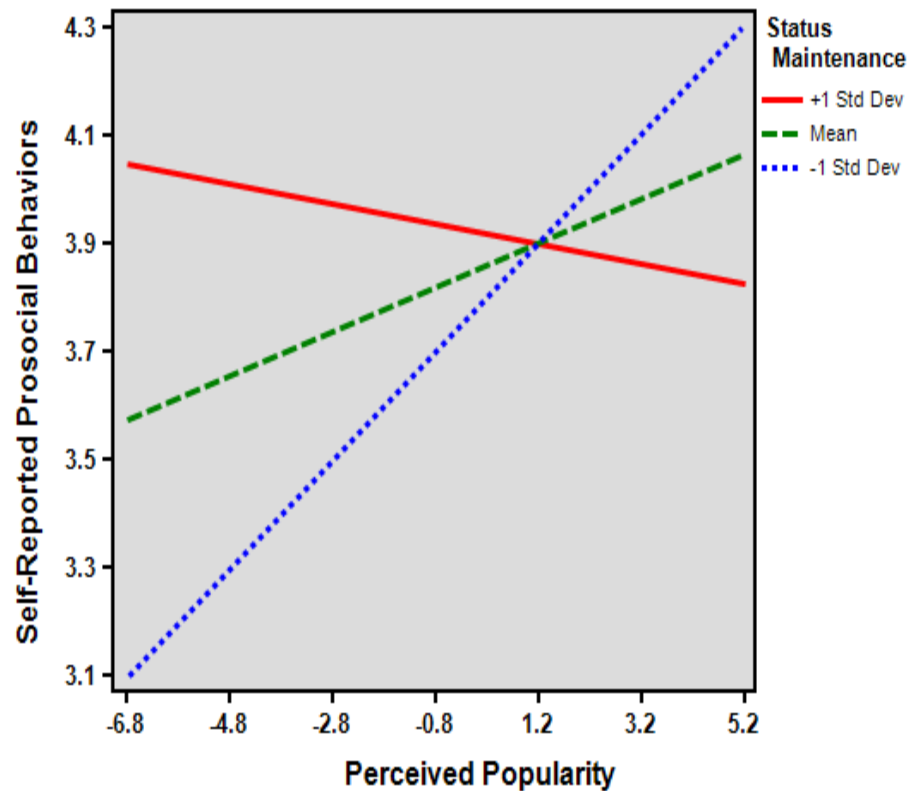


Figure 15: Graphical Depiction of the Interaction between Perceived Popularity and Outcome Expectancy of Status Maintenance when Predicting Self-Reported Prosocial Behavior

Peer-nominated social behaviors. As reported in the section with Hypothesis I, peer-nominated overt aggression was positively related to perceived popularity (for the outcome expectancy of emotionally harm only), but negatively associated with social preference (see Tables 32 and 33 in Appendix U). A significant two-way interaction

between perceived popularity and status attainment was found, $\beta = -.17, p < .05$, as was a two-way interaction between social preference and status attainment, $\beta = .55, p < .05$, $\Delta R^2 = .03, p < .05$. Peer-nominated overt aggression and perceived popularity were more strongly related at higher levels of the status attainment outcome expectancy (simple slopes: $B = 3.09, SE = 1.37, p < .05$ at +1 SD; $B = 2.41, SE = 1.04, p < .05$ at the mean; $B = 1.74, SE = .73, p < .01$ at -1 SD; see Figure 16). In addition, the association between peer-nominated overt aggression and social preference was more negative at lower levels of the status attainment outcome expectancy (simple slopes: $B = -.14, SE = .10, p = n.s.$ at +1 SD; $B = -.23, SE = .07, p < .001$ at the mean; $B = -.33, SE = .10, p < .001$ at -1 SD; see Figure 17 on the next page).

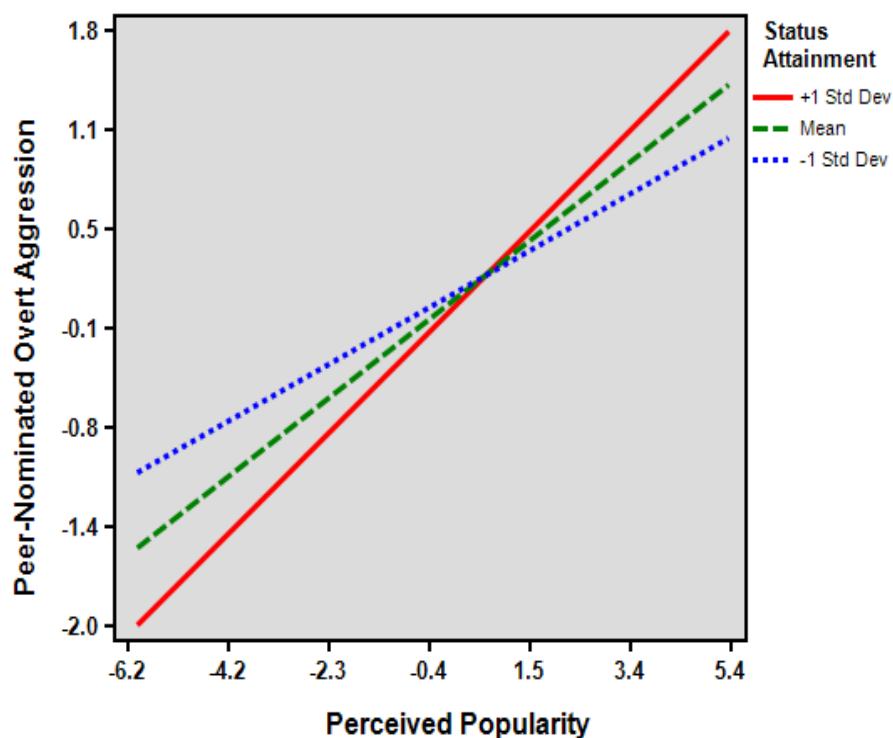


Figure 16: Graphical Depiction of the Interaction between Perceived Popularity and Outcome Expectancy of Status Attainment when Predicting Peer-Nominated Overt Aggression

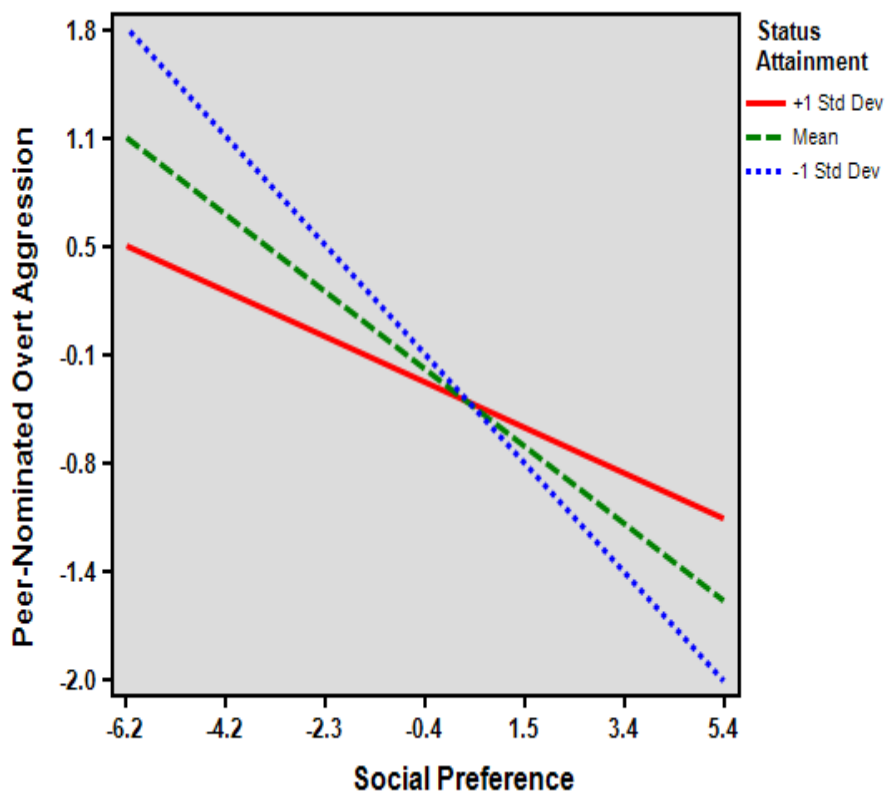


Figure 17: Graphical Depiction of the Interaction between Social Preference and Outcome Expectancy of Status Attainment when Predicting Peer-Nominated Overt Aggression

Another two-way interaction was found between perceived popularity and the open-ended outcome expectancy of harm to the victim's status and friendships when predicting peer-nominated overt aggression, $\beta = -.21, p < .05, \Delta R^2 = .04, p < .05$ (see Table 33 in Appendix U). Perceived popularity and peer-nominated overt aggression were strongly related when the adolescent did not endorse the outcome expectancy of harm to the victim's status and friendships (simple slope: $B = .08, SE = .05, p < .05$ for not endorsing this outcome expectancy; see Figure 18 on the next page). However, when the

adolescent endorsed the outcome expectancy of harm the victim's status and friendships, the relationship between perceived popularity and peer-nominated overt aggression were negatively associated (simple slope: $B = -.17$, $SE = .07$, $p < .01$ for endorsing the outcome expectancy; see Figure 18).

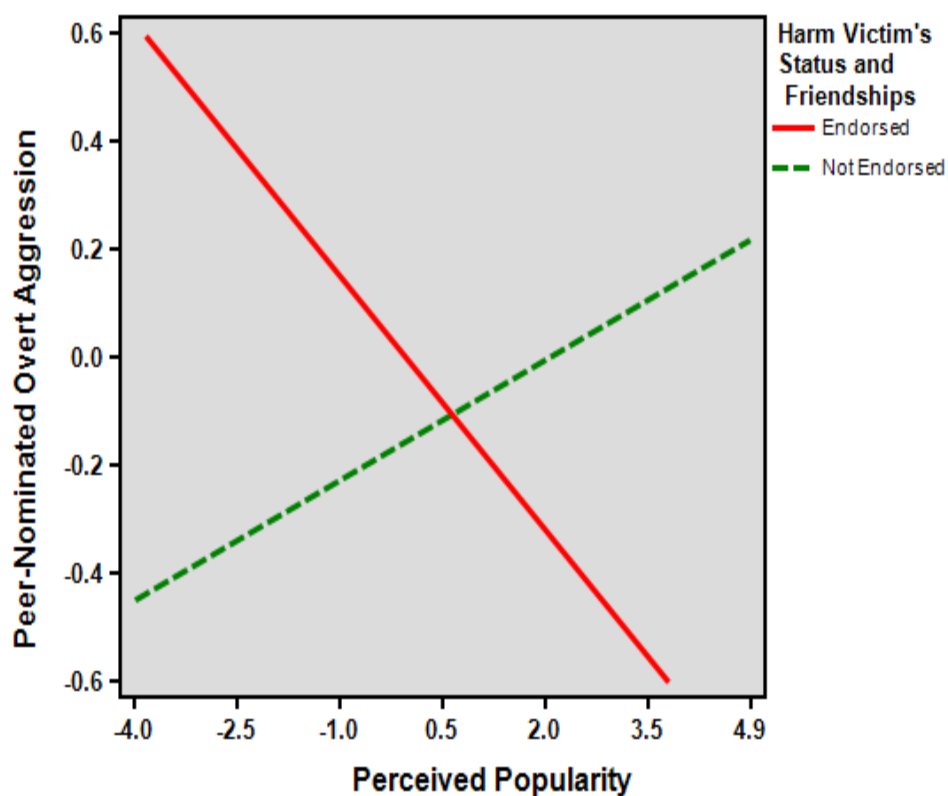


Figure 18: Graphical Depiction of the Interaction between Perceived Popularity and Outcome Expectancy of Harm Victim's Status and Friendships when Predicting Peer-Nominated Overt Aggression

Additionally, a two-way interaction between social preference and the outcome expectancy of create aggression was significant when predicting peer-nominated overt aggression, $\beta = -.24$, $p < .05$, $\Delta R^2 = .04$, $p < .05$ (see Table 33 in Appendix U). More specifically, social preference and peer-nominated overt aggression were negatively

associated when the adolescent did not endorse the create aggression outcome expectancy (simple slopes: $B = -.08$, $SE = .02$, $p < .001$ for not endorsing; $B = .08$, $SE = .06$, $p = n.s.$ for endorsing the outcome expectancy; see Figure 19). No other interactions were found for the other closed-ended and open-ended outcome expectancies when predicting peer-nominated overt aggression.

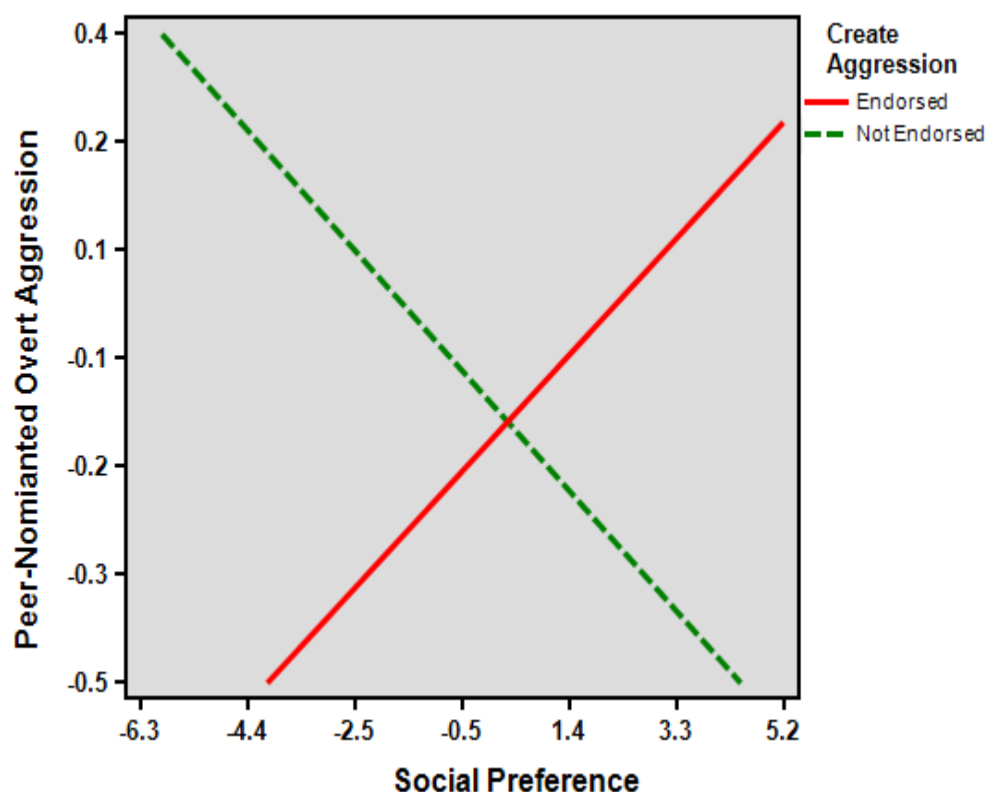


Figure 19: Graphical Depiction of the Interaction between Social Preference and Outcome Expectancy of Create Aggression when Predicting Peer-Nominated Overt Aggression

As previously reported in the Hypothesis I section, peer-nominated relational aggression was positively associated with perceived popularity but negatively related to

social preference (see Tables 32 and 33 in Appendix U). In addition, girls were nominated as more relationally aggressive in comparison to boys. A two-way interaction between social preference and harm victim's status was significant when predicting peer-nominated relational aggression, $\beta = -.14$, $p < .05$, $\Delta R^2 = .03$, $p < .01$ (see Table 32). The relationship between peer-nominated relational aggression and social preference was more negative at higher levels of the harm-victim's-status outcome expectancy (simple slopes: $B = -.63$, $SE = .18$, $p < .001$ at +1 SD; $B = -.26$, $SE = .13$, $p < .05$ at the mean; $B = .11$, $SE = .20$, $p = n.s.$ at -1 SD; see Figure 20).

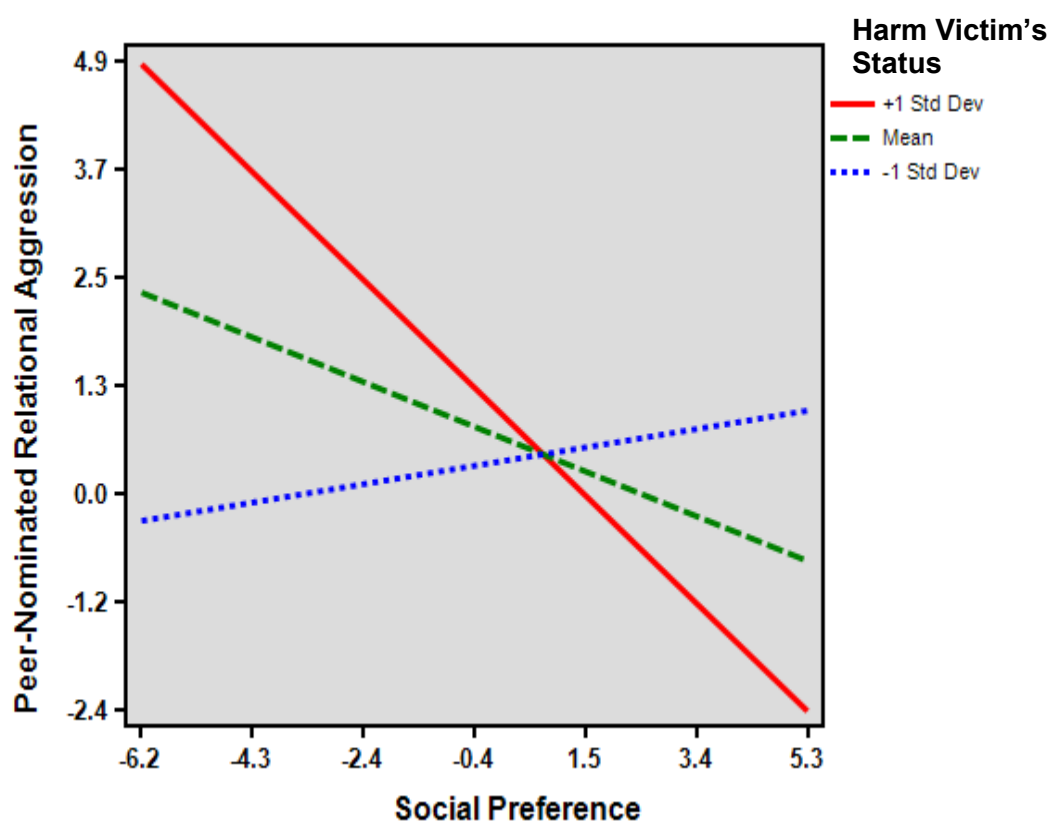


Figure 20: Graphical Depiction of the Interaction between Social Preference and Outcome Expectancy of Harm Victim's Status when Predicting Peer-Nominated Relational Aggression

When using peer-nominated relational aggression as the dependent variable, a two-way interaction between status attainment and perceived popularity was found, $\beta = -.25, p < .001, \Delta R^2 = .05, p < .001$ (see Table 32 in Appendix U). At lower levels of the outcome expectancy of status attainment, the association between peer-nominated relational aggression and perceived popularity was stronger (simple slopes: $B = .06, SE = .22, p = n.s.$ at +1 SD; $B = .22, SE = .04, p < .001$ at the mean; $B = .38, SE = .07, p < .001$ at -1 SD; see Figure 21). No other interactions were found for the other closed-ended and open-ended outcome expectancies when predicting peer-nominated relational aggression.

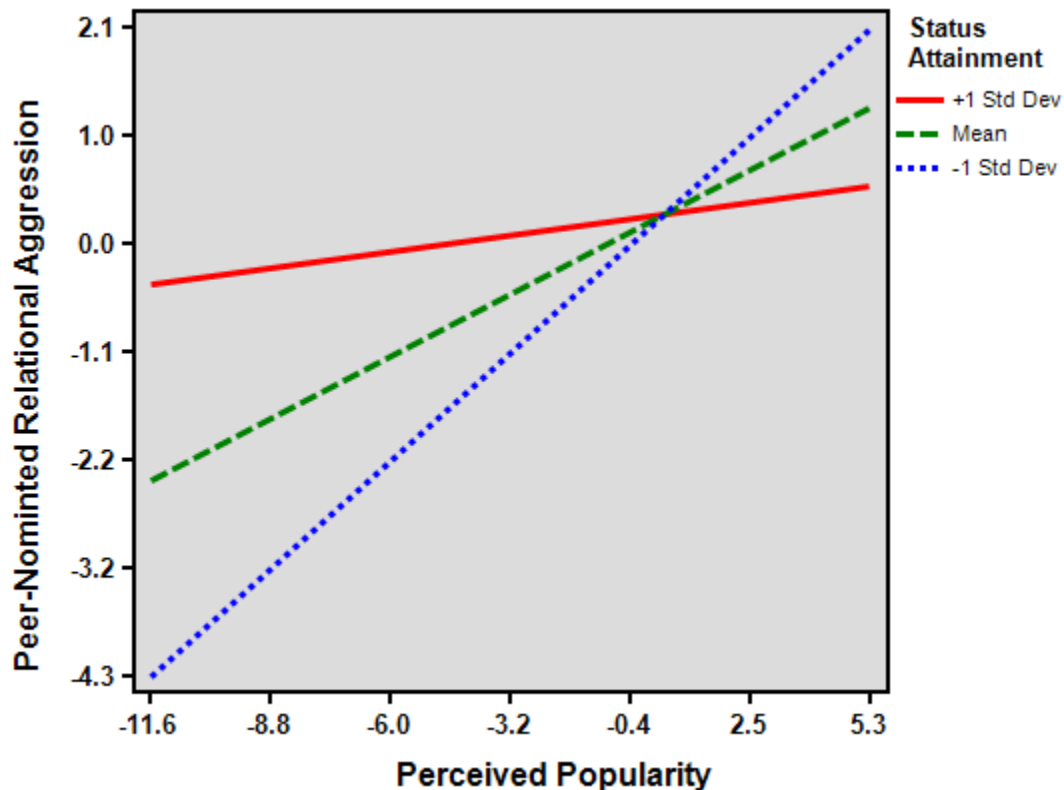


Figure 21: Graphical Depiction of the Interaction between Perceived Popularity and Outcome Expectancy of Status Attainment when Predicting Peer-Nominated Relational Aggression

For prosocial behavior, perceived popularity and social preference were each positively related to peer-nominated prosocial behaviors as reported in the Hypothesis I section (see Tables 34 and 35 in Appendix U). Additionally, the outcome expectancy of friendship establishment was positively associated with peer-nominated prosocial behaviors, $\beta = .21, p < .001, \Delta R^2 = .04, p < .001$ (see Table 35). No interactions were found for the outcome expectancies when predicting peer-nominated prosocial behavior.

CHAPTER IV

DISCUSSION

The aims of this study were four-fold. The first aim was to replicate previous research findings regarding the relationship between popularity types (i.e., perceived popularity, social preference) and social behaviors (i.e., overt aggression, relational aggression, prosocial behavior). The second aim was to examine perceived popularity and social preference in relation to attributions and outcome expectancies concerning aggressive and prosocial behaviors. Similarly, for the third aim, the associations between both popularity types and coping intentions regarding overt and relational aggression were investigated. The final aim was to test an integrative model to understand how adolescents' social cognitive processes (i.e., attributions, outcome expectancies) moderated the relationships between their peer status and social behaviors.

The current study uniquely adds to the literature in a variety of ways. First, the study investigates social cognitive processes as potential explanations for popular adolescents' distinctive behavioral profiles. The current results indicate that the relationships between social behaviors and popularity types are moderated by adolescents' social cognitive processes. Second, although much of the previous research conducted on popularity has examined gender differences in popular adolescents' social behaviors, the current study added to the literature by providing evidence of the moderating role of gender in the relationship between peer status and adolescents' social behaviors (e.g., Andreou, 2006; Cillessen & Mayeux, 2004; Mayeux & Cillessen, 2008; Prinstein & Cillessen, 2003; Xie et al., 2002; Walcott et al., 2008). A methodological contribution of this study to the literature is the utilization of the open-ended questions to

assess adolescents' attributions, outcome expectancies, and coping intentions. This method allows adolescents to include detailed information about their true feelings regarding their peers' social behaviors as well as encourages spontaneous responses (Campbell, 2003). Because adolescents actively pursue peer status using different behavioral strategies, they may have unique perceptions of aggressive and prosocial behaviors. Therefore, open-ended questions are conducive for obtaining insight into their thoughts (Adler & Adler, 1995; LaFontana & Cillessen, 2002; Rubin et al., 2006).

Findings of this study have implications for policy making as well. Given that perceived popular adolescents are relationally aggressive, understanding the social cognitive processes involved in their social behaviors may be helpful for programs aiming to reduce aggression among adolescents (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003; Xie et al., 2002; Walcott et al., 2008). More specifically, intervention programs could be developed focusing on high perceived popularity in an effort to modify adolescents' attributions and outcome expectations for aggressive behaviors. Changing these adolescents' thoughts or providing them with different methods to maintain their status, may be helpful for reducing their aggressive behaviors.

Relations between Peer Status and Social Behaviors

Perceived popularity was positively associated with self-reported overt aggression, but negatively related to peer-nominated overt aggression. Moreover, social preference was negatively associated with self-reported overt aggression but not related to peer-nominated overt aggression. Initially these findings, particularly those for perceived popularity, appear to be inconsistent with previous research and the study's hypotheses. In the literature, some researchers (e.g., Andreou, 2006; Cillessen & Mayeux,

2004; Mayeux & Cillessen, 2008) have found negative associations between perceived popularity and peer-nominated overt aggression, whereas other researchers (e.g., Cillessen & Borch, 2006; Prinstein & Cillessen, 2003) have found positive relationships between these two variables. Furthermore, adolescents' self-reports and peer reports also diverged in reporting aggressive behaviors in the current study. It is important to consider multiple informants (i.e., teacher, peer, self) because each source may only observe one aspect of adolescents' social behaviors (Putallaz, Grimes, Foster, Kupersmidt, Coie, & Dearing, 2007). A possible explanation for the differences among the reporters is that adolescents may have considered their motivations for utilizing overt aggression. More specifically, adolescents with high perceived popularity may see overt aggression as serving a reactive purpose when they believe that their social status is challenged, resulting in higher self-reported overt aggression. This explanation is supported by previous findings concerning the positive association between perceived popularity and reactive overt aggression (Walcott et al., 2008). In addition, the negative association between social preference and self-reported overt aggression found in the current study is supported by previous research (e.g., Andreou, 2006; Cillessen & Mayeux, 2004; Mayeux & Cillessen, 2008; Prinstein & Cillessen, 2003; Xie et al., 2002; Walcott et al., 2008). Socially-preferred adolescents may view aggression, overt and relational, as inconsequential to maintaining their status, engaging in less of these behaviors (Rubin et al., 2006).

While overt aggression may serve a reactive purpose, relational aggression is utilized as a means to maintain adolescents' popularity (Eder, 1985; Lease et al., 2002; Pettit, Bakshi, Dodge, & Coie, 1990; Rose et al., 2004; Vaughn & Waters, 1981; Wright,

Zakriski, & Fisher, 1996). Supported by previous research, findings from the current study indicated that perceived popularity was positively related to both self and peer-nominated relational aggression, further indicating that such behaviors may help improve adolescents' social standing. Conversely, social preference was negatively associated with relational aggression as reported by self and peers, which is also consistent with previous findings (Andreou, 2006; Cillessen & Mayeux, 2004; De Bruyn, Cillessen, & Wissink, 2009; LaFontana & Cillessen, 2008; Rose et al., 2004; Prinstein, 2007; Walcott et al., 2008).

However, relational aggression is not the only behavioral strategy adolescents utilize to maintain perceived popularity (Prinstein, 2007). When relational aggression does not help to maintain adolescents' perceived popularity, they may utilize prosocial behavior (Hawley, 2003; Lease et al., 2002). In addition, prosocial behavior is also utilized by socially-preferred adolescents to advance their status. Therefore, both popularity types were expected to positively relate to prosocial behavior. The current study's findings indicated that peer-nominated prosocial behavior positively related to social preference, which is consistent with previous literature (Caprara, Dodge, Pastorelli, & Zelli, 2006; Ellis & Zabatany, 2007; Rotenberg, McDougall, Boulton, Vaillancourt, Fox, & Hymel, 2004; Zimmer-Gembeck, Geiger, & Crick, 2005). Although perceived popularity was not related to peer-nominated prosocial behavior after including social preference in the model, correlational findings revealed that perceived popularity and these behaviors were related. Findings from both the correlational and regression analyses suggest that social preference may be a stronger predictor of peer-nominated prosocial behavior for the adolescents in the current study.

With regard to self-reported prosocial behavior, neither popularity type was related to such behavior. This finding suggests that adolescents, regardless of their current social standing, may perceive themselves as engaging in prosocial behavior. In addition, Paulhus (1989) argued that higher scores on prosocial behavior may represent the individual's self-belief that he/she is a good person who often acts prosocially. Therefore, adolescents in the current study might be susceptible to the "positivistic bias" about the kind of person they were, which led them to report high levels of prosocial behavior (Penner, Fritzsche, Craiger, & Freifeld, 1995).

