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AN ATTRIBUTIONAL ANALYSIS OF OBSERVERS HELPING THE BULLY IN  
BULLYING EPISODES

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Psychology

## An Attributional Analysis of Observers Helping the Bullying in Bullying Episodes

Chairperson: Greg Macheck, Ph.D.

Student attitudes regarding bullying are mixed. Although most students appear to condemn the behavior (Boulton & Underwood, 1992), a sizable minority group displays beliefs and attitudes supportive of bullying (Rigby & Slee, 1991; Rigby & Slee, 1993). Previous research has also found that students involved in bullying situations can be categorized into different roles based on their behaviors during bullying episodes (Samivalli, Huttunen, & Lagerspetz, 1997). An established method to measure and predict attitudes and thoughts about a person's actions in a situation is to use an attribution framework. Weiner (1995) proposes an attribution model in which the observer's thoughts about a person's responsibility in a given situation give rise to feelings (sympathy or anger), which in turn leads to subsequent behaviors. Numerous studies have found these affective responses to be particularly powerful indicators of subsequent help-giving (for a meta-analytic review, see Rudolph, Roesch, Greitmeyer, & Weiner, 2004). In a sample of 958 middle school students, responses on victim perceived controllability, sympathy, anger, and intentions of helping the bully were obtained for two vignettes depicting an incident of bullying. Participants also answered questions about their own roles in bullying incidents in school. Results indicated that there were significant mean difference in participants' judgments of responsibility, sympathy, anger, and intentions of helping the bully based on the information included in the vignette. Overall, it was found that levels of anger and sympathy toward the victim mediate the relationship between their judgments of responsibility for the victim and their intentions of helping the bully. However, there were differences found in the attribution model based on the participants' self-reported roles in bullying situations as well as their gender. Implications for future research and intervention strategies are further discussed in this paper.

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## An Attributional Analysis of Observers Helping the Bully in Bullying Episodes

### **Introduction**

Bullying is a phenomenon that many school-aged children have to navigate with-in schools every day. According to the World Health Organization's Health Behavior in School-Aged Children survey (Craig & Harel, 2004), the average prevalence of victims across 35 different countries was 11% and the average prevalence for bullies represented another 11% of the children who participated in the survey. Bullying is defined as a type of aggressive behavior, in which an individual or group of individuals repeatedly attacks, harasses, or purposely excludes a seemingly weaker victim(s) (Tani, Greenman, Schneider, & Fregoso, 2003). The aggression is intentional and has the result of inflicting pain or discomfort upon the other individual. A generally agreed upon, and concise, definition of bullying is provided by Olweus (1993). He states that for a behavior to be considered bullying, it must include three elements: it must be intended to harm, it must be repetitive, and a difference of power must exist between the bully and the victim.

Bullying can also take three different forms: relational, physical, and verbal bullying (Olweus, 1993). Physical bullying includes behaviors such as hitting, kicking, or any other form of overt violence toward other students. Verbal bullying refers to name-calling, teasing, and other verbal threats, which can cause discomfort to the victim. Relational bullying is a form of social aggression that can include behaviors such as gossiping, intentionally leaving other students out of activities, spreading rumors, and other measures that seek to change the victim's peer group status (Olweus, 2003). In some cases of relational bullying, the bully attempts to

inflict pain on another person in such a manner that he or she makes it seem as though there has been no intention to hurt them at all (Björkqvist, Lagerspetz, & Kaukiainen, 1992).

The type of bullying has implications for how others tend to perceive its consequences. Jacobsen and Bauman (2007) found that when school counselors are shown vignettes of the three types of bullying situations, they have the least empathy for the victim of relational bullying and are less likely to intervene in a relational bullying situation. However, it is important to recognize all forms of bullying and treat them equally because victims of all three forms of peer-harassment display similar negative outcomes as a result of being bullied (Juvonen, Nishina, & Graham, 2000; Meraviglia, Becker, Rosenbluth, Sanchez, & Robertson, 2003).

The negative outcomes from bullying can include the serious risk for psychosocial and academic adjustment problems for both the victims (Erath, Flanagan, & Bierman, 2008; Hawker & Boulton, 2000; Isaacs, Hodges, & Salmivalli, 2008) and the bullies (Kaltiala-Heino, Rimpelä, Rantanen, & Rimpelä, 2000). Many victimized children are subjected to repeated bodily attacks, verbal threats, and torments. The everyday experiences that these victims face surely pose immediate negative effects, but recent research has focused on the more long-lasting effects of being victimized which can be categorized into three broad categories: academic problems, interpersonal difficulties, and internalizing problems (Boivin, Hymel, & Hodges, 2001).

It is not surprising that many of the victims of bullying develop very negative attitudes toward school, which can lead to avoidance and school refusal (Kochenderfer & Ladd, 1996). If these negative and fearful attitudes toward school are pervasive, victims' academic performance declines which has not been found to cause victimization but rather a consequence of victimization (Boivin et al., 2001). Further, children who are victimized often have many



difficulties in interpersonal relationships and are often physically weaker (Olweus 1993), submissive (Schwartz, Dodge, & Coie, 1993), and ineffective in conflict situations (Hodges et al., 1995) relative to non-victimized peers. Given their marginal status within their peer groups, victimized children are also found to lack close friendships, be more rejected by peers, and often report more feelings of loneliness and social dissatisfaction (Bukowski, Sippola, & Boivin, 1995; Hodges et al., 1995, Malone & Perry, 1995). Some of the more serious and long-lasting effects of bullying can be seen in the form of internalizing problems that can develop over time in victims, including anxiety, depression, and lowered self-esteem (Björkqvist, Ekman, & Lagerspetz, 1982; Boulton & Underwood, 1992; Egan & Perry, 1998; Kochenderfer & Ladd, 1996; Olweus, 1978).

### **Bullying as a social process**

Most research that has been conducted on bullying tends to focus on those persons most noticeably involved in a bullying situation; that is, the bully and the victim (Olweus, 1991; Sharp and Cowie, 1994). However, there is a problem with conceptualizing bullying incidents as solely between the victim and the bully without considering the social influences other peers who are not directly involved in bullying incidents, have on school-wide bullying. The term bullying was originally conceptualized as “mobbing” and described a group of children ganging up on one and the same victim, harassing and tormenting him or her repeatedly over time (Olweus, 1993). Given that peers have been reported to be present in 85% of bullying situations and the behaviors of these by-standing individuals can contribute to the process, it is important not to exclude these individuals when interpreting a bullying situation (Pepler & Craig, 1995). Today, the group involvement in bullying is understood differently than its original conceptualization of a group of students collectively harassing a victim. Instead, the group members are seen as maintaining

different roles in the bullying incidents that collectively influence the bullying behaviors (Salmivalli, 2010). The characteristics of the individuals involved in bullying incidents interact with environmental factors, such as classroom norms, and contribute to the overall bullying process which can have extremely negative effects on the targeted individual (Salmivalli, 2010). Conceptualizing bullying as more of a group process will help in developing a more thorough understanding of individuals' motivation to engage in bullying, the lack of support provided to the victims of bullying, the persistence of bullies engaging in bullying, and the adjustment of victims across many different contexts. Nishina and Juvonen (2005) have also shown that there is evidence that merely witnessing bullying incidents can have a negative impact on the observer such as having lower ratings of feeling safe in school. In their study, they found that over a four day period 42% of the students witnessed at least one incident of peer harassment. Students also reported feeling more sympathetic for the victim and less bothered by the incident when they witnessed verbal rather physical bullying.

**Participant Roles.** In an effort to better understand the different behaviors contained within the entire student body in bullying incidents, researchers have endeavored to define the main roles that children take during bullying incidents. Participant roles refer to students' ways of being involved and behaving in bullying situations (Salmivalli, Lagerspetz, Björkqvist, & Österman, 1996). For example, when observing a bullying situation, some students may help the bully while others may help the victim. It is important to understand the effect that these other participants have on a bullying situation.

Some important questions to ask about these other participants in a bullying episode might include questions regarding whether they join in and aid the bully or victim, or if their actions support the bullies in less direct ways, such as cheering them on without physically helping

them. If the other participants are involved in reinforcing the bully, it may actually be inflating the bully's self-esteem. It is thought that the most common motivations to bully are "to feel powerful" or "to look cool" (Ziegler & Rosentein-Manner, 1991). Boulton and Flemington (1996) found that twenty-three percent of children reported being amused by bullying scenarios. Peer onlookers, by the mere fact of their passive presence and attention, may also spread the idea that the bully is powerful which can raise the bully's social status and reinforce the bullying behavior (Wright, Zakriski, & Fisher, 1996). De Rosier, Cillessen, Coie, and Dodge (1994) found that these reputations may serve as self-fulfilling prophecies, thus locking the victims and bullies into their respective roles.

Given the evidence supporting the presence of peer onlookers that reinforce the bully in a bullying episode, one must also wonder if there are peer onlookers who support or help the victim. Whitney and Smith (1993) found that forty-four percent of children report that they do try to help the victim in a bullying situation and that fifty-six percent of children report that they stay out of the bullying situation altogether, although they would like to help. Even this behavior of ignoring the situation may be thought of as reinforcing to the bully. It is important to determine the factors that are influencing these "outsiders" in not helping the victim even though they would like to help.

With such an expanded view of student roles in bullying incidents comes the need to measure these "other" roles in a reliable and valid way. To this end, Salmivalli, Lagerspetz, Björkqvist, and Österman (1996) developed a 49-item self- and peer-report questionnaire which investigated estimates of participant role behaviors in a bullying situation using 573 Finnish children ages 12 and 13. This questionnaire included six scales to measure different participant roles: Bully scale, Reinforcer scale, Assistant scale, Outsider scale, Defender scale, and Victim

scale. The items on the Bully scale described active, leader like, initiative-taking bullying behaviors. The Reinforcer scale included items that describe behaviors reflecting tendencies to act in ways that would reinforce the bullying behavior, like laughing at the situation, being an audience, and enticing the bully. The items on the Assistant scale are similar to the items on the Bully scale but are more follower behaviors instead of leader-like behaviors. On the Defender scale, items describe behaviors that are supportive, consoling behaviors, taking the side of the Victim, and making efforts to help stop the bullying situation. The Outsider scale describes behaviors that involve doing nothing in and staying out of the bullying situation. The Victim scale is a one-item scale that asks if the child “gets bullied.” The subscales showed strong internal consistency ( $\alpha=.81$  to  $.93$ ), supporting the existence of identifiable roles or behaviors within a bullying episode (Salmivalli et al., 1996). Salmivalli et al. (1996) found that eighty-seven percent of children could be categorized in this way, with 8.2% Bullies, 19.5% Reinforcers, 6.8% Assistants, 17.3% Defenders, 23.7% Outsiders, and 11.7% Victims. The rest had no identifiable role (12.7%). There was also a significant sex difference, with more female than male Defenders and Outsiders and more male than female Bullies, Reinforcers, and Victims.

When conducting research on bullying, it is important to view a bullying situation as a social process. We must consider all the different roles that students can be involved in during a bullying episode in order to include those individuals other than the Bully and Victim in the intervention efforts. When conceptualizing bullying as a social process we can borrow theories of behavior from both social and cognitive psychology to help predict the behaviors of those present during the situation. Some of the more relevant theories from these related disciplines

psychology discipline are the Social Information-Processing theory (Crick & Dodge, 1994) and Attribution Theory (Kelley & Michela, 1980; Weiner, 1980, 1995).

### **Social Information-Processing Theory**

Social information-processing (SIP) models have been designed to help explain the cognitive mechanisms and processes that an individual goes through when interpreting and responding in a situation that contributes to socially competent behavior in children. One such model proposes that there are five interrelated processes that account for a child's competent response to a situational demand: encoding of relevant stimulus cues, accurate interpretation of those cues, response generation, response evaluation, and behavioral enactment of a selected response (Dodge, Pettit, McClaskey, & Brown, 1986). This sequence is conceptualized as an ongoing repetitive process that occurs during ongoing social interactions, in either conscious or nonconscious ways and can be used to predict the behaviors that the child will enact in given situations (Dodge, 1993).