Gender Differences in Adolescents' Social Behaviors

The results of the current study found that boys self-reported more overt aggression in comparison to girls, which was inconsistent with the current study's hypotheses. This hypothesis stated that no gender differences would be found for overt aggression. Rivers and Smith (1994) found that boys' self-reported overt aggression peaks in adolescence, supporting the current results. In the current study, no gender differences were found for peer-nominated overt aggression. Informants may have differed on their reports of overt aggression because boys may have felt more pressure to conform to the behaviors typically associated with their gender (Coie & Dodge, 1998; Eagly & Steffen, 1986; Odgers & Moretti, 2002). In addition, through gender socialization, girls may have reported less overt aggression as they may be taught to refrain from engaging in direct confrontation, which discourages their usage of overt aggression (Underwood, 2003).

Girls were nominated as more relationally aggressive in comparison to boys. However, no gender differences were found for self-reported relational aggression. Based

on findings from meta-analyses, informants do diverge on their reports of relational aggression in adolescence. More specifically, Archer's (2004) meta-analysis supports the current study's findings. In his analysis, Archer took into account different methods for assessing relational aggression (i.e., peers, self, teacher, parent). He found that girls become more relationally aggressive in adolescence but only when these behaviors were assessed through peer-nominations. Archer's results are also corroborated by Smith and colleagues (2010). Therefore, finding no gender differences for self-reported relational aggression in the current study is consistent with the previous literature (i.e., Archer, 2004; Smith et al., 2010), as is the finding that girls were nominated as more relationally aggressive in comparison to boys (Cillessen & Mayeux, 2004; Zimmer-Gembeck et al., 2005).

Findings from the current study indicated that girls self-reported more prosocial behavior when compared to boys, providing support for the current study's hypotheses. These results are consistent with the literature as girls typically self-report higher levels of prosocial behavior when compared to boys (Fabes, Carlo, Kupanoff, & Laibel, 1999; Hastings, Utendale, & Sullivan, 2007; Pursell et al., 2008; Zimmer-Gembeck et al., 2005). However, gender differences were not found for peer nominated prosocial behavior. Socialization processes may account for these differences as girls may have felt more pressure to conform to a prosocial orientation even if boys are perceived by their peers as engaging in similar levels of prosocial behavior in comparison to girls (Fabes et al., 1999; Hastings et al., 2007).

No interactions were found between social preference and gender when predicting overt aggression as assessed by self-report and peer-nomination. However, a significant

interaction between perceived popularity and gender was found when using peer-nominated overt aggression as the dependent variable. Boys' perceived popularity was positively associated with peer-nominated overt aggression, whereas this association was negative for girls. This finding may suggest that boys' usage of overt aggression is pertinent to perceived popularity, which is consistent with previous literature (e.g., Cillessen & Mayeux, 2004; Eder & Kinney, 1995).

With regard to relational aggression, no interactions were found between gender and social preference when predicting peer-nominated or self-reported relational aggression. Similarly, the interaction between gender and perceived popularity was not significant, which does not support the current study's hypotheses. These findings were not expected as Cillessen and Mayeux (2004) found that relational aggression was more relevant to girls' perceived popularity than to boys'. One potential explanation is that gender differences in using relational aggression was not evident in the current study as shown by the non-significant gender differences in self-reported relational aggression. Another explanation may be that there were a high number of non-White adolescents in the current study. Ethnicity has been understudied as a moderator in the relationship between perceived popularity and relational aggression. In the only study examining these associations, Lansford and colleagues (2009) found that gender did not moderate the relations between perceived popularity and relational aggression. Instead, they found that this relationship was moderated by ethnicity, indicating that relational aggression is less accepted by the peer group for African-American adolescents than for European-American adolescents. Therefore, finding that gender did not moderate the relationship between perceived popularity and relational aggression is consistent with Lansford and

colleagues' study as the current study's sample also included a large number of non-White adolescents. More research should be conducted in this area to fully understand the moderation roles of both ethnicity and gender in relations between adolescents' relational aggression and their perceived popularity.

Due to gender socialization, the relationship between both popularity types (i.e., social preference, perceived popularity) and prosocial behavior were expected to be stronger for girls than for boys (Fabes et al., 1999; Hastings et al., 2007; Pursell et al., 2008; Zimmer-Gembeck et al., 2005). Both of these expectations were not supported for either self-reported or peer-nominated prosocial behavior. However, previous research also shows that gender is not a moderator in the relationship between social preference and prosocial behavior (i.e., Zimmer-Gembeck et al., 2005). Finding no effect of gender on the relations between social preference and prosocial behavior indicates that this relationship may be similar for both boys and girls. At present, limited is known about the moderating effect of gender on the relations between perceived popularity and prosocial behavior. Follow-up research should be conducted to either confirm or refute the current study's findings.

Associations among Peer Status and Attributions

Considering that overt aggression was expected to decline in adolescence, no relationships were expected between these behaviors and either of the high peer statuses (Xie et al., 2002). However, a significant relationship between the open-ended attribution of aggressor's jealousy (i.e., an attribution that blames the aggressor) and social preference was found. Social preference increased the odds for adolescents making the attribution of aggressor's jealousy pertaining to overt aggression. These results are

somewhat similar to Wright and colleagues' (2012) findings regarding adolescents with the social preference goal (i.e., the desire to be well-liked among one's peers). These adolescents made aggressor's-jealousy attributions for relational aggression. Because Wright and colleagues found that adolescents with the social preference goal were less relationally aggressive, they concluded that these adolescents do not see relational aggression as a strategy to promote status. Consequently, these adolescents do not show in-group favoritism toward individuals who engage in such behaviors (Tajfel, Billig, Bundy, & Flament, 1971). In the current study, a negative relationship was found between social preference and overt aggression, suggesting that socially-preferred adolescents may blame overt aggression on the perpetrator's jealousy, showing less favoritism toward overtly aggressive individuals. The current study extends Wright and colleagues' findings to overt aggression and adolescents' social preference. Due to a scarcity of research on this topic, more studies are needed to further investigate the current study's findings.

As perceived popularity is positively associated with relational aggression (Cillessen & Mayeux, 2004; Rose et al., 2004), it was expected that adolescents with perceived popularity would attribute relational aggression to the perpetrator's jealousy regarding the victims' higher social standing. However, this expectation was not supported, which is somewhat consistent with Wright and colleagues' (2012) findings. Given that relational aggression is used to maintain one's popularity, adolescents with high perceived popularity may be more likely to make attributions justifying their usage of relational aggression in order to show favoritism toward relationally-aggressive adolescents, rather than placing the blame on the perpetrator's jealousy. These

adolescents are able to maintain their positive beliefs regarding relational aggression as a means to reduce cognitive dissonance (Hawley, 2003; Tajfel et al., 1971; Yoon, Hughes, Cavell, & Thompson, 2000).

As adolescents' social preference is negatively associated with relational aggression, they may be unlikely to show favoritism toward perpetrators of relational aggression (Cillessen & Mayeux, 2004; Rose et al., 2004). However, this hypothesis was not supported, which is somewhat inconsistent with Wright and colleagues' (2012) study. In Wright and colleagues' study, they did not specifically examine adolescents' attained social preference but instead the desire to gain higher social preference. These adolescents may hold different attributions regarding relational aggression in comparison to adolescents with high social preference. Furthermore, previous research shows that neutral attribution is used by children with high social preference to explain peer conflict situations (Crick & Ladd, 1993). Findings from the current study do not support the linkage between social preference and the neutral attribution (i.e., blaming relational aggression on conflict between the victim and aggressor). A potential explanation for this inconsistency could be age differences as Crick and Ladd utilized a sample of 3rd and 5th graders. Going from childhood into adolescence, the magnitude of the negative relationship between social preference and relational aggression increases. In comparison to younger children, adolescents with higher social preference may be less tolerable of relational aggression, as well as less inclined to utilize these behaviors (Cillessen & Mayeux, 2004). Thus, as these children become adolescents, they may not perceive relational aggression as a byproduct of conflict between the victim and perpetrator but instead as the perpetrator's problem.

On the other hand, prosocial behavior may be perceived more positively by both types of high peer status adolescents as such behaviors are expected to increase or maintain their higher social position (Lease et al., 2002; Mayeux & Cillessen, 2008; Walcott et al., 2008). In the current study, high perceived popularity was linked to the decreased likelihood of making the friendship-establishment attribution regarding these behaviors, as measured by an open-ended question. The friendship cliques of adolescents with high perceived popularity have the highest rates of instrumental relational aggression in comparison to their less popular peers (Closson, 2009). Such adolescents utilize relational aggression within their friendship cliques as a means to maintain their status by decreasing the social position of others. Thus, when prosocial behavior is utilized by members of perceived-popular friendship cliques, these behaviors may be insincere. The current study's results are consistent with previous literature as adolescents with high perceived popularity may not consider friendship establishment as motivation to act prosocially but instead as a way to manipulate their own social standing among their friends.

No linkages were found between social preference and attributions pertaining to prosocial behavior. Based on previous literature (e.g., Mayeux & Cillessen, 2008; Lease et al., 2002; Walcott et al., 2008), it may be expected that these adolescents would use status-maintenance attributions to explain prosocial behavior because adolescents with high social preference employ these behaviors to achieve or maintain their social standing. However, in one study (i.e., Wardle et al., 2011), findings indicated that prosocial children were more likely to attribute moral motives to prosocial behavior, whereas antisocial children attributed selfish motives to such behavior. Given that social

preference is positively linked to prosocial behavior in adolescence, these adolescents may employ moral based attributions concerning prosocial behavior, instead of status maintaining attributions (i.e., a selfish motive) (Cillessen & Mayeux, 2004).

Gender Differences in Attributions

Through socialization processes, girls are more likely to engage in prosocial behavior in comparison to boys (Fabes et al., 1999; Hastings et al., 2007; Zimmer-Gembeck et al., 2005). Therefore, girls may expect that prosocial characteristics are part of someone's personality. Findings from the current study indicated that girls were more likely to attribute prosocial behavior to the giver's desire to help the receiver, which is an open-ended attribution representing a type of personality characteristic involving the individual's ability to empathize with the receiver. These findings are consistent with the literature as girls are more likely to attribute prosocial behavior to the giver's personality characteristics when compared to boys (Pursell et al., 2008).

Although girls self-report high levels of prosocial behavior, they are more likely to employ negative behavioral strategies, such as a manipulation and relational aggression, to maintain or achieve a higher peer status (Cillessen & Mayeux, 2004). Girls typically utilize positive strategies, such as friendliness and other prosocial behavior, as last resorts in their pursuit of status. Consequently, girls with higher perceived popularity may expect that prosocial behavior is a means to gaining or maintaining their status. Supporting this view, the current study indicated that girls' perceived popularity decreased the chance of making the friendship-establishment attribution to explain prosocial behavior.

Associations among Peer Status and Outcome Expectancies

Because high status adolescents are not typically overtly aggressive, they were expected to believe that such behaviors have negative outcome expectancies (i.e., emotional harm) (Cillessen & Mayeux, 2004; Rose et al., 2004). However, neither peer status type was linked to any outcome expectancies for overt aggression. In the literature, overtly aggressive adolescents typically expect positive outcomes for their behaviors, whereas their non-aggressive peers expect negative ones (Hubbard et al., 2001; Perry et al., 1986; Slaby & Guerra, 1988; Smithmeyer et al., 2000). Finding no relationship between both popularity types and any outcome expectancy concerning overt aggression is potentially inconsistent with the literature but the lack of research on this topic makes it difficult to come to a definitive conclusion. This is especially so given that perceived popularity was negatively linked to peer-nominated overt aggression, but positively associated with self-report in the current study.

The literature suggests that perceived popularity may be linked to positive outcome expectancies (e.g., improving one's status, reducing a rival's social standing) for engaging in relational aggression as it is an effective strategy to gain popularity among adolescents (Cillessen & Mayeux, 2004; Crick & Werner, 1998; Goldstein & Tisak, 2004). Further strengthening this proposal are the findings that relationally aggressive adolescents expect positive outcomes for their behaviors, whereas their non-relationally aggressive peers expect negative outcomes (Prinstein & Cillessen, 2003; Rubin et al., 2006). Therefore, socially-preferred adolescents may also expect negative outcome expectancies concerning relational aggression, given that social preference is negatively associated with such behaviors. However, the current study's results are not consistent

with the literature such that high peer status was not associated with any of the outcome expectancies pertaining to relational aggression. The lack of significant findings for both overt and relational aggression may indicate that behavioral characteristics, such as being overtly and/or relationally aggressive, are better predictors of outcome expectancies than either type of peer status.

Similar to the outcome expectancies for relational aggression, positive outcome expectancies (e.g., status maintenance) for prosocial behavior were expected to be related to both adolescents' perceived popularity and their social preference. Yet, neither peer status was associated with any outcome expectancy concerning prosocial behavior. Cuddy and Frame (1991) found that popular-nonaggressive and aggressive male adolescents did not differ in their outcome expectancies (i.e., making someone feel glad) regarding prosocial behavior. Such findings together with the current findings may indicate that adolescents, no matter their peer status or behavioral characteristics, expect similar outcomes for prosocial behavior.

Gender Differences in Outcome Expectancies

Boys are typically more overtly aggressive in comparison to girls (Crick & Werner, 1998). To be consistent with their behavior, boys are more likely to believe that such behaviors are expected to have positive outcomes in comparison to girls (Perry et al., 1986; Slaby & Guerra, 1988). In contrast, girls are more likely to expect negative outcomes for overt aggression. Consistent with the literature, the current study findings demonstrated that girls were more likely to believe that overt aggression occurred because the perpetrator wanted to harm the victim emotionally, a type of negative outcome expectancy.

On the other hand, girls typically believe that relational aggression has positive outcomes in comparison to boys (e.g., Crick & Grotpeter, 1995; Crick & Werner, 1998; Goldstein & Tisak, 2004). Subsequently, girls are more likely to engage in relational aggression when compared to boys. For the current study, girls were more likely to believe that the perpetrator of relational aggression wanted to harm the victim's peer status when compared to boys. Harming the victim's status is an ambiguous outcome expectancy as it could be perceived as a positive or negative outcome, depending on the characteristics or social desires of the individual evaluating this outcome. In particular, girls who want to improve their status may utilize relational aggression as a way to harm another girl's status, thereby bolstering their own, and making the outcome positive (Closson, 2009). On the other hand, a girl who does not desire status and/or engage in relational aggression may perceive the outcome expectancy of such behaviors as negative because these actions are harmful to the victim. Future research should take adolescents' social status goals into consideration to better understand more about the linkages between high peer status and outcome expectancies concerning adolescents' social behavior.

Associations among Peer Status and Coping Intentions

Early adolescents typically utilize social support coping strategies to deal with overt aggression, such as asking an adult for help (Else & Rees, 2001). Therefore, adolescents, regardless of their social standing, were expected to use social support to deal with overt aggression. Consistent with this expectation, peer status was not linked to any of the coping strategies concerning peers' overtly aggressive behaviors. However, approximately 38 adolescents reported that they would ask an adult for help, 58 explained

that they would talk to or hang out with a friend, and 12 said that they would talk to someone but did not specify the identity of the individual. Each of these coping strategies was classified into a final category regarding social support. The relative small number of respondents for each category might have contributed to small statistical power. Another potential explanation for the conflicting findings is that Else and Rees (2001) utilized closed-ended questions to ask adolescents about the coping strategies they would use to deal with overt aggression, whereas the current study employed an open-ended question. Such a methodology may have offered more opportunity for adolescents to express themselves (Campbell, 2003). Due to the lack of research in the area of adolescents' high peer status in relation to their coping intentions regarding overt aggression, it is difficult to resolve the differences between the available research and the study's current findings.

Findings also showed that adolescents' perceived popularity positively related to the rate of using social support to deal with relational aggression, but this was mainly found among girls. Letendre and Smith (2011) suggest that adolescents typically utilized social support seeking coping strategies to deal with their peers' relational aggression, supporting the current findings. Additionally, social support seeking is particularly effective in preventing subsequent victimization by relational aggression (Hunter et al., 2007). Therefore, adolescents with perceived popularity may utilize social support coping intentions as a way to reduce victimization by relational aggression. Providing support for this proposal, De Bruyn and colleagues (2009) found a negative relationship between adolescents' perceived popularity and victimization by relational aggression. Lower levels of victimization by relational aggression may allow popular adolescents to maintain their social standing and dominance among their peers.

Furthermore, an interaction was found between gender and the social support coping intention. Specifically, increases in boys' perceived popularity decreased the chances of using social support seeking coping intentions to deal with relational aggression. As suggested by the literature that boys are typically less distressed by relational aggression in comparison to girls (French, Jansen, & Pidada, 2002; Galen & Underwood, 1997; Paquette & Underwood, 1999), they may be less likely to seek help, even if they have high perceived popularity. In addition, by experiencing gender socialization, boys are taught to "tough it out" and to manage their problems independently, leading them to use less social support, but more of the other coping strategies (Kindlon & Thompson, 2000).

Peer Status and Attributions as Antecedents of Aggressive and Prosocial Behaviors

In this section, the moderation effects of attributions on the relationships between peer status and social behaviors are discussed. The first subsection begins with a discussion of the results pertaining to self-reported overt aggression, followed by peer-nominated overt aggression. Similarly, in the next subsection, the findings for self-reported relational aggression are explained first, followed by those concerning peer-nominated relational aggression. This section concludes with the moderation effects found for self-reported and peer-nominated prosocial behaviors. Gender differences are discussed within subsection depending

Moderation Effects for Overt Aggression

Associations between both popularity types and overt aggression were not expected to be moderated by adolescents' attributions as such behaviors were expected to decline in adolescence (Xie et al., 2002). Contrary to this hypothesis, the relationship

between boys' perceived popularity and their use of overt aggression as assessed through self report was stronger when they made less of the aggressor's- jealousy-about-status attribution, measured by close-ended questions. In the current study, and consistent with previous literature, boys' perceived popularity was positively associated with peer-nominated overt aggression (e.g., Cillessen & Mayeux, 2004; Eder & Kinney, 1995). Endorsing less attribution for aggressor's jealousy about status justifies boys' utilization of overt aggression as a strategy to maintain or promote their peer status. By not believing that the perpetrator of overt aggression is responsible for such behaviors, boys' sense of well-being is preserved, allowing them to easily engage in these behaviors (Wright et al., 2012).

On the other hand, another interaction effect revealed that boys' social preference was more negatively related to self-reported overt aggression when they attributed less aggressor's jealousy about status assessed by closed-ended question. As overt aggression is more common in boys' peer groups (Dodge, Coie, & Lynam, 2006), boys may be less likely to believe that overt aggression is carried out as a result of the aggressor's jealousy regarding others' peer status. To boys, it is generally more acceptable to use overt aggression to gain additional peer status. Boys with more of the aggressor's-jealousy-about-status attribution may have an even higher norm of using overt aggression and censure these behaviors less, which contributed to reduced negative association between their social preference and overt aggression. Taken together, additional research is needed on boys' peer group dynamics in order to understand more about their social cognitive processes. Such an investigation is important as the aggressor's-jealousy-about-

status attribution moderates the associations between both popularity type and overt aggression in different ways among boys.

With regard to peer-nominated overt aggression, the open-ended attribution of bad behavior of the victim moderated the linkage between these behaviors and social preference. In particular, social preference and peer-nominated overt aggression were negatively associated when adolescents did not endorse the attribution of bad behavior of the victim. In contrast, this relationship was positive when adolescents endorsed this attribution. These findings were particularly intriguing because overall social preference is negatively associated with overt aggression in the current study and in the literature (e.g., Andreou, 2006; Cillessen & Mayeux, 2004; De Bruyn et al., 2009; LaFontana & Cillessen, 2008; Mayeux & Cillessen, 2008; Rose et al., 2004; Prinstein, 2007; Walcott et al., 2008). Blaming the victim is a way of justifying aggressive behaviors by suggesting that the victim deserved what happened to them. Such feelings reduce cognitive dissonance which in turn increases the likelihood of further using aggression (Davis & Jones, 1960; Glass, 1964). Even though there is a general negative association between social preference and overt aggression, attributing overt aggression to victims' problems may result in more use of overt aggression among adolescents with higher social preference. This finding reveals the complexity of peer status and behavioral associations that vary as a function of adolescents' attributions, highlighting the importance of considering adolescents' social information processing in the investigation of these associations.

Moderation Effects for Relational Aggression

Many of the current study's moderation hypotheses involved relational aggression as such behaviors promote and maintain perceived popularity, but are inconsequential to the pursuit of status among socially-preferred adolescents (Hawley, 2003; Lease et al., 2002). Findings of this study revealed no moderation effects for the relationship between self-reported relational aggression and perceived popularity. In contrast, the relationship between boys' social preference and their usage of relational aggression as assessed through self-report was moderated by the attribution of aggressor's jealousy about status, measured through closed-ended questions, such that the relationship was more negative when they made more of this attribution. Given that relational aggression is an unlikely strategy to promote boys' social preference, they may be more inclined to believe that such behaviors are not motivated by the aggressor's jealousy regarding another peers' social standing (Cillessen & Mayeux, 2004). Thereby, socially-preferred boys are not only likely to utilize less relational aggression, but they are also likely to be vehemently against such behaviors as tools used for the pursuit of status.

The relationship between boys' social preference and self-reported relational aggression was less negative when they attributed these behaviors more to romantic relationship competition measured by closed-ended questions. This was not expected but the literature does not provide many explanations for these findings. Available research demonstrates that boys exhibit emotional engagement and lower levels of confidence in their romantic relationships (Giordano, Longmore, & Manning, 2006). Thus, relational aggression may be perceived by boys as being motivated by romantic relationship competition. Therefore, there may be an instrumental purpose of using relational

aggression for boys. If they have more of this instrumental attribution, they may censure relational aggression less, resulting in a weaker negative association between social preference and relational aggression.

The victim-blame attribution moderated the relationship between peer-nominated relational aggression and perceived popularity. Specifically, peer-nominated relational aggression and perceived popularity were more strongly associated when adolescents attributed more victim-blame as assessed by closed-ended questions. This finding is consistent with previous research suggesting linkages between blaming the victim and later aggression (Davis & Jones, 1960; Glass, 1964). Therefore, adolescents may blame relational aggression on the victim because such attributions allow them to justify their usage of these behaviors without explicitly placing the blame on themselves (Wright et al., 2012). Considering that perceived popularity and relational aggression are positively associated, blaming the victim may justify these adolescents' usage of such behaviors in order to decrease others' social standing or to promote their own status (Andreou, 2006; Cillessen & Mayeux, 2004; De Bruyn et al., 2009; LaFontana & Cillessen, 2008; Mayeux & Cillessen, 2008; Rose et al., 2004; Prinstein, 2007; Walcott et al., 2008).

In contrast, the association between social preference and peer-nominated relational aggression was more negative when adolescents attributed greater victim-blame as measured through closed-ended questions. This finding is puzzling as previously it was reported that endorsing the bad-behavior-of-victim attribution assessed by closed-ended question, a type of victim-blame, made the relationship between overt aggression and social preference positive. To reconcile these conflicting findings, it could be possible that overt aggression may be justifiable when the victim has bad behavioral

characteristics, whereas relational aggression may not. This proposal is somewhat consistent with Moretti, Holland, and McKay (2001)'s study, which found that adolescents' negative representations of the victim predicted more use of overt but not relational aggression. Moretti et al. did not consider peer status in their study, the inclusion of which may be important as socially-preferred adolescents may not be relationally aggressive even though they are likely to blame the victim.

The open-ended attribution of aggressor's jealousy moderated the relations between peer-nominated relational aggression and perceived popularity. When adolescents did not use the aggressor's-jealousy attribution, the association between perceived popularity and peer-nominated relational aggression was more positive. On the other hand, this relationship was negative when an adolescent endorsed the attribution of aggressor's jealousy. As perceived popularity was positively related to peer-nominated relational aggression (e.g., Andreou, 2006; Cillessen & Mayeux, 2004; De Bruyn et al., 2009; LaFontana & Cillessen, 2008; Mayeux & Cillessen, 2008; Rose et al., 2004; Prinstein, 2007; Walcott et al., 2008), adolescents with higher perceived popularity may exhibit in-group favoritism toward other relationally aggressive adolescents by not blaming relational aggression on the perpetrator's jealousy. Such beliefs allow these adolescents to engage in relational aggression as a means to maintain or promote their status. In comparison, endorsing the attribution of aggressor's jealousy placed the blame of relational aggression on the perpetrator, resulting in less use of relational aggression among adolescents with higher perceived popularity. These results are consistent with Wright and colleagues' (2012) findings regarding adolescents' popularity goals and their attributions pertaining to relational aggression. In addition, the current study's findings

indicated that the association between perceived popularity and relational aggression was differentiated based on whether adolescents blamed the aggressor's jealousy or not.

The above findings are important as they strengthen the proposal that relationally aggressive adolescents show in-group favoritism toward others who are behaviorally similar (Simon, Eder, & Evans, 1992). Considering the distinctive social cognitive profiles, perceived popularity may further be delineated into groups of adolescents who are socially central but vary based on their social behaviors and social cognitive processes. In the literature, there is some support for classifying perceived popularity into different categories based on popular adolescents' utilization of aggressive and prosocial behaviors. For instance, De Bruyn and Cillessen (2006) delineated perceived popularity into the groups of popular-prosocial, linked to positive characteristics, and popular-antisocial, linked to relational aggression. Similarly, Pakaslahti and Keltikangas-Jarvinen (2001) classified popular adolescents according to their levels of aggression, resulting in popular/non-aggressive and popular/aggressive groups. Based on the current study's findings, one group of popular adolescents may be more aggressive, prosocial, socially central, and genuinely believe relational aggression is necessary for status, making them less inclined to blame the aggressor for such behaviors. On the other hand, the second group of popular adolescents may be less relationally aggressive, more prosocial, and socially central. The second group may not believe that relational aggression is necessary for status, making them more likely to blame the aggressor for these behaviors.

Moderating Effect for Prosocial Behavior

Prosocial behavior is positively linked to perceived popularity and social preference (Cillessen & Mayeux, 2004). These behaviors are expected to help boost or

maintain adolescents' social standing. Therefore it was hypothesized that the relation between prosocial behavior and social preference would be stronger at higher levels of the giver's jealousy-about-status attribution measured by closed-ended questions. Even though this hypothesis was not supported, the attribution of giver's jealousy about academics moderated the relationship between peer-nominated prosocial behavior and social preference. Social preference and peer-nominated prosocial behavior were more strongly related when the adolescent attributed less giver's jealousy about academics. These findings are consistent with previous literature. In particular, Wardle et al. (2011) found that prosocial children were more likely to attribute moral motives to prosocial behavior, whereas antisocial children attributed personal motives. Giver's jealousy about status is an instrumental attribution representing adolescents' desire to manipulate their status by acting prosocially. Giver's jealousy about academics was proposed as an instrumental attribution in which adolescents acted nicely toward the receiver in order to obtain either academic help and/or approval by one's teacher, a personal motive. Among adolescents who endorse less of the giver's-jealousy-about-academics, increases in their social preference is linked to more use of prosocial behavior.

As dating becomes increasingly important adolescents may become concerned with finding a romantic partner (Simon et al., 1992). Prosocial behavior may be utilized by adolescents as a means to attract a potential romantic partner by either being nice to their romantic interest or to manipulate a romantic rival. By acting prosocially toward a romantic rival, adolescents' true intentions (i.e., to acquire the rival's romantic interest/partner) are disguised. Therefore, perceived popularity and prosocial behaviors were hypothesized to be more strongly associated at higher levels of the romantic-

relationship-competition attribution as measured by closed-ended questions. The attribution of romantic relationship competition is a type of romantic jealousy that serves an instrumental purpose. This hypothesis was not supported by the current findings. Understanding whether the current study's findings are consistent with previous literature is complicated by the lack of research on the linkage between perceived popularity and romantic relationship competition. In the one published study examining popularity and romantic jealousy, Mayeux (2011) found that adolescents elicited more romantic jealousy toward popular peers than they did for unpopular peers. Mayeux explains that popular peers may be seen as "stiff dating competition" as they have more social power, attractiveness, and/or other peer-valued characteristics. Therefore, adolescents with high perceived popularity may recognize that they are considered threatening romantic rivals, as they are well aware of their higher social status (Mayeux & Cillessen, 2008). These adolescents may not rely on various positive behavioral strategies, such as prosocial behavior, in order to manipulate the dating odds in their favor.

Romantic relationship establishment is also another personal motive which was found to moderate the relationship between social preference and peer-nominated prosocial behavior. The relationship between peer-nominated prosocial behavior and social preference was significant when adolescents did not endorse the open-ended attribution of romantic relationship establishment, but was non-significant when they endorsed this attribution. This finding is also supported by Wradle et al.'s (2011) study in which they found that prosocial children utilized moral attributions pertaining to prosocial behaviors as opposed to personal motives. Given that socially-preferred adolescents are likely to be prosocial, they may be expected to attribute such behavior to

moral motivations (Caprara et al., 2006; Ellis & Zarbatany, 2007; Rotenberg et al., 2004; Wradle et al., 2011; Zimmer-Gembeck et al., 2005).