Dodge (1986) and Crick and Dodge (1994) define and explain the five steps in their reformulated social information processing model. The first step in processing social information involves the child encoding the relevant aspects of the social situations through sensory input, selective attention to social cues, and to store this information into short-term memory. In the second step of the mental representation process of the model after the cues are encoded, meaning is then applied to these cues. In the third step, the child then stores this meaningful interpretation of the stimulus rather than just the simple iconic traces of these stimuli. Through the fourth step of response accessing, these mental representations elicit one or more behavioral and affective responses. With repeated pairings, these mental representations become associated

with several possible responses which are not necessarily the enacted behavior. In the fifth step of the process, the possible responses to the mental representation are evaluated and aid the respondent in decision-making. There are many ways in which the potential responses can be evaluated for acceptability. The responses may be evaluated in terms of their moral acceptability and/or the anticipated consequences of the response, which include interpersonal, intrapersonal, and instrumental outcomes. If a potential response is deemed acceptable through this evaluation process, the final step of the process of behavioral enactment can be conducted which involves the selected response being transformed into an enacted behavior.

Crick and Dodge (1996) have found two general patterns of social information-processing that are characteristic of children who display aggressive behaviors. The first pattern occurs at the level of interpreting the social stimuli. Aggressive children often exhibit biases in the way they interpret situations of ambiguous provocations by attributing hostile intent to these provocations and thus exhibiting a hostile attribution bias (HAB) (Dodge, 1980; Dodge & Frame, 1982; Guerra & Slaby, 1989; Nasby, Hayden, & DePaulo, 1979). Children that display a HAB often use aggression as a defense mechanism toward the perceived intentional provocation. This HAB, which occurs during the interpretation stage of the social information-processing model, often leads to children displaying reactive aggression toward peers.

Children who display a HAB have a tendency to overattribute hostile intentions to peers' behaviors toward them when the cause of the behavior is really unknowable. In a study conducted by Dodge (1980), aggressive and nonaggressive boys were exposed to a frustrating outcome instigated by a peer who had intentions that were not apparent. In response, aggressive boys were more likely to show a bias toward attributing a hostile intention to the peer. This directly mediated the relationship between the frustrating event and the retaliatory behavior of

these boys. Even when aggressive children were shown videotapes of benign provocations, aggressive children often demonstrated relative deficits in accurately interpreting others' intentions as being hostile in nature (Dodge, Murphy, & Buchsbaum, 1984; Dodge, Pettit, McClaskey, & Brown, 1986). Research also indicates that the type of aggressive behaviors that a child displays plays a role in whether they will display these types of biases when making causal attributions (Dodge et al., 1990). For example, Dodge et al (1990) showed that children who scored higher on a reactive aggression subscale were more likely to have a HAB when attributing cause toward an event than those children who had higher scores on a proactive subscale. Reactive aggression involves aggression in response to anger, whereas proactive aggression is more methodical and instrumental in nature. The HAB model helps explain the behavior of a child who is directly involved in a situation involving aggression but does not help to explain the behaviors of children who are only witnessing the situation but nonetheless may significantly influence these aggressive acts happening.

Another pattern that is seen in children who display more proactive aggressive tendencies occurs during the response decision stage of the social information-processing model. Crick and Ladd (1991) have demonstrated that during the response decision stage of social information-processing, aggressive children tend to evaluate aggressive acts in favorable ways, thus increasing the likelihood of choosing these responses as appropriate given the social situation. Additionally, the children tend to expect a relatively positive outcome to occur in using aggressive behaviors and also feel more confident about their ability to perform aggressive actions than do their nonaggressive peers. These beliefs and attitudes that go along with this processing bias are more likely to be present in proactive aggressors who view aggression as a reasonable way to obtain a desired goal (Crick & Dodge, 1996).

One problem with the HAB and the SIP paradigms is that they are fairly unidimensional in considering the judgments that actors make in potentially provocative situations. For example, they primarily ascribe poor encoding and hostile attributional biases. They do not allow for more complex attributional analyses that could influence the individuals' behaviors in the situation. Secondly, they are fundamentally interpersonal: They do not allow for the respondent to analyze and pass judgment on the behaviors of others that do not directly affect them. Although HAB uses an attributional approach, it explains and predicts behavior of only those persons that are directly involved in a conflict situation. Another application of attribution theory can help where the SIP paradigm leaves off by allowing us to predict an individual's behavior even if the person is not directly involved in the situation.

### **Attribution Theory**

Weiner uses an interpersonal attribution model to predict motivated behaviors. The premise of this theory is that, when people observe an event, they will ask themselves "why" questions about the causes that led to the event or situation occurring (Wong & Weiner, 1981). When individuals answers these "why" questions, they are making causal attributions as to the reasons why the event occurred, or why someone behaved in a particular way. Attribution theory is based on the principle that people seek out explanatory information to help make sense of the events that transpire in their world (Weiner, 1980). Research has demonstrated that people have a tendency to attribute someone else's behavior to either internal or external causes, which are termed dispositional and situational attributions, respectively (Heider, 1958). For example, when a teacher searches for a cause of why a student is failing in class, she may wonder if the underachievement is due to lack of motivation and/or ability (dispositional) or if it is due to some type of contextual (e.g., social and/or physical) circumstances (situational). Again, one major



goal of the attribution process is to help individuals understand, organize, and give meaning about the events we observe every day. This process of understanding is important because without it, events in our world would be perceived as unpredictable and uncontrollable (Wong and Weiner, 1981).

There are two main approaches to studying attribution processes: attribution theories and attributional theories (see Figure 1). Attribution theories are concerned with the events leading to the attribution or the antecedents leading to the observer's causal attribution. Attributional theories are concerned with the consequences of the observer making a certain causal attribution (see Kelley & Michela, 1980). Research conducted by Thibaut and Rieken (1955) can demonstrate and give more understanding to these two approaches of studying attributional processes. In their procedure, subjects interacted with two other persons, one of higher status and the other of lower status. During the experiment, it became necessary for the subject to elicit help from the other two people, after which the subjects were asked if they thought the person helped because of internal reasons (because he wanted to help) or external reasons (because of the pressure the subject put on him). Results suggested that the high status person's compliance was more often attributed to internal causes and the low status person's compliance was more often attributed to external causes. On the antecedent (attribution) side, certain information about behaviors and the circumstances of their occurrence were used by the subject to infer its cause. On the consequences (attributional) side, the persons whose compliance was attributed to internal causes were viewed in a more positive light by the subjects. For example, attribution research is concerned with the factors that influence a person's causal attribution about an event (e.g., Jim never fails classes, so this professor must have been unfair) whereas, attributional research has concerned itself with how these causal ascriptions influence subsequent emotions

and behaviors (e.g., Jim could have avoided failing the test by studying, so I am inclined to not help him).

Although the distinction can be made between attribution and attributional theories, there is a desire to combine the two branches into one overall attribution theory because targeting causal attributions and their antecedents can be very effective in a behavior change program and thus effect the consequences of the causal attributions (Försterling & Rudolph, 1988; Kelley, 1972; Weiner, 1986). Research has demonstrated that if an individual has a tendency to make attributions that are realistic and appropriate for the observed situations, then these attributions will likely lead to the individual having more functional and adaptive behaviors for that situation. On the other hand, if an individual tends to make unrealistic and inappropriate attributions, these attributions will often lead to behaviors that are more maladaptive (Försterling, 1986). For example, if a student fails an exam and this person attributes the failure to lack of effort or not studying appropriately for the exam he or she is making an appropriate causal attribution for the situation which will likely result in the student preparing more for a future exam. Alternatively, if the student were to make a causal attribution that the exam was unfair, the student is making an attribution that will likely lead to the student not preparing as much for future exams and lead to similar results as before. Throughout the current paper “attribution” and “attributional” will be used interchangeably because the current study will be using a combined perspective in study the attribution processes involved in bullying situations.

Another important distinction to make when studying causal attributions is the difference between intrapersonal and interpersonal attribution-based theories of motivated behavior (Weiner, 2000). When using the intrapersonal model of attribution theory, the attributional “why” questions are being asked by the actor about their own behaviors and characteristics in the

observed situation. For example, if a person is in financial stress because of losing a job, which he or she attributes to a lack of ability (e.g., I lost my job because I am not smart enough), the person is making an intrapersonal attribution about his or her current situation. Research has demonstrated that this type of attribution results in lowered self-esteem, low expectancy of future success, affective experiences of shame and humiliation, and behavioral withdrawal (Weiner, 1985). These feelings, thoughts, and behaviors that are self-directed and personally regulated are what make up the intrapersonal theory of motivation (Rudolph, Roesch, Greitmeyer, & Weiner, 2004).

If we now shift our focus to the individual who has been laid-off and he or she is asking for financial help from someone, the potential future helper will then search for reasons why the needy individual has been laid-off. This search may result in the causal ascriptions of the individual as good or bad, able or unable to gain future employment, or that the individual was personally responsible or not responsible for their loss and their current dilemma. The potential helper may then experience certain emotional responses, such as anger or sympathy, which can be based on the causal attributions that were directed toward the needy individual. This observer may then praise and help the individual in need or reprimand and refuse to help the needy person. These cognitions, affects, and behaviors that are directed at another person are the major components that make up an interpersonal (social) theory of motivation (Rudolph et al., 2004). In other words, attributional “why” questions are asked by an observer about another’s characteristics and responsibility for being in their current situation. Since bullying episodes happen in a social context, the current study focuses on the interpersonal, or social, attribution-based theory of behavior.

We must pay especially close attention to how these causal ascriptions can lead to judgments of whom or what is causing, or is responsible for, the outcome in given social situations. In the process of developing a judgment of responsibility, people generally seek to answer questions such as, “why did this misfortune happen to him/her?” and “how much is it that person’s fault for the situation or event occurring?” Although questions of responsibility and causality appear to be related, Weiner (1995) explains that they are conceptually distinct. For example, if a person fails a test, an observer searches for the reason for the student failing the test or the cause of the event and also searches for who is responsible for the event happening. If the observer makes the causal attribution that the test was too difficult (situational attribution), the test is deemed as being more responsible for the failure and less blame would be placed on the individual. However, if the observer attributes cause toward the student not studying adequately (dispositional attribution), then more responsibility would be placed on the student and not the test itself. In other words, making judgments about responsibility necessitates consideration of a number of other variables at play in any given situation.

The application of an attributional approach to understanding aggression in children has, thus far, been limited. However, Weiner proposes an attributional model that is more flexible and allows respondents to judge, as a “third” party observer, actions of others that do not directly affect them but nonetheless present situations in which the observer may act. In Weiner’s attribution model of motivated behavior, he posits that there are three variables that are related to each other and help explain the subsequent behaviors of observers: an attributional analysis of an observed event, a subsequent affective response based on the attributional analysis, and possible behavioral responses in the situation. When applying this model, many behavioral sequences appear to be initiated following an observer making a causal attribution for the event (Weiner,

1980a). The causal ascription then produces an affective response (i.e., sympathy or anger), which then influences the behavioral response (i.e., help-giving or aggression). This model can be summed up in terms of an attribution – emotion – behavior temporal sequence (see Figure 2).

There are three important dimensions of causality that have been identified: locus, stability, and controllability (Weiner, 1986). The locus of an event refers to the location of the cause of the event, which can either be within or outside of the actor directly (i.e., situational or dispositional attributions). For example, ability and effort are considered to be internal causes of success, and chance and help from others are considered external causes. Causal stability refers to the duration of a cause. Some causes are perceived as constant and others are considered temporary, such as ability and chance, respectively. Causes such as effort are subject to volitional alteration and are personally controllable, whereas others cannot be willfully changed and are considered uncontrollable.

The variable that has been shown to be particularly important in determining subsequent helping or not helping in an observed event is the perceived controllability of the actor in that event (Piliavin, Rodin, & Piliavin, 1969). For example, studies have shown that when a person falls in the subway and is assumed to be intoxicated, bystanders helped less than if the person is assumed to have a physical disability (Piliavin, Rodin, & Piliavin, 1969). If the cause of an event (falling) is seen as in control of a person (intoxicated), the affective response that follows is anger and this initiates the behavior of not helping. Whereas, if the cause of the behavior is viewed as not in control of a person (illness or disability), pity or sympathy is the affective response and this leads to the bystander helping. In summary, these studies show that if a causal attribution elicits pity or sympathy, the observer is more likely to help the person than if the

attribution directed toward actor elicits the affective response of anger, which would make them less likely to help the actor (Weiner & Graham, 1989).

This theory of attribution explains that when observing a situation there is a sequenced attribution-emotion-behavior response that leads to a behavioral response to the observed event (Weiner, 1980a). With this in mind, there are many different motivational models that include thoughts, emotions, and actions that are possible. Some examples of the most viable models are depicted in Figure 3 (Weiner, 1995). In Model 1 of Figure 3, thoughts indirectly influence behaviors through the mediating variable of emotion. In Model 2, thoughts directly and indirectly influence behaviors with emotions not being necessary for the resulting action. Model 3 adds a relation between anger and sympathy or pity in which these effects are mutually inhibitory or hedonically incompatible. Model 4 includes both a direct influence of thoughts to action as well as a relation between the two effects. Finally, in Model 5 the eliciting stimulus itself affects the behavioral response, directly.

In an attempt to examine these models, Weiner conducted a series of studies (1980a, 1980b) using a partial correlation approach. These are the initial experiments testing the effect of emotions as mediating variables. The initial analyses in these studies found that controllability correlates negatively with sympathy, positively with anger or unpleasant emotions, and negatively with intentions to help (Weiner, 1980a). In addition, this analysis found that sympathy correlates positively with help, whereas anger or negative emotions are negatively correlated with help (Weiner, 1980a). In the next step of the analysis, the specific examination of emotions as mediating variables was conducted (Weiner, 1980b). The goal of this step was to determine if controllability would still maintain a significant correlation while partialing out the influence emotion has on the helping behavior. Weiner (1980b) found that when emotion was partialled

from the sequence, controllability no longer maintained a significant correlation with help, but when controllability was partialled from the model, sympathy and anger still maintained significant correlations with help. These results support Model 1 of Figure 3 and the hypothesis that emotions are mediating this attribution sequence (Weiner, 1980b). This is very important when considering the topic of the current study, which is uncovering and researching the role that an observer's affective response has in influencing their behaviors in that situation. The affective response of anger has been shown to be an important variable in acts of aggression such as bullying (Rubin, 1969; Tavis 1982, Weiner, 1995).

### **Anger**

Many acts of aggression, including joining in on an act of bullying, can often be attributed to anger. Although anger is an emotion that many of us feel every day, it is often very difficult to put a precise definition on what exactly is meant by anger. Consequently, the factors involved in what leads to the behavioral expressions of anger (i.e., aggression) are frequently different as well. Some researchers holding a biological perspective believe that there may be a gene that is one of the primary causal agents for violence and aggression (Caspi, et al., 2002). Other theorists in the biological realm have made claims that the primary driving force in the experience and expression of anger includes increased testosterone (Dabbs & Hargrove, 1997), a dysfunctional amygdala (Viding & Frith, 2005), reduced levels of serotonin (Rossiby, 2003), and a dysregulation of the frontal lobes (Bogaerts, VanHeule, & Desmets, 2006). Overall, there are many theories attempting to explain anger and without one conclusive theory that fully explains our experience of anger.

What is consistent in research on anger is that most people experience anger from several times a day to several times a week (Averill, 1979). Even children, who are often punished if they become overly angry, and adults are often told they are being childish if they display anger, display feelings of anger on a consistent basis (Averill, 1983). One theory on emotions that helps us to understand anger in a social context is the social-constructivist theory of emotions (Averill, 1983). Anger is a negative emotion both in terms of our subjective experiences with anger and in the social evaluation of anger (Averill, 1983).

The social-constructivist model holds that emotions are social constructions, not biological givens or the products of strictly intrapsychic processes (Averill, 1983). This theory of emotions maintains four major assumptions. First, emotions are “whole person” responses to the environment so they cannot be defined in terms of subclasses of responses, such as physiological or expressive reactions. Next, emotions are complex syndromes where no subset of elements or kind of response is a necessary or sufficient condition for the whole. Third, the rules that dictate the organizations of emotions are primarily social in nature. Finally, emotions serve a function in our social system and are often related to other behaviors that have a social function. This view sharply contrasts with those that assume a biological basis. The social-constructivist theory suggests that anger is a socially constituted syndrome that is maintained because of its consequences.

**Anger and Aggression.** Anger is one of the main motivating factors behind many forms of aggression. Anger can be thought of as the subjective experience of an individual that leads to aggressive impulses. Although there are many forms of aggressive behaviors that are not emotionally charged, the current study is more concerned with those aggressive behaviors that are incited by the emotion of anger because we are exploring aggression in response to the



interpretation of a social situation. It should be pointed out that the current study does not attempt to measure anger in a biological fashion; instead, the construct is measured by self-report responses to related descriptors (how much anger, irritation, and aggravation the participant would have toward the vignette victim).

The link between aggression and anger is most readily explained by biologically oriented theories of aggression (Plutchik, 1980). This is due to the ease of observing aggression in most animals and the generalization from animal aggression to human aggression is often made. Although there are many animal models of aggression, there are three models that have been applied to predicting effects of biological interventions for humans: offensive aggression, defensive aggression, and predatory aggression (Oliver & Young, 2002). Because these acts of aggression are explained by observations of behaviors of the animals as they interact with stimuli in their environment, it is difficult to determine if there are any emotions that drive the behaviors of the animals or if they are simply instinctual acts of aggression. Social psychology research with human subjects gives us another picture of anger and aggression. Many experiments involving human subjects manipulate anger as part of the experimental design. Although anger is rarely discussed in the experiments, there seems to be an assumption that anger leads to aggression (Rubin, 1969; Tavris, 1982).

Weiner (1995) explains that the emotion of anger is very closely linked with perceptions of responsibility. Weiner defines anger as being generated by inferences about responsibility. Using this as the definition for anger, one can conceptualize anger as a value judgment or accusation that follows the belief that the other person could have or should have done something different (Weiner, 1995). Using Weiner's definition, one can see that there is a perceptual component to anger in that the observer's perception of responsibility or

controllability of another's situation directly influences his or her feelings of anger toward the other person. With this definition, anger could presumably be altered in a person if that same person receives information that decreases the perception of responsibility or control toward another person (Weiner 1995). For example, if a person becomes angry at a roommate because the roommate forgot to do his or her chores and then received information about the electricity going out which made it impossible to complete the household chores, the observer would feel a decrease in anger because the responsibility of the chores not being completed is no longer solely on the roommate.

Weiner (2006) also explains that help-giving is likely to have more determinants that are not related to attributions than retaliatory aggression has and that the affective response of sympathy seems to be particularly important in predicting help-giving behaviors. When the judgment of responsibility is low (it is not the victim's fault for being in the unfortunate situation), it seems that positive emotional responses toward the subject (i.e., sympathy toward a victim) are the best predictors of helping. However, when perceived responsibility is high, anger also tends to be high, and indicates that the best predictor of helping is the controllability variable not anger which does not function as a mediator in the relationship. Weiner (2006) explains that aggression is more directly influenced "by responsibility beliefs and affective reaction, particularly anger" (p. 85).

### **Current Study**

The current study employs an attributional framework to assess the thoughts, feelings, and potential behaviors towards bullies and victims in a middle school setting. It is important to understand how different types of students feel toward those involved in a bullying situation. The

current study is particularly interested in how the thoughts and feelings of observers of bullying situations influence the likelihood of them joining in and helping the bully either directly or indirectly.

The study will first investigate whether attributions of high controllability toward a victim in a bullying situation gives rise to more anger and, hence, a higher willingness to join the bully in harassing the victim. Specifically, the current study is to determine if Weiner's (1995) attribution theory of motivated behavior can be accurately applied to bullying situations in which observers may join in and help the bully. The current study is designed to determine if a victim who is portrayed as being very annoying and appears to be responsible for his or her behaviors is perceived by participants as being more responsible for being bullied if there is not a reason explaining that their behavior is not in their control. Similarly, it endeavors to explain whether the participants report higher feelings of anger and lower sympathy toward the victim. Finally, it seeks to uncover whether the participants would be more likely to help the bully. Specifically, and in reference to the causal path model described by Weiner (1995), the current study seeks to determine if anger and/or sympathy mediate the relationship between a respondent's perceived responsibility of the victim and their intentions of helping the bully when they are given a vignette in which a victim displays annoying behaviors and then gets bullied by another student. The study also aims to determine if the respondents' responses perceptions of a victim responsibility for being in a bullying situation is changed by the presence of uncontrollable factor explaining their behaviors. Participants are expected to attribute more blame to the bully if the victim is not in control of their behavior versus if it appears that the victim is in control of the annoying behavior. This is very important when designing and implementing an intervention because being able to understand how to influence the thoughts of those who may be particularly

likely to be involved as an aggressor in incidents of school bullying can also influence their subsequent, feelings, and, ultimately, behaviors.

Next, the study seeks to determine if the respondents' own participant role (i.e. Aggressor, Defender, Outsider, or Victim) in real bullying situations will moderate or change the variable relationships in the mediation model. In order to get a complete picture of the bullying situation and those involved in bullying, the current study will include and categorize all of the individuals who may be influencing the bullying situation. It will be important to determine if the mediation model holds across all participant roles, and if not, why these differences are present. In the current study, participants will be grouped into participant roles based on their own actions in a bullying situation and then the mediation model will be tested for each participant role to determine if it holds.

Finally, the study seeks to determine if mean levels of perceived controllability of the victim's behavior, affective responses toward the victim, and joining in or helping the bully differ as a function of the actual participant role of the respondents and/or because of changes in the information they are given regarding the responsibility and controllability of the victim in the situation. Research in the field of bullying has called for the study of attitudes towards bullies and victims in a bullying situation to be broken down by the observers' characteristics (i.e. bullies, bystanders, etc.) and the current study is designed to do this using an attributional framework (Baldry, 2004; Espelage & Swearer, 2003).

## Methods

### Participants

The current study utilizes an archival data set that was collected for a previous study. Participants were students from three middle schools in a mid-sized town in the inland Pacific Northwest. In order for subjects to be excluded from the study, their parents had to sign and return an assent form, which explained the study and the potential risk of allowing their child to participate. The subjects included 314 sixth graders, 315 seventh graders, 328 eighth graders, and one participant with an unknown grade that resulted in a total sample of 958 participants (460 males, 494 females, and 4 who did not specify a gender).

### Procedures

Trained graduate and undergraduate students explained the study to the teachers and instructed the teachers on how to explain the study to the children. Next, the teachers gave the scripted instructions to the students. Before participating, participants were asked to sign informed assent forms that explained the study and their rights as participants and then to remove and turn in the assent form to ensure there would not be any identifying information attached to the packets they were being asked to complete. Then participants were given the common definition of bullying provided by Olweus (1996) (see Figure 4). After reading the definition, participants were given two bullying vignettes and asked to answer the questions about their thoughts and feelings toward the victim and bully in each vignette. The two versions of the vignettes (physical or relational bullying) were alternated to control for order effects. The vignettes also either included or excluded information that the victims' annoying and disruptive behaviors were in their control (see appendix A). A more thorough explanation of the bullying

vignettes is provided in the Bullying Vignette section of this paper. Then the participants were asked to fill out the Olweus Bully/Victim Questionnaire and the Revised Participant Role Questionnaire. Finally after all the questionnaires were filled out, participants were given an explanation of the study to read.