Peer Status and Outcome Expectancies as Antecedents of Aggressive and Prosocial Behaviors

The results of the moderating effects for outcomes expectancies on the relationships between peer status and social behaviors are discussed within this section. First, the results for the outcome expectancies pertaining to self-reported overt aggression are explained, which is then followed by peer-nominated overt aggression. Similarly, in the next subsection, the findings for self-reported relational aggression are explained first, followed by those for peer-nominated relational aggression. In the last subsection, the moderation effects of outcome expectancies for self-reported and peer-nominated prosocial behavior are discussed. Gender differences are also discussed in the appropriate subsections.

Moderation Effects for Overt Aggression

There were no hypotheses made regarding interactions between both high peer statuses and outcome expectancies when predicting overt aggression. However, an interaction was found between perceived popularity and the status-attainment outcome expectancy. In particular, the association between perceived popularity and overt aggression, as reported by self and peer, was stronger when the adolescent expected more of the status-attainment outcome expectancy. Coie (1990) theorized of the emergent and maintenance phases of peer status development in which adolescents utilize a variety of different behavioral strategies to maintain and/or change their status. Adolescents who endorsed higher levels of the status-attainment outcome expectancy may be in the

emergent phase of peer status development as they expect that overt aggression will help them gain additional status. Therefore, these adolescents are likely to believe that overt aggression has positive outcomes, such as advancing one's social standing, which leads them to engage in more of these behaviors. Such findings are also supported by research that shows aggressive adolescents typically expect positive outcomes for their behaviors, resulting in more aggressive behaviors (e.g., Cuddy & Frame, 1991; Dodge et al., 1986).

In contrast to the findings for perceived popularity, the relationship between social preference and peer-nominated overt aggression was more negative when adolescents expected that such behaviors resulted in status-attainment. Considering that socially-preferred adolescents tend not to engage in overt aggression, such behaviors may be viewed as having negative outcomes (e.g., Andreou, 2006; Cillessen & Mayeux, 2004; Hubbard et al., 2001; Mayeux & Cillessen, 2008; Perry et al., 1986; Schwartz et al., 1998; Slaby & Guerra, 1988; Smithmeyer et al., 2000). Status attainment may be perceived by more socially-preferred adolescents as a positive outcome, but not when it is for overt aggression as they are not likely to utilize such behaviors.

Create aggression is another type of outcome expectancy that can be considered either positive or negative, depending on adolescents' characteristics. But for socially-preferred adolescents, creating or starting aggression is not considered a positive outcome regarding overt aggression but a negative one. As previously reported, socially-preferred adolescents are not likely to utilize overt aggression, reducing the value they see in such behaviors (Cillessen & Mayeux, 2004; Mayeux & Cillessen, 2008; Schwartz et al., 1998). Thus, it may be hypothesized that the relationship between social preference and overt aggression would be more negative when adolescents endorsed negative outcome

expectancies, such as creating aggression. Supporting this hypothesis, when adolescents did not endorse this outcome expectancy, the relationship between social preference and peer-nominated overt aggression was negative. On the other hand, the association between social preference and overt aggression was positive, when adolescents endorse the create-aggression outcome expectancy. This finding is unexpected but it may indicate that some adolescents with higher social preference may be more likely to engage in overt aggression when they believe that the aggression is retaliatory and that the aggressor purposefully targeted them.

Similar to the create aggression outcome expectancy, the perception of whether harm-the-victim's-status-and-friendships outcome expectancy can be either positive or negative depends on the adolescents' behavioral characteristics and/or peer status. The open-ended outcome expectancy of harm victim's status and friendships moderated the relationship between peer-nominated overt aggression and perceived popularity. The association between these two variables was positive when adolescents did not endorse this outcome expectancy. On the other hand, endorsing this outcome expectancy made the relationship between perceived popularity and peer-nominated overt aggression negative. At first, these findings appear to counter the existing literature as adolescents with higher perceived popularity are more likely to aggress against their peers in order to exert their dominance (Mayeux & Cillessen, 2008). However, the distinctive behavioral and social cognitive profiles may potentially suggest that these adolescents may belong to different phases of peer status development. Adolescents who did not expect to harm the victim's status and friendships when utilizing overt aggression may be in the maintenance phase of Coie's (1990) theory on peer status development. Such adolescents may believe

that overt aggression is used to maintain their status, rather than harming other's status and/or friendships in order to boost their own. This proposal may account for the positive relationship between perceived popularity and peer-nominated overt aggression when these adolescents did not endorse the harm victim's status and friendships outcome expectancy. On the other hand, adolescents who expected to harm the victim's status and friendships may be in the emergent phase, in which they are likely to expect that aggressive behaviors are used to attain a higher social standing. However, these adolescents may not consider overt aggression as a viable strategy for establishing higher perceived popularity. They may utilize other strategies, such as relational aggression that targets other adolescents' friendships and status (Crick & Grotpeter, 1995).

Moderations Effects for Relational Aggression

Adolescents pay close attention to their social standing among their peers, potentially aiming to pursue a higher peer status (Adler & Adler, 1995; LaFontana & Cillessen, 2002; Rubin et al., 2006). As one of the preferred behavioral strategies to promote social dominance and higher social standing, relational aggression is increasingly used by adolescents. Consistent with the literature, this study found that the closed-ended outcome expectancy of status attainment was positively associated with self-reported relational aggression. These findings also indicate that adolescents, regardless of their current peer status, may utilize relational aggression in order to achieve their desired social standing.

The association between perceived popularity and relational aggression was expected to be stronger at higher levels of the status-attainment outcome expectancy measured by closed-ended questions. This hypothesis was not supported in the expected

direction. Instead, the relationship between perceived popularity and peer-nominated relational aggression was stronger at lower levels of the status-attainment outcome expectancy. Such findings are puzzling but the stronger association may indicate that these adolescents are more concerned with maintaining their social standing through using relational aggression (Coie, 1990). The maintenance of status is distinctive from status attainment. Status maintenance implies that adolescents have already achieved certain peer status and try to keep the same status, whereas status attainment suggests that the adolescent is trying to reach a higher social standing. Adolescents with lower status-attainment outcome expectancy may try to maintain their status using relational aggression, whereas those adolescents with higher status-attainment outcome expectancy may use other strategies (e.g., prosocial behavior) in addition to relational aggression to gain higher status, resulting in a relatively weakened association between popularity and relational aggression. Additional research is needed in order to understand this particular social cognitive process regarding the pursuit of popularity.

A moderating effect of the closed-ended harm-victim's-status attribution was found in the relationship between peer-nominated relational aggression and social preference. In particular, among adolescents who endorse more of the harm-victim-status attribution, increases in their social preference is more negatively associated with social preference. It has been established in the literature that as adolescents' social preference increases, their use of relational aggression decrease (Cillessen & Mayeux, 2004; Rose et al., 2004). For the current moderation result, it is possible that adolescents with higher of the harm-victim's-status attribution are more empathetic towards victims and censure relational aggression more, both of which lead to even less use of relational aggression.

Moderating Effect for Prosocial Behavior

Peer-nominated prosocial behavior was positively associated with the outcome expectancy of friendship establishment as measured by open-ended question.

Conceptualized as an intimate and supportive relationship between peers, friendship serves as an important interpersonal context that can facilitate social, emotional, and cognitive development (Asher, Parker, & Walker, 1996; Furman & Buhrmester, 1985; Laursen & Collins, 1994; Bukowski & Sippola, 1996). As children become adolescents, they rely more on their friends for guidance and social support, making the desire for these relationships especially salient (Larson, Richards, Moneta, Holmbeck, & Duckett, 1996). Therefore, adolescents may expect positive outcomes as a result of prosocial behavior, such as friendship establishment, as these behaviors foster the development and maintenance of friendships (Rubin, 2003).

Because adolescents may desire an increased peer status, they may engage in the behaviors, such as prosocial behavior, that they perceive are associated with higher social standing (Adler & Adler, 1995; LaFontana & Cillessen, 2002; Rubin et al., 2006).

Findings from the current study indicated that the outcome expectancy of status maintenance was associated with adolescents' self-reported prosocial behavior. These findings suggest that adolescents, regardless of their peer status, may utilize prosocial behavior in an effort to gain additional status.

In the final set of hypotheses, it was proposed that higher levels of the status-maintenance outcome expectancy would make the relationship between perceived popularity and prosocial behavior stronger. Contrary to this hypothesis, self-reported prosocial behavior and perceived popularity were more strongly associated at lower

levels of the status-maintenance outcome expectancy assessed by closed-ended question. Because adolescents may be bistrategic, they utilize both relational aggression and prosocial behavior to help them advance their higher social standing (Cillessen & Rose, 2004; Hawley, 2003; Rose et al., 2004). It's possible that adolescents specifically use prosocial behaviors to attain higher perceived popularity. When prosocial behavior is expected to maintain status, adolescents with higher popularity may not use it as much as those who expect relatively less status maintenance from prosocial behavior. More research is needed in this area in order to identify adolescents' behavioral trajectories in their pursuit of peer status.

Limitations and Recommendations for Future Research

There are some limitations of the current study that should be noted. Some of the categories for the open-ended questions had relatively low response rates. Participants may feel that these questions are too time-consuming and/or require more effort than they would want to expend (Jennerich & Jennerich, 1987). In addition, some answers included unnecessary information that was not codeable because participants were either not paying attention to the question or not answering seriously. Follow-up research should take steps to ensure that participants understand the meaning and importance of answering open-ended questions. Researchers could interview adolescents about their answers to open-ended questions either in a focus group or in individual interviews. This methodology may help to ensure that participants understand the meaning of the open-ended questions by allowing the researcher to ask probing questions and having the participants' questions answered.

A limited number of attribution responses were included for closed-ended questions across each social behavior, especially concerning prosocial behavior. Little attention has been given to the motivations associated with prosocial behavior as many times these behaviors are deemed to be other oriented (Svetlova, Nichols, & Brownell, 2010). However, behaving prosocially is not always other oriented (Eisenberg, 2005; Rheingold, 1982). Particularly, prosocial behavior may be motivated by self-oriented concerns, such as the desire for social approval, status attainment, concrete rewards, or reciprocal prosocial responding. Based on this consideration, the present study included instrumental attributions (i.e., used as a means of securing some reward or to achieve an external goal) for prosocial behavior. Although this inclusion addressed a gap in the literature, attributions reflecting empathetic helping (i.e., concern for another person in distress) or the receiver's characteristics (e.g., being a nice person) were not included as attribution items in the current study. In an effort to understand more about adolescents' attributions pertaining to prosocial behaviors, follow-up research may include not only instrumental motivations but also the attributions of empathetic helping and receiver's characteristics.

Similar to many studies, this study examined adolescents' attributions and outcome expectancies pertaining to their peers' behaviors (e.g., Arsenio, Adams, & Gold, 2009; Boxer & Tisak, 2003). Although adolescents' social information processing of other peers' behaviors is associated with their own aggressive behavior (Arsenio et al., 2009; Losel, Bilesener, & Bender, 2007), a fruitful direction for future research may be to examine adolescents' attributions and outcome expectancies regarding their own social

behavior. Such an investigation will offer additional insight into the potential causes of popular adolescents' subsequent aggressive and prosocial behavior.

Even though the assessment of perceived popularity and social preference in the current study is consistent with the literature (e.g., Andreou, 2006; Cillessen & Mayeux, 2007; Lafontana & Cillessen, 1999; Prinstein & Cillessen, 2003), some researchers have further delineated perceived popularity into different categories (e.g., De Bruyn & Cillessen, 2006; Pakaslahti & Keltikangas-Jarvinen, 2001). For instance, De Bruyn & Cillessen (2006) classified perceived popularity into the groups of popular-prosocial and popular-antisocial. The popular-prosocial group is linked to positive characteristics, whereas the popular-antisocial group is associated with relational aggression. Similarly, Pakaslahti and Keltikangas-Jarvinen (2001) classified popular adolescents according to whether they were aggressive or non-aggressive in order to examine these groups' associations with prosocial behaviors. The popular/non-aggressive group was more prosocial in comparison to the aggressive-popular group. One limitation of these studies is that a group of popular adolescents exhibiting both prosocial and aggressive behaviors has not been examined. Given that adolescents who are perceived as popular are bistrategic (i.e., exhibiting both prosocial and aggressive behaviors), researchers may consider adding a popular-aggressive-prosocial group to further understand these adolescents' social cognitive processes (Hawley, 2003). Furthermore, based on the findings from the current study, adolescents' social cognitive processes may have a role in their peer status and social behaviors. Thus, future research may aim to differentiate different types of high peer statuses based not only on social behaviors but also on their attributions and outcome expectancies pertaining to social behaviors.

In addition, ethnicity differences were not considered in the current study, despite a high number of non-White adolescents. The diverse sample of adolescents was not expected, nor was ethnicity differences in popularity in the current study. However, future research might consider examining not only the associations between peer status and social behaviors among non-White adolescents, but also the role of their social cognitive processes in their behaviors, as well as make comparisons between ethnic groups. This area has been understudied among ethnic minority adolescents. Based on the limited research, it appears that the associations between popularity and aggressive behaviors are not the same for non-Whites as those for White adolescents. In particular, Lansford and colleagues (2009) found that relational aggression was less acceptable for popular African-American adolescents. Utilizing a sample of urban children from ethnically diverse backgrounds, LaFontana and Cillessen (2002) found that overt aggression was related to perceived popularity among African American children. Therefore, these findings underscore the importance of investigating not only popular non-White adolescents' social behaviors but also their social cognitive processes. This is an important future direction because differences in social cognitive processes may be partially responsible for the different associations between popularity and social behaviors among non-White and White adolescents.

Overall Conclusions

Support for the integrative model involving both popularity types and social cognitive processes as precursors for aggression (i.e., relational, overt) and prosocial behaviors are in one statement: Complicated but informative. Even though some of the hypotheses regarding this model were not supported, there were a variety of unique

associations between popularity types and adolescents' social behaviors when using attributions and outcome expectancies as moderators.

The current study's findings indicated that the positive association between social preference and peer-nominated overt aggression was strengthened by adolescents' bad-behavior-of-the-victim attribution, but it was negative when adolescents did not endorse this attribution. In addition, the positive association between perceived popularity and peer-nominated relational aggression was strengthened by adolescents' aggressor's jealousy and victim-blame attributions. As expected, this negative relationship was strengthened for social preference. For prosocial behaviors, when endorsing less of the giver's- jealousy-about-academics and none of the romantic-relationship-establishment attributions, adolescents' social preference and peer-nominated prosocial behaviors were more strongly related. Figure 22 presents the significant relationships between social preference and social behaviors (located on page 133), whereas Figure 23 displays the significant associations between perceived popularity and social behaviors (located on page 134).

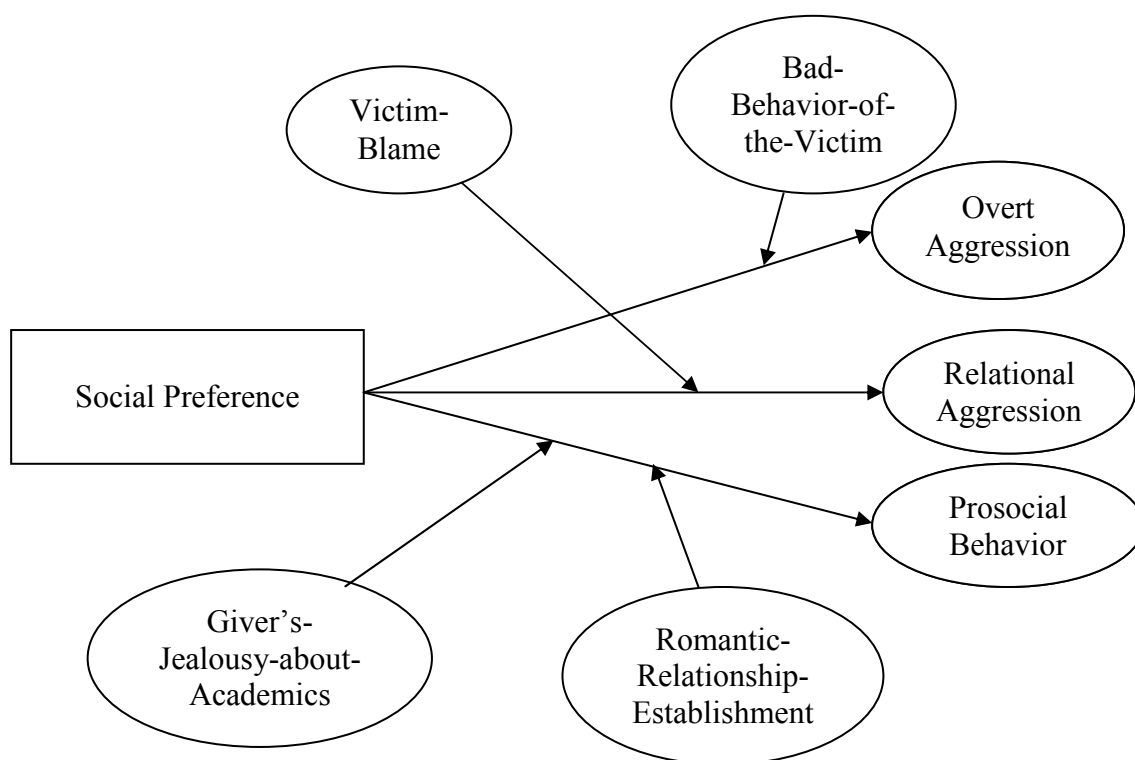


Figure 22: The Moderation Effects of Attribution between Social Preference and Social Behaviors (Model 3)

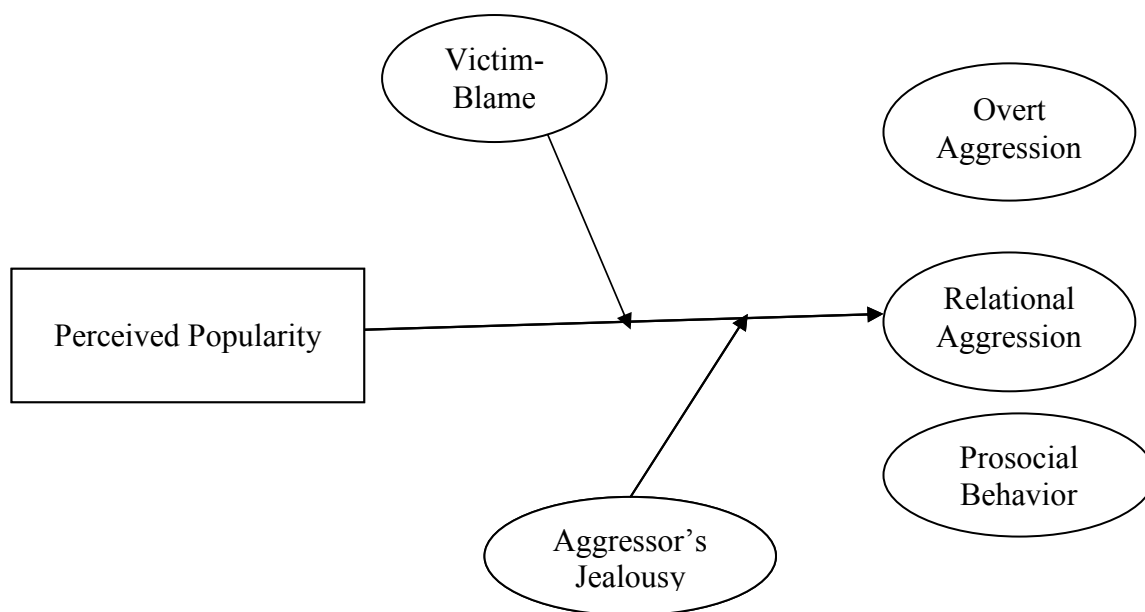


Figure 23: The Moderation Effects of Attribution between Perceived Popularity and Social Behaviors (Model 3)

With regards to outcome expectancies, overt aggression and perceived popularity were more positively related when adolescents utilized more status-attainment outcome expectancies. In contrast, this pattern was in the opposite direction for social preference as the relationship between peer-nominated overt aggression and this type of peer status was more negative at lower levels of the status-attainment outcome expectancy. Furthermore, when adolescents endorsed the create-aggression outcome expectancy, their social preference and peer-nominated overt aggression were positively associated, whereas this pattern was in the opposite direction when adolescents did not endorse this outcome expectancy. For self-reported overt aggression, the positive relationship between perceived popularity and these behaviors were positively associated when they did not endorse the victim's-status-and-friendship outcome expectancy. In contrast, this relationship was negative when adolescents did not endorse this outcome expectancy.

When it came to peer-nominated relational aggression, perceived popularity and these behaviors were more positively associated when adolescents expected less status attainment. In addition, endorsing higher levels of the harm-victim's-status outcome expectancy for relational aggression contributed to a more negative relationship between social preference and peer-nominated relational aggression. For prosocial behavior, when adolescents endorsed less of the status-maintenance outcome expectancy, perceived popularity and self-reported prosocial behaviors were more positively related. Figure 24 presents the significant relationships between social preference and social behaviors, whereas Figure 25 displays the significant associations between perceived popularity and social behaviors (on the next page).

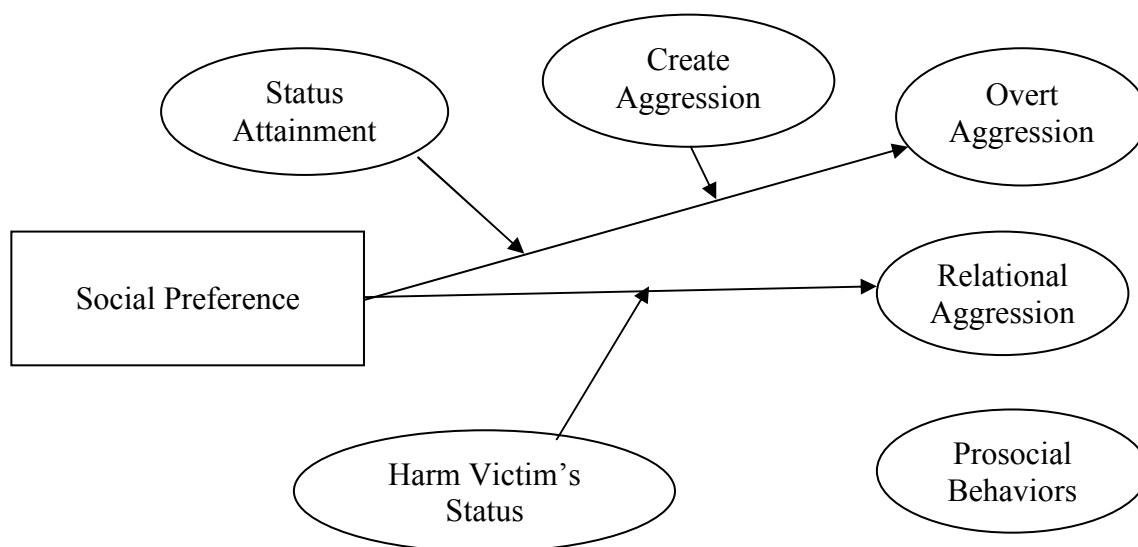


Figure 24: The Moderation Effects of Outcome Expectancies between Social Preference and Social Behaviors (Model 3)

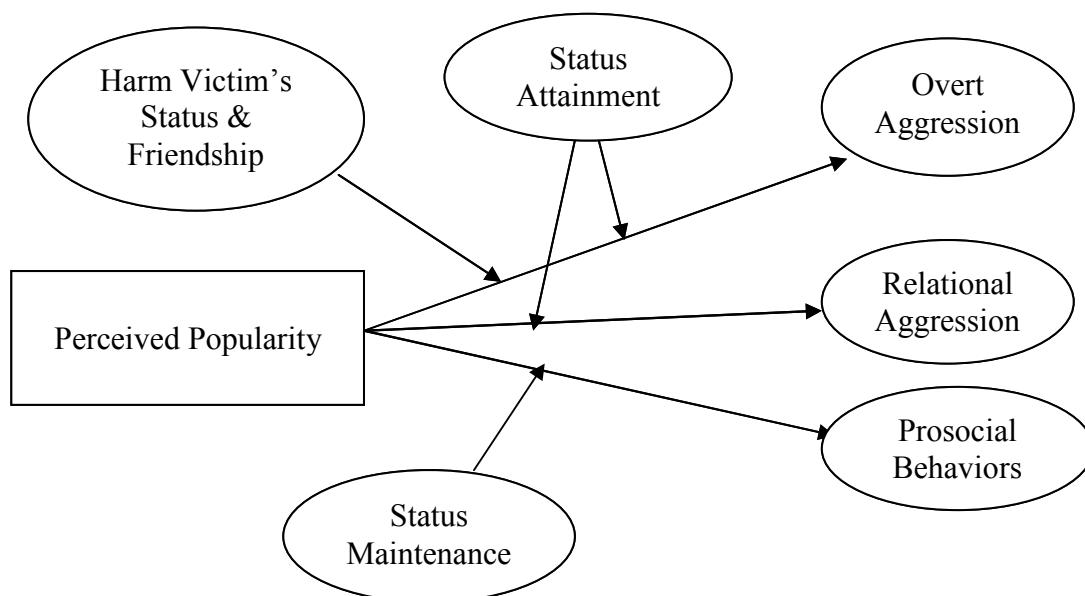


Figure 25: The Moderation Effects of Outcome Expectancies between Perceived Popularity and Social Behaviors (Model 3)

Furthermore, gender and social cognitive processes were found to be joint moderators in the relationship between popularity types and adolescents' social behaviors. In particular, the relationship between self-reported overt aggression and boys' social preference was more negative at lower levels of the aggressor's-jealousy-about status-attribution, whereas this relationship was more positive at the lower levels of this attribution for perceived popularity. Moreover, the negative association between social preference and self-reported relational aggression was strengthened by boys' attributions of aggressor's jealousy about status and romantic relationship competition. Figure 26 displays the significant relationships between boys' peer status and their social behaviors with attributions as a moderator.

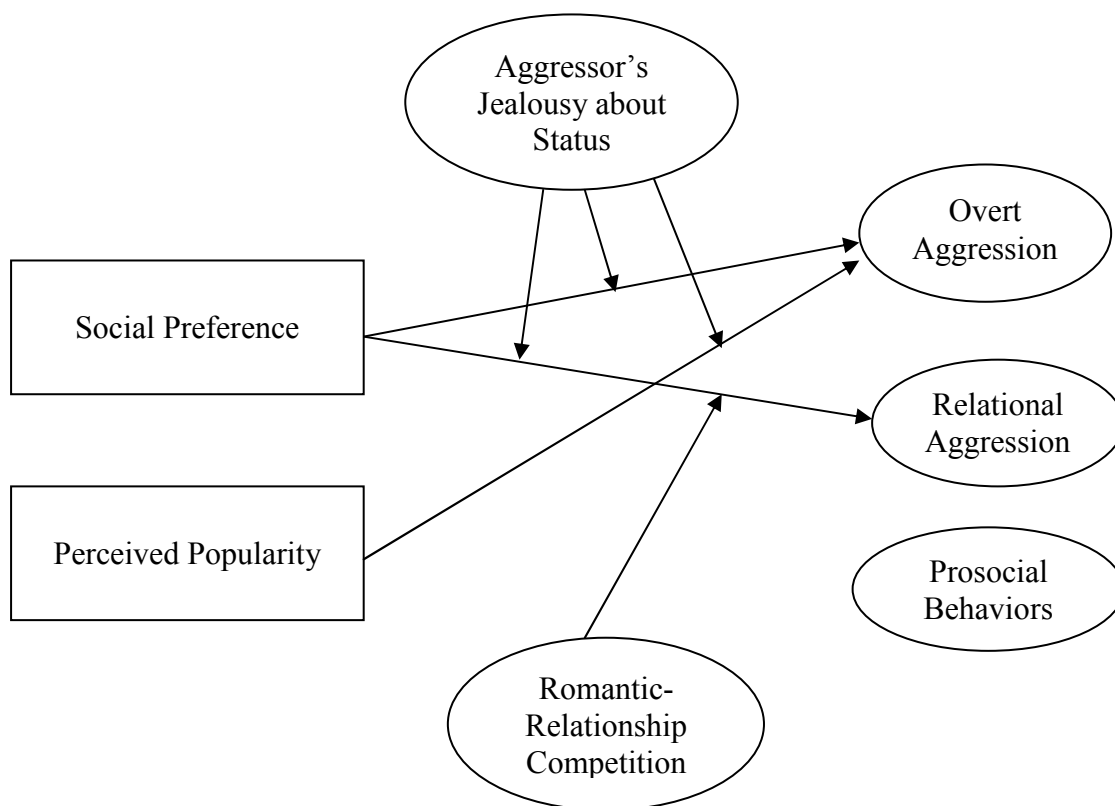


Figure 26: The Moderation Effects of Outcome Expectancies between Boys' Peer Status and Social Behaviors (Model 3)

Some findings of the current study conflict with the current study's hypotheses and previous literature. More research is needed to further investigate the relationship between adolescents' peer status and social cognitive processes as well as how they interactively relate to adolescents' social behaviors.

In summary, the current study's findings demonstrated that the relationships between peer status and social behaviors were more positive or negative depending on whether adolescents endorsed higher or lower levels of a particular social cognitive process. Typically, social cognitive patterns moderated the negative relationship between

social preference and aggressive behaviors, whereas the reverse was typically found for perceived popularity. However, when it came to prosocial behaviors and social preference, this relationship became more or less positive depending on adolescents' social cognitions. In conclusion, adolescents' social cognitive processes not only relate to social behaviors as suggested by the literature (e.g., Crick et al., 2002; Crick & Werner, 1998; Cuddy & Frame, 1991; Dodge et al., 1986; Pursell et al., 2008), but change the relationships between adolescents' peer status and their social behaviors.

CHAPTER V

SUMMARY

As children enter adolescence, they become increasingly concerned with their peer status. Consequently, adolescents may actively attempt to gain additional status in the peer group (Adler & Adler, 1995). At the top of the social hierarchy, there are two types of high peer statuses (i.e., perceived popularity, social preference), both linked to distinctive behavioral profiles (Coie et al., 1982; Parkhurst & Hopmeyer, 1998). Perceived popularity is positively associated with relational aggression, whereas a negative relationship is found for social preference (Rodkin et al., 2000; Rubin et al., 1998). However, both peer statuses are positively related to prosocial behavior (Cillessen & Mayeux, 2004; Rose et al., 2004). Adolescents utilize different behaviors in order to maintain their social standing or attain higher peer status (e.g., Mayeux & Cillessen, 2004; Rose et al., 2004).

The social information processing model, a theoretical model detailing adolescents' social cognitions, is applied in the current study to understand the behavioral characteristics associated with both high peer statuses (Crick & Dodge, 1994). Given that adolescents' social behaviors are used to maintain or attain certain social standing, their social cognitive processes may also vary as a function of the type of behavior they are evaluating. Little attention has been given to this premise, although the available research demonstrates that adolescents' behaviors are influenced by these processes (Crick & Dodge, 1994; Dodge & Newman, 1981; Hughes et al., 1991).

Drawing on the social information processing theory, the present study proposed an integrative model on the precursors of adolescents' social behaviors, with social

cognitive processes and gender serving as moderators in the relationship between popularity types and adolescents' behaviors. Four-hundred and five 6th, 7th, and 8th graders participated in the current study. Adolescents completed self-reported and peer-nominated social behaviors questionnaires as well as closed-ended and open-ended questions regarding their social cognitive processes pertaining to their peers' aggressive and prosocial behaviors. Open-ended questions were coded and main themes were identified. Next, adolescents' answers to the open-ended questions along with their closed-ended questions were analyzed in relation to their social behaviors and peer status.

Results indicated that attributional patterns served as moderators in the relationship between peer status and adolescents' social behaviors. Some of these moderation effects also varied for boys and girls. In particular, boys' self-reported overt aggression and social preference were more negatively related at lower levels of the jealousy-about-status-attribution, whereas this relationship was more positive for perceived popularity. In addition, the negative relationship between social preference and self-reported relational aggression was strengthened when boys attributed less aggressor's jealousy about status and romantic relationship competition.

Furthermore, peer-nominated relational aggression and social preference were more negatively associated at higher levels of the victim-blame attribution, whereas this relationship was more positive for perceived popularity. On the other hand, the positive association between social preference and peer-nominated prosocial behavior was strengthened when adolescents' attributed more giver's jealousy about academics. The same relationship was found for social preference and peer-nominated prosocial behavior but at lower levels of the romantic-relationship-establishment-attribution.

Similarly, outcome expectancies also moderated the relationship between peer status and adolescents' social behaviors. Peer-nominated overt aggression and social preference were more negatively associated at lower levels of the status attainment outcome expectancy, whereas this relationship was stronger for perceived popularity. Less status-attainment attributions contributed to a more positive relationship between peer-nominated relational aggression and perceived popularity. In contrast, this relationship was negative for social preference and harm-victim's-status attribution. Finally, at lower levels of the status maintenance outcome expectancy, perceived popularity and self-reported prosocial behaviors were more positively associated.

The current study provides an early investigation of the precursors to adolescents' social behaviors (e.g., aggressive and prosocial behaviors) by focusing on the moderating roles of gender and social cognitive processes in the relations between their social behaviors and peer status (i.e., popularity and social preference). A major strength of the study is the usage of open-ended questions to assess adolescents' social cognitive processes, which encourages unique and spontaneous responses and allows expressions of true feelings. Findings of this study contribute to the literature by revealing the diverse and distinctive social cognitive processes related to social behaviors and the moderating role of them on the associations between social behaviors and peer status among adolescents. More research is greatly needed to further understand the complex role of social cognitive processes in adolescents' behavioral development and in their attainment and maintenance of peer status.

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Appendix A
School Recruitment Script

Dear Principal,

My name is Michelle Wright and I am a graduate student working with Dr. Yan Li, a Professor in the Psychology Department at DePaul University. We are inviting your school to participate in a research study for Spring 2010.

The study plans to investigate adolescents' social behavior and peer relations. We are particularly interested in adolescents' social experiences (especially positive experiences) in the school setting. Students will fill out a set of questionnaires and this takes about 30-45 minutes. We can administer the questionnaires during regular school hours at the convenience and preference of the teachers and principals. Before administering the questionnaires, we will also make a separate and very brief visit (about 10 minutes) to the classroom in order to explain the study to all students and pass out the Parent Permission materials for students to take home. Only children whose parents give permission would be able to participate. If you wish, I can provide you with copies of the questionnaires we will be using.

To thank students, teachers, and the principal for their help, we will offer an incentive. To encourage students to return parental permission slips, students can pick a snack or a small gift (determined by the school) regardless of whether or not their parent gave them permission to participate. Participating students will also receive a chance to win a \$25.00 gift certificate to a place of their choice. Additionally, we want to give the participating students a pizza party to thank them for their help. The party time will be determined by the teachers and principals. To thank the teachers and principal for their time, we will offer them a \$25.00 gift certificate each.

Additionally, we extend to your school our help or anything your school may need for helping us with our study. For example, we could give a presentation on adolescents' peer experiences. We could also share the results of the study. Please feel free to discuss your need with us. We hope to make the collaboration mutually beneficial.

My contact information is: 773-325-4099 (office phone) and mwrigh20@depaul.edu (email). You can also contact Dr. Yan Li at 773-325-4098 (office phone) and yli34@depaul.edu (email). Again, thank you for considering participation in our project.

Sincerely,

Michelle Wright, M.S.
Graduate Student
DePaul University

Appendix B
Parental Permission

PARENTAL PERMISSION FOR CHILD'S PARTICIPATION IN RESEARCH STUDY)

ADOLESCENTS' SOCIAL INFORMATION PROCESSING FOR THEIR PEER INTERACTIONS

What is the purpose of this research?

We are asking your child to be in a research study because we are trying to learn more about how adolescents think, feel, and deal with social situations. A major goal of the study is to examine how adolescents think and feel about their peer interactions. Your child is invited to participate in this study because s/he is in either the 7th or 8th grade at a participating middle school. This study is being conducted by Michelle Wright, M.S., a graduate student at DePaul University. This research is being supervised by her faculty mentor, Dr. Yan Li.

How much time will this take?

This study will take about 30-45 minutes of your child's time.

What will my child be asked to do if I allow her/him to participate in this study?

If you allow your child to be in this study, s/he will be asked to fill out surveys asking about their experiences with their peers.

- The first questionnaire asks your child's age, ethnicity, and grade.
- The second questionnaire asks your child to imagine a situation with their peers. Your child is asked to record what he/she thinks about the cause of the situation, his/her feelings about the situation, how he/she would deal with the situation, and what the peer expects to gain from the situation.
- The third questionnaire asks your child to nominate students in their class that fit a description such as "helps others", etc.
- The fourth questionnaire asks your child to record how often they experience conflict with their peers. An example question is "I left another teen out of an activity or conversation that they wanted to be included in."
- The fifth questionnaire asks your child about their experiences with their peers.
- The sixth questionnaire asks your child to record what makes a boy or girl popular or unpopular.

What are the risks involved in participating in this study?

Being in this study does not involve any risks other than what your child would encounter in daily life. There is a chance that your child may feel uncomfortable or embarrassed about answering certain questions, but your child should feel free to skip any question that she/he does not want to answer.

What are the benefits of my child's participation in this study?

Your child will not personally benefit from being in this study. However, we hope that what we learn will help provide more information about how adolescent's think, feel, and deal with situations involving different social behaviors.

Will my child receive any kind of payment for being in this study?

Your child will receive a snack or a small gift for returning this form letting us know yes or no whether you will let them be in the study. If your child is in the study, your child will have the chance to win a \$25.00 gift certificates to a store of his/her choice. We will also have a pizza party at your child's school at a time decided by their teacher.

Can I decide not to allow my child to participate? If so, are there other options?

Yes, you can choose not to allow your child to participate. Even if you allow your child to be in the study now, you can change your mind later, and your child can leave the study. There will be no negative consequences if you decide not to allow your child to participate or change your mind later. Your child's grades will not be affected by your decision. Also, even if you give your permission, your child may decide that he/she does not want to be in this study, and that is ok with us. If your child does not want to participate after you gave them permission, they will either work on homework or go to another classroom.

How will the confidentiality of the research records be protected?

The records of this study will be kept confidential. In any report we might publish, we will not include any information that will identify your child. Research records will be stored securely, and only the researchers will have access to the records that identify your child by name. Some people might review our records in order to make sure we are doing what we are supposed to. For example, the DePaul University Institutional Review Board may review your child's information. If they look at our records, they will keep your child's information confidential.

Whom can I contact for more information?

If you have questions about this study, please contact Michelle Wright, M.S. at 773-325-4099 (or at mwrigh20@depaul.edu) or Dr. Yan Li at 773-325-4098 (or at yli34@depaul.edu). If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have all my questions answered. Please return this sheet regardless of what decision you make for your child to participate. (Check one:)

I permit my child to be in this study.

I **DO NOT** permit my child this study.

Child's Name: _____

Grade in School: _____

Parent/Guardian Signature: _____

Date: _____

Printed name: _____

Appendix C
Parent Information Sheet

Dear Parent,

My name is Michelle Wright. I am a graduate student in the Psychology Department at DePaul University conducting research under the guidance of Dr. Yan Li. The project is on how adolescents' interpret the behaviors of their peers and how this relates to their own feelings and thoughts. I am looking for children (7th and 8th grade) to participate in my study. This will involve completing 6 questionnaires that will be administered at their school on _____ at _____.

Your child's participation in this study is completely voluntary. If your child does not want to participate, they will work on homework or go to another classroom. However, if you approve and your child is willing to help, we will be asking your child to complete 6 questionnaires at the date and time specified above. Filling out the questionnaires should take about 30-45 minutes. As a token of our appreciation, your child will receive a pizza party (along with other participating students) at their school. Additionally, your child will be entered in a drawing to win a \$25.00 gift card.

We have included a parent/guardian permission form for you to read, sign, and have your child bring back to their school. In addition, we will have an assent form for your child to read on the study date. Your child will sign the form before the study begins. If your child does not bring the parental consent form to the school, he/she will be unable to participate in our study. For tracking purposes, we ask you to sign and indicate your decision and return the form, whether or not you allow your child to participate in the research.

Your child's responses will be completely confidential. If you have any questions about the study, please feel free to contact Michelle Wright at her office (773-325-4099) or Dr. Li at her office (773-325-4098). We will be happy to tell you more about the study and answer any questions you may have.

Thank you for taking the time to consider your child's participation in this study.

Sincerely,

Michelle Wright, M.S.
Graduate Student
DePaul University

Appendix D

Child Assent

ASSENT TO PARTICIPATE IN RESEARCH STUDY

ADOLESCENTS' SOCIAL INFORMATION PROCESSING FOR THEIR PEER INTERACTIONS

What is the purpose of this research?

We are asking you to be in a research study because we are trying to learn more about 7th and 8th graders experiences with their peers. You are invited to participate in this study because you are in the 7th or 8th grade at a participating middle school. This study is being conducted by Michelle Wright and Dr. Yan Li at DePaul University.

How much time will this take?

This study will take about 30-45 minutes of your time.

What will I be asked to do if I agree to participate in this study?

If you agree to be in this study, you will be asked to fill out some brief questionnaires about what you think and feel about your online and offline experiences with your peers.

- The first questionnaire asks about your age, ethnicity, and grade.
- The second questionnaire asks you to imagine a situation with your peers. You will be asked to record what you think about the cause of the situation, feelings about the situation, how you would deal with the situation, and what the peer expects to gain from the situation.
- The third questionnaire asks you to nominate students in your grade that fits a description such as “helps others,” “does nice things for others,” etc.
- The fourth questionnaire asks you to record how often you engage in or experience conflict with your peers. An example question is “I left another teen out of an activity or conversation that they wanted to be included in.”
- The fifth questionnaire asks you about the things you do when with your peers.
- The sixth questionnaire asks you what makes a boy or girl popular or unpopular.

What are the risks of being in this study?

This study does not involve any risks other than what you deal with in daily life. There is a chance that you may feel uncomfortable or embarrassed about answering certain questions, but you should feel free to skip any question that you do not want to answer.

What are the benefits of being in this study?

You will not get any benefit from being in this study. However, we hope that what we learn will help provide more information about what middle school students think about their interactions with their peers.

Will I receive any kind of payment for being in this study?

Snacks or a small gift were given out for returning the parental permission slip. You will have the chance to win a \$25.00 gift certificates to a store of your choice. We will also have a pizza party at your school at a time decided by their teacher.

Can I decide not to participate? If so, are there other options?

Yes, you can choose not to participate. We have asked your parents to let you be in this study. But even if your parents have said “yes,” you can still decide not to be in the study. Even if you agree to be in the study now, you can change your mind later and leave the study. Nothing bad will happen if you decide not to participate or change your mind later. Your grades will not

affected by your decision to not participate. If you do not want to participate, you will go back to your homeroom or go to another classroom while the other students finish up.

How will my privacy be protected?

The records of this study will be kept private. In any report we might make, we will not include any information that will identify you, like your name. Research records will be stored securely, and only researchers will be able to look at the records.

Whom can I contact if I have questions?

If you have questions about this study, please contact Michelle Wright, M. S. at 773-325-4099 (or at mwrigh20@depaul.edu) or Dr. Yan Li at 773-325-4098 (or at yli34@depaul.edu). If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You will be given a copy of this information to keep with you.

Statement of Assent:

I have read the above information. I have all my questions answered. (Check one:)

I agree to be in this study.

I **DO NOT** agree to be in this study.

Signature: _____ Date: _____ Grade in School: _____

Print your first and last name: _____

Guardian/Parent's Name: _____

Appendix E

Peer Nominations for Aggressive and Prosocial Behaviors

Section 1. Peer Nomination

Instructions: A class roster will be given to you. Nominate as many students as you want in your class that fit the descriptions below. Write the ID from the class roster to indicate which student from your class fits the description. You will write the IDs on a separate sheet of paper provided by the researcher.

1. Peers you like most
2. Peers you like least
3. Peers who are good leaders
4. Peers who do nice things for others
5. Peers who help others
6. Peers who cheer up others
7. Peers who seem happy at school
8. Peers who hit, push others
9. Peers who yell, call others mean names
10. Peers who start fights
11. Peers who when mad, get even by keeping the person from being in their group of friends
12. Peers who tell friends they will stop liking them unless friends do what they say
13. Peers who when mad at a person, ignores them or stops talking to them
14. Peers who try to keep certain people from being in their group during an activity
15. Peers who play alone a lot
16. Peers who seem sad at school
17. Peers who seem lonely at school
18. Peers who are popular
19. Peers who are unpopular
20. Peers you hang out with

Appendix F

Self-Reported Relational Aggression, Overt Aggression, and Prosocial Behaviors

Instruction: Here is a list of things that adolescents do. Please circle how often you act as described in the items.

	Never	Almost Never	Sometimes	Almost all the time	All the time
1. How often do you help, cooperate or share with others?	1	2	3	4	5
2. How often do you say something nice to your peers?	1	2	3	4	5
3. How often do you cheer another peer up when they are unhappy?	1	2	3	4	5
4. How often do you tell another peer you care about them?	1	2	3	4	5
5. How often do you like to play with peers rather than alone?	1	2	3	4	5
6. How often do you make new friends?	1	2	3	4	5
7. How often do you enjoy talking with others?	1	2	3	4	5
8. How often do you have many friends to play with?	1	2	3	4	5
9. How often do you start fights with others?	1	2	3	4	5
10. How often do you say mean things to other peers?	1	2	3	4	5
11. How often do you tell your peers that you will beat them up unless they do what you say?	1	2	3	4	5
12. How often do you keep a peer out of a group of peers because you are mad at the peer?	1	2	3	4	5
13. How often do you ignore or stop talking to somebody when you are mad at the peer?	1	2	3	4	5
14. How often do you say something bad about people behind their backs?	1	2	3	4	5
15. How often do you tell a peer that they cannot be in the group?	1	2	3	4	5
16. How often do you tell your peers not to include a certain peer?	1	2	3	4	5
17. How often do you watch your peers do an activity without joining it?	1	2	3	4	5
18. How often would you rather do an activity alone than with your peers?	1	2	3	4	5
19. How often do you do an activity by yourself rather than with your peers?	1	2	3	4	5

Appendix G

Social Cognitions for Relational Aggression

Sometimes at school, kids may do mean things to one another. Some of these behaviors include: saying mean things about others behind their back, ignoring someone, and excluding someone from a group. There are many possible reasons why students do this to one another. Think about such behaviors that happened in your school and answer the following questions.

1. Such events are often done by _____ (please circle one):
 A) Girls to girls B) Girls to boys C) Boys to girls D) Boys to boys

2. Describe the possible reasons or causes that may make a peer do any of these behaviors.

3. What effects or changes does a peer expect to see by doing these behaviors?

4. **Student A** is doing these behaviors to **Student B**. The following is a list of reasons why **Student A** does these behaviors to **Student B**. Please rate the likelihood of each statement being the reason.

	Very Unlikely		Neutral		Very Likely
A) Student B is getting more popular in the class.	1	2	3	4	5
B) Student B gets better grades.	1	2	3	4	5
C) Student B gets teachers' attention and preference.	1	2	3	4	5
D) Student B brags.	1	2	3	4	5
E) Student B cares too much about their looks or appearance.	1	2	3	4	5
F) Student B and A like the same boy/girl in a romantic way.	1	2	3	4	5
G) Student B does not treat Student A nicely.	1	2	3	4	5
H) Student B has a higher status (e.g., more popular) in the class.	1	2	3	4	5

5. Please rate how acceptable, tolerable, and normal such behaviors are for boys and girls to do according to teachers, peers and parents views:

Acceptability (1 = very unacceptable, 2 = unacceptable, 3 = neutral, 4 = acceptable, 5 = very acceptable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Tolerability (1 = very intolerable, 2 = intolerable, 3 = neutral, 4 = tolerable, 5 = very tolerable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Normalcy (1 = very atypical, 2 = atypical, 3 = neutral, 4 = typical, 5 = very typical)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

6. What do other people think about such behaviors?

Teachers: _____

Peers: _____

Parents: _____

7. **Circle** whether anyone has ever treated you this way before? **Yes** **No**

8. What was (or would be) the reason you were treated this way?

9. How did (or would) you respond when you were treated this way?

10. What effects or changes does a peer expect by doing these behaviors to you?

11. What would you do to make yourself feel better if you had been treated this way?

12. How did you feel when you were treated this way?

13. How likely (1 = Definitely would not think, 3 = Unsure, 5 = Definitely would think) are you to think the following was an expected outcome?

	Definitely Would NOT Think		Unsure		Definitely Would Think
A) This peer wants to inflict emotional harm.	1	2	3	4	5
B) This peer wants to gain increased popularity.	1	2	3	4	5
C) This peer wants to hurt my popularity and influence.	1	2	3	4	5
D) This peer wants to maintain control and power.	1	2	3	4	5
E) The peer wants to get others to like them.	1	2	3	4	5
F) The peer wants to make others dislike me.	1	2	3	4	5

14. Have you ever treated someone like that before in real-life (please circle)? **Yes** **No**

15. What was (or would be) the reason you treated someone that way?

16. What was (or would be) the relationship between you and them? (Please list all possible ones)

17. What effects or changes did (or would you) you expect by treating someone this way?

18. When you treated someone this way, did you achieve the expected changes or results? [Please circle]

YES

NO

NOT SURE

Why or why not? _____

Appendix H

Social Cognitions for Overt Aggression

Sometimes at school, kids may do mean things to one another. Some of these behaviors include calling others mean names, hitting, kicking, punching, or slapping someone, and damaging another peer's property. Think about such things that happened at your school and answer the following questions.

1. Such events are often done by _____ (please circle one):
 A) Girls to girls B) Girls to boys C) Boys to girls D) Boys to boys

2. Describe the possible reasons or causes that may make a peer do any of these behaviors.

3. What effects or changes does a peer expect to see by doing these behaviors?

4. **Student A** is doing these behaviors to **Student B**. The following is a list of reasons why **Student A** does these behaviors to **Student B**. Please rate the likelihood of each statement being the reason.

	Very Unlikely		Neutral		Very Likely
A) Student B is getting more popular in the class.	1	2	3	4	5
B) Student B gets better grades.	1	2	3	4	5
C) Student B gets teachers' attention and preference.	1	2	3	4	5
D) Student B brags.	1	2	3	4	5
E) Student B cares too much about their looks or appearance.	1	2	3	4	5
F) Student B and A like the same boy/girl in a romantic way.	1	2	3	4	5
G) Student B does not treat Student A nicely.	1	2	3	4	5
H) Student B has a higher status (e.g., more popular) in the class.	1	2	3	4	5

5. Please rate how acceptable, tolerable, and normal such behaviors are for boys and girls to do according to teachers, peers and parents views:

Acceptability (1 = very unacceptable, 2 = unacceptable, 3 = neutral, 4 = acceptable, 5 = very acceptable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Tolerability (1 = very intolerable, 2 = intolerable, 3 = neutral, 4 = tolerable, 5 = very tolerable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Normalcy (1 = very atypical, 2 = atypical, 3 = neutral, 4 = typical, 5 = very typical)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

6. What do other people think about such behaviors?

Teachers: _____

Peers: _____

Parents: _____

7. **Circle** whether anyone has ever treated you this way before? **Yes** **No**

8. What was (or would be) the reason you were treated this way?

9. How did (or would) you respond when you were treated this way?

10. What effects or changes does a peer expect by doing these behaviors to you?

11. What would you do to make yourself feel better if you had been treated this way?

12. How did you feel when you were treated this way?

13. How likely (1 = Definitely would not think, 3 = Unsure, 5 = Definitely would think) are you to think the following was an expected outcome?

	Definitely Would NOT Think	Unsure	Definitely Would Think
A) This peer wants to inflict emotional harm.	1	2	3 4 5
B) This peer wants to gain increased popularity.	1	2	3 4 5
C) This peer wants to hurt my popularity and influence.	1	2	3 4 5
D) This peer wants to maintain control and power.	1	2	3 4 5
E) The peer wants to get others to like them.	1	2	3 4 5
F) The peer wants to make others dislike me.	1	2	3 4 5

14. Have you ever treated someone like that before in real-life (please circle)? **Yes** **No**

15. What was (or would be) the reason you treated someone that way?

16. What was (or would be) the relationship between you and them? (Please list all possible ones)

17. What effects or changes did (or would you) you expect by treating someone this way?

18. When you treated someone this way, did you achieve the expected changes or results? [Please circle]

YES

NO

NOT SURE

Why or why not? _____

Appendix I

Social Cognitions for Prosocial Behaviors

Sometimes at school, kids may do nice things to one another. Some of these behaviors include cheering another peer up, showing they care, saying something nice to another peer, sharing and cooperating with other peers, and helping other peers out. Think about such things happened at your school and answer the following questions.

1. Such events are often done by _____ (please circle one):
 A) Girls to girls B) Girls to boys C) Boys to girls D) Boys to boys

2. Describe the possible reasons or causes that may make a peer do any of these behaviors.

3. What effects or changes does a peer expect to see by doing these behaviors?

4. **Student A** is doing these behaviors to **Student B**. The following is a list of reasons why **Student A** does these behaviors to **Student B**. Please rate the likelihood of each statement being the reason.

	Very Unlikely		Neutral		Very Likely
A) Student B is getting more popular in the class.	1	2	3	4	5
B) Student B gets better grades.	1	2	3	4	5
C) Student B gets teachers' attention and preference.	1	2	3	4	5
D) Student B and A like the same boy/girl in a romantic way.	1	2	3	4	5
E) Student B has a higher status (e.g., more popular) in the class.	1	2	3	4	5

5. Please rate how acceptable, tolerable, and normal such behaviors are for boys and girls to do according to teachers, peers and parents views:

Acceptability (1 = very unacceptable, 2 = unacceptable, 3 = neutral, 4 = acceptable, 5 = very acceptable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Tolerability (1 = very intolerable, 2 = intolerable, 3 = neutral, 4 = tolerable, 5 = very tolerable)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

Normalcy (1 = very atypical, 2 = atypical, 3 = neutral, 4 = typical, 5 = very typical)

	<i>Girls</i>					<i>Boys</i>				
Teachers	1	2	3	4	5	1	2	3	4	5
Peers	1	2	3	4	5	1	2	3	4	5
Parents	1	2	3	4	5	1	2	3	4	5

6. What do other people think about such behaviors?

Teachers: _____
 Peers: _____

Parents: _____

7. **Circle** whether anyone has ever treated you this way before? **Yes** **No**

8. What was (or would be) the reason you were treated this way?

9. How did (or would) you respond when you were treated this way?

10. What effects or changes does a peer expect by doing these behaviors to you?

11. How did you feel when you were treated this way?

12. How likely (1 = Definitely would not think, 3 = Unsure, 5 = Definitely would think) are you to think the following was an expected outcome?

	Definitely Would NOT Think	Unsure	Definitely Would Think
A) This peer wants to gain increased popularity.	1	2	3
B) This peer wants to maintain control and power.	1	2	3
C) The peer wants to get others to like them.	1	2	3
D) The peer wants to maintain other relationships by acting this way.	1	2	3
E) The peer wants to start a friendship with me.	1	2	3
F) The peer wants to maintain a friendship with me.	1	2	3

13. Have you ever treated someone like that before in real-life (please circle)? **Yes** **No**

14. What was (or would be) the reason you treated someone that way?

15. What was (or would be) the relationship between you and them? (Please list all possible ones)

16. What effects or changes did (or would you) you expect by treating someone this way?

17. When you treated someone this way, did you achieve the expected changes or results? [Please circle]

YES

NO

NOT SURE

Why or why not?

Appendix J
Gift Card Information

THANK YOU!!!

To thank you for helping us, we want to offer you the chance to be entered in a drawing to win a \$25.00 gift card. We will announce the winner of the gift card at the pizza party. Please answer whether you want to be entered in the drawing or not. If you do, please print your NAME (first and last) and HOMEROOM TEACHER below. Also, remember to print where you want your gift card from.

Yes, I want to be entered in the drawing.

No, I do not want to be entered in the drawing.

Print Name: _____ Homeroom Teacher: _____

Where would you like the gift card? _____

Appendix K

Debriefing

Debriefing for:

The Social Information Processing of Peers' Behaviors

The social information processing model is a theoretical model that attempts to explain how children and adolescents' think and feel about their interactions with their peers. In this study, you answered questions about what you think, feel, and how you deal with your interactions with your peers including aggressive peer behaviors and prosocial behaviors. We were interested in what you think, feel, and how you deal with aggressive and prosocial behaviors.

We were also interested in what makes a girl and boy popular or unpopular. While we are not interested in "who" is popular or unpopular, we are interested in the characteristics that make other adolescents popular or unpopular.

Remember your answers will be kept confidential and will be stored in a locked location. Your names will not be on any of your answers and we will have no way to know what you answered. We also ask that you keep your answers private from other classmates. However, you can feel free to discuss your answers (if you want) with teachers and parents. If you feel upset after being in the research, you should talk to your parents. If your parent thinks you need to speak to someone else, have your parent contact the local mental health center.

Again, thank you for participating in our study. We will hold the drawing for the \$25.00 gift card after we have collected all data. You should have filled out a "Gift Card Information" sheet that asked you if you wanted to be entered in the drawing asking you for your name, homeroom teacher, and where you want the gift card from. If you did not receive this sheet, please let the researchers know. You will be notified during the pizza party if you won and you will receive your gift card at this time.

If you or your parents have any questions for the researchers, they can contact us at 773-325-4099 for Michelle Wright or through email at mwrigh20@depaul.edu; they can also contact 773-325-4098 for Dr. Yan Li or through email at yli34@depaul.edu.

Thank you very much for your help!