## Measures

**Olweus Bully/Victim Questionnaire.** The Olweus Bully/Victim Questionnaire first presents a definition of bullying based on Olweus's (1996) widely accepted definition of bullying by students. The Olweus Bully/Victim Questionnaire has two global items, which are used to assess whether the respondent is a victim, bully, or other. These global measures ask if the respondent has been bullied or has bullied a victim with possible responses of "I haven't been bullied," "it has only happened once or twice," "2 or 3 times a month," "about once a week," or "several times a week." The cut-points used to determine if the respondent is grouped as a bully or victim is "2 or 3 times a month." In a study looking at differences in responses to the global measures, there were significant differences for those who answered at the cut-points or higher from those who answered below the cut-points (Solberg & Olweus, 2003). For the victim measure, respondents who qualified as "victims" showed significant differences on social disintegration and global negative self-evaluations with effect sizes of 1.05 and .62, respectively demonstrating that students who meet the cut-points are characteristically different from those who do not meet the cut-points. The "bullies" reported effect sizes for general aggression and antisocial behavior as 1.12 and 1.02, respectively. This shows a clear distinction between those who answered at the cut-point and those who did not. The internal consistency of the measure is .88 for being bullied and .87 for bullying other students, which are considered good for a measure of this type (Solberg & Olweus, 2003).

**Participant Role Questionnaire.** With the growing knowledge of bullying as a social process, this study makes use of the 15-item Participant Roles Questionnaire (Salmivalli & Voeten, 2004). The Participant Role Questionnaire has been used in a number of studies to examine the general behaviors of students during situations of school-based bullying (Salmivalli et al., 1996; Salmivalli & Voeten, 2004). The questionnaire includes scales for the Bully, Assistant, Reinforcer, Defender, and Outsider. Each subject is categorized into a participant role by the scale on which they score the highest (Salmivalli & Voeten, 2004). The current study adapts the Participant Roles Questionnaire into a self-report measure in order to compare the attributional model using participant role as a grouping variable.

The original Participant Role Questionnaire yields data that are both valid and reliable. Salmivalli et al. (1996) compared the self- and peer-report methodology of measuring participant roles and they found a significant positive correlation between the self- and peer-reports. The scales have been shown to have satisfactory internal consistency with Cronbach's alpha coefficients of .93 to .88 (Salmivalli & Voeten, 2004).

The PRQ roles were derived as a result of theory and confirmatory factor analyses. However, a number of studies have not shown a clear five-factor solution (Salmivalli & Voeten, 2004; Sutton & Smith, 1999, 2002). For example, Sutton and Smith (1999) found that the Bully, Assistant, and Reinforcer combined into one factor thus maintaining Bullies (a general "aggressive" category including the students that scored highly on Bully, Assistant, and/or Reinforcer scales), Outsiders, Defenders, and Victims as participant roles. Salmivalli, Huttunen, and Lagerspetz (1997) similarly found that the Bully, Assistant, and Reinforcer scales loaded on to a single factor. Due to this inconsistency, the current study utilized an exploratory factor analysis to determine the best fitting model for the current dataset. Analysis of the Scree plot and

using a criterion of Eigen values equal to or greater than one (1) indicated that the Bully scale, the Reinforcer scale, and the Assistant scale were too highly correlated to be seen as discrete constructs. This resulted in three distinct factors from the PRQ questions: Aggressors, Outsiders, and Defenders.

Participants were categorized into a Participant Role based on their factor scores for each Participant Role, as well as using the Olweus Bully/Victim questionnaire victim question to classify victims. Each subject's factor scores were transformed into standard scores ( $\mu = 0$ ;  $\sigma = 1$ ). Participants were then categorized by their factor scores that were greater than the mean or z-score  $> 0$  after the transformation. If participants were able to be categorized into more than one group, they were put into the participant role that was more "active." For example, if the subject met the criterion for both a victim and an outsider, the subject would be categorized into the Victim category because this is the more active role and better explains how they would choose to behave in a bullying situation. If subjects scored higher than the mean on two scales that were both active participant roles in bullying situations (i.e. Defenders and Aggressors), subjects would be categorized by the scale they scored the highest on. If a participant met the criteria for Victim and also scored above the mean on the Aggressor factor, they were categorized as an Aggressive-Victim because this label best explains their behaviors in a bullying situation and research supports this categorization (Schwartz, Dodge, Pettit, & Bates, 1997). If the participant's score did not meet criterion for a victim and did not score above the mean on any of the PRQ scales than they were categorized as an "Others" because they do not meet criterion for any Participant Role. Using these decision rules, there are 155 (62% males and 38% females) Aggressors, 251 Defenders (35% males and 65% females), 204 Outsiders (48% males and 52% females), 109 Victims (55% males and 45% females), 64 Aggressive-Victims (64% males and



36% females), 100 Others (44% males and 56% females), and there were 75 participants that had missing PRQ data and could not be categorized into any Participant Role.

**Bullying Vignettes.** Two written bullying vignettes were used to obtain judgments of helping. The vignettes explained a situation in which one student, who is described as very annoying and often distracting and disruptive to others during school classes, is being continually picked on by another student. In these vignettes, the controllability of the victim is manipulated by either explicitly describing that the victim has a diagnosable disorder responsible for their annoying and provocative behavior (uncontrollable) or not describing any diagnostic reasons for the annoying (controllable). Each participant received one of the two versions of the vignette. After viewing the vignette, participants were asked to answer questions about both the victim and bully on a 9-point Likert scale regarding controllability, affective response to each character's behavior (i.e. sympathy and anger), and intentions of helping the bully. For example, the respondent would be asked how much responsibility the victim had over being in their situation, how much anger and sympathy they felt toward the victim, and how likely they would be to help the bully in the situation (See Appendix A for a copy of the vignette and response sheet.) Although there may be other affective variables that could be playing a role in this model, Weiner (1995) has utilized anger and sympathy as affective responses in his help-giving model. Thus, it makes conceptual sense to continue to utilize the same variables as past research has used to be agreement with the overall theory.

### **Variables of Interest**

The variables that will be used in the statistical analyses are:

- *Perceived controllability*: The participants' judgment of how responsible the victim is for their situation.
- *Affective response*: The participants' ratings of how much anger and sympathy they feel toward the victim.
- *Help-giving behavior*: The participants' ratings of how likely they would be to help and join the bully in the situation.
- *Vignette manipulated controllability*: The information that is being manipulated in the vignettes, one vignette containing information that suggests the victim is not in control of his annoying behavior and the other vignette excluding the controllability information.
- *Participant Role*: The role (aggressor, outsider, helper, or victim) each participant rated themselves as taking during situations of bullying.
- *Gender*: Each participant's gender.

### **Hypotheses**

The specific research hypotheses to be tested in the current study are:

1. The Attribution-Affect-Action model proposed by Weiner (1995) will be replicated in the current study predicting observers of a bullying episode joining and helping the bully.
  - a. Specifically, the study will determine if participants' affective responses of anger and/or sympathy mediate the relationship between perceived controllability of the victim and the participant's intent to help the bully.
2. Gender will moderate the aforementioned model relationships.
  - a. Specifically, the study will determine if the mediation model will hold for males and females separately.

3. The respondents' participant role will moderate the aforementioned model relationships.
  - a. Specifically, the study is designed to determine if the mediation model hold for each participant role (Aggressor, Outsider, Defender, and Victim) separately.
4. There will be differences in the mean levels of the respondents' perceived controllability regarding the victim by manipulated controllability within the different vignettes.
5. There will be differences in mean levels of the respondents' perceived controllability regarding the victim as a function of that same respondent's participant role and/or gender.
6. There will be differences in mean levels of the respondents' affective response toward the victim by the vignette's manipulated controllability.
7. There will be differences in mean levels of the respondents' affective response toward the victim as a function of that same respondent's participant role and/or gender.
8. There will be differences in mean levels of the respondents' level of proposed help-giving toward the bully by the vignette's manipulated controllability.
9. There be differences in mean levels of the respondents' proposed help-giving toward the bully as a function of that same respondent's participant role and/or gender.

## **Results**

**Hypothesis 1: The Attribution-Affect-Action model proposed by Weiner (1995) will be replicated in the current study predicting observers of a bullying episode joining and helping the bully.**

**Causal Steps.** The initial step in testing to determine if the current model replicates the model proposed by Weiner (1995) is to conduct a series of correlational tests between

perceptions of control, anger, sympathy and intent to help the bully for each experimental condition:

Control-Sympathy

Control-Anger

Control-Help-giving

Sympathy-Help-giving

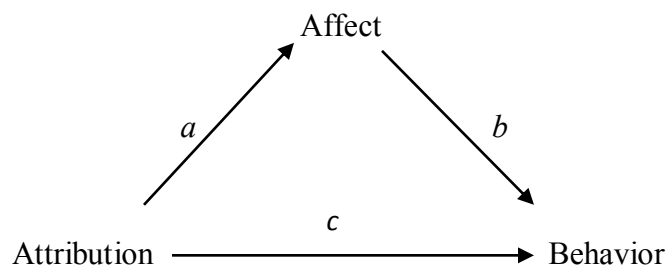
Anger-Help-giving

Weiner's model is supported when perceptions of victim controllability are negatively correlated with feelings of sympathy, positively correlated with feelings of anger toward the victim, and positively correlated with the respondent's own judgments of helping the bully in the situation. That is, high perceptions of personal responsibility for the victim's annoying behavior should be accompanied by less sympathy, more anger, and higher intent to help the bully by the observer respondent. Furthermore, sympathy should be negatively related to judgments of help, whereas anger should be positively associated with judgments of help. These assumptions are based on previous research (e.g., Weiner, 1980; Weiner, 2006).

Participants' overall ratings of the victim's perceived controllability are negatively correlated with sympathy toward the victim ( $r = -.472; p < .01$ ), and positively correlated with both anger ( $r = .510; p < .01$ ) and intentions of helping the bully ( $r = .343; p < .01$ ). Further, sympathy is negatively correlated with both intentions of helping the bully ( $r = -.328; p < .01$ ) and anger ( $r = -.297; p < .01$ ). Also, anger is positively correlated with helping the bully ( $r = .336; p < .01$ ). As the participants rated the victim as being more in control of their annoying behavior and their plight,

they felt more anger toward the victim, less sympathy toward the victim, and were more likely to declare that they would help the bully in the bullying situation. On the other hand, if the victim was perceived as being less culpable for the situation, the participants responded that they felt less anger and more sympathy toward the victim, and would be less likely to help the bully in the depicted situation. Refer to table 1 for the full correlation matrix.

Further, to explicitly test the mediation model the steps by Baron and Kenny (1986) are followed. For example given the following model, these are the steps to establish mediation:



Step 1: Show that the attribution is correlated with behavior. Use behavior as the criterion variable in a regression equation and attribution as a predictor to estimate and test path  $c$ . This step establishes that there is an effect that may be mediated (Baron & Kenny, 1986).

Step 2: Show that attribution is correlated with affect by using affect as the criterion variable in the regression equation and attribution as a predictor to estimate and test path  $a$ . This step essentially involves treating the mediator as if it were an outcome variable (Baron & Kenny, 1986).

Step 3: Show that affect affects the outcome variable by using behavior as the criterion variable in the regression equation and attribution and affect as predictors. It is not sufficient just to correlate affect with behavior: affect and behavior may be correlated because they are both

caused by attribution. Thus, attribution must be controlled in establishing the effect of affect on behavior (Baron and Kenny, 1986).

The first two steps of Baron and Kenny's (1986) process have already been described. The last analyses help confirm or disconfirm the mediation hypothesis by correlating the mediator (affect) with the outcome (help-giving) while controlling for the effects of attributions (perceived controllability). If there is a relationship between the mediator and the outcome variable after controlling for the effect of perceived controllability, then (at least) partial mediation is supported (assuming all the other steps are also supported). It is important to note that although the methods employed in the current study are designed to determine if mediation is occurring statistically, this is based on the theoretical assumption that the causal attribution leads to an affective response which then leads to a behavior. This sequence has been demonstrated in previous research (Weiner, 1995). It also makes sense conceptually and that a person must first interpret a situation before developing an emotional response for that situation and thus, these influence a person's intentions of behaving. Although other preferable methods of testing for mediation are also used, the current study employs Baron and Kenney's (1986) causal steps approach because it is important to demonstrate that there is an initial relationship between perceived controllability and intentions of helping the bully that can be mediated by affect and the causal steps approach provides this analysis.