Appendix L
Coding Scheme for Attributions

ATTRIBUTIONS FOR RELATIONAL AGGRESSION (HYPOTHETICAL)

Main categories consist of:

1. Aggressor-side
2. Conflict
3. Victim-side
4. Other reasons

I. Aggressor-side: Relational aggression occurs because of the aggressor, either with his/her characteristics, motivations, or behaviors

A. Proactive Aggression: Purposeful type of aggression

1. Dislike the victim
 - a. "Don't like the victim"
 - b. "Hates the other person"
2. Dominance threatened
 - a. "Feel threatened by the peer"
3. Jealousy
 - a. "Jealous"
 - b. "Envious"
4. Negative emotions
 - a. "Mad"
 - b. "Upset"
 - c. "Anger"
 - d. "emotional problems"
5. Aggressive, like hurting others
 - a. Physical/Verbal
 1. "Teasing"
 - b. Socially
 1. "Saying stuff about people"
 2. "Rumors"
 - c. Displaced Aggression
 1. "Want to feel better"
 2. "Need to feel better about self"
 3. "Been bullied before"
 4. "Someone is doing that to them"

B. Harm victims' status

1. "Hurt victim's status"

C. Romantic relationship motives

1. Fight over boy/girl
 - a. "Boys fight over girls"
 - b. "Boys"
 - c. "Fight over boys"
 - d. "Took their boyfriend"
 - e. "Girl is cheating on a boy"
 - f. "Girl is flirting with another girl's boyfriend"

2. Boyfriend/girlfriend problem

- a. "Girlfriend/boyfriend problems"

D. Reactive Aggression: aggression performed in response to provocation or retaliation to perceived provocation

1. Revenge

- a. "Revenge"
b. "Get back at them"
c. "Spread rumors about them in return"

2. Environment

- a. "Bad home life"
b. "Not enough attention at home"

E. Aggressor's status

1. "They are popular"
2. "The person is way more popular than the other"

F. Aggressor's characteristics

1. General statement about characteristics

- a. "The person is mean"
b. "They are just impulsive"
c. "Because she is self-centered"
d. "Rude!"
e. "He is an ego maniac"
f. "The person has really low self esteem"

G. Aggressor's desires

1. "Wants to be a bully"
2. "More friends"
3. "Wants to act cool"

H. Aggressor's status desires

1. "Wants to increase status"
2. "Wants to gain dominance"

II. Conflict: problem between the aggressor and victim; the conflict between both of them is neutral as both the aggressor and victim take it out on each other

A. General conflict (not specified)

1. "They are in a fight with each other"
2. "They are in a conflict"

B. Conflict because they don't like each other

1. "They don't like each other so they fight"
2. "Both of them hate each other"

III. Victim-side: Relational aggression occurs because of the victim

A. Characteristics

1. Bad character

- a. "The other person is very annoying"
b. "The victim is obnoxious"
c. "The victim gets on the person's nerves"

2. Appearance

- a. "The other person is fat"
- b. "The person is ugly"

B. Low status

- 1. "Unpopular"

C. Bad habit, bad behavioral pattern

- 1. "Doesn't fit in"
- 2. "Act fake"
- 3. "Act different"

IV. Other Reasons: Consistent themes mentioned by adolescents but these do not fit under the typical aggressor/victim categories

A. Gender difference

1. Boy/girl difference

- a. "This is the way boys are but not girls"

2. Girl trait

- a. "Girls are just mean and judgmental"
- b. "Girl drama"
- c. "Girls are jealous of each other"
- d. "Girls are competitive"
- e. "Girls are bitchy"
- f. "Girls make other girls sad so they feel happy"

B. Other (not specific categories)

1. Please a friend

- a. "To get friends"
- b. "Make one's friends like them"

2. Gain attention

- a. "Want attention"
- b. "Trying to get attention from others"

3. Bored

- a. "Bored"

4. Stereotype/Racism

- a. "Person is being mean to the other person because they believe in stereotypes"
- b. "The one peer doesn't like that the other is a different race than them"
- c. "The aggressor is racist"

5. Insecurity

- a. "They are insecure"

6. Humor

- a. "Think it's funny"
- b. "They are just joking"

7. Trust

- a. "Not trusting each other"
- b. "Don't trust each other"

ATTRIBUTIONS FOR OVERT AGGRESSION (HYPOTHETICAL)

Main categories consist of:

1. Aggressor-side
2. Conflict
3. Victim-side
4. Other reasons

I. Aggressor-side: Overt aggression occurs because of the aggressor, either with his/her characteristics, motivations, or behaviors

A. Proactive Aggression: Purposeful type of aggression

1. Dislike the victim
 - a. "Dislike the other person"
 - b. "The peer hates the victim"
2. Social status or dominance threatened
 - a. Increase status
 1. "They want to be popular"
 2. "Want to maintain popularity"
 - b. Dominance gains
 1. "Prove they're strong"
 2. "Prove their dominant"
 3. "They want to seem powerful"
3. Aggressive, like hurting others
 - a. Physical/Verbal
 1. "They're more aggressive"
 2. "They say bad words"
 3. "Saying mean things"
 - b. Socially
 1. "Rumors"
 2. "Gossip"
 - c. Displaced Aggression
 1. "They might be lettering out anger"
 2. "Making self feel better"
4. Jealousy
 - a. "They are jealous of the other peer"
 - b. "Envious of what the other peer has"
5. Negative emotions
 - a. "Sad"
 - b. "Crying"

B. Reactive Aggression: aggression performed in response to provocation or retaliation to perceived provocation

1. Revenge
 - a. "Thought the victim said something about them"
 - b. "Revenge for something that person did"

- c. “Made fun of their family”
 - d. “Might be taking their friends”
 - 2. Environment
 - a. “They were treated that way”
 - b. “They had a bad past”
 - c. “Problems at home”
- C. Aggressor’s characteristics
 - 1. Self-centered
 - a. “The peer is self-centered”
 - 2. Mean/violent
 - a. “They are just a mean person”
 - b. “The person is violent”
- D. Romantic relationship motives
 - 1. Fight over boy/girl
 - a. “Took their boyfriend/girlfriend”
 - b. “Stealing boyfriends”
 - c. “Flirting with other girl boys”
 - d. “Fighting over girls”
 - 2. Boy/girl problems
 - a. “Boyfriend/girlfriend break-up”

II. Conflict: problem between the aggressor and victim; the conflict between both of them is neutral as both the aggressor and victim take it out on each other

- A. General conflict (not specified)
 - 1. “One makes the other upset”
 - 2. “They challenge each other”
- B. Conflict because they are mad at each other
 - 1. “They make each other mad”
- C. Conflict because they hate each other
 - 1. “They both cannot stand each other”
 - 2. “They both really hate each other”
- D. Conflict because they both talk about each other
 - 1. “They talk bad about each other”
 - 2. “Talk about each other”
 - 3. “Talking behind each other’s back”

III. Victim-side: Overt aggression occurs because of the victim

- A. Characteristics
 - 1. Bad Character
 - a. “The victim is weird”
 - b. “The person thinks the other is nasty”
 - c. “Victim is too annoying”
 - d. “The victim is so obnoxious”
- B. Bad habit, bad behavioral pattern
 - 1. “The person is fake ”

- C. Aggression
 1. "Said offensive things"
 2. "Hurts others"
 3. "Talks badly about everyone"
- D. Low status
 1. "The victim is unpopular"
 2. "The person is rejected"

IV. Other Reasons: Consistent themes mentioned by adolescents but these do not fit under the typical aggressor/victim categories

- A. Gender difference
 1. Boy girl difference
 - a. "Boys are independent"
 - b. "Boys can be rough"
 - c. "Boys do this sort of thing"
 - d. "Because they're boys"
 - e. "Boys are violent"
 2. Girl trait
 - a. "Girl issue"
 - b. "Girls are jealous"
- B. Other (not specific categories)
 1. Gain attention
 - a. "They want attention"
 2. Insecurity
 - a. "Insecure"
 3. Humor
 - a. "Think it is fun/funny"
 4. Trust
 - a. "Broken trust"
 5. Goal Directed
 - a. "Think it'll accomplish something"

REASON FOR PROSOCIAL BEHAVIORS (HYPOTHETICAL)

Main categories consist of:

1. Other-Focus (the focus on the receiver)
2. Giver-Focus (the focus on the giver)
3. Relationship Development/Maintenance
4. Other

I. Other-Focus: This attribution category explains prosocial behaviors occur because of the receiver

A. Characteristics:

1. Manipulative
 - a. "Looking sad to make others care"
 - b. "Faking to get trust"
2. Personal Characteristics
 - a. "Cute / attractive"
 - b. "Nice to others"

B. Negative Emotions/Feelings

1. "A friend is feeling down"
2. "A friend is feeling bad"
3. "If someone was sad"
4. "May be depressed"

C. Catastrophic Event

1. Family related
 - a. "A family member might have died"
2. Academic difficulties
 - a. "Got a bad grade"
 - b. "Failed a test"
3. Boy/girl problem
 - a. "Break up"
 - b. "Someone got dumped"
 - c. "Got rejected by boy/girl"
4. Bad day
 - a. "Had a tough day"

II. Giver-Focus: This attribution category explains prosocial behaviors occur because of the giver

A. Characteristics

1. Prosocial Characteristics
 - a. "They are just nice"
 - b. "Like to help people"
 - c. "Being nice"
 - d. "Very likeable"
2. Empathy
 - a. "Understand what it feels like"

- b. "They know how it feels"
 - 3. Concern for Others
 - a. "Because they care about other people"
 - b. "Make them feel better"
 - c. "Considerate"
 - d. "Don't like when others are upset"
- B. Selfish Motivations
 - 1. Self presentation
 - a. "Make self look good"
 - 2. Academics
 - a. "To look good in front of teachers"
 - b. "Wants to get in college"
 - c. "Wants to get grades"
 - 3. Self-esteem improvements
 - a. "Boost self-esteem"
 - 4. Wants to be treated this way
 - a. "Want to be treated this way"
 - 5. Boost status
 - a. "Gain respect"
- C. Projection
 - 1. "Had a good day so do it to others"
- D. Bad Emotions
 - 1. Guilt/envy
 - a. "Guilty"
 - b. "Envious"
 - 2. Jealousy
 - a. "Jealousy"

III. Relationship Development / Maintenance – this attribution category explains that prosocial behaviors occur because

- A. Expectation (about friendship)
 - 1. "Cause they're your friend"
 - 2. "What is expected from friends"
 - 3. "They're best friends"
 - 4. "Friends"
 - 5. "Because they like you"
- B. Friendship Establishment
 - 1. "Want to be your friend"
 - 2. "To make an alliance"
- C. Romantic Relationship Establishment
 - 1. "They have feelings for each other"
 - 2. "Crushing"
 - 3. "The guy likes the girl"

IV. Other – this attribution category includes various subcategories that stood out but did not fit in other categories

- A. Trust
 - 1. "Because they could trust each other"
- B. Gender Differences
 - 1. "Girls are nicer"
 - 2. "Girls have bigger hearts"
- C. Congratulations
 - 1. "Won something"
 - 2. "Congratulations"
 - 3. "Celebration"

Appendix M

Original Coding Categories for Attributions

Codes: Attributions for Relational Aggression		Variable Name		
AGGRESSOR-SIDE	Proactive Aggression	dislike the victim	ra_dislikevic	
		jealousy	ra_jealousagg	
		dominance threatened	ra_threatened	
		negative emotions	anger/mad	ra_angeragg
			upset/sad	ra_upsetagg
			emotional problems	ra_emoprbl
		aggressive	physical/verbal aggression	ra_overtagg
			social aggression	ra_socialagg
			displaced aggression	ra_dpagg
	Reactive Aggression	revenge	ra_revenge	
		environment	ra_environagg	
	Romantic Relationship Motives	fight over boy/girl	ra_fightoverbg	
		boyfriend/girlfriend problem	ra_boygirlprbl	
	Aggressor's status	popular	ra_aggpopular	
	Aggressor's characteristics	general statement about characteristics		ra_aggchar
			mean	ra_aggmean
		impulsive, lack self-control	ra_impulsive	
		self-centered	ra_selfcenter	
		rude	ra_rude	
egotistical		ra_egotist		
low self esteem		ra_lowesteem		
immature		ra_immature		
Aggressor's desires		wants to start a fight/be a bully	ra_startfight	
		more friends	ra_morefriends	
		wants to act cool	ra_cool	
Aggressor's status desires	wants to increase status	ra_incrstatus		
	wants to gain dominance	ra_domgain		
	general conflict (unspecified)	ra_conflict		
	talking behind each other's backs	ra_conflictalk		
CONFLICT	conflict because they don't like each other	ra_conflictinlike		
	annoying	ra_annoying		
VICTIM-SIDE	appearance	ra_appearance		
	low status	ra_lowstatus		
	self as an aggressor	ra_aggvictim		

					ra_badhabit
					ra_disrespect
OTHER	Behavioral Patterns	bad habit, bad behavioral pattern			ra_boygirlidiff
	Gender Difference	victim disrespect the aggressor			ra_girltrait
		boy girl difference			ra_othtrust
		girl trait			ra_othhumor
		trust			ra_othplsfriend
		humor			ra_othgetattn
		please a friend			ra_othbored
		to gain attention			ra_otherracism
		bored			ra_notfriends
		stereotype/racism			ra_likethem
		aren't friends			ra_norm
		like them			ra_othinsecure
		normal thing to do			
		insecurity			
					FINAL KAPPA:

Codes: Attributions for Overt Aggression			Variable Name
AGGRESSOR-SIDE	Proactive Aggression	dislike the victim	oa_dislikevic
		jealousy	oa_jealousagg
		social status or dominance threatened	oa_incrstatus
		negative emotions	oa_domgain
			oa_angeragg
			oa_upsetagg
		aggression	oa_overtagg
			oa_displacedagg
			oa_revenge
			oa_environagg
	Reactive Aggression	fight over boy/girl	oa_fightoverboygirl
	Romantic Relationship Motives	boyfriend/girlfriend problems	oa_boygirlprb
		popular	oa_ispopular
		general characteristics	oa_generalchar
		defensive	oa_defensive
		self-centered	oa_selfcenter
		mean/violent	oa_meanagg
		think better than other	oa_thinkbetter
	Aggressor's Characteristics	prove	oa_strongagg
		tough/strong/show off/control/feel stronger	
	didn't get what wanted	oa_notgetwhatwant	
	angry/mad at person	oa_angryatvic	
	put victim in weak state/make look bad	oa_makeviclookbad	
	general unspecified conflict	oa_conflict	
CONFLICT	conflict - mad at each other	oa_madconflict	
	conflict - dislike/hate each other	oa_hateeachother	
	conflict - talk behind other's backs	oa_talkconflict	
VICTIM CHARACTERIS	obnoxious/gets on other's nerves/annoying	oa_obnoxious	

TICS	Behavioral Pattern	poor personality, bad habit, bad behavioral pattern, act bad	oa_badhabit	
	Gender Differences	low status	oa_lowstatus	
		boy trait	oa_boytrait	
		girl trait	oa_girltrait	
		bored	oa_bored	
	OTHER		general characteristics (unspecific if aggressor or victim)	oa_badcharact
			aggressor wants to seem cool	oa_seemcool
			peer pressure	oa_peerpressure
			were disrespect	oa_disrespect
			humor	oa_othumor
		to gain attention	oa_othgetattn	
		goal directed	oa_goaldirect	
		insecurity	oa_othinsecure	
			FINAL KAPPA:	
			.77	

Codes: Attributions for Prosocial Behaviors			Variable Name	
RECEIVER-FOCUS	Characteristics	behavioral characteristics	nice to others	
		personal characteristics	appearance	
	Catastrophic Event	family related		pb_familyissues
		bad day		pb_badday
		boy/girl problem		pb_boygirlprb
		negative emotions feelings		pb_negemo
	Characteristics	prosocial/nice to others		pb_givernice
		empathetic		pb_giveremp
		concern for others		pb_giverconcern
		jealousy		pb_jealousy
guilt/envy			pb_guilt	
GIVER-FOCUS	Bad Emotions	self presentations		pb_selfpresent
		academics		pb_impracademics
		self-esteem improvements		pb_selfesteemimpr
		wants to be treated this way		pb_treatedinreturn
		respect		pb_respect
	Selfish Motivations	boost status/gain popularity		pb_booststatus
		expectations (about friendship)		pb_expfriendship
		they are there for me		pb_support
		friendship establishment		pb_friendest
		romantic relationship establishment		pb_romanticest
RELATIONSHIP DEVELOPMENT/MAINTENANCE	Characteristics	feel bad for them		pb_feelbad4them
		want to help		pb_help
		want them to be happy		pb_happy
		make feel better		pb_feelbetter
		want to cheer up		pb_cheer
		girl trait		pb_girltrait
		doing right thing		pb_norm
		trust		pb_trust
		congratulations		pb_congratz
		HELP	Gender Differences Normative	
OTHER REASONS	Gender Differences Normative			
			FINAL KAPPA:	.89

Appendix N

Revised Coding Document (Used for Analyses) and Frequencies for Attributions

Code Names for Attributions about Relational Aggression						
	Includes which codes	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 342 (Yes / No)	Counts
<u>Jealousy</u>	ra_jealousagg	ra_threatened			62 / 280	0, 1
<u>Proactive Aggression</u>	ra_overtagg	ra_startfight	ra_dpagg	ra_dislikevic	55 / 287	0, 1, 2
	ra_socialagg	ra_norm				
<u>Reactive Aggression</u>	ra_revenge	ra_angeragg	ra_environgagg	ra_upsetagg	67 / 275	0, 1, 2
<u>Romantic Relationship Competition</u>	ra_boygirlprb	ra_likethem	ra_fightoverbg		43 / 299	0, 1, 2
<u>Aggressor's Characteristics</u>	ra_aggchar	ra_othinsecure	ra_immature	ra_lowesteem	73 / 269	0, 1, 2
	ra_aggmean	ra_otherracism	ra_impulsive	ra_othbored		
	ra_rude	ra_emoprbr	ra_selfcenter	ra_othumor		
	ra_egotist					
<u>Status Desires</u>	ra_incrstatus	ra_othgetattn	ra_morefriends	ra_othplsfriend	28 / 314	0, 1, 2
	ra_domgain	ra_cool	ra_aggpopular			
<u>Conflict</u>	ra_conflict	ra_notfriends	ra_conflictalk	ra_conflictdnlike	62 / 280	0, 1, 2
<u>Bad Behavior of Victim</u>	ra_annoying	ra_lowstatus	ra_girltrait	ra_appearance	47 / 318	0, 1, 2
	ra_boygirldiff					
<u>Bad Characteristics of Victim</u>	ra_badhabit	ra_disrespect	ra_aggvictim		24 / 295	0, 1

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Code Names for Attributions about Overt Aggression						
	Includes which codes	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 208 (Yes / No)	Counts
<u>Jealousy</u>	oa_jealousagg				30 / 178	0, 1
<u>Proactive Aggression</u>	oa_overtagg	oa_makeviclookbad	oa_displacedagg	oa_dislikevic	45 / 163	0, 1, 2
<u>Reactive Aggression</u>	oa_revenge	oa_angeragg	oa_environgagg	oa_upsetagg	52 / 156	0, 1, 2
	oa_notgetwhatwant	oa_angryatvic				
<u>Romantic Relationship Competition</u>	oa_boygirlprb	oa_fightoverbg			13 / 195	0, 1, 2
<u>Aggressor's Characteristics</u>	oa_generalchar	oa_defensive	oa_selfcenter	oa_bored	29 / 179	0, 1, 2
	oa_meanagg	oa_thinkbetter	oa_othumor	oa_othinsecure		
<u>Status Desires</u>	oa_incrstatus	oa_othgetattn	oa_strongagg	oa_peerpressure	36 / 172	0, 1, 2, 3
	oa_domgain	oa_seemcool	oa_ispopular	oa_goaldirect		
<u>Conflict</u>	oa_conflict	oa_madconflict	oa_talkconflict	oa_hateeachother	22 / 186	0, 1, 2
<u>Bad Characteristics of Victim</u>	oa_obnoxious	oa_lowstatus	oa_boytrait	oa_girltrait	19 / 189	0, 1
<u>Bad Behavior of Victim</u>	oa_badhabit	oa_disrespect			8 / 200	0, 1

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Code Names for Attributions about Prosocial Behaviors					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 254 (Yes / No)	Counts
<u>Receiver's Characteristics</u>	pb_recrnice	pb_recrappearance		17 / 237	0, 1
<u>Event</u>	pb_familyissues	pb_negemo	pb_badday	11 / 243	0, 1, 2
	pb_boygirlprb				
<u>Giver Characteristics</u>	pb_givernice	pb_feelbad4them	pb_girltrait	74 / 180	0, 1, 2
	pb_giveremp	pb_giverconcern	pb_norm		
<u>Selfish Motivations</u>	pb_selfpresent	pb_respect	pb_impracademics	29 / 225	0, 1, 2
	pb_jealousy	pb_selfesteemimpr	pb_guilt		
	pb_treatedinreturn	pb_boostatus			
<u>Friendship Expectations</u>	pb_expfriendship	pb_trust	pb_support	37 / 217	0, 1, 2
<u>Friendship Establishment</u>	pb_friendest			25 / 229	0, 1
<u>Romantic Relationship Establishment</u>	pb_romanticest			24 / 230	0, 1
<u>Desire to Help</u>	pb_help	pb_happy	pb_feelbetter	46 / 208	0, 1, 2
	pb_cheer				

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Appendix O

Coding Scheme for Outcome Expectancies

**OUTCOME EXPECTANCIES FOR RELATIONAL AGGRESSION
(HYPOTHETICAL)**

Main categories consist of:

- I. Harm the victim
- II. Social Status
- III. Damage relationships
- IV. Aggressor focused
- V. Conflict
- VI. Aggression

I. Harm the victim: The aggressor expects to hurt the victim by a variety of means

- A. Emotional harm
 - 1. "Crying"
 - 2. "Scared"
 - 3. "Sad"
- B. Academic
 - 1. "Drop their grades"
- C. Damage their life
 - 1. "Ruin their life"
- D. Hurt their status
 - 1. "Hurt status"
- E. Change their attitude
 - 1. "Change victim's attitude"
 - 2. "Change victim's appearance"

II. Social status: improvements to aggressor's status

- A. Improve status
 - 1. "Become more popularity"
- B. Gain status/dominance
 - 1. "Minor popularity"
 - 2. "Be cooler"
 - 3. "Dominance"
- C. Gain respect
 - 1. "Gain respect"
- D. Well-liked/accepted
 - 1. "Become accepted"
 - 2. "Become well-liked"

III. Damage relationships: aggressor desires to damage relationships

- A. Losing friends
 - 1. "Losing friends"
 - 2. "Friends fade away"
- B. Become enemies
 - 1. "Become enemies"

- C. Get rid of the person
 1. "Get rid of the person"
 2. "Get them to not talk to them anymore"
 3. "Leave them alone"

IV. Aggressor focused: aggressor wants an outcome that is associated with them

- A. Negative humor
 1. "A laugh"
 2. "See them cry"
- B. Get what they want
 1. "Get what they want"
- C. Change people's opinions about them
 1. "Get people to think differently about them"
- D. Seem tough
 1. "Appear tough"
- E. Control
 1. "Show they are in control"
- F. Get attention
 1. "Get attention"
 2. "Attention"
- G. More cool
 1. "appear to be more cool"

V. Conflict: some type of conflict between the victim-aggression started relational aggression (neutral type of blame)

- A. "A fight"
- B. "Arguments"
- C. "Big problems"
- D. "Emotional breakdown"

VI. Aggression: involves a very specific form of conflict, namely aggression

- A. Social: involves relationally aggressive behaviors
 1. Drama
 - a. "Drama"
 2. Rumor/gossip
 - a. "Gossiping"
 3. Ignore
 - a. "Ignore them"
- B. Physical: involves physical aggression
 1. "Fight"

OUTCOME EXPECTANCIES FOR OVERT AGGRESSION (HYPOTHETICAL)

Main categories consist of:

- I. Harm the victim
- II. Social Status
- III. Damage relationships
- IV. Aggressor focused
- V. Conflict

I. Harm the victim: The aggressor expects to hurt the victim

- A. Emotional harm
 - 1. Hurt their self esteem
 - a. "a big drop in self esteem"
 - 2. Make them cry/sad
 - a. "Sadness"
 - 3. Make them mad
 - a. "Madness"
 - 4. Make them afraid/scared
 - a. "Fear"
 - b. "More frightened to come to school"
- B. Academic harm
 - 1. "Bad grades"

II. Social status/control

- A. Improve status
 - 1. "Might become more popular"
 - 2. "Social status"
- B. Gain status/dominance
 - 1. "Control"
 - 2. "Gain respect"
 - 3. "Gain power"

III. Relationships

- A. Improve relationships
 - 1. "Have more friends"
- B. Damage relationships
 - 1. "Less friends"

IV. Aggressor focused

- A. Revenge
 - 1. "Get back at them"
- B. Emotional
 - 1. "Anger"
 - 2. "Embarrass others"
- C. Negative humor

1. "Wants to see the other person suffer"

V. Conflict: some type of conflict between the victim-aggression started relational aggression (neutral type of blame)

- A. "Yelling"
- B. "Starting fighting"
- C. "Get others to stop talking to them"
- D. "Calling each other names"

**OUTCOME EXPECTANCIES FOR PROSOCIAL BEHAVIORS
(HYPOTHETICAL)**

Main categories consist of:

1. Other-focus (focused on the receiver)
2. Giver-focus (focused on self)
3. Relationship Development/Maintenance

I. Other-focus: expect something from the receiver

A. Emotional

1. Improve mood
 - a. "Make happier"
 - b. "Make smile"
2. Cheer them up
 - a. "Life in spirit"
 - b. "Comfort"
 - c. "Cheer the person up"

B. Change outlook on life

1. "Better outlook on life"
2. "Less grouchy"

C. Improve self-esteem

1. "Change their self-esteem"

II. Giver-focus: expect to do something for self

A. Self-serving expectation

1. "A thank you"
2. "Something in return"
3. "Compliment back"
4. "Be nicer to them"
5. "Kindness back"
6. "Expect to be treated the same way"

C. Academic expectation

1. "Better grades"
2. "Teachers trust"
3. "More awards"

D. Social expectation

1. Gain popularity
 - a. "Gain popularity"
2. Gain trust
 - a. "Gain trust"
3. Gain likeability
 - a. "Want to be liked"
4. Gain attention
 - a. "More attention"
5. Gain respect

- a. "Gain respect"
- b. "Respect"

IV. Relationship Development/Maintenance: want to develop a relationship or maintain one with the receiver or other people

A. Development

- 1. "An increase in friendship"
- 2. "Be friends with them"
- 3. "Become friends"
- 4. "Liking"

B. Maintenance

- 1. "Become closer friends"
- 2. "Better friendships"

C. Romantic relationship

- 1. "Become boyfriend/girlfriend"
- 2. "Want to go out with them"

Appendix P

Original Coding Categories for Outcome Expectancies

Codes: Outcome Expectancies for Relational Aggression		Variable Name
HARM THE VICTIM	emotional harm	sad/hurt/cry
		anger/mad
		fearful
		damage their life
SOCIAL STATUS		hurt their status
		change their attitude
		improve status
		gain status/dominance
		gain respect
		well-liked/accepted
		losing friends
		not talk to them anymore/leave them alone
DAMAGE RELATIONSHIPS		become enemies
		negative humor
AGGRESSOR FOCUS		get what they want
		seem tough
		control
		get attention
		more cool
		conflict
		revenge
		drama
CONFLICT	revenge	raout_sad
		raout_anger
		raout_fear
		raout_dmgtheirlife
AGGRESSION	social	raout_hurtstatus
		raout_chgattitude
		raout_improvestatus
		raout_gainstatus
		raout_respect
		raout_wellliked
		raout_losefriends
		raout_leavealone
AGGRESSION	overt	raout_becomeenemies
		raout_neghumor
		raout_getwant
		raout_tough
AGGRESSION	overt	raout_control
		raout_attention
		raout_morecool
		raout_conflict
AGGRESSION	overt	raout_revenge
		raout_drama
		raout_rumor
		raout_ignore
AGGRESSION	overt	raout_fight
		raout_namecalling
		raout_verbal
		FINAL KAPPA: .94

Codes: Outcome Expectancies for Overt Aggression		Variable Name
HARM THE VICTIM	Emotional harm	oaout_harmsel
		oaout_hurtthem
		oaout_cry
		oaout_mad
		oaout_afraid
		oaout_embarrass
	Academic harm	oaout_acadharm
		oaout_gainstatus
		oaout_improvestatus
		oaout_createrelation
SOCIAL STATUS/CONTROL RELATIONSHIPS		oaout_dmrelation
		oaout_revenge
		oaout_respect
		oaout_attention
		oaout_satisfy
		oaout_cool
		oaout_neghumor
		oaout_chgattitude
		oaout_feelbetter
		oaout_wants
AGGRESSOR FOCUSED		oaout_control
		oaout_tough
		oaout_stronger
		oaout_conflict
		FINAL KAPPA:
		.93
CONFLICT		

Codes: Outcome Expectancies for Prosocial Behaviors		Variable Name
RECEIVER-FOCUS	Emotional	
		improve mood
		show care
		help them
		change outlook on life
		improve self-esteem
		self-serving expectation
GIVER-FOCUS		academic expectation
	Social Expectation	gain popularity
		gain trust
		gain likeability
		gain attention
		gain respect
		development
maintenance		
RELATIONSHIP DEVELOPMENT/ MAINTENANCE		romantic relationship
		FINAL KAPPA:
		.91

Appendix Q

Revised Coding Document (Used for Analyses) and Frequencies for Outcome

Expectancies

Code Names for Outcome Expectancies about Relational Aggression					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 307 (Yes / No)	Count
<u>Harm Victim Emotionally</u>	raout_sad	raout_anger	raout_fear	50 / 257	0, 1, 2
<u>Harm Victim's Status and Friendships</u>	raout_dmghtheirlife	raout_neghumor	raout_losefriends	31 / 276	0, 1
	raout_hurtstatus				
<u>Gain Status</u>	raout_improvestatus	raout_tough	raout_getwant	53 / 254	0, 1, 2
	raout_gainstatus	raout_control	raout_respect		
	raout_morecool	raout_attention	raout_wellliked		
<u>Change Victim</u>	raout_leavealone	raout_chgtattitude		18 / 289	0, 1
<u>Create Aggression</u>	raout_revenge	raout_conflict	raout_drama	74 / 233	0, 1, 2, 3
	raout_becomeenemies	raout_rumor	raout_ignore		
	raout_fight	raout_verbal			

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Code Names for Outcome Expectancies about Overt Aggression					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 186 (Yes / No)	Counts
<u>Harm Victim Emotionally</u>	oaout_mad oaout_embarrass	oaout_cry	oaout_afraid	35 / 151	0, 1
<u>Harm Victim's Status and Friendships</u>	oaout_dmrelation oaout_hurtthem	oaout_neghumor oaout_harmselfesteem	oaout_acadham	32 / 154	0, 1, 2
<u>Gain Status</u>	oaout_gainstatus oaout_tough oaout_improvestatus oaout_wants	oaout_respect oaout_createrelation oaout_attention	oaout_cool oaout_satisfy oaout_control	46 / 140	0, 1, 2
<u>Create Aggression</u>	oaout_revenge	oaout_conflict		25 / 161	0, 1

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Code Names for Outcome Expectancies about Prosocial Behaviors					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 242 (Yes / No)	Counts
<u>Help the Receiver</u>	pbout_impr mood pbout_impr selfesteem	pbout_help	pbout_chgoutlook	73 / 169	0, 1, 2
<u>Selfish Motivations</u>	pbout_selfserv ingexp	pbout_academicexp		22 / 220	0, 1
<u>Gain Status</u>	pbout_gainpop pbout_gainattn	pbout_gaintrust pbout_respect	pbout_gainlikeability	30 / 212	0, 1, 2
<u>Develop & Maintain Friendships</u>	pbout_devrelation pbout_devromantic	pbout_maintrelation	pbout_showicare	47 / 195	0, 1
<u>Develop Romantic Relationships</u>				9 / 233	0, 1

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Appendix R
Coding Scheme for Coping Intentions

COPING INTENTIONS FOR RELATIONAL AGGRESSION (HYPOTHETICAL)

Main categories consist of:

- I. Positive/adaptive coping strategies
- II. Negative/maladaptive coping strategies
- III. Friendship dissolution
- IV. Other Strategy

I. Positive/adaptive coping strategies

A. Problem solving effort

1. "Ask them why they did that"
2. "Ask them why they are doing this to me"
3. "Find the reason why"
4. "Ask if they have a problem"

B. Seek social support/advice and support

1. Friends

a. Talk to friends

1. "Ask my friends for morale support"
2. "Go to my friends for support"
3. "Console with a friend"
4. "Call a friend"

b. Hang with friends

1. "Hang out with my friends"

2. Parents

- a. "Consoled with my mom"
- b. "Talk to my mom"
- c. "Talk to an adult"

3. Teachers/Principal/Dean

- a. "Talk to an adult"
- b. "Tell the teacher"
- c. "Talk to the dean"

4. Sibling

- a. "Talk to my brother"

II. Negative/maladaptive coping strategies

A. Focus on the positive

1. "Create a pros and cons list"
2. "Tell myself I'm awesome"
3. "Tell myself I'm better than this"

B. Self-blame

1. "Apologize"

C. Distancing/avoidance

1. "Pretend it never happened"
2. "Continuing like normal"
3. "Forget about it"

D. Emotional

1. "Angry"
2. "Get sarcastic"

E. Aggression

1. Overt aggression
 - a. "Beat the crap out of them"
 - b. "Fight the person"
2. Relational aggression
 - a. "Spread rumors about them"

F. Revenge

1. "Get back at the person"

G. Distraction

1. "Do something else"
2. "Get pizza"
3. "Play music"
4. "Play video games"

H. Pacify self

1. "Calm self"

I. Neutral

1. Not care
 - a. "Not care about them"
2. Unphased
 - a. "Didn't make me feel bad"
3. Know it isn't true
 - a. "I would know it isn't true"
4. Do nothing
 - a. "Do nothing"
 - b. "Nothing"
5. Ignore
 - a. "Ignore it"

III. Friendship dissolution

A. End friendship

1. "find a new friend"
2. "find different friends"
3. "get better friends"

B. No interactions with person

1. "stop interacting with the person"

COPING STRATEGIES FOR OVERT AGGRESSION (HYPOTHETICAL)

Main categories consist of:

- I. Positive/adaptive coping strategies
- II. Negative/maladaptive coping strategies
- III. Friendship dissolution

I. Positive/adaptive coping strategies

A. Seek social support/advice and support

- 1. Friends
 - a. "Be with friends"
 - b. "Console with someone I like"
- 2. Parents
 - a. "Get adult help"
 - b. "Talk to my mom"
- 3. Teachers/Principal/Dean
 - a. "get adult help"
 - b. "talk to dean"
- 4. Spiritual
 - a. "ask God for help"
 - b. "talk to God"

II. Negative/maladaptive coping strategies

A. Emotional

- 1. "Angry"
- 2. "Cry"

B. Aggression

- 1. "Beat the person up"
- 2. "Bite them"
- 3. "Choke them out"
- 4. "Fight back"
- 5. "Get my boys"
- 6. "Hit them back"

C. Revenge

- 1. "Do the same thing back"
- 2. "Get even"
- 3. "Get back at them"

D. Distancing

- 1. "Forget about it"
- 2. "Pretended she didn't say or do anything"

E. Distraction

- 1. "Make a cake"
- 2. "Girls night out"
- 3. "Eat a lot of ice cream"

III. Friendship dissolution

A. "Get new friends"

B. "Get rid of the friend"

Appendix S

Original Coding Categories for Coping Intentions

Codes: Coping Intentions for Relational Aggression		Variable Name	
POSITIVE/ADAPTIVE COPING STRATEGIES	problem solving effort	racope_prbsolve	
	ask the person to stop	racope_askstop	
	Seek social support/ advice and support	general person	racope_talktosomeone
		general adult	racope_talktoadult
		sibling	racope_talktosib
		boyfriend/girlfriend	racope_talktobfgf
		friends	racope_talktofriends
		be w/ friends	racope_hangwfriends
		parents	racope_withfriends
		teachers/principal/dean	racope_talktoparents
		focus on the positive	racope_talktoteacher
		self-blame	racope_focuspositive
	distancing/avoidance/ignore	racope_slblame	
	emotional	mad/angry	racope_distancing
upset/cry/sad		racope_angry	
overt		racope_upset	
relational		racope_overtagg	
NEGATIVE/MALADAPTIVE COPING STRATEGIES	revenge	racope_relationalagg	
	distraction	racope_revenge	
	pacify self (calm down)	racope_distract	
	I wouldn't care/unphased	racope_calm	
	know it isn't true	racope_notcare	
	do nothing	racope_nottrue	
	pretend I don't care	racope_donothing	
	end friendship	racope_pretend	
	no interactions w/person	racope_endfriend	
	make new friends	racope_endinteract	
FRIENDSHIP DISSOLUTION		racope_newfriend	
		FINAL KAPPA:	
FRIENDSHIP ESTABLISHMENT		.86	

Codes: Coping Intentions for Overt Aggression		Variable Name	
POSITIVE/ADAPTIVE COPING STRATEGIES	Problem-Solving	problem solving effort	
		ask them to stop	
		stay away from them	
	Social Support Seeking Strategies	general adult	oacope_talktoadult
		friends	oacope_talktofriends
		someone	oacope_hangwfriends
		parents	oacope_bewfriends
		spiritual	oacope_talktosomeone
		sibling	oacope_talktoparents
		teachers/principal/dean	oacope_spiritual
		tell on them	oacope_talktosib
		distancing/avoidance/ignore	oacope_talktoteachers
self-blame	oacope_tellonthem		
NEGATIVE/MALADAPTIVE COPING STRATEGIES		oacope_distancing	
		oacope_sifblame	
		oacope_focuspositive	
		oacope_emotional	
		oacope_aggression	
		oacope_revenge	
		oacope_noticare	
		oacope_distract	
FRIENDSHIP ESTABLISHMENT	make new friends	oacope_newfriend	
	FINAL KAPPA:	.97	

Appendix T

Revised Coding Document (Used for Analyses) and Frequencies for Coping Intentions

Code Names for Coping Intentions about Relational Aggression					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 302 (Y / N)	Counts
<u>Problem-Solving</u>	racope_prbolsve	racope_asktostop		13 / 289	0, 1
<u>Social Support Seeking</u>	racope_talktosomeone	racope_talktosib	racope_talktobfgf	95 / 207	0, 1, 2, 3
	racope_talktoadult	racope_talktofriends	racope_hangwifriends		
	racope_withfriends	racope_talktoparents	racope_talktoteacher		
<u>Distancing</u>	racope_distancing			72 / 230	0, 1
<u>Revenge</u>	racope_overtagg	racope_revenge	racope_relationagg	22 / 280	0, 1, 2
<u>Distraction</u>	racope_distract	racope_calm		34 / 268	0, 1, 2
<u>Do Nothing</u>	racope_donothing	racope_notcare	racope_pretend	32 / 270	0, 1, 2
<u>Dissolve Relationship</u>	racope_endfriend	racope_newfriend	racope_endinteract	33 / 269	0, 1, 2

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Code Names for Coping Intentions about Overt Aggression					
	Includes which codes	Includes which codes	Includes which codes	Frequency of Codes N = 179 (Y / N)	Counts
<u>Problem-Solving</u>	oacope_prbsolve	oacope_asktostop	oacope_stayaway	12 / 167	0, 1, 2
<u>Social Support Seeking</u>	oacope_talktoadult	oacope_talktofriends	oacope_hangwfriends	68 / 111	0, 1, 2, 3
	oacope_bewfriends	oacope_talktosomeone	oacope_talktoparents		
	oacope_spiritual	oacope_talktosib	oacope_talktoteachers		
	oacope_talkonthem				
<u>Distancing</u>	oacope_distancing			32 / 147	0, 1
<u>Revenge</u>	oacope_aggression	oacope_revenge		34 / 145	0, 1, 2
<u>Distraction</u>	oacope_distract			13 / 166	0, 1

Note. In the “Frequency of Codes” column, “Yes” indicates the number of times this particular code was given, whereas “No” indicates the frequency of times this code was not reported.

Appendix U

Tables 1 through 35

Table 1.
Means and Standard Deviations for all Continuous Study Variables

Variable	Total		Girl		Boy		Chronbach's Alpha
	M	SD	M	SD	M	SD	
Perceived Popularity	.08	1.53	.17	1.57	-.10	1.42	
Social Preference	.56	1.68	.86	1.63	-.05	1.60	
Self-Reported Relational Aggression	1.95	.71	1.90	.68	2.05	.75	.79
Self-Reported Overt Aggression	1.75	.62	1.68	.56	1.90	.71	.62
Self-Reported Prosocial Behavior	3.77	.68	3.95	.61	3.39	.66	.69
Peer-Nominated Relational Aggression	.13	1.00	.94	4.53	-.31	2.43	.85
Peer-Nominated Overt Aggression	-.10	.64	-.38	1.90	-.13	1.94	.73
Peer-Nominated Prosocial Behavior	.40	1.15	2.25	4.90	.30	3.64	.84
Relational Aggression Attribution – Aggressor's Jealousy about Status	3.15	1.23	3.23	1.21	2.97	1.25	.73
Relational Aggression Attribution – Aggressor's Jealousy about Academics	3.00	1.12	2.99	1.12	3.01	1.12	.62
Relational Aggression Attribution – Victim-Blame	3.41	.98	3.44	.99	.36	.97	.59
Relational Aggression Attribution – Romantic Relationship Competition	3.71	1.30	3.90	1.24	3.32	1.33	
Overt Aggression Attribution – Aggressor's Jealousy about Status	3.06	1.21	3.15	1.21	2.89	1.20	.74
Overt Aggression Attribution – Aggressor's Jealousy about Academics	2.82	1.21	2.86	1.28	2.74	1.07	.75
Overt Aggression Attribution – Victim-Blame	3.44	.96	3.42	.98	3.47	.92	.62
Overt Aggression Attribution – Romantic Relationship Competition	3.55	1.32	3.63	1.33	3.41	1.30	
Prosocial Behavior Attribution – Giver's Jealousy about Status	3.12	1.13	3.18	1.14	3.00	1.10	.73
Prosocial Behavior Attribution – Giver's Jealousy about Academics	2.92	1.07	2.98	1.09	2.78	1.02	.71
Prosocial Behavior Attribution – Romantic Relationship Competition	2.69	1.38	2.75	1.41	2.57	1.32	
Relational Aggression Outcome Expectancy – Emotional Harm	3.32	1.24	3.38	1.23	3.18	1.27	
Relational Aggression Outcome Expectancy – Harm Victim's Status	3.43	1.16	3.59	1.16	3.13	1.12	.68
Relational Aggression Outcome Expectancy – Status Attainment	3.83	.98	3.87	.98	3.76	.98	.72
Overt Aggression Outcome Expectancy – Emotional Harm	3.44	1.34	3.65	1.27	3.06	1.39	
Overt Aggression Outcome Expectancy – Harm Victim's Status	3.43	1.27	3.47	1.17	3.34	1.45	.72
Overt Aggression Outcome Expectancy – Status Attainment	3.55	1.20	3.50	1.17	3.66	1.27	.76
Prosocial Behavior Outcome Expectancy – Relationship Maintenance	3.90	.98	3.92	.97	3.86	.99	.74
Prosocial Behavior Outcome Expectancy – Status Maintenance	3.23	1.07	3.21	1.10	3.27	1.01	.77

Note. Variables without Chronbach's alphas include those that are subtracted scores or one item.

Table 2.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Social Behaviors

	1	2	3	4	5	6	7	8
1. Perceived Popularity								
2. Social Preference	.32***							
3. SRRA	.07	-.20***						
4. SROA	.07	-.23***	.61***					
5. SRPB	.12*	.21***	-.14**	-.22***				
6. PNRA	.21***	-.10*	.20***	.19***	.07			
7. PNOA	-.12*	-.27***	.20***	.36***	-.02	.42***		
8. PNPB	.20***	.50***	-.15***	-.18***	.30***	.05	-.04	

Note. SRRA = self-reported relational aggression; SROA = self-reported overt aggression; SRPB = self-reported prosocial behaviors; PNRA = peer-nominated relational aggression; PNOA = peer-nominated overt aggression; PNPB = peer-nominated prosocial behaviors.

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

Table 3.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Social Behaviors split by Gender

	1	2	3	4	5	6	7	8
1. Perceived Popularity	---	.43***	.09	.04	.16	.37***	.13	.20*
2. Social Preference	.26***	---	-.12	-.25**	.19*	-.01	-.35***	.43***
3. SRRA	.09	-.21***	---	.64***	-.12	.15	.25**	-.01
4. SROA	.12+	-.16*	.59***	---	-.20*	.06	.30***	-.17+
5. SRPB	.05	.09	-.11+	-.15*	---	.20*	.05	.23*
6. PNRA	.16**	-.19**	.27***	.29***	-.04	---	.41***	.16+
7. PNOA	-.23***	-.22***	.15*	.39***	.01	.45***	---	-.09
8. PNPB	.19**	.49***	-.16*	-.15*	.25***	-.01	-.01	---

Note. Girls are included on the bottom half of the table and boys are included on the top half of the table. SRRA = self-reported relational aggression;

SROA = self-reported overt aggression; SRPB = self-reported prosocial behaviors; PNRA = peer-nominated relational aggression; PNOA = peer-nominated overt aggression; PNPB = peer-nominated prosocial behaviors.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Closed-Ended Attributions

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived Popularity													
2. Social Preference	.32***												
3. RA-ATT-Aggressor's Jealousy about Status	.08	-.02											
4. RA-ATT-Aggressor's Jealousy about Academics	-.08	-.04	.25***										
5. RA-ATT-Victim-Blame	.06	-.06	.44***	-.03									
6. RA-ATT-Romantic Relationship Competition	.05	.08	.36***	.03	.37***								
7. OA-ATT-Aggressor's Jealousy about Status	.06	.06	.53***	.34***	.32***	.21***							
8. OA-ATT-Aggressor's Jealousy about Academics	-.11	.01	.21**	.53***	.15*	.06	.50***						
9. OA-ATT-Victim-Blame	.14*	.07	.29***	.08	.56***	.23***	.46***	.24***					
10. OA-ATT-Romantic Relationship Competition	.06	.02	.24***	.15*	.25***	.44***	.33***	.19**	.50***				
11. PB-ATT-Giver's Jealousy about Status	.07	-.08	.19***	.09	.19***	.10	.22***	.10	.14*	.13+			
12. PB-ATT-Giver's Jealousy about Academics	.02	-.11+	.13*	.13*	.11*	-.05	.15*	.23***	.11+	-.06	.55***		
13. PB-ATT-Romantic Relationship Competition	.05	-.06	.13*	.11+	.08	.13*	.10	.09	-.04	.01	.33***	.28***	

Note. RA = Relational aggression; OA = Overt Aggression; PB = Prosocial Behaviors; ATT = Attributions.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Closed-Ended Attributions split by Gender

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Perceived Popularity	---	.43***	.14	-.13	.12	.08	.02	-.28*	.19+	-.01	-.03	.04	-.12
2. Social Preference	.26***	---	-.03	-.06	-.02	.08	.03	-.16	.21+	.03	-.14	-.11	-.17
3. RA-ATT-Aggressor's Jealousy about Status	.05	-.04	---	.30***	.46***	.38***	.58***	.27*	.28*	.23*	.22*	.11	-.03
4. RA-ATT-Aggressor's Jealousy about Academics	-.05	-.02	.23***	---	-.03	.19*	.31**	.60***	-.07	-.28*	.21*	.13	.21*
5. RA-ATT-Victim-Blame	.04	-.08	.42***	-.02	---	.48***	.36**	-.03	.64***	.26*	.22*	-.02	-.05
6. RA-ATT-Romantic Relationship Competition	.02	.01	.33***	-.05	.32***	---	.44***	.17	.42***	-.38***	.22*	-.18+	.07
7. OA-ATT-Aggressor's Jealousy about Status	.05	.03	.50***	.36***	.31***	.07	---	.47***	.30**	.35***	.27*	.01	.04
8. OA-ATT-Aggressor's Jealousy about Academics	-.03	.05	.18*	.51***	.22**	-.01	.53***	---	.03	.24*	.08	.12	.09
9. OA-ATT-Victim-Blame	.11	.01	.30***	.15+	.53***	.15+	.54***	.33***	---	.40***	.12	.06	-.18
10. OA-ATT-Romantic Relationship Competition	.07	-.03	.25**	.09	.25**	.46***	.31***	.16*	.56***	---	.27*	-.17	-.09
11. PB-ATT-Giver's Jealousy about Status	.11	-.09	.17*	.04	.17*	.02	.18*	.10	.16+	.04	---	.41***	.23*
12. PB-ATT-Giver's Jealousy about Academics	-.02	-.15*	.13+	.14+	.17*	-.01	.22**	.28***	.14+	-.01	.61***	----	.21*
13. PB-ATT-Romantic Relationship Competition	.13+	-.04	.20**	.07	.14*	.14*	.12	.09	.02	.04	.37***	.30***	---

Note. Girls are included on the bottom half of the table and boys are included on the top half of the table. RA = Relational aggression; OA = Overt

Aggression; PB = Prosocial Behaviors; ATT = Attributions.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Closed-Ended Outcome Expectancies

	1	2	3	4	5	6	7	8	9	10
1. Perceived Popularity										
2. Social Preference	.32***									
3. RA-OE-Emotional Harm	-.06	.04								
4. RA-OE-Status Harm	.01	.07	.50***							
5. RA-OE-Status Attainment	-.04	.02	.43***	.51***						
6. OA-OE-Emotional Harm	.10	.22**	.53***	.40***	.36***					
7. OA-OE-Status Harm	-.10	.01	.06	.14*	.16*	.01				
8. OA-OE-Status Attainment	-.03	.01	-.04	.04	.09	.03	.63***			
9. PB-OE-Relationship Maintenance	.02	.05	.21***	.24***	.16**	.15*	-.02	-.03		
10. PB-OE-Status Maintenance	-.05	-.07	.15*	.15*	.30***	.28***	-.01	-.01	.28***	

Note. RA = Relational aggression; OA = Overt Aggression; PB = Prosocial Behaviors; OE = Outcome Expectancies.

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

Table 7.

Bivariate Pearson Correlations among Perceived Popularity, Social Preference, and Closed-Ended Outcome Expectancies split by Gender

	1	2	3	4	5	6	7	8	9	10
1. Perceived Popularity	---	.43***	.05	.02	-.11	.17	-.18	-.05	.12	-.15
2. Social Preference	.26***	---	.09	.08	-.01	.15	.01	.10	.16	-.20+
3. RA-OE-Emotional Harm	-.13+	-.02	---	.64***	.40***	.56***	.11	-.05	.18	.06
4. RA-OE-Status Harm	-.04	-.01	.42***	---	.52***	.38***	.13	.02	.23*	.21+
5. RA-OE-Status Attainment	-.02	.01	.44***	.50***	---	.36***	.16	.02	.17	.43***
6. OA-OE-Emotional Harm	-.03	.15+	.48***	.38***	.35***	---	-.15	-.24+	.19	.28*
7. OA-OE-Status Harm	-.06	-.01	.02	.14	.16+	.11	---	.72***	-.14	-.04
8. OA-OE-Status Attainment	.01	-.01	-.01	.08	.14	.23*	.58***	---	-.12	-.04
9. PB-OE-Relationship Maintenance	-.05	-.01	.23**	.25***	.16*	.11	.05	.02	---	.38***
10. PB-OE-Status Maintenance	.01	-.02	.21**	.14+	.26***	.29***	-.03	.02	.23**	---

Note. Girls are included on the bottom half of the table and boys are included on the top half of the table. RA = Relational aggression; OA = Overt

Aggression; PB = Prosocial Behaviors; OE = Outcome Expectancies.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8.

Hierarchical Multiple Regressions for Predicting Social Behaviors from Gender and Peer Status

	Overt Aggression			Relational Aggression			Prosocial Behavior		
	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Self-Report Behaviors</u>									
Block 1		.03	.03**		.02	.02*		.14	.14***
Gender	.17**			.13*			-.38***		
Block 2		.09	.06***		.07	.05***		.16	.02*
Gender	.12*			.09			-.35***		
Perceived Popularity	.15**			.14**			.06		
Social Preference	-.24***			-.22***			.10+		
Block 3		.09	.01		.07	.01		.16	.01
Gender	.09			.09			-.34		
Perceived Popularity	.06			.05			-.04		
Social Preference	.05			-.22			-.01		
Perceived Popularity X Gender	.11			.01			.10		
Social Preference X Gender	-.33			-.01			.11		
<u>Peer-Nomination Behaviors</u>									
Block 1		.01	.01		.02	.02**		.04	.04***
Gender	.06			-.15**			-.20***		
Block 2		.07	.07***		.11	.09***		.26	.22***
Gender	-.01			-.18***			-.08+		
Perceived Popularity	-.04			.27***			.05		
Social Preference	-.26***			-.24***			.46***		
Block 3		.13	.06***		.11	.01		.26	.01
Gender	-.03			-.17			-.09		
Perceived Popularity	-.73***			.21			.12		
Social Preference	.18			-.45			.68		
Perceived Popularity X Gender	.75***			.06			-.07		
Social Preference X Gender	-.49**			.23			-.23		

Note. Gender was coded as follows: Girls = 1, Boys = 2. The regression coefficient for social preference changed from a negative value in Block 2 to a positive value in Block 3, which may suggest a suppressor effect

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Social Preference	-.14	.03	.01	-.15	.03	.01	-.10	.03	.01
Block 3									
Gender	-.10			-.13			-.09		
Perceived Popularity	.22			-.09			.35		
Social Preference	-.07			-.16			-.01		
Perceived Popularity X Gender	-.13			.14			-.30		
Social Preference X Gender	-.06			.01			-.09		

Note. Gender was coded as follows: Girls = 1, Boys = 2. There were no analyses conducted for the attribution of victim-blame regarding prosocial behavior because this attribution was not included in this study.

+ $p < .10$. *** $p < .001$.

Table 10.

Logistic Regressions for Predicting Open-Ended Attributions regarding Aggressive Behaviors Vignettes from Gender and Peer Status

	Relational Aggression Vignette		Overt Aggression Vignette	
	OR (SE)	95% CI	OR (SE)	95% CI
Aggressor's Jealousy				
Block 1				
Gender	.52 (.36)	.26 to 1.05	.58 (.49)	.22 to 1.51
Block 2				
Gender	.60 (.37)	.29 to 1.24	.74 (.51)	.28 to 2.00
Perceived Popularity	1.04 (.09)	.85 to 1.27	1.15 (.17)	.83 to 1.59
Social Preference	1.18 (.11)	.98 to 1.42	1.31* (.14)	1.01 to 1.72
Block 3				
Gender	.56 (.39)	.26 to 1.20	.57 (.59)	.18 to 1.81
Perceived Popularity	.89 (.34)	.46 to 1.71	1.10 (.52)	.40 to 3.05
Social Preference	.84 (.32)	.44 to 1.58	.74 (.52)	.27 to 2.03
Perceived Popularity X Gender	1.13 (.27)	.66 to 1.93	.99 (.40)	.46 to 2.16
Social Preference X Gender	1.35 (.27)	.79 to 2.29	1.67 (.45)	.69 to 4.03
Bad Behavior of Victim				
Block 1				
Gender	1.85 (.16)	.79 to 4.32	.75 (.83)	.15 to 3.83
Block 2				
Gender	2.02 (.45)	.83 to 4.91	1.07 (.89)	.19 to 6.17
Perceived Popularity	.90 (.15)	.68 to 1.20	.56 (.26)	.27 to 1.15
Social Preference	1.11 (.14)	.84 to 1.46	1.70 (.37)	1.03 to 2.81
Block 3				
Gender	1.96 (.46)	.79 to 4.86	.68 (1.20)	.06 to 7.14
Perceived Popularity	1.38 (.48)	.54 to 3.55	1.44 (1.15)	.15 to 13.62
Social Preference	1.13 (.42)	.49 to 2.57	1.18 (.87)	.22 to 6.42
Perceived Popularity X Gender	.72 (.35)	.37 to 1.44	.50 (.84)	.10 to 2.61
Social Preference X Gender	1.01 (.30)	.56 to 1.82	1.38 (.73)	.33 to 5.80
Bad Characteristic of Victim				
Block 1				
Gender			1.37 (.50)	.51 to 3.67
Block 2				
Gender			1.25 (.52)	.45 to 3.50
Perceived Popularity			.98 (.19)	.67 to 1.44
Social Preference			.92 (.16)	.67 to 1.26
Block 3				
				2.38

Gender	1.20 (.57)	.39 to 3.64
Perceived Popularity	2.08 (.57)	.68 to 6.38
Social Preference	.98 (.48)	.38 to 2.53
Perceived Popularity X Gender	.60 (.41)	.27 to 1.33
Social Preference X Gender	.99 (.35)	.50 to 1.98

Note. Gender was coded as follows: Girls = 1, Boys = 2. The “Bad Characteristic of Victim” for relational aggression was not displayed in this table because poisson regression was used for this analysis as the data were counts and thus it is included in Table 11.

+ $p < .10$. * $p < .05$.

Table 11.