Using perceived controllability and sympathy to predict helping the bully, sympathy continues to significantly predict intentions of helping the bully ( $r = -.328$ ;  $p < .01$ ) while the relationship between perceived controllability and helping the bully still remained significant, this relationship decreased ( $r = .127$ ;  $p < .01$ ). Because the relationship between sympathy and helping the bully remained at a significant level and the relationship between perceived

controllability and helping the bully decreased when sympathy and perceived controllability are used together to predict helping the bully, we can say that the relationship between perceived controllability and helping the bully is working through or being mediated by the participants' emotional responses of sympathy toward the victim (see figure 9).

To investigate if anger is also functioning as a mediating variable in the relationship between perceived controllability and helping the bully, perceived controllability and anger are used together as predictors of helping the bully. The analysis revealed that anger continues to significantly predict helping the bully ( $r=.442; p<.01$ ). While the relationship between perceived controllability remained significant, this relationship decreased when using both anger and perceived controllability as predictors ( $r=-.127; p<.01$ ). Because the relationship between anger and intentions of helping the bully remained at a significant level and the relationship between perceived controllability and intentions of helping the bully decreased when anger and perceived controllability are used together to predict helping the bully, we can say that the relationship between perceived controllability and intentions of helping the bully is working through or being mediated by the participants' emotional responses of anger toward the victim (see figure 10).

**Bootstrap Analyses.** Although Baron and Kenney's (1986) approach is widely used, it does have some identified weaknesses. Hayes (2009) explained that the causal steps analysis does not provide a specific statistical test for the indirect effect that an independent variable has on a dependent variable via a proposed mediator. The causal steps analysis also has the lowest power of all tests for mediation because it requires that there is a significant relationship between the independent variable and the dependent variable (MacKinnon, Fairchild, & Fritz, 2007). Another statistical method for exploring mediation is the Sobel test, which is also known as the product of coefficients approach. Although this method is commonly used, it suffers from one

major flaw: it requires that the researcher must assume that the sampling distribution of the indirect effect is normal, when this distribution actually tends to be asymmetric (Bollen & Stine, 1990).

The problems associated with the causal steps approach and the Sobel test can be overcome by using the bootstrapping method described by Preacher and Hayes (2006). Preacher and Hayes (2006) explain that the bootstrapping method is a preferable method for testing for significant indirect effects (mediation effects). Bollen and Stine (1990) explain that an indirect effect is the effect of one variable on another that is mediated by at least one other variable in a model. In the current study, perceived controllability ( $x$ ) has an indirect effect on help-giving ( $y$ ), through sympathy ( $m$ ). Bootstrapping is a statistical method that resamples the actual sample with replacement to create a 95% confidence interval of indirect effects. Using this method to determine if there is a significant indirect effect, the null hypothesis is that the indirect effect is zero. If the 95% confidence interval does not contain zero (0), we can reject the null hypothesis and conclude that there is a significant indirect effect and that participants' affective responses mediate the relationship between perceived controllability and intentions of help-giving in the current study. Following the recommendations of Preacher and Hayes (2006), bias-corrected and accelerated confidence intervals, based on 5,000 resamples is used in the bootstrap analyses for the current study to further explore the proposed mediation model.

The results indicated the mean indirect effect (MIE) for participants' ratings of sympathy toward the victim in the bully vignettes is .0841 and the bias corrected and accelerated confidence interval did not contain zero (CI ranged from .0505 to .1199). This indicates that the indirect effect, the path from controllability to helping the bully working through anger, is significant. The bootstrapped results showed mean indirect effect of .0916 for participants'



perceived controllability on their intentions of helping the bully, working through their emotional response of anger toward the victim. The bootstrapping analysis yielded a bias corrected and accelerated confidence interval of .0549 to .1369 and does not contain zero. This result indicates that the indirect effect of perceived controllability to helping through the mediating variable of anger toward the victim is significantly different from zero at  $p < .05$ . (see table 2)

Similar results were discovered when conducting bootstrap analyses on both versions of vignettes regardless if they had controllability information (i.e. information that explains the victim's annoying behavior is due to a medical condition). The bootstrapped results using sympathy as the mediating variable for the vignettes that included the controllability information (child described as having a medical condition that causes their behavior) obtained a mean indirect effect of .0667. The bias corrected and accelerated confidence interval of .0235 to .1113 does not contain zero, which indicates that the indirect effect of perceived controllability to helping the bully, through sympathy, is significantly different from zero at  $p < .05$ . The bootstrapping analysis using anger as a mediator for the relationship between perceived controllability and helping the bully for vignettes that included controllability information yielded a mean indirect effect of .531 which is significantly different from zero at  $p < .05$  based on the bias corrected and accelerated confidence interval of .0083 to .1054. The bootstrapped analysis for the vignette that did not contain controllability information showed significant mediation for both sympathy (MIE = .0616; CI = .0324 to .1104) and anger (MIE = .1079; CI = .585 to .1845) at  $p < .05$  based on the 95% bias corrected and accelerated confidence interval not containing zero.

**Hypothesis 2: The mediation model will hold for both males and females separately.**

Participant's gender was analyzed to determine if it serves as a moderating variable in the aforementioned model relationships. To test for moderation, the current study uses the bootstrapping analysis described earlier for mediation on each level of the moderator (i.e. males and females). Specifically, the current study will determine if participants' affective responses mediate the relationship between perceived controllability and help-giving for males and females separately for each vignette type. If affective response does not mediate the relationship between perceived controllability and help-giving for one gender but does mediate this relationship for the other, one can say that the mediation model changes as a function of the subjects' gender and that it is conditioned on the levels of the moderator (Edwards & Lambert, 2007).

**Mediation Analyses for Sympathy by Gender.** The bootstrapping technique using 5,000 bootstrapped samples was used to determine if the mediation model "holds" using sympathy as the mediator for males and females separately. Table 3 shows the bootstrapped results for the vignette not containing controllability information and using sympathy as the mediating variable for males and females separately. The mean indirect effect of participants' perceived controllability of the victim to intentions of helping the victim through their affective response of sympathy towards the victim is significantly different from zero for both males (MIE = .0668; CI = .0091 to .1336) and females (MIE = .0566; CI = .0181 to .1203) at  $p < .05$  as indicated by the confidence intervals not containing zero. The bootstrapped results for the vignette containing controllability information and using sympathy as the mediating variable for males and females separately are represented in table 4. The mean indirect effect of participants' perceived controllability of the victim to intentions of helping the victim working through their affective response of sympathy towards the victim is significantly different from zero for both

males (MIE = .0758; CI = .0345 to .1525) and females (MIE = .0339; CI = .0040 to .1177) at  $p < .05$ .

**Mediation Analyses for Anger by Gender.** The bootstrapping technique using 5,000 bootstrapped samples was also used to discover if the mediation model “holds” using anger as the mediating variable in the model for males and females separately. Table 5 shows the results of the bootstrapping analyses for the vignette that does not contain controllability information for males and females separately using anger as the mediating variable model. Results indicated that the mean indirect effect for males is significantly different from zero (MIE = .0768; CI = .0156 to .1526) but for females, the mean indirect effect is not significantly different from zero (MIE = .0263; CI = -.0219 to .0947). Table 6 shows the results of the bootstrapping analyses on the vignette containing controllability information for males and females separately and using anger as the mediating variable in the mediation model. Results indicated that the mean indirect effect for perceived controllability to helping the bully working through anger for males (MIE = .0890; CI = .0309 to .1892) and females (MIE = .1348; CI = .0613 to .2683) is significantly different from zero at  $p < .05$ .

**Hypothesis 3: The mediation model will hold for each participant role individually.**

Participants’ participant role was analyzed to determine if it serves as a moderating variable in the aforementioned model relationships. To test for moderation, the current study will use the bootstrapping analysis described earlier for mediation on each level of the moderator (i.e. Aggressors, Outsiders, Defenders, Victims, Aggressive-Victims, and Others). Specifically, the current study investigated whether participants’ affective responses mediated the relationship between perceived controllability and help-giving for each participant role separately. If the

affective response does not mediate the relationship between perceived controllability and helping for one participant role but does mediate this relationship for another, one can say that the mediation model changes as a function of the subjects' participant role and that it is conditioned on the levels of the moderator or is acting as a moderator in the relationship (Edwards & Lambert, 2007).

**Mediation Analysis for Sympathy by Participant Role.** The bootstrapping technique using 5,000 bootstrapped samples was used to determine if the mediation model “holds” using sympathy as the mediator for each participant role separately. Table 7 summarizes the bootstrapped results using sympathy as the mediating variable for each participant role separately responding to the vignette that did not contain controllability information. The mean indirect effects are significantly different from zero at  $p < .05$  for Defenders (MIE = .1017; CI = .0457 to .1189), Outsiders (MIE = .0629; CI = .0164 to .1414), and Victims (MIE = .1375; CI = .0278 to .3715) as indicated by the 95% confidence intervals not containing zero. These results indicate that for participants who are Defenders, Outsiders, and Victims the relationship between their perceived controllability of the victim to their intentions of helping the bully is working through their emotional response of sympathy toward the victim. For Aggressors, Aggressive-Victims, and Others, the mean indirect effects were not significantly different from zero. This means that the relationship between perceived controllability and intentions of helping the bully is not working through reported sympathy for the victim for Aggressors, Aggressive-Victims, and Others.

Table 8 summarizes the bootstrapped results using sympathy as the mediating variable for each participant role separately responding to the vignette that had the controllability information included in it. The mean indirect effects are not significantly different from zero at  $p$

< .05 for Aggressors (MIE = .0215; CI = -.0056 to .2552), Defenders (MIE = .0215; CI = -.138 to .1157), Outsiders (MIE = .0188; CI = -.147 to .0821), Victims (MIE = .0031; CI = -.0857 to .0789), Aggressive-Victims (MIE = .0034; CI = -.1052 to .0714), and Others (MIE = .0237; CI = -.0014 to .0908) as indicated by the 95% confidence intervals not containing zero. The results indicate that for all participant roles, sympathy does not function as a significant mediator for the relationship between perceived controllability and intentions of helping the bullying.

**Mediation Analysis for Anger by Participant Role.** The bootstrapping technique using 5,000 bootstrapped samples was used to determine if the mediation model “holds” using anger as the mediator for each participant role separately. Table 9 summarizes the bootstrapped results using anger as the mediating variable for each participant role separately for participants responding to the vignette not containing information that explains that the victim’s annoying behavior is not in their control. Results indicated that the mean indirect effects are not significantly different from zero for Aggressors (MIE = .1096; CI = -.0114 to .3226), Defenders (MIE = -.0331; CI = -.1510 to .0384), Outsiders (MIE = .0424; CI = -.0013 to .1350), Victims (MIE = .0293; CI = -.0219 to .2629), Aggressive-Victims (MIE = .1832; CI = -.0160 to .5090), and Others (MIE = .0014; CI = -.0551 to .0663) at  $p < .05$  based on the 95% confidence intervals containing zero. This indicates that there are no participant roles where anger functions as a significant mediating variable between perceived controllability of the victim and helping the bully when they are responding to the vignette that did not contain controllability information.

Table 10 shows the bootstrapped results using anger as the mediating variable for each participant role separately for participants responding to the vignette containing information that explains that the victim’s annoying behavior is due to a medical condition thus making it appear not in their control. The mean indirect effect is significantly different from zero for Aggressors

(MIE = .1250; CI = .0059 to .3322), Defenders (MIE = .1508; CI = .593 to .3475), and Aggressive-Victims (MIE = .6905; CI = .2065 to 1.2194) at  $p < .05$  based on the 95% confidence intervals not containing zero. However, the mean indirect effects for Outsiders (MIE = .0117; CI = -.0075 to .0734), Victims (MIE = .0462; CI = -.0426 to .4402), and Others (MIE = .0202; CI = -.0027 to .07) are not significantly different from zero a  $p < .05$  based on the 95% confidence interval containing zero.

### **Hypothesis 4 and 5.**

In order to investigate if participants' perceived controllability of the victim differ by vignette manipulated controllability and participant role, a 2 x 6 (vignette manipulated controllability x participant role) ANOVA was used. Participants who answered all of the questions on the PRQ and perceived controllability question were included in the analysis ( $n = 851$ ). The results indicated that there were significant differences on manipulated controllability ( $F(1, 850) = 226.398, p < .001, \omega_p^2 = .210$ ). Although  $\eta_p^2$  is often reported as an effect size for ANOVA, it is upwardly biased so the current study will use  $\omega_p^2$  (Pierce, Block, & Aguinias, 2004). Participants' mean perceived controllability ratings were higher when they read the vignette that did not include information about the victim's annoying behavior being explained by a medical condition ( $M = 4.847$ ) than when they read the vignette that included this information ( $M = 2.674$ ). Main effects for participant role were not present in the results, indicating that there were no significant differences in perceived controllability between participant roles ( $F(5, 850) = 2.118, p = .061, \omega_p^2 = .006$ ). The interaction between participant role and vignette manipulated controllability was also assessed yielding nonsignificant findings ( $F(5, 850) = .748, p = .514, \omega_p^2 = .001$ ; see figure 5).

A 2 x 2 (vignette manipulated controllability x gender) ANOVA was used to determine if there are mean differences in helping the bully by gender and vignette type. All participants who answered the bullying vignette questions and gender information were included in the analyses ( $n = 913$ ). The results indicated significant differences in both manipulated controllability ( $F(1, 912) = 285.444, p < .001, \omega_p^2 = .52$ ) and gender ( $F(1, 912) = 45.582, p < .001, \omega_p^2 = .04$ ). Males mean perceived controllability ratings ( $M = 3.919$ ) were significantly higher than females ( $M = 3.472$ ). There was no significant interaction between gender and manipulated controllability for perceived controllability ( $F(1, 912) = 3.041, p = .082, \omega_p^2 = .01$ ; see figure 6).

### **Research questions 6 and 7.**

**Mean Differences in Sympathy.** In order to assess whether participants' ratings of sympathy differ as a function of their self-reported participant role and vignette manipulated controllability, a 2 x 6 (vignette manipulated controllability x participant role) ANOVA was used. Main effects for both manipulated controllability and participant role were present ( $F(1, 864) = 162.460, p < .01, \omega_p^2 = .160$  and  $F(5, 864) = 11.489, p < .01, \omega_p^2 = .058$ , respectively). Participants' ratings of sympathy toward the victim were higher if they read the vignette containing information about the victim's annoying behavior as occurring because of a medical condition ( $M = 4.193$ ) than when they read the vignette containing no such information ( $M = 6.123$ ). The interaction between participant role and vignette manipulated controllability was assessed yielding nonsignificant findings ( $F(5, 864) = 1.035, p = .395, \omega_p^2 = .001$ ; see figure 7).

Tukey's HSD post hoc tests were conducted to analyze the main effect for participant role further. Results revealed that Aggressors' mean ratings of sympathy ( $M = 4.44$ ) were

significantly lower than Outsiders' ( $M = 5.306, p < .01$ ), Defenders' ( $M = 5.903, p < .01$ ), Victims' ( $M = 5.196, p < .05$ ), and Others' ( $M = 5.435, p < .01$ ) ratings of sympathy toward the victim in the vignette. The post hoc tests also revealed that Defenders' mean ratings of sympathy toward the victim were significantly higher than responses from Outsiders, Victims', and Aggressive-Victims. Additionally, post hoc test revealed that Aggressive-Victims' mean rating of sympathy toward the victim ( $M = 4.668$ ) is significantly lower than Others' mean ratings of sympathy toward the victim.

A 2 x 2 (vignette manipulated controllability x gender) ANOVA was used to determine if there are mean differences in sympathy by gender and vignette type. All participants who answered the bullying vignette questions and gender information were included in the analyses ( $n = 933$ ). The results indicated significant differences in both manipulated controllability ( $F(1,932) = 198.464, p < .001, \omega_p^2 = .46$ ) and gender ( $F(1,932) = 28.582, p < .001, \omega_p^2 = .11$ ). Males mean sympathy ratings ( $M = 4.915$ ) were significantly lower than females ( $M = 5.630$ ). There was no significant interaction between gender and manipulated controllability for perceived controllability ( $F(1, 932) = 2.466, p = .117, \omega_p^2 = .008$ ; see figure 8).

**Mean Differences in Anger.** In order to assess whether participants' ratings of anger differ as a function of their self-reported participant role and vignette manipulated controllability, a 2 x 6 (vignette manipulated controllability x participant role) ANOVA was used. The results revealed significant main effects for vignette manipulated controllability ( $F(1,858) = 116.811, p < .01, \omega_p^2 = .118$ ) as well as significant main effects for participant role ( $F(4,858) = 2.563, p < .05, \omega_p^2 = .009$ ). Mean ratings of anger toward the victim were higher if participants read the vignette that did not include information that the victim's annoying behavior can be explained by a medical condition ( $M = 4.554$ ) than if they read the vignette that contained such information



( $M = 2.801$ ). Tukey's HSD post hoc tests revealed that Aggressors' rating of anger toward the victim ( $M = 4.087$ ) is significantly higher than Others' ratings of anger toward the victim ( $M = 3.206, p < .05$ ) which is the only significant difference in ratings of anger by participant role. The interaction between participant role and vignette manipulated controllability was also assessed yielding nonsignificant findings ( $F(5,858) = .616, p = .687, \omega_p^2 = .002$ ; see figure 9).

A 2 x 2 (vignette manipulated controllability x gender) ANOVA was used to determine if there are mean differences in anger by gender and vignette type. All participants who answered the bullying vignette questions and gender information were included in the analyses ( $n = 922$ ). The results indicated significant differences in manipulated controllability ( $F(1,921) = 151.595, p < .001, \omega_p^2 = .42$ ) but not for gender ( $F(1,921) = .198, p = .198, \omega_p^2 = .007$ ). Males mean anger ratings ( $M = 3.746$ ) were not significantly different than females ( $M = 3.565$ ). There was no significant interaction between gender and manipulated controllability for perceived controllability ( $F(1,921) = 1.353, p = .245, \omega_p^2 = .008$ ; see figure 10).

### **Research questions 8 and 9.**

Participants' judgments for helping the bully in the vignette are analyzed using a 2 x 6 (vignette manipulated controllability x participant role) ANOVA, with two levels of manipulated controllability and six participant roles. Main effects for both manipulated controllability and participant role were present ( $F(1,882) = 38.410, p < .001, \omega_p^2 = .040$  and  $F(5,882) = 22.828, p < .001, \omega_p^2 = .110$ , respectively). Specifically, participants' ratings of helping the bully were higher when they read the vignette that portrays the victim's annoying behavior as not being due to a medical condition ( $M = 2.481$ ) than when they read the vignette containing information portraying the victim's annoying behavior as being due to a medical condition ( $M = 1.754$ ).

Tukey's HSD post hoc tests revealed that if participants were categorized as Aggressors, mean ratings on the likelihood of helping the bully ( $M = 2.938$ ) are higher than the Defenders' ( $M = 1.756, p < .01$ ), Outsiders' ( $M = 1.659, p < .01$ ), Victims' ( $M = 1.939, p < .01$ ), and Others' ( $M = 1.380, p < .01$ ) ratings of helping the victim in the vignette. Post hoc test also revealed that Aggressive-Victims' ratings of helping the bully ( $M = 3.032$ ) are significantly higher than the Defenders' ( $M = 1.756, p < .01$ ), Outsiders' ( $M = 1.659, p < .01$ ), Victims' ( $M = 1.939, p < .01$ ), and Others' ( $M = 1.380, p < .01$ ) intentions of helping the bully. The results also showed an interaction between Participant Role and manipulated controllability on intent to help ratings ( $F(5,882) = 3.455, p < .01, \omega_p^2 = .014$ ). Figure 11 shows that for the vignette condition that includes controllability information (i.e. that the victim has a medical condition explaining their annoying behaviors) Aggressive-Victim and Outsiders are much less likely to report high levels of helping the bully than if this information is excluded thus showing that they are influenced by this information being included in the vignettes more than other participant roles.

A 2 x 2 (vignette manipulated controllability x gender) ANOVA was used to determine if there are mean differences in helping the bully by gender and vignette type. All participants were included in the analyses ( $n = 952$ ). The results indicated significant differences in both manipulated controllability ( $F(1,951) = 33.181, p < .001, \omega_p^2 = .08$ ) and gender ( $F(1,951) = 32.997, p < .001, \omega_p^2 = .08$ ). Males mean helping the bully ratings ( $M = 2.303$ ) were significantly higher than females ( $M = 1.707$ ). There was a significant interaction between gender and manipulated controllability for perceived controllability ( $F(1,951) = 5.46, p < .05, \omega_p^2 = .01$ ; see figure 12).

## Discussion

The current study set out to explore how observers' perceptions of a victim's culpability for being in a bullying situation are related to their emotional responses and intentions to assist the bully in the situation. A second major aim of the study was to investigate specific participant characteristics (i.e. participant role and gender) that might influence a person's perceptions of who is at fault, their affective responses toward a victim, and the likelihood of them helping the bully. Most bullying incidents occur in the presence of others who may be observing the situation so it is important to explore the characteristics of those students who are not directly involved but may be present during bullying incidents because they may significantly impact the progression of the situation (Peplar & Craig, 1994). Thus, if the current study can uncover factors that influence the likelihood of an observer helping the bully, interventions can be designed to target these factors and potentially reduce peer involvement in joining or helping bullies.

### Overall Mediation Model of Help-Giving

The current study was designed to first determine if the attribution model proposed by Weiner (1986, 1995) could be used to explain and predict observers helping the bully in a bullying incident. Using regression analyses, it was found that higher ratings of perceived culpability of the victim in the bullying vignettes are related to the observer feeling less sympathy, and more anger toward the victim, as well as higher intentions of assisting the bully. Further exploration on the role of participants' affective responses using both causal steps and bootstrapping analyses revealed that sympathy and anger function as significant mediating variables in the relationship between perceived controllability of the victim and intentions of

helping the bully for both vignette conditions. Thus, the relationship between the observers' perceived responsibility of the victim and assisting the bully is significantly influenced by their reported anger and sympathy toward the victim.

These results are important because they indicate that we may be able to shape observers' behaviors by teaching them to change the way they perceive the victim in bullying situations. If intervention efforts could effectively do this, the results suggest that they would also influence and change the observers' emotional responses toward the victim and their likelihood of assisting the bully. This would likely be achieved by adding components of an attributional retraining approach (Försterling, 1985) to a universal school-wide bullying intervention program such as the Second Steps (Frey, Hirschstein, & Guzzo, 2000). If an intervention of this kind is successful in changing the observers' perception of controllability and subsequent affect, the findings of the current study suggest that the behavioral responses of helping the bully may also be decreased. Further, the discussion of the results by gender and participant roles have implications for ideas on interventions strategies for small group and tertiary interventions to help when more specific information about the students are know (i.e., participant role and gender).

### **Results for Gender**

A secondary goal of the study was to determine if there are any specific participant variables that change the mediation model. Specifically, the current study set out to determine if the mediation model changes as a function of the participants' participant roles and/or gender. When conducting individual mediation analyses for each gender (i.e. mediation analyses for males and females separately), sympathy mediated the relationship for males and females

regardless of whether or not the controllability information was included in the vignette.

However, anger was found to mediate this relationship for both genders when the vignette contained controllability information but only for males when it does not contain this information.

Consistent with past research showing that females are more able to understand a victim's suffering (Hoffman, 1977), the females in the present study are less likely to want to join the bullying. Furthermore, females also have higher levels of sympathy for the victim and lower perceptions of victim culpability than males. Although there are no significant differences on mean levels of anger by gender, anger was only a significant mediator in the overall relationship for females responding to the vignette that contained controllability information. Interestingly, in this condition they also endorsed lower overall anger responses toward the victim. Thus, females' anger responses toward the victim would be less meaningful in predicting the likelihood of them helping the bully than the anger responses for males, who had uniformly higher rates of anger. Therefore, interventions targeting a reduction in both males' anger and causal attributions toward the victim may be the most beneficial in reducing the overall likelihood of assisting bullies. Additionally, because females' anger adds no significant explanatory power in predicting assisting behavior, it may be more important to target the causal attributions and not their levels of anger toward the victim to decrease the likelihood of joining the bully. However, it should be noted that the current results are based on a vignette depicting males engaged in physical harassment (a primarily male-based type of bullying). These results may differ if female respondents were considering a vignette depicting female participants engaged in bullying behavior more typical of girls (indirect harassment, social exclusion, etc.).

## Results for Participant Roles

The current study also investigated how participants' roles in bullying situations influence their perceptions of controllability, emotional responses, and intentions of helping the bully. The differences found within each participant role have important implications for future research and intervention and are further discussed throughout the rest of this section.

**Aggressors.** The results for Aggressors indicated that they respond in a way that is consistent with their measured role. Specifically, when compared to other participant roles, Aggressors tend to have higher levels of anger toward the victim, lower levels of sympathy toward the victim, and higher intentions of helping the bully compared to other participant roles, regardless of whether controllability information was furnished. Previous research has shown that children who display aggressive behaviors (similar to the Aggressors in the current study) tend to interpret ambiguous social cues from peers as more hostile and threatening compared to nonaggressive youth (a hostile attribution bias; Dodge, Petite, McClaskey, & Brown, 1986). Although HAB studies have primarily focused on misattribution of hostile intentions in situations where a person is directly interacting with participants, a similar dynamic may be occurring in the current study. Chiefly, participants that are more likely to be aggressive may also be more likely to be primed to see any ambiguous behaviors as provocative, and be more likely to behave in accordance with this interpretation. The victim in the current study's vignette is described to be engaging in annoying behaviors which appear to lead to being bullied. Thus, Aggressors tend to interpret this victim as being more in control of and responsible for being bullied when a straightforward explanation as to why these behaviors are happening is not provided (i.e. due to a medical condition) and indicate that they would be more likely to help or join the bully than non-aggressive peers.

The results also indicated that the relationship between perceived controllability of the victim and assisting the bully is working through the emotional response of anger when controllability information is provided to Aggressors. This is consistent with research showing that bullies tend to have difficulties channeling their anger and frustrations in appropriate ways (Sheras, 2002). This may be due to aggressive children having difficulties accessing positive behavioral responses in social situations (Crick & Dodge, 1994).

Overall, the results of the current study suggest that it is important for bullying intervention programs to include components that are targeted at helping Aggressors learn skills to view the victims of bullying as less culpable and to access more positive behavioral responses when encountering these types of situations. This could be achieved by having children generate and discuss different behavioral responses to both provocative and benign situations in order to provide them with an array of behaviors for situations similar to what they may encounter throughout their school day. It may also be beneficial for these students to rate each response on effectiveness and provide examples of consequences of engaging in each of the behaviors. This would allow students to have a discussion about the acceptability of different types of responses and persuade Aggressors to see that there are alternatives to aggressive behaviors. This approach may be especially powerful for Aggressors because of the influence peers have been shown to have on maintaining bullying behaviors (Salmivalli, 2010). Utilizing peer input in providing alternative behavioral responses to situations would seem to be much more meaningful to Aggressors than feedback from school personnel or other adults.

**Aggressive-Victims.** Similar to Aggressors, results for Aggressive-Victims responding to the vignette containing controllability information indicate that anger mediates the overall relationship and sympathy does not function as a mediator in either vignette condition. This

result is consistent with past research indicating that aggressive-victims have more difficulties regulating their negative emotional states, such as anger, and often engage in more reactive aggression compared to other children (Schwartz, Dodge, Pettit, & Bates, 1997). Price and Dodge (1989) found that children who display reactive aggression also experience higher levels of peer rejection. This leads to a situation in which Aggressive-Victims are more likely to be provoked and also more likely to react aggressively toward others. This leads Aggressive-Victims being ultimately stuck in their role. Because reactive aggression is associated with HAB (Schwartz, Dodge, Coie, Hubbard, Cillessen, Lemerise, & Bateman, 1998), Aggressive-Victims typically interpret peer behaviors with more hostile intent than non-reactive youth. Further, this interpretation may lead them to engage in more aggressive behaviors. Thus, the behavioral pattern by Aggressive-Victims would be expected to be very similar to Aggressors.

Although the pattern for Aggressive-Victims and Aggressors is similar, there are some important distinctions that help explain how Aggressive-Victims are a unique subset of aggressive youth. Schwartz, Proctor, and Chien (2001) also indicated that Aggressive-Victims are often characterized as having a particularly difficult time in modulating behaviors and affect. This can lead to an increased risk for peer rejection and overall adjustment difficulties in school. Additionally, Aggressive-Victims have been characterized as being the most aggressive out of all participant roles (Salmivalli & Nieminen, 2002). This is consistent with the results of the current study showing that Aggressive-Victims have the highest intentions of helping the bully compared to other participant roles when the controllability information is not included in the vignette. There is also an interaction that occurs between participant roles and manipulated controllability indicating that when given the controllability information, Aggressive-Victim's are much less likely to say they would help the bully than if this information is provided. Thus,



the results for Aggressive-Victims suggest that they are more likely to respond to the controllability information than other participant roles. This finding may be due to Aggressive-Victims, who have personal histories of being bullied (Dodge, Lochman, Harnish, Bates, & Pettit, 1997), being much more likely to empathize with victims especially when they are primed with such information.

The current results have not been seen in previous research and suggest that this subgroup of students is complex but also may significantly benefit from being taught to look for information that would lead them to interpret the victim as less culpable for being bullied. Although Aggressive-Victims are more likely to interpret others' behaviors as more hostile, the current study demonstrated that if they are explicitly provided information suggesting that another person's behavior is not hostile in nature, they are much more likely to say they would not join the bully. Results also indicated that Aggressive-Victims would also be less likely to interpret the person's behaviors as in their control and hostile when this information is provided. Aggressive-Victims may be influenced by their own experiences with being a victim. Thus, they may be predisposed to feel more sympathy when they are able to access information that suggests that a person's behaviors that may be perceived as hostile are not be in their control. Overall, it would be important for school personnel to identify Aggressive-Victims in order to develop more strategic and specific interventions for these students.

The current study suggests that intervention efforts for Aggressive-Victims should take place in a small group setting in order to draw on the similar experiences of students in this unique group. Utilizing this approach, the students could be instructed to share times when they have been a victim of bullying and ways that may have felt helpless in these situations. This may lead to more sympathetic responses from students in the group because they could relate to the

situations that are being shared. After this, students could provide examples of situations where they reacted aggressive and potentially bullied another student and then provide reason for which that person may not have been responsible for being in the situation. This could be a way to prime Aggressive-Victims for sympathetic responses and being able to interpret others' behaviors as less hostile while at the same time utilizing personally meaningful examples. If this small group intervention is utilized, it will be important to carefully navigate issues surrounding confidentiality with the information shared in group. This approach paired with the development of coping skills designed to help regulate their emotions could significantly decrease the amount of aggressive responses Aggressive-Victims display at school.

**Outsiders.** Outsiders are a group of students in bullying situations who could be important bystanders because their actions in response to an observed bullying incident could significantly influence how the situation progresses if they do become involved. Based on the nature of Outsiders, it is expected that they would have a different response pattern than the more active participant roles (i.e. Aggressors and Aggressive-Victims) in the current study. The results indicated that anger does not mediate the overall relationship for Outsiders and thus, does not play as important of a role in their intentions of helping the bully as it did with Aggressors and Aggressive-Victims. For example, even if Outsiders have a high level of anger toward the victim, this anger response does not significantly influence/predict the likelihood of them joining the bully in the current study. The results also indicated that Outsiders' mean levels of anger were the lowest of all participant roles for the vignette that contained controllability information and second lowest when the information was not included. Together, the results indicate that although Outsiders tend to have lower levels of anger toward the victim overall, this affective response does not significantly influence the likelihood of them assisting the bully.

These findings may be due to Outsiders being characterized as children who typically withdraw from bullying situations (Salmivalli, 2010) which would suggest that they would not be as likely to join in the bullying situation even if they are experiencing elevated levels of anger compared to other participant roles. Further, the only condition that affect does serve as a significant mediator in the overall model is for sympathy on the vignette that does not contain controllability information. This is also the condition that Outsiders would be most likely to not join in the bullying situation as well. However, the finding that there is still a significant difference in their intentions of helping the bully when controllability information is included is very important for this group. This indicates that the information provided in the vignettes is the main factor influencing Outsiders' intentions of helping which is important considering that these children typically stay out of bullying situations. Furthermore, Outsiders overall levels of assisting the bully significantly decreased when the controllability information is included which indicates that these important "fence-sitters" can be influenced by the causal information they are provided about a bullying situation. Universal intervention strategies which are discussed later should be focused on reaching Outsiders in an effective way because they are the sizable majority of the student body and they are in a position that would allow them to easily move into another role during a bullying episode. For this reason, it seems critical to develop intervention strategies that would keep Outsiders from joining and helping the bully and the current study suggests that teaching them that a victim may not be at fault for being bullied is a key component in achieving this.

**Defenders.** Results indicated that Defender's anger and sympathy both play a significant role in predicting their subsequent intentions of helping the bully. For Defenders, sympathy mediates the overall relationship only when controllability information is not included, and anger

mediates the relationship only when this information is included. The results also show that Defenders have higher overall levels of sympathy toward the victim than Aggressors, Aggressive-Victims, Outsiders, and Victims. This means that when Defenders are not given the controllability information, their sympathy toward the victim may help maintain lower intentions of helping the bully because of the negative correlation sympathy has with joining the bully. However, having the controllability information in the vignette also leads to lower anger towards the victim. This may be decreasing the overall intentions of helping the bully by Defenders due to the positive correlation found between these two variables. Thus, these findings show that the emotional responses toward the victim appear to be especially important in defending behaviors and choosing not to join the bully.

Consistent with the behaviors that define their role, Defenders' overall intentions of helping the bully in the vignette are significantly lower than Aggressors and Aggressive-Victims. These intentions of helping also appear generally low and less affected by the controllability information. Previous research which indicates that Defenders tend to have strong anti-bullying attitudes (Salmivalli & Voeten, 2004) and have high self-efficacy related to defending (Pöyhönen & Salmivalli, 2008). Further, children who are categorized as Defenders tend to be well-liked (Salmivalli et al., 1996) and perceived as popular by peers (Caravita, DiBlasio, & Salmivalli, 2009). This may be positively reinforcing the behaviors of not joining the bully and helping the victim. Overall, the current study makes a case that increasing the sympathy and decreasing the anger of Defenders by teaching them to put less culpability on the victim would be important to maintain their defending behaviors. Although, this is not a group that interventions would be necessarily aimed at because of their role in helping victims,

interventions strategies could be aimed at highlighting their positive behaviors in helping victims to demonstrate to other students that they could engage in behaviors to help victims of bullying..

**Victims.** For Victims, sympathy appears to play a unique role in their intentions of helping the bully in the vignettes. For the vignette condition that did not contain controllability information, perceived controllability's influence on helping the bully is mediated by sympathy. However, this is also the condition for which Victims evidence fairly low levels of sympathy to begin with, with only Aggressors and Aggressive-Victims being lower. This presents a complex situation where Victims are relatively unsympathetic when they do not have the knowledge of the vignette victim's specific characteristics which may have led to them being bullied. Yet, at the same time, higher levels of sympathy can predict an absence of joining behaviors, highlighting the importance of cultivating critical empathetic thinking that can lead to more sympathetic responses toward victims. Thus, when there is no controllability information provided, they may not feel more sympathy than other participant roles but sympathy is playing an important role in the overall relationship with helping the bully.

A different pattern is seen in the when controllability information is included in the vignette with an absence of a significant indirect effect for sympathy. However, this is likely due to significantly higher levels of sympathy, overall, as well as the limited range of data for the variables in this condition (see table 13). One could argue that a significant indirect effect is unnecessary given the low levels of controllability, high levels of sympathy, and low levels of intent to join, regardless of a significant path through sympathy. This finding may be due to Victims being better able to relate to and understand the situation that the victim is experiencing. This may lead to them having significantly higher levels of sympathy for the victim but not lower levels of joining the bully relative to their empathetic response. Previous research indicates

that victims often go to considerable means to avoid being future victims (Slee, 1994), which may be why their levels of helping the bully are more neutral compared to other participant roles even when they have higher levels of sympathy overall.