Poisson Regressions for Predicting Open-Ended Attributions Regarding Aggressive Behaviors Vignettes from Gender and Peer Status

	Relational Aggression Vignette			Overt Aggression Vignette		
	<i>B</i> (<i>SE</i>)	<i>e^β</i>	95% CI	<i>B</i> (<i>SE</i>)	<i>e^β</i>	95% CI
Proactive Aggression						
Gender	-.12 (.32)	.89	-.75 to .51	.19 (.34)	1.21	-.47 to .86
Perceived Popularity	-.10 (.28)	.90	-.64 to .45	.01 (.41)	1.01	-.80 to .82
Social Preference	.01 (.27)	1.01	-.51 to .53	-.04 (.34)	.96	-.67 to .59
Perceived Popularity X Gender	.07 (.22)	1.07	-.36 to .50	-.11 (.29)	.90	-.67 to .45
Social Preference X Gender	-.01 (.20)	.99	-.41 to .39	.14 (.24)	1.15	-.34 to .61
χ^2	.27			2.31		
<i>df</i>	5			5		
Reactive Aggression						
Gender	.41 (.25)	1.51	-.08 to .91	.48 (.29)	1.62	-.10 to 1.06
Perceived Popularity	-.05 (.24)	.95	-.51 to .41	-.37 (.38)	.69	-.12 to .39
Social Preference	.05 (.23)	1.05	-.40 to .49	.14 (.29)	1.15	-.43 to .70
Perceived Popularity X Gender	-.12 (.19)	.89	-.48 to .25	.17 (.25)	1.18	-.32 to .66
Social Preference X Gender	.08 (.17)	1.08	-.25 to .41	-.04 (.20)	.96	-.44 to .36
χ^2	8.86			3.99		
<i>df</i>	5			5		
Romantic Relationship						
Competition						
Gender	-2.30** (.85)	.10	-3.97 to -.63	-.12 (.64)	.89	-1.36 to 1.13
Perceived Popularity	-.18 (.53)	.84	-1.22 to .86	.06 (.61)	1.06	-1.14 to 1.25
Social Preference	.30 (.50)	1.35	-.68 to 1.28	-.64 (.58)	.53	-1.78 to .51
Perceived Popularity X Gender	.13 (.50)	1.14	-.86 to 1.12	.11 (.45)	1.12	-.76 to .99
Social Preference X Gender	-.25 (.47)	.78	-1.18 to .68	.37 (.47)	1.45	-.54 to 1.29
χ^2	18.62**			3.38		
<i>df</i>	5			5		
Aggressor's Characteristics						
Gender	.23 (.24)	1.26	-.24 to .70	.01 (.43)	1.01	-.83 to .85
Perceived Popularity	.07 (.22)	1.07	-.36 to .50	-.49 (.48)	.61	-1.44 to .46
Social Preference	-.20 (.22)	.82	-.62 to .23	.27 (.37)	1.31	-.46 to 1.00
Perceived Popularity X Gender	-.12 (.17)	.89	-.46 to .22	.35 (.33)	1.42	-.30 to .99
Social Preference X Gender	.13 (.16)	1.14	-.18 to .44	-.25 (.27)	.78	-.79 to .28
χ^2	3.82			1.61		
<i>df</i>	5			5		
Status Desires						

Gender	.25 (.38)	1.28	-.49 to .99	-.45 (.40)	.64	-1.23 to .34
Perceived Popularity	-.12 (.35)	.89	-.81 to .57	-.74 (.41)	.48	-1.54 to .06
Social Preference	-.31 (.35)	.73	-.99 to .38	-.05 (.34)	.95	-.71 to .61
Perceived Popularity X Gender	.08 (.27)	1.08	-.44 to .60	.53 (.30)	1.70	-.06 to 1.11
Social Preference X Gender	.31 (.26)	1.36	-.21 to .82	-.06 (.27)	.94	-.58 to .47
χ^2	3.10			5.98		
<i>df</i>	5			5		
Conflict						
Gender	.24 (.30)	1.27	-.34 to .82	.11 (.48)	1.12	-.83 to 1.05
Perceived Popularity	.58 (.26)	1.79	.08 to 1.09	.45 (.49)	1.57	-.50 to 1.41
Social Preference	.24 (.24)	1.27	-.22 to .70	-.11 (.42)	.90	-.93 to .71
Perceived Popularity X Gender	-.39 (.19)	.68	-.77 to -.01	-.31 (.34)	.73	-.98 to .37
Social Preference X Gender	-.14 (.18)	.87	-.49 to -.21	.04 (.31)	1.04	-.56 to .64
χ^2	9.68+			1.64		
<i>df</i>	5			5		
Bad Characteristic of Victim						
Gender	.34 (.32)	1.41	-.28 to .97			
Perceived Popularity	-.02 (.32)	.98	-.64 to .60			
Social Preference	.03 (.29)	1.03	-.54 to .59			
Perceived Popularity X Gender	-.03 (.24)	.97	-.50 to .44			
Social Preference X Gender	.07 (.21)	1.07	-.35 to .49			
χ^2	2.26					
<i>df</i>	5					

Note. Gender was coded as follows: Girls = 1, Boys = 2. The “Bad Characteristic of Victim” for relational aggression was not displayed in the table above because logistic regression was used for this analysis as the data was binary and thus it is included in Table 10.

+ $p < .10$. ** $p < .01$.

Table 12.

Logistic Regressions for Predicting Open-Ended Attributions regarding Prosocial Behavior Vignette from Gender and Peer Status

	Prosocial Behavior Vignette		
	<i>OR (SE)</i>	<i>95% CI</i>	χ^2
<u>Receiver's Characteristics</u>			
Block 1			.18
Gender	1.27 (.56)	.43 to 3.81	
Block 2			.61
Gender	1.27 (.57)	.42 to 3.91	
Perceived Popularity	1.15 (.18)	.81 to 1.63	
Social Preference	.98 (.17)	.71 to 1.35	
Block 3			5.38+
Gender	1.39 (.63)	.40 to 4.79	
Perceived Popularity	3.72 (.53)	1.32 to 10.52	
Social Preference	.64 (.53)	.23 to 1.82	
Perceived Popularity X Gender	.40 (.41)	.18 to .89	
Social Preference X Gender	1.47 (.41)	.66 to 3.26	
<u>Friendship Establishment</u>			
Block 1			.09
Gender	1.15 (.47)	.45 to 2.92	
Block 2			6.68*
Gender	1.23 (.50)	.46 to 3.30	
Perceived Popularity	.65* (.18)	.46 to .92	
Social Preference	1.22 (.15)	.92 to 1.63	
Block 3			6.12*
Gender	1.53 (.54)	.60 to 5.24	
Perceived Popularity	.18** (.58)	.06 to .56	
Social Preference	1.99 (.45)	.83 to 4.78	
Perceived Popularity X Gender	2.49* (.37)	1.21 to 5.12	
Social Preference X Gender	.68 (.32)	.37 to 1.27	
<u>Romantic Relationship Establishment</u>			
Block 1			.18
Gender	1.23 (.48)	.48 to 3.14	
Block 2			3.26
Gender	1.02 (.50)	.38 to 2.71	
Perceived Popularity	.87 (.16)	.63 to 1.19	
Social Preference	.85 (.15)	.64 to 1.27	
Block 3			1.90
Gender	1.15 (.52)	.42 to 3.18	
Perceived Popularity	.49 (.51)	.18 to 1.34	
Social Preference	.73 (.45)	.30 to 1.76	
Perceived Popularity X Gender	1.47 (.34)	.75 to 2.85	
Social Preference X Gender	1.10 (.32)	.59 to 2.05	

Note. Gender was coded as follows: Girls = 1, Boys = 2.

+ $p < .10$. * $p < .05$. ** $p < .01$.

Table 13.

Poisson Regressions for Predicting Open-Ended Attributions regarding Prosocial Behavior Vignette fromGender and Peer Status

	Prosocial Behavior Vignette		
	<i>B (SE)</i>	<i>e^B</i>	95% <i>CI</i>
Event			
Gender	-.95 (1.04)	.39	-2.98 to 1.09
Perceived Popularity	-.45 (.65)	.64	-1.74 to .83
Social Preference	.09 (.65)	1.09	-1.18 to 1.35
Perceived Popularity X Gender	.18 (.47)	1.20	-.74 to 1.10
Social Preference X Gender	-.22 (.52)	.80	-1.23 to .78
χ^2	3.74		
<i>df</i>	5		
Giver Characteristics			
Gender	-.45 (.31)	.64	-1.05 to .15
Perceived Popularity	-.13 (.27)	.88	-.66 to .41
Social Preference	-.37 (.27)	.69	-.89 to .15
Perceived Popularity X Gender	.08 (.21)	1.08	-.34 to .49
Social Preference X Gender	.32 (.22)	1.38	-.11 to .76
χ^2	6.03		
<i>df</i>	5		
Selfish Motivations			
Gender	-.16 (.42)	.85	-.98 to .66
Perceived Popularity	-.03 (.41)	.97	-.83 to .78
Social Preference	-.09 (.36)	.91	-.80 to .62
Perceived Popularity X Gender	-.14 (.31)	.87	-.74 to .47
Social Preference X Gender	.19 (.29)	1.21	-.39 to .76
χ^2	3.27		
<i>df</i>	5		
Friendship Expectations			
Gender	.37 (.34)	1.45	-.31 to 1.04
Perceived Popularity	-.09 (.38)	.91	-.83 to .65
Social Preference	-.52 (.34)	.59	-1.19 to .15
Perceived Popularity X Gender	.01 (.28)	1.01	-.51 to .50
Social Preference X Gender	.41 (.25)	1.51	-.08 to .90
χ^2	4.63		
<i>df</i>	5		
Desire to Help			
Gender	-1.06* (.47)	.35	-1.97 to -.15
Perceived Popularity	.08 (.33)	1.08	-.56 to .73
Social Preference	.02 (.34)	1.02	-.64 to .68
Perceived Popularity X Gender	.04 (.28)	1.04	-.51 to .59
Social Preference X Gender	.07 (.30)	1.07	-.53 to .66
χ^2	13.18*		
<i>df</i>	5		

Note. Gender was coded as follows: Girls = 1, Boys = 2.

* $p < .05$.

Table 14.

Hierarchical Multiple Regressions for Predicting Closed-Ended Outcome Expectancies regarding Aggressive Behaviors Vignettes from Gender and Peer

Status

	Emotional Harm		Harm Victim's Status		Status Attainment	
	β	$R^2 \Delta R^2$	β	$R^2 \Delta R^2$	β	$R^2 \Delta R^2$
<u>Overt Aggression Vignette</u>						
Block 1		.06 .06***		.01 .01		.01 .01
Gender	-.25***		-.05		.07	
Block 2		.09 .02+		.02 .01		.01 .01
Gender	-.21		-.05		.08	
Perceived Popularity	-.01		-.12		-.03	
Social Preference	.16		.04		.05	
Block 3		.09 .01		.02 .01		.02 .01
Gender	-.21		-.03		.10	
Perceived Popularity	-.27		.16		.17	
Social Preference	.26		-.17		-.22	
Perceived Popularity X Gender	.30		-.32		-.24	
Social Preference X Gender	-.13		.26		.31	
<u>Relational Aggression Vignette</u>						
Block 1		.01 .01		.04 .04***		.01 .01
Gender	-.09		-.20***		-.08	
Block 2		.02 .01		.04 .01		.01 .01
Gender	-.09		-.19		-.08	
Perceived Popularity	-.09		-.03		-.05	
Social Preference	.05		.03		.02	
Block 3		.02 .01		.04 .01		.01 .01
Gender	-.08		-.20		-.08	
Perceived Popularity	-.26		-.04		.12	
Social Preference	-.07		-.09		-.05	
Perceived Popularity X Gender	.19		.01		-.19	
Social Preference X Gender	.12		.13		.09	

Note. Gender was coded as follows: Girls = 1, Boys = 2.

+ $p < .10$. *** $p < .001$.

Table 15.

Hierarchical Multiple Regressions for Predicting Closed-Ended Outcome Expectancies regarding Prosocial Behavior Vignette from Gender and Peer Status

	Relationship Maintenance			Status Maintenance		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Prosocial Behavior Vignette</u>						
Block 1		.01	.01		.01	.01
Gender	-.03			.01		
Block 2		.01	.01		.01	.01
Gender	-.02			-.02		
Perceived Popularity	-.01			-.03		
Social Preference	.05			-.06		
Block 3		.01	.01		.01	.01
Gender	-.01			-.03		
Perceived Popularity	-.14			.08		
Social Preference	-.14			.13		
Perceived Popularity X Gender	.14			-.10		
Social Preference X Gender	.20			-.20		

Note. Gender was coded as follows: Girls = 1, Boys = 2.

Table 16.

Logistic Regressions for Predicting Open-Ended Outcome Expectancies regarding Aggressive BehaviorsVignettes from Gender and Peer Status

	Relational Aggression Vignette			Overt Aggression Vignette		
	OR (SE)	95% CI	χ^2	OR (SE)	95% CI	χ^2
<u>Harm Victim's Status and Friendships</u>						
Block 1			.01			.17
Gender	1.05 (.42)	.46 to 2.37		.83 (.45)	.35 to 2.01	
Block 2			.65			.10
^N Gender	1.08 (.43)	.46 to 2.53		.84 (.46)	.34 to 2.07	
Perceived Popularity	.90 (.13)	.71 to 1.15		.95 (.17)	.69 to 1.32	
^O Social Preference	1.05 (.12)	.82 to 1.33		1.03 (.13)	.80 to 1.32	
Block 3			1.57			.11
^t Gender	1.42 (.42)	.50 to 2.62		.82 (.47)	.32 to 2.07	
Perceived Popularity	1.02 (.41)	.46 to 2.27		.95 (.52)	.35 to 2.63	
^e Social Preference	.67 (.39)	.31 to 1.44		1.15 (.40)	.52 to 2.54	
Perceived Popularity X Gender	.90 (.36)	.47 to 1.74		1.01 (.37)	.49 to 2.10	
[.] Social Preference X Gender	1.42 (.30)	.80 to 2.53		.91 (.31)	.50 to 1.69	
<u>Create Aggression</u>						
Block 1						2.12
Gender				.46 (.58)	.15 to 1.41	
Block 2						4.25
^G Gender				.52 (.60)	.16 to 1.67	
^e Perceived Popularity				.73 (.21)	.48 to 1.11	
Social Preference				1.32 (.15)	.98 to 1.77	
Block 3						.18
ⁿ Gender				.49 (.63)	.14 to 1.69	
^d Perceived Popularity				.90 (.66)	.25 to 3.26	
Social Preference				1.36 (.51)	.50 to 3.70	
^e Perceived Popularity X Gender				.87 (.50)	.33 to 2.31	
^r Social Preference X Gender				.98 (.43)	.42 to 2.26	
<u>Change the Victim</u>						
Block 1			1.86			
Gender	2.07 (.52)	.74 to 5.75				
Block 2			.56			
^w Gender	1.86 (.54)	.64 to 5.37				
Perceived Popularity	1.02 (.17)	.73 to 1.41				
^a Social Preference	.89 (.17)	.64 to 1.23				
Block 3			1.98			
^s Gender	2.01 (.56)	.67 to 5.58				
Perceived Popularity	2.06 (.5)	.70 to 6.07				
Social Preference	.61 (.52)	.22 to 1.70				
Perceived Popularity X Gender	.59 (.40)	.27 to 1.28				
^c Social Preference X Gender	1.35 (.36)	.67 to 2.72				

oded as follows: Girls = 1, Boys = 2. The "Create Aggression" for relational aggression was not displayed

in this table because poisson regression was used for this analysis as the data were counts and thus it is

included in Table 17. "Change the Victim" is not a code that was used for overt aggression.

Table 17.

Poisson Regressions for Predicting Open-Ended Outcome Expectancies regarding Aggressive BehaviorsVignettes from Gender and Peer Status

	Relational Aggression Vignette			Overt Aggression Vignette		
	<i>B (SE)</i>	<i>e^B</i>	95% <i>CI</i>	<i>B (SE)</i>	<i>e^B</i>	95% <i>CI</i>
Harm Victim Emotionally						
Gender	-.02 (.31)	.98	-.63 to .59	-.04 (.36)	.96	-.75 to .67
Perceived Popularity	-.10 (.27)	.90	-.62 to .43	-.03 (.42)	.97	-.86 to .82
Social Preference	-.30 (.27)	.74	-.83 to .23	-.51 (.34)	.60	-1.18 to .16
Perceived Popularity X Gender	.06 (.22)	1.06	-.36 to .49	-.08 (.31)	.92	-.68 to .52
Social Preference X Gender	.20 (.20)	1.22	-.20 to .59	.40 (.27)	1.49	-.12 to .92
χ^2	2.29			3.12		
<i>df</i>	5			5		
Gain Status						
Gender	.17 (.32)	1.19	-.47 to .81	.09 (.33)	1.09	-.57 to .74
Perceived Popularity	.13 (.31)	1.14	-.47 to .73	.44 (.35)	1.55	-.25 to 1.12
Social Preference	.33 (.26)	1.39	-.18 to .83	-.09 (.29)	.91	-.67 to .48
Perceived Popularity X Gender	-.06 (.23)	.94	-.51 to .40	-.31 (.26)	.73	-.82 to .20
Social Preference X Gender	-.12 (.20)	.89	-.51 to .27	.22 (.24)	1.25	-.24 to .68
χ^2	6.61			6.37		
<i>df</i>	5			5		
Create Aggression						
Gender	-.40 (.28)	.64	-.96 to .16			
Perceived Popularity	-.35 (.22)	.70	-.78 to .08			
Social Preference	.01 (.22)	1.01	-.42 to .44			
Perceived Popularity X Gender	.29 (.17)	1.34	-.05 to .63			
Social Preference X Gender	.05 (.17)	1.05	-.29 to .40			
χ^2	7.34					
<i>df</i>	5					

Note. Gender was coded as follows: Girls = 1, Boys = 2. The “Create Aggression” for overt aggression was not displayed in this table because logistic regression was used for this analysis as the data was binary and thus it is included in Table 16.

Table 18.

Logistic Regressions for Predicting Open-Ended Outcome Expectancies regarding Prosocial BehaviorVignette from Gender and Peer Status

	Prosocial Behavior Vignette		
	OR (SE)	95% CI	χ^2
<u>Selfish Motivations</u>			
Block 1			2.31
Gender	.41 (.64)	.12 to 1.44	
Block 2			.12
Gender	.41 (.65)	.11 to 1.48	
Perceived Popularity	.94 (.17)	.67 to 1.32	
Social Preference	1.02 (.15)	.77 to 1.36	
Block 3			2.67
Gender	.36 (.77)	.08 to 1.51	
Perceived Popularity	1.27 (.61)	.39 to 4.17	
Social Preference	.40 (.64)	.11 to 1.41	
Perceived Popularity X Gender	.75 (.51)	.28 to 2.01	
Social Preference X Gender	2.33 (.58)	.75 to 7.24	
<u>Develop & Maintain Friendships</u>			
Block 1			.40
Gender	.79 (.38)	.37 to 1.67	
Block 2			3.49
Gender	.92 (.39)	.43 to 1.99	
Perceived Popularity	.94 (.12)	.74 to 1.20	
Social Preference	1.22 (.11)	.99 to 1.51	
Block 3			4.47
Gender	.79 (.43)	.34 to 1.81	
Perceived Popularity	1.14 (.40)	.53 to 2.47	
Social Preference	.57 (.40)	.26 to 1.25	
Perceived Popularity X Gender	.83 (.30)	.46 to 1.49	
Social Preference X Gender	1.92 (.34)	.99 to 3.74	
<u>Develop Romantic Relationships</u>			
Block 1			1.23
Gender	.18 (.29)	.01 to 1.13	
Block 2			4.10
Gender	.08 (.21)	.11 to 1.01	
Perceived Popularity	.69 (.28)	.40 to 1.19	
Social Preference	.75 (.24)	.47 to 1.19	
Block 3			2.61
Gender	.01 (.20)	-.74 to .51	
Perceived Popularity	.48 (.43)	.21 to 1.23	
Social Preference	.56 (.39)	.29 to 1.32	
Perceived Popularity X Gender	1.45 (.31)	.84 to 3.52	
Social Preference X Gender	1.33 (.23)	.47 to 3.24	

Note. Gender was coded as follows: Girls = 1, Boys = 2.

Table 19.

Poisson Regressions for Predicting Open-Ended Outcome Expectancies regarding Prosocial BehaviorVignette from Gender and Peer Status

	Prosocial Behavior Vignette		
	<i>B</i> (SE)	e^B	95% <i>CI</i>
Help the Receiver			
Gender	-.09 (.29)	.91	-.65 to .47
Perceived Popularity	.05 (.27)	1.05	-.48 to .59
Social Preference	-.04 (.25)	.96	-.52 to .46
Perceived Popularity X Gender	-.07 (.20)	.93	-.47 to .33
Social Preference X Gender	.16 (.20)	1.17	-.24 to .55
χ^2	5.02		
<i>df</i>	5		
Gain Status			
Gender	.81 (.41)	2.25	.01 to 1.61
Perceived Popularity	.46 (.36)	1.58	-.25 to 1.18
Social Preference	.18 (.35)	1.20	-.50 to .86
Perceived Popularity X Gender	-.24 (.25)	.79	-.73 to .25
Social Preference X Gender	-.02 (.25)	.98	-.51 to .47
χ^2	6.64		
<i>df</i>	5		

Note. Gender was coded as follows: Girls = 1, Boys = 2.

Table 20.

Logistic Regressions for Predicting Coping Intentions from Gender and Peer Status

	Relational Aggression Vignette			Overt Aggression Vignette		
	OR (SE)	95% CI	χ^2	OR (SE)	95% CI	χ^2
<u>Problem-Solving</u>						
Block 1						
Gender	1.78 (.60)	.55 to 5.78	.89			
Block 2						
Gender	1.60 (.62)	.47 to 5.43	.56			
Perceived Popularity	1.09 (.20)	.73 to 1.62				
Social Preference	.87 (.20)	.59 to 1.28				
Block 3						
Gender	1.81 (.64)	.52 to 6.28	2.31			
Perceived Popularity	.79 (.53)	.28 to 2.23				
Social Preference	.48 (.64)	.14 to 1.67				
Perceived Popularity X Gender	1.26 (.40)	.57 to 2.75				
Social Preference X Gender	1.53 (.46)	.62 to 3.75				
<u>Distancing</u>						
Block 1						
Gender	.93 (.31)	.51 to 1.69	.07	.97 (.44)	.41 to 2.30	.01
Block 2						
Gender	1.02 (.32)	.55 to 1.92	3.31	.96 (.46)	.39 to 2.38	.98
Perceived Popularity	1.14 (.10)	.93 to 1.40		.85 (.17)	.61 to 1.18	
Social Preference	1.08 (.09)	.90 to 1.29		1.06 (.13)	.81 to 1.38	
Block 3						
Gender	1.02 (.33)	.54 to 1.93	.53	.99 (.45)	.41 to 2.42	.86
Perceived Popularity	1.00 (.32)	.54 to 1.87		.63 (.56)	.21 to 1.90	
Social Preference	.96 (.30)	.54 to 1.73		.88 (.42)	.39 to 2.00	
Perceived Popularity X Gender	1.10 (.24)	.69 to 1.77		1.19 (.37)	.58 to 2.45	
Social Preference X Gender	1.09 (.24)	.69 to 1.74		1.15 (.32)	.62 to 2.14	
<u>Distraction</u>						
Block 1						
Gender				1.39 (.60)	.43 to 4.47	.30
Block 2						
Gender				1.39 (.63)	.40 to 4.86	1.92
Perceived Popularity				.72 (.25)	.45 to 1.16	
Social Preference				1.15 (.20)	.78 to 1.69	
Block 3						
Gender				1.52 (.65)	.43 to 5.41	.77
Perceived Popularity				.35 (.88)	.06 to 1.97	
Social Preference				1.33 (.60)	.41 to 4.33	
Perceived Popularity X Gender				1.57 (.53)	.55 to 4.46	
Social Preference X Gender				.89 (.42)	.39 to 2.05	

Note. Gender was coded as follows: Girls = 1, Boys = 2. The “Problem-Solving” for overt aggression and “Distraction” for relational aggression were not displayed in this table because poisson regression was used for these analyses as the data were counts and thus they are included in Table 21.

Table 21.

Poisson Regressions for Predicting Coping Intentions from Gender and Peer Status

		Relational Aggression Vignette		Overt Aggression Vignette	
		B (SE)	e^{β}	B (SE)	e^{β}
		95% CI		95% CI	
Problem-Solving					
Gender		.40 (.67)	1.49		-90 to 1.71
Perceived Popularity		-1.18 (.64)	.31		-2.44 to .07
Social Preference		-.75 (.57)	.47		-1.87 to .38
Perceived Popularity X Gender		.68 (.42)	1.97		-1.5 to 1.50
Social Preference X Gender		.31 (.39)	1.36		-.46 to 1.08
χ^2		8.91			
df		5			
Social Support Seeking					
Gender		-.74** (.28)	.48	-1.29 to -.18	
Perceived Popularity		.51* (.23)	1.67	.07 to .96	
Social Preference		-.22 (.23)	.80	-.66 to .22	
Perceived Popularity X Gender		-.44* (.19)	.64	-.81 to -.07	
Social Preference X Gender		.17 (.19)	1.19	-.20 to .55	
χ^2		12.99*			
df		5			
Revenge					
Gender		1.08 (.47)	2.94	.16 to 2.01	
Perceived Popularity		-.43 (.40)	.65	-1.21 to .35	
Social Preference		.53 (.43)	1.70	-.30 to 1.37	
Perceived Popularity X Gender		.15 (.28)	1.16	-.39 to .70	
Social Preference X Gender		-.26 (.29)	.77	-.82 to .31	
χ^2		8.24			
df		5			
Distraction					
Gender		.25 (.37)	1.28	-.49 to .43	
Perceived Popularity		-.32 (.32)	.73	-.95 to .32	
Social Preference		-.01 (.36)	.99	-.72 to .70	
Perceived Popularity X Gender		.13 (.26)	1.14	-.39 to .64	
Social Preference X Gender		.11 (.28)	1.12	-.44 to .66	
χ^2		3.46			
df		5			
Do Nothing					
Gender		.19 (.43)	1.21	-.66 to 1.05	

Perceived Popularity	.33 (.37)	1.39	-.40 to 1.06
Social Preference	.26 (.36)	1.30	-.43 to .95
Perceived Popularity X Gender	-.16 (.26)	.85	-.67 to .60
Social Preference X Gender	-.26 (.25)	.77	-.76 to .24
χ^2	4.49		
<i>df</i>	5		
Dissolve Relationship			
Gender	-.14 (.43)	.87	-.97 to .70
Perceived Popularity	.31 (.38)	1.36	-.43 to 1.06
Social Preference	-.48 (.41)	.62	-1.27 to .32
Perceived Popularity X Gender	-.14 (.29)	.87	-.72 to .44
Social Preference X Gender	.44 (.34)	1.55	-.22 to 1.11
χ^2	4.84		
<i>df</i>	5		

Note. Gender was coded as follows: Girls = 1, Boys = 2. The “Problem-Solving” for relational aggression and “Distraction” for overt aggression were not displayed in this table because logistic regression was used for these analyses as the data were binary and thus they are included in Table 20. The attributions of “Do Nothing” and “Dissolve Relationship” were not used for overt aggression.

+ $p < .10$. * $p < .05$. ** $p < .01$.

Table 22.

Hierarchical Multiple Regressions for Predicting Self-Reported Social Behaviors from Gender, Peer Status, and Closed-Ended Attributions

	Self-Reported Relational Aggression		Self-Reported Overt Aggression		Self-Reported Prosocial Behavior	
	β	$R^2 \Delta R^2$	β	$R^2 \Delta R^2$	β	$R^2 \Delta R^2$
<u>Aggressor's/Giver's Jealousy about Status</u>						
Block 1						
Gender	.10+	.02 .02**	.20**	.05 .05***	-.40***	.16 .16***
Block 2						
Perceived Popularity	.13*	.07 .05***	.17*	.11 .05**	.02	.17 .02+
Social Preference	-.23***		-.20**		.12	
Block 3						
Aggressor's/Giver's Jealousy about Status	.03	.07 .01	.08	.11 .01	.02	.17 .01
Block 4						
Perceived Popularity X Aggressor's/Giver's Jealousy about Status	-.07	.07 .01	.40+	.13 .02	.07	.18 .01
Social Preference X Aggressor's/Giver's Jealousy about Status	-.52**		-.56**		-.08	
Block 5						
Perceived Popularity X Aggressor's/Giver's Jealousy about Status X Gender	.06	.11 .04***	-.63**	.18 .05**	.16	.18 .01
Social Preference X Aggressor's/Giver's Jealousy about Status X Gender	.58***		.67**		-.09	
<u>Aggressor's/Giver's Jealousy about Academics</u>						
Block 1						
Gender	.10+	.02 .02**	.19**	.05 .05***	-.39***	.16 .16***
Block 2						
Perceived Popularity	.13*	.07 .05***	.19**	.10 .05**	.02	.17 .02+
Social Preference	-.21***		-.23**		.12	
Block 3						
Aggressor's/Giver's Jealousy about Academics	-.01	.07 .01	.01	.10 .01	.01	.17 .01
Block 4						
Perceived Popularity X Aggressor's/Giver's Jealousy about Academics	.02	.07 .01	.02	.11 .01	-.08	.18 .01
Social Preference X Aggressor's/Giver's Jealousy about Academics	.08		-.09		.01	.18 .01
Block 5						
Perceived Popularity X Aggressor's/Giver's Jealousy about Academics X Gender	-.10	.08 .01	-.43	.13 .02	-.36	.18 .01
Social Preference X Aggressor's/Giver's Jealousy about Academics X Gender	.22		.21			.27
<u>Romantic Relationship Competition</u>						

Block 1										
Gender	.09	.02	.02**	.19**	.05	.06***	.15	.15***		
Block 2										
Perceived Popularity	.13*	.06	.05***	.20**	.11	.06***	.17	.02+		
Social Preference	-.18**	.06	.01	-.25***	.12	.01	.17	.01		
Block 3										
Romantic Relationship Competition	.05	.07	.01	.05	.12	.01	.18	.01		
Block 4										
Perceived Popularity X Romantic Relationship Competition	.04	.09	.02*	.04	.14	.02	.02	.01		
Social Preference X Romantic Relationship Competition	-.38*	.09	.02*	.03	.14	.02	.06	.01		
Block 5										
Perceived Popularity X Romantic Relationship Competition X Gender	-.08	.37					-.01	.01		
Social Preference X Romantic Relationship Competition X Gender	.47*	.09					-.22	.01		
<u>Victim-Blame</u>										
Block 1										
Gender	.10+	.02	.02**	.19**	.05	.05***				
Block 2										
Perceived Popularity	.13*	.07	.05***	.19**	.11	.05**				
Social Preference	-.21***	.07	.01	-.24***	.11	.01				
Block 3										
Victim-Blame	.05	.07	.01	.07	.11	.01				
Block 4										
Perceived Popularity X Victim-Blame	.04	.07	.01	.04	.11	.01				
Social Preference X Victim-Blame	-.05	.07	.01	-.01	.12	.01				
Block 5										
Perceived Popularity X Victim-Blame X Gender	-.05	.25		.25						
Social Preference X Victim-Blame X Gender	.11	-.09		-.09						

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the closed-ended questions. There were no analyses conducted for the attribution of victim-blame regarding prosocial behavior because this attribution was not included in this study. Statistics from highest significant block are reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 23.