These results are also consistent with research showing that frequent victimization in early childhood can lead to the development of biased social-cognitive processing (Rosen, Milich, & Harris, 2009). Rosen, Milich, and Harris (2009) found that victimized children often respond to bullying situations with emotions and behaviors consistent with their own experiences. Therefore, the response pattern that was found for Victims may be due to biases in their abilities to effectively process the social situation because of their own experiences with bullying. This could explain why their emotional responses are playing a more important role in predicting their intentions of helping the bully in one condition but not the other. It appears that Victims' personal experiences of being bullied is likely influencing them to report that they would help the bully enough to maintain a safe position even though they have relatively high levels of sympathy for the victim. Overall, the results suggest that it may be these social-cognitions that need to be targeted to inhibit the joining in behaviors of Victims.

**Others.** A different response pattern was found for participants categorized as Others compared to all other participant roles with neither sympathy or anger mediating the overall model. This is important because although their level of sympathy toward the victim is high, it is not a meaningful predictor of helping the bully and that their level of perceived controllability is a better predictor alone. Additionally, Others' reported intentions of helping the bully are the lowest in both conditions. This suggests the Others group are less aggressive and less likely to take part in the bullying situation compared to all other participant roles. Overall, these findings may be due to the unique characteristics of the role Others tend to play in bullying situations.

The PRQ indicates that the group categorized as Others are characterized as a group of students who are present during the bullying situation but are not active participants when it occurs. Olweus (2001) has described a group of students involved in the bullying circle who tend to watch what happens but do not take a stand which he labeled as disengaged onlookers. These disengaged onlookers, or “Others,” can be important swing people in the overall bullying process because these are students who can shift power to either the bully or the victim depending on their actions. Overall, the results of the current study suggest that targeting the causal ascriptions made by these students is more important than trying to get them to be more empathetic toward the victim in order minimize their joining and helping the bully behaviors. Similar to Outsiders, universal interventions are best suited for targeting Others because they are critical to keep from joining the bully in the goal of decreasing school-wide bullying overall.

## **Conclusion**

The current study’s results indicate that the causal attributions, affective responses, and intentions of helping the bully by observer can all be influenced significantly by the information that has been provided to the individual regardless of their gender and/or participant role. The study also found that the results for Weiner’s model are mixed, with emotions mediating the model in some cases but not in other cases. In the cases where affect does not mediate the model, perceived controllability continues to be a significant predictor of helping the bully and participants respond with less intentions of helping the bully for the vignette that included controllability information. Although there are some interesting differences that have more specific intervention implications, the results indicated this influence of the controllability information regardless of the participants’ own gender or participant roles. Thus, these findings lend support that utilizing attributional retraining components in a universal bullying intervention

program may be beneficial at decreasing overall negative bystander involvement. These components would be designed to teach children to analyze a victim's behavior and reason for being in a bullying situation with more complexity and ultimately, more prosocial ways. This section is devoted to discussing an intervention approach that is more universal than what has previously discussed and designed to reach every student in the school.

Current school-based anti-bullying programs are often universal programs that generally include these main components: Democratic participation of all school members, improvement of the classroom atmosphere, introduction of peer support systems, interventions in the recreational areas of school, pro-social activities included in the classroom, and individualized work with bullied students or those at risk for being bullied (Cowie, 2000; Cunningham, Cunningham, Martorelli, Tran, Young, Zacharias, 1998). Several meta-analyses of studies investigating the effectiveness of school-wide bullying prevention programs have not produced promising results and often reveal that there is very little effectiveness of the current programs being used in schools (Smith, Schneider, Smith, & Ananiadou, 2004; Vreeman & Carroll, 2007; Merrell, Gueldner, Ross, & Isava, 2008). None of these programs include an explicit attribution retraining component and, according to the results of the current study, this may be a key component in reducing the likelihood of observers joining the bullying situation as an aggressor or reinforcing the bullying behaviors, particularly when addressing students at school-wide level.

Försterling (1985) conducted a comprehensive review of studies on attributional retraining on an individual level and concluded that these methods have been consistently successful in increasing persistence and performance for many educational subjects. Based on the results of the current study, using this same attributional retraining approach to teach students to perceive the victim as less responsible for being in a bullying situation may decrease the



likelihood of the perceiver to help the bully in bullying situations which will likely lead to less reinforcement for bullying behaviors. Further, the attributional retraining component suggested here could include lessons to teach students that there are multiple ways to perceive any given situation and that their perceptions heavily influence their subsequent behaviors in these situations. These skills could be practiced by utilizing scenarios and vignettes of different types of typical interactions, including bullying interactions, and then eliciting examples of different ways to perceive the intentions of the characters in the scenarios. It would also be important to not single out any specific students in the school when creating examples for the students because this could lead to the student being stigmatized. With this, utilizing more benign examples will be very important in discussing individual differences in students. Overall, incorporating this type of attributional retraining component at all levels of an already existing positive behavioral support program may be very beneficial in decreasing the occurrence of bullying and increasing school-wide prosocial behaviors.

### **Limitations and Future Directions**

Although the current study does have some interesting and meaningful findings, it also has limitations that future research can address. One limitation is that the current study is making the assumption that the responses provided by the participants correspond with the way they will actually behave in bullying situations. Although there is a correlation between a person's declaration of behaviors and their actual behaviors (Ajzen & Fishbein, 2005), this correlation is mediocre and we cannot always assume that the way a person responds to our questions may be the way they will behave in real bullying situations. Future research utilizing observational data may be able to determine if the way students respond to questionnaires similar to the current study is how they would actually behave in a bullying situation.

Another limitation of the current study is that the data did not result in participant roles that are consistent with previous research. Specifically, the current study found an “Others” role that is difficult to clearly define. Although there are previous studies that have had difficulties with clear aggressor categorizations (i.e. Salmivalli, Huttunen, and Lagerspetz, 1997), the current study found a group that is characteristically different than all of the other previously found participant roles utilizing the Participant Role Questionnaire. In the current study, the Others group was maintained and not grouped with the Outsider role based on the differences found in the results for the Others compared with the other participant roles. Although the Others role appears to be similar to the group Olweus (2001) describes as the disengaged onlookers, the measures utilized in the current study are not designed to categorize students into this role specifically. Future research on the Participant Role Questionnaire is needed to determine if the participants grouped as Others in the current study can be categorized as fitting the characteristics of disengaged onlookers.

A main aim of the current study was to determine if sympathy and anger play a significant role in observers’ intentions of helping the bully. One problem is that there may be aggressors that take a more proactive aggressive style and their emotions may not play a significant role in the aggressive actions toward victims. This study did not include a measure on reactive and proactive aggression and previous research has shown that these are two characteristically different forms of aggression (Crick & Dodge, 1996). This may impact the results of the current study because there may be participants included in the study who do not have a strong emotional stance when engaging in bullying acts and engage in a more instrumental style of aggression. This is a variable that future research should address by

including a measure of reactive and proactive aggression to determine if there are individual differences that appear as a result of being categorized as either proactive or reactive aggressors.

Finally, the current study's findings lend support to the idea that an attributional retraining intervention could be utilized to help facilitate more understanding of pupil behavior and increase prosocial behavior in a school setting. The next step in future research studies would be to create a program that could be used in a school setting to specifically train students to attribute less blame toward the victims of bullying. This may then foster less helping and joining the bully from those who observe bullying situations. Future research could be designed to develop a school-wide intervention program that utilizes an attributional retraining approach and then explore the effectiveness of this program on both increasing the prosocial behaviors of student when encountering a bullying situation and decreasing the overall bullying and joining in behaviors. This will be an important next step in combining research with practice and may lead to a different and more effective approach to bullying prevention than what is being used in schools today.

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Figure Caption

*Figure 1.* General model of attribution research.

*Figure 2.* Attribution -> Emotion -> Action model.

*Figure 3.* Models of helping behavior relating the eliciting stimulus, perceived controllability, and affective reactions to help giving behavior.

*Figure 3.* Mean levels of perceived controllability by manipulated controllability and participant role.

*Figure 4.* Definition of bullying provided by Olweus (1996).

*Figure 5.* Mean levels of perceived controllability by manipulated controllability and participant role.

*Figure 6.* Mean levels of perceived controllability by manipulated controllability and gender.

*Figure 7.* Mean levels of sympathy by manipulated controllability and participant role.

*Figure 8.* Mean levels of sympathy by manipulated controllability and gender.

*Figure 9.* Mean levels of anger by manipulated controllability and participant role.

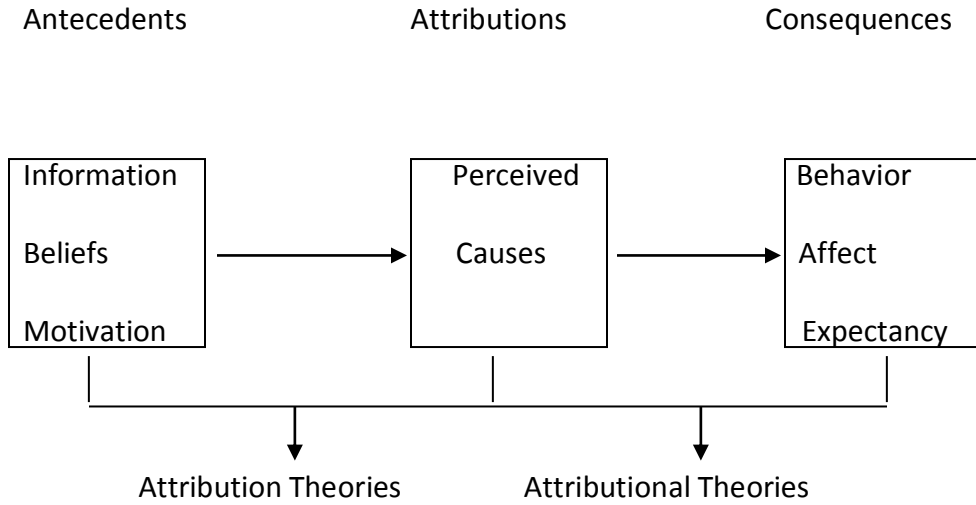
*Figure 10.* Mean levels of anger by manipulated controllability and gender.

*Figure 11.* Mean levels of helping the bully by manipulated controllability and participant role.

*Figure 12.* Mean levels of helping the bully by manipulated controllability and gender.

*Figure 13.* Mediation model of helping with sympathy functioning as a mediating variable.

*Figure 14.* Mediation model of helping with anger functioning as a mediating variable.



Adapted from Kelley (1967)

Figure 1. General model of attribution research.

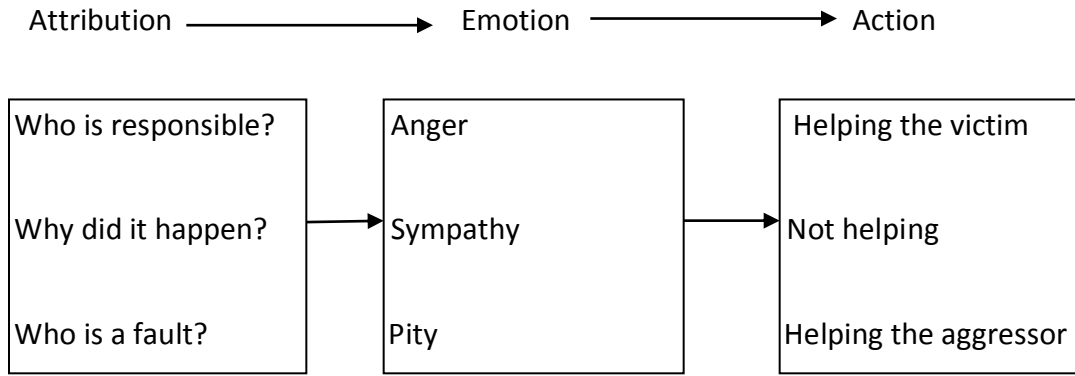