Hierarchical Multiple Regressions for Predicting Self-Reported Relational and Overt Aggression from Gender, Peer Status, and Open-Ended

Attributions	Self-Reported Relational Aggression			Self-Reported Overt Aggression		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Aggressor's Jealousy</u>						
Block 1		.03	.03**		.05	.05**
Gender	.17**			.19**		
Block 2		.08	.05***		.11	.06**
Perceived Popularity	.16**			.21**		
Social Preference	-.22***			-.25**		
Block 3		.08	.01		.12	.01
Jealousy	-.04			-.10		
Block 4		.08	.01		.12	.01
Perceived Popularity X Aggressor's Jealousy	-.02			-.07		
Social Preference X Aggressor's Jealousy	-.03			-.01		
Block 5		.08	.01		.12	.01
Perceived Popularity X Aggressor's Jealousy X Gender	-.21			-.20		
Social Preference X Aggressor's Jealousy X Gender	.30			-.04		
<u>Bad Behavior of Victim</u>						
Block 1		.03	.03**		.05	.05**
Gender	.11+			.19**		
Block 2		.08	.05***		.11	.06**
Perceived Popularity	.16**			.21**		
Social Preference	-.22***			-.25**		
Block 3		.08	.01		.11	.01
Bad Behavior of Victim	.07			.08		
Block 4		.09	.01		.11	.01
Perceived Popularity X Bad Behavior of Victim	-.05			-.08		
Social Preference X Bad Behavior of Victim	.14			.08		
Block 5		.10	.01		.12	.01
Perceived Popularity X Bad Behavior of Victim X Gender	.15			-.61		
Social Preference X Bad Behavior of Victim X Gender	.33			.70		
<u>Bad Characteristic of Victim</u>						
Block 1					.05	.05**
Gender				.19**		

Block 2			
Perceived Popularity	.21**	.11	.06**
Social Preference	-.25**		
Block 3			
Bad Characteristic of Victim	-.01	.11	.01
Block 4			
Perceived Popularity X Bad Characteristic of Victim	-.03	.11	.01
Social Preference X Bad Characteristic of Victim	.07		
Block 5			
Perceived Popularity X Bad Characteristic of Victim X Gender	-.11	.11	.01
Social Preference X Bad Characteristic of Victim X Gender	-.05		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. The dependent variable of “Bad Characteristics of Victim” was not analyzed for relational aggression as it was a count variable (i.e., 0s, 1s, 2s). The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.
+ $p < .10$. ** $p < .01$. *** $p < .001$.

Table 24.

Hierarchical Multiple Regressions for Predicting Self-Reported Prosocial Behavior from Gender, Peer Status, and Open-Ended Attributions

	Self-Reported Prosocial Behavior		
	β	R^2	ΔR^2
<u>Receiver's Characteristics</u>			
Block 1		.12	.12***
Gender	-.35***		
Block 2		.13	.01
Perceived Popularity	-.01		
Social Preference	.09		
Block 3		.13	.01
Receiver's Characteristics	-.07		
Block 4		.13	.01
Perceived Popularity X Receiver's Characteristics	.01		
Social Preference X Receiver's Characteristics	.02		
Block 5		.14	.01
Perceived Popularity X Receiver's Characteristics X Gender	-.51		
Social Preference X Receiver's Characteristics X Gender	.39		
<u>Friendship Establishment</u>			
Block 1		.12	.12***
Gender	-.35***		
Block 2		.13	.01
Perceived Popularity	-.01		
Social Preference	.09		
Block 3		.13	.01
Friendship Establishment	.05		
Block 4		.14	.01
Perceived Popularity X Friendship Establishment	.08		
Social Preference X Friendship Establishment	-.11		
Block 5		.15	.01
Perceived Popularity X Friendship Establishment X Gender	.36		
Social Preference X Friendship Establishment X Gender	-.13		
<u>Romantic Relationship Establishment</u>			
Block 1		.12	.12***
Gender	-.35***		
Block 2		.13	.01
Perceived Popularity	-.01		
Social Preference	.09		
Block 3		.13	.01
Romantic Relationship Establishment	.01		
Block 4		.13	.01
Perceived Popularity X Romantic Relationship Establishment	-.07		
Social Preference X Romantic Relationship Establishment	-.03		
Block 5		.14	.01
Perceived Popularity X Romantic Relationship Establishment X Gender	-.44		
Gender			
Social Preference X Romantic Relationship Establishment X Gender	.37		
Gender			

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. Non-significant blocks include statistics from their respective blocks.

*** $p < .001$.

Table 25.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Social Behaviors from Gender, Peer Status, and Closed-Ended Attributions

	Peer-Nominated Relational Aggression			Peer-Nominated Overt Aggression			Peer-Nominated Prosocial Behaviors		
	β	R^2	ΔR^2	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Aggressor's/Giver's Jealousy about Status</u>									
Block 1									
Gender	-.18***	.02	.02**	.04	.01	.01	-.05	.03	.03**
Block 2									
Perceived Popularity	.29***	.12	.10***	.15*	.06	.05**	.11*	.25	.22***
Social Preference	-.26***			-.26***			.44***		
Block 3									
Aggressor's/Giver's Jealousy about Status	.01	.12	.01	-.02	.06	.01	-.02	.25	.01
Block 4									
Perceived Popularity X Aggressor's/Giver's Jealousy about Status	-.02	.13	.01	-.08	.07	.01	.07	.26	.01
Social Preference X Aggressor's/Giver's Jealousy about Status	.05			.03			-.10		
Block 5									
Perceived Popularity X Aggressor's/Giver's Jealousy about Status X Gender	.12	.14	.01	-.08	.08	.01	-.09	.26	.01
Gender									
Social Preference X Aggressor's/Giver's Jealousy about Status X Gender	-.31			.38			.01		
<u>Aggressor's/Giver's Jealousy about Academics</u>									
Block 1									
Gender	-.18***	.02	.02**	.03	.01	.01	-.06	.04	.04***
Block 2									
Perceived Popularity	.29***	.12	.10***	.15*	.06	.05**	.12*	.25	.21***
Social Preference	-.26***			-.25***			.42***		
Block 3									
Aggressor's/Giver's Jealousy about Academics	-.06	.13	.01	-.01	.06	.01	-.08	.26	.01*
Block 4									
Perceived Popularity X Aggressor's/Giver's Jealousy about Academics	-.11	.14	.01+	-.09	.07	.01	.06	.28	.02*
Social Preference X Aggressor's/Giver's Jealousy about Academics	.05			-.04			-.15**		
Block 5									
Perceived Popularity X Aggressor's/Giver's Jealousy about Academics X Gender	-.11	.14	.01	-.01	.07	.01	-.24	.29	.01+
Gender									
Social Preference X Aggressor's/Giver's Jealousy about Academics X Gender	-.17			-.05			-.17		
<u>Romantic Relationship Competition</u>									
Block 1									
Gender		.02	.02**		.01	.01		.03	.03**

Gender	-.18***	.12	.10***	.03	-.06	.25	.21***
Block 2							
Perceived Popularity	.29***			.15*	.12*		
Social Preference	-.26***			-.26***	.43***		
Block 3							
Romantic Relationship Competition	.04	.12	.01	.03	.06	.01	.25
Block 4							
Perceived Popularity X Romantic Relationship Competition	.08	.13	.01	-.12	.08	.01	.25
Social Preference X Romantic Relationship Competition	-.02			.10	.01		.01
Block 5							
Perceived Popularity X Romantic Relationship Competition	-.25	.14	.01	.35	.09	.02	.26
X Gender							.01
Social Preference X Romantic Relationship Competition X Gender	.16			.08			-.20
Victim-Blame							
Block 1		R^2	ΔR^2	β	R^2	ΔR^2	β
Gender	-.18***	.02	.02**	.03	.01	.01	
Block 2							
Perceived Popularity	.27***	.12	.10***	.15*	.06	.05**	
Social Preference	-.25***			-.26***			
Block 3							
Victim-Blame	.06	.13	.01	.03	.06	.01	
Block 4							
Perceived Popularity X Victim-Blame	.10*	.15	.02*	.04	.06	.01	
Social Preference X Victim-Blame	-.12*			-.02			
Block 5							
Perceived Popularity X Victim-Blame X Gender	.02	.15	.01	.20	.07	.01	
Social Preference X Victim-Blame X Gender	.25			.16			

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the closed-ended questions. There were no analyses conducted for the attribution of victim-blame regarding prosocial behavior because this attribution was not included in this study. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 26.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Relational and Overt Aggression from Gender, Peer Status, and Open-Ended

<u>Attributions</u>	<u>Peer-Nominated Relational Aggression</u>			<u>Peer-Nominated Overt Aggression</u>		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Aggressor's Jealousy</u>						
Block 1						
Gender	-.17***	.02*		.01	.01	.01
Block 2						
Perceived Popularity	.41***	.09***		.13+	.05**	.05**
Social Preference	-.29***			-.25**		
Block 3						
Aggressor's Jealousy	.06	.01		-.08	.06	.01
Block 4						
Perceived Popularity X Aggressor's Jealousy	-.29***	.05***		.02	.06	.01
Social Preference X Aggressor's Jealousy	.11			.07		
Block 5						
Perceived Popularity X Aggressor's Jealousy X Gender	.12	.01		.01	.06	.01
Social Preference X Aggressor's Jealousy X Gender	.07			.20		
<u>Bad Behavior of Victim</u>						
Block 1						
Gender	-.18***	.02*		.01	.01	.01
Block 2						
Perceived Popularity	.28***	.09***		.16*	.05***	.05***
Social Preference	-.26***			-.33***		
Block 3						
Bad Behavior of Victim	-.03	.01		.07	.06	.01
Block 4						
Perceived Popularity X Bad Behavior of Victim	-.06	.01		-.07	.14	.09***
Social Preference X Bad Behavior of Victim	.06			.38***		
Block 5						
Perceived Popularity X Bad Behavior of Victim X Gender	.04	.01		-.48	.15	.01
Social Preference X Bad Behavior of Victim X Gender	-.03			.10		
<u>Bad Characteristics of Victim</u>						
Block 1						
Gender					.01	.01
				-.01		

Block 2			
Perceived Popularity	.13+	.05	.05**
Social Preference	-.24**		
Block 3			
Bad Characteristics of Victim	.21**	.09	.04**
Block 4			
Perceived Popularity X Bad Characteristics of Victim	-.05	.10	.01
Social Preference X Bad Characteristics of Victim	-.07		
Block 5			
Perceived Popularity X Bad Characteristics of Victim X Gender	.69	.12	.02+
Social Preference X Bad Characteristics of Victim X Gender	-.63		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. “Bad Characteristics of Victim” was not analyzed for relational aggression as it was a count variable (i.e., 0s, 1s, 2s). The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 27.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Prosocial Behavior from Gender, Peer Status, and Open-Ended Attributions

	Peer-Nominated Prosocial Behavior		
	β	R^2	ΔR^2
<u>Receiver's Characteristics</u>			
Block 1		.01	.01
Gender	.01		
Block 2		.25	.24***
Perceived Popularity	.08		
Social Preference	.47***		
Block 3		.25	.01
Receiver's Characteristics	-.03		
Block 4		.26	.01
Perceived Popularity X Receiver's Characteristics	-.09		
Social Preference X Receiver's Characteristics	.13		
Block 5		.26	.01
Perceived Popularity X Receiver's Characteristics X Gender	.31		
Social Preference X Receiver's Characteristics X Gender	-.32		
<u>Friendship Establishment</u>			
Block 1		.01	.01
Gender	.01		
Block 2		.25	.24***
Perceived Popularity	.08		
Social Preference	.47***		
Block 3		.26	.01+
Friendship Establishment	.10		
Block 4		.27	.01
Perceived Popularity X Friendship Establishment	.08		
Social Preference X Friendship Establishment	.08		
Block 5		.28	.01
Perceived Popularity X Friendship Establishment X Gender	-.13		
Social Preference X Friendship Establishment X Gender	-.23		
<u>Romantic Relationship Establishment</u>			
Block 1		.01	.01
Gender	-.01		
Block 2		.25	.24***
Perceived Popularity	.05		
Social Preference	.50***		
Block 3		.25	.01
Romantic Relationship Establishment	-.02		
Block 4		.27	.02*
Perceived Popularity X Romantic Relationship Establishment	.11+		
Social Preference X Romantic Relationship Establishment	-.14*		
Block 5		.28	.01
Perceived Popularity X Romantic Relationship Establishment X Gender	-.16		
Gender			
Social Preference X Romantic Relationship Establishment X Gender	.17		
Gender			

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$ *** $p < .001$.

Table 28.

Hierarchical Multiple Regressions for Predicting Self-Reported Aggression from Gender, Peer Status, and Closed-Ended Outcome Expectancies

	Self-Reported Relational Aggression			Self-Reported Overt Aggression		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Emotional Harm</u>						
Block 1		.03	.03**		.06	.06***
Gender	.13*			.19**		
Block 2		.08	.05***		.11	.06**
Perceived Popularity	.14*			.17*		
Social Preference	-.22***			-.26***		
Block 3		.08	.01		.12	.01
Emotional Harm	.03			.06		
Block 4		.08	.01		.12	.01
Perceived Popularity X Emotional Harm	-.02			-.03		
Social Preference X Emotional Harm	-.02			.05		
Block 5		.08	.01		.13	.01
Perceived Popularity X Emotional Harm X Gender	-.09			.27		
Social Preference X Emotional Harm X Gender	.11			.13		
<u>Harm Victim's Status</u>						
Block 1		.03	.03**		.05	.05**
Gender	.13*			.18*		
Block 2		.08	.05***		.12	.08***
Perceived Popularity	.14*			.25***		
Social Preference	-.21***			-.24**		
Block 3		.09	.01+		.13	.01
Status Harm	.10			.10		
Block 4		.09	.01		.15	.02
Perceived Popularity X Harm Victim's Status	.01			-.12		
Social Preference X Harm Victim's Status	.10			.13		
Block 5		.11	.01		.16	.01
Perceived Popularity X Harm Victim's Status X Gender	-.17			-.42		
Social Preference X Harm Victim's Status X Gender	.43			.27		
<u>Status Attainment</u>						
Block 1		.03	.03**		.05	.05**
Gender	.14*			.15*		
Block 2		.08	.05***		.12	.08***
Perceived Popularity	.14*			.22**		
Social Preference	-.22***			-.68**		
Block 3		.10	.03**		.13	.01
Status Attainment	.17**			.04		
Block 4		.12	.01		.16	.04*
Perceived Popularity X Status Attainment	-.06			-.21**		
Social Preference X Status Attainment	.12			.45+		
Block 5		.13	.01		.18	.02
Perceived Popularity X Status Attainment X Gender	-.36			.06		
Social Preference X Status Attainment X Gender	.43			-.48		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These outcome expectancies are from the closed-ended questions. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 29.

Hierarchical Multiple Regressions for Predicting Self-Reported Aggression from Gender, Peer Status, and Open-Ended Outcome Expectancies

	Self-Reported Relational Aggression			Self-Reported Overt Aggression		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Harm the Victim</u>						
Block 1		.04	.04***		.04	.04*
Gender	.14*			.16*		
Block 2		.10	.06***		.09	.06**
Perceived Popularity	.17**			.18*		
Social Preference	-.24***			-.26**		
Block 3		.10	.01		.09	.01
Harm the Victim	.09			-.03		
Block 4		.12	.02+		.10	.01
Perceived Popularity X Harm the Victim	.11			-.09		
Social Preference X Harm the Victim	.05			.05		
Block 5		.12	.01		.12	.02
Perceived Popularity X Harm the Victim X Gender	-.03			.51		
Social Preference X Harm the Victim X Gender	-.05			-.73		
<u>Change Victim</u>						
Block 1		.04	.04***			
Gender	.14*					
Block 2		.10	.06***			
Perceived Popularity	.17**					
Social Preference	-.24***					
Block 3		.10	.01			
Change Victim	.01					
Block 4		.10	.01			
Perceived Popularity X Change Victim	.09					
Social Preference X Change Victim	.01					
Block 5		.11	.01			
Perceived Popularity X Change Victim X Gender	.24					
Social Preference X Change Victim X Gender	.25					
<u>Create Aggression</u>						
Block 1					.04	.04*
Gender				.16*		
Block 2					.09	.06**
Perceived Popularity				.18*		
Social Preference				-.26**		
Block 3					.10	.01
Status Attainment				.09		
Block 4					.11	.01
Perceived Popularity X Status Attainment				.04		
Social Preference X Status Attainment				.11		
Block 5					.12	.01
Perceived Popularity X Status Attainment X Gender				.22		
Social Preference X Status Attainment X Gender				-.36		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. “Create Aggression” was not analyzed for relational aggression as it was a count variable (i.e.,

0s, 1s, 2s). The “Change Victim” outcome expectancy was not a code found for overt aggression. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

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

Table 30.

Hierarchical Multiple Regressions for Predicting Self-Reported Prosocial Behavior from Gender, Peer Status, and Closed-Ended Outcome Expectancies

	Self-Reported Prosocial Behavior		
	β	R^2	ΔR^2
<u>Relationship Maintenance</u>			
Block 1		.14	.14***
Gender	-.37***		
Block 2		.15	.02
Perceived Popularity	-.01		
Social Preference	.13		
Block 3		.16	.01
Relationship Maintenance	.10		
Block 4		.17	.01
Perceived Popularity X Relationship Maintenance	-.01		
Social Preference X Relationship Maintenance	-.07		
Block 5		.17	.01
Perceived Popularity X Relationship Maintenance X Gender	.18		
Social Preference X Relationship Maintenance X Gender	-.19		
<u>Status Maintenance</u>			
Block 1		.14	.14***
Gender	-.36***		
Block 2		.16	.01
Perceived Popularity	-.01		
Social Preference	.13*		
Block 3		.17	.02*
Status Maintenance	.14**		
Block 4		.20	.03**
Perceived Popularity X Status Maintenance	-.16**		
Social Preference X Status Maintenance	-.06		
Block 5		.22	.02+
Perceived Popularity X Status Maintenance X Gender	-.31		
Social Preference X Status Maintenance X Gender	.42		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These outcome expectancies are from the closed-ended questions. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 31.

Hierarchical Multiple Regressions for Predicting Self-Reported Prosocial Behavior from Gender, Peer Status, and Open-Ended Outcome Expectancies

	Self-Reported Prosocial Behavior		
	β	R^2	ΔR^2
<u>Selfish Motivations</u>			
Block 1		.13	.12***
Gender	-.37***		
Block 2		.15	.01
Perceived Popularity	-.02		
Social Preference	.08		
Block 3		.15	.01
Selfish Motivations	-.03		
Block 4		.15	.01
Perceived Popularity X Selfish Motivations	-.01		
Social Preference X Selfish Motivations	.07		
Block 5		.16	.01
Perceived Popularity X Selfish Motivations X Gender	.44		
Social Preference X Selfish Motivations X Gender	-.16		
<u>Develop & Maintain Friendships</u>			
Block 1		.14	.14***
Gender	-.37***		
Block 2		.15	.01
Perceived Popularity	-.02		
Social Preference	.08		
Block 3		.15	.01
Friendship Establishment	.03		
Block 4		.15	.01
Perceived Popularity X Friendship Establishment	.08		
Social Preference X Friendship Establishment	-.01		
Block 5		.16	.01
Perceived Popularity X Friendship Establishment X Gender	.19		
Social Preference X Friendship Establishment X Gender	.05		
<u>Romantic Relationship Establishment</u>			
Block 1		.14	.14***
Gender	-.37***		
Block 2		.15	.01
Perceived Popularity	-.02		
Social Preference	.08		
Block 3		.15	.01
Romantic Relationship Establishment	.02		
Block 4		.15	.01
Perceived Popularity X Romantic Relationship Establishment	-.10		
Social Preference X Romantic Relationship Establishment	-.07		
Block 5		.16	.01
Perceived Popularity X Romantic Relationship Establishment X Gender	.14		
Social Preference X Romantic Relationship Establishment X Gender	-.10		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

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

Table 32.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Aggression from Gender, Peer Status, and Closed-Ended Outcome Expectancies

	Peer-Nominated Relational Aggression			Peer-Nominated Overt Aggression		
	β	R^2	ΔR^2	β	R^2	ΔR^2
<u>Emotional Harm</u>						
Block 1		.03	.03**		.01	.01
Gender	-.20***			.04		
Block 2		.12	.10***		.09	.08***
Perceived Popularity	.28***			.17*		
Social Preference	-.27***			-.31***		
Block 3		.13	.01+		.09	.01
Emotional Harm	.10			-.01		
Block 4		.14	.01		.11	.02
Perceived Popularity X Emotional Harm	-.04			-.16		
Social Preference X Emotional Harm	-.04			.04		
Block 5		.15	.01		.11	.01
Perceived Popularity X Emotional Harm X Gender	.27			-.01		
Social Preference X Emotional Harm X Gender	-.22			-.01		
<u>Harm Victim's Status</u>						
Block 1		.03	.03**		.02	.02*
Gender	-.17**			.08		
Block 2		.13	.10***		.07	.05*
Perceived Popularity	.32***			.11		
Social Preference	-.25***			-.24**		
Block 3		.13	.01		.07	.01
Harm Victim's Status	.09			-.02		
Block 4		.15	.03**		.08	.02
Perceived Popularity X Harm Victim's Status	-.06			-.10		
Social Preference X Harm Victim's Status	-.14*			.14		
Block 5		.16	.01		.11	.03+
Perceived Popularity X Harm Victim's Status X Gender	.29			-.39		
Social Preference X Harm Victim's Status X Gender	.09			.61		
<u>Status Attainment</u>						
Block 1		.03	.03**		.02	.02*
Gender	-.19***			.07		
Block 2		.12	.10***		.07	.05*
Perceived Popularity	.39***			.08		
Social Preference	-.27***			-.77**		
Block 3		.13	.01		.07	.01
Status Attainment	.06			-.07		
Block 4		.17	.05***		.10	.03*
Perceived Popularity X Status Attainment	-.25***			-.17*		
Social Preference X Status Attainment	.05			.55*		
Block 5		.18	.01		.13	.03+
Perceived Popularity X Status Attainment X Gender	.16			.09		
Social Preference X Status Attainment X Gender	-.12			-.52		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These outcome expectancies are from the closed-ended questions. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 33.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Aggression from Gender, Peer Status, and Open-Ended Outcome Expectancies

	Peer-Nominated Relational Aggression		Peer-Nominated Overt Aggression	
	β	$R^2 \Delta R^2$	β	$R^2 \Delta R^2$
<u>Harm the Victim's Status and Friendships</u>				
Block 1		.02 .02*		.01 .01
Gender	-.18**		.01	
Block 2		.11 .09***		.05 .05*
Perceived Popularity	.29***		.22*	
Social Preference	-.25***		-.25**	
Block 3		.11 .01		.06 .01
Harm the Victim	-.02		.10	
Block 4		.11 .01		.10 .04*
Perceived Popularity X Harm the Victim's Status and Friendships	.01		-.21*	
Social Preference X Harm the Victim's Status and Friendships	-.02		-.03	
Block 5		.11 .01		.13 .03+
Perceived Popularity X Harm the Victim's Status and Friendships X Gender	-.13		.25	
Social Preference X Harm the Victim's Status and Friendships X Gender	.21		-.23	
<u>Change Victim</u>				
Block 1		.02 .02*		
Gender	-.18**			
Block 2		.11 .09***		
Perceived Popularity	.29***			
Social Preference	-.25***			
Block 3		.11 .01		
Change Victim	.01			
Block 4		.12 .01		
Perceived Popularity X Change Victim	-.07			
Social Preference X Change Victim	.13			
Block 5		.12 .01		
Perceived Popularity X Change Victim X Gender	.03			
Social Preference X Change Victim X Gender	-.32			
<u>Create Aggression</u>				
Block 1				.01 .01
Gender			.02	
Block 2				.05 .05*
Perceived Popularity			.16+	

Social Preference	.35***	
Block 3		
Create Aggression	.05	.01
Block 4	-.03	
Perceived Popularity X Create Aggression	-.05	.04*
Social Preference X Create Aggression	.24**	
Block 5		
Perceived Popularity X Create Aggression X Gender	.11	.02
Social Preference X Create Aggression X Gender	-.30	
	-.25	

Note. Gender was coded as follows: Girls = 1, Boys = 2. The highest significant block is reported. These attributions are from the open-ended questions. “Create Aggression” was not analyzed for relational aggression as it was a count variable (i.e., 0s, 1s, 2s). The “Change Victim” outcome expectancy was not a code found for overt aggression. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

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

Table 34.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Prosocial Behavior from Gender, Peer Status, and Closed-Ended Outcome Expectancies

	Peer-Nominated Prosocial Behavior		
	β	R^2	ΔR^2
<u>Relationship Maintenance</u>			
Block 1		.04	.04***
Gender	-.07		
Block 2		.28	.23***
Perceived Popularity	.12*		
Social Preference	.45***		
Block 3		.28	.01
Relationship Maintenance	.08		
Block 4		.30	.01+
Perceived Popularity X Relationship Maintenance	.03		
Social Preference X Relationship Maintenance	.11		
Block 5		.30	.01
Perceived Popularity X Relationship Maintenance X Gender	-.02		
Social Preference X Relationship Maintenance X Gender	-.15		
<u>Status Maintenance</u>			
Block 1		.04	.04***
Gender	-.07		
Block 2		.27	.23***
Perceived Popularity	.12*		
Social Preference	.45***		
Block 3		.27	.01
Status Maintenance	-.05		
Block 4		.28	.01
Perceived Popularity X Status Maintenance	-.08		
Social Preference X Status Maintenance	-.04		
Block 5		.29	.01
Perceived Popularity X Status Maintenance X Gender	-.14		
Social Preference X Status Maintenance X Gender	-.13		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These outcome expectancies are from the closed-ended questions. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 35.

Hierarchical Multiple Regressions for Predicting Peer-Nominated Prosocial Behavior from Gender, Peer Status, and Open-Ended Outcome Expectancies

	Peer-Nominated Prosocial Behavior		
	β	R^2	ΔR^2
<u>Selfish Motivations</u>			
Block 1		.02	.02*
Gender	-.02		
Block 2		.25	.23***
Perceived Popularity	.07		
Social Preference	.47***		
Block 3		.25	.01
Selfish Motivations	.03		
Block 4		.26	.01
Perceived Popularity X Selfish Motivations	-.09		
Social Preference X Selfish Motivations	.01		
Block 5		.27	.01
Perceived Popularity X Selfish Motivations X Gender	.49		
Social Preference X Selfish Motivations X Gender	-.35		
<u>Friendship Establishment</u>			
Block 1		.02	.02*
Gender	-.02		
Block 2		.25	.23***
Perceived Popularity	.08		
Social Preference	.44***		
Block 3		.29	.04***
Friendship Establishment	.21***		
Block 4		.31	.01
Perceived Popularity X Friendship Establishment	.11		
Social Preference X Friendship Establishment	.06		
Block 5		.32	.02+
Perceived Popularity X Friendship Establishment X Gender	.02		
Social Preference X Friendship Establishment X Gender	-.41		
<u>Romantic Relationship Establishment</u>			
Block 1		.02	.02*
Gender	-.02		
Block 2		.25	.23***
Perceived Popularity	.07		
Social Preference	.47***		
Block 3		.25	.01
Romantic Relationship Establishment	.02		
Block 4		.26	.01
Perceived Popularity X Romantic Relationship Establishment	-.01		
Social Preference X Romantic Relationship Establishment	-.12		
Block 5		.26	.01
Perceived Popularity X Romantic Relationship Establishment X Gender	-.10		
Social Preference X Romantic Relationship Establishment X Gender	-.04		

Note. Gender was coded as follows: Girls = 1, Boys = 2. These attributions are from the open-ended questions. Only the coding categories that included binary variables (i.e., 0s, 1s) were analyzed. The highest significant block is reported. Non-significant blocks include statistics from their respective blocks.

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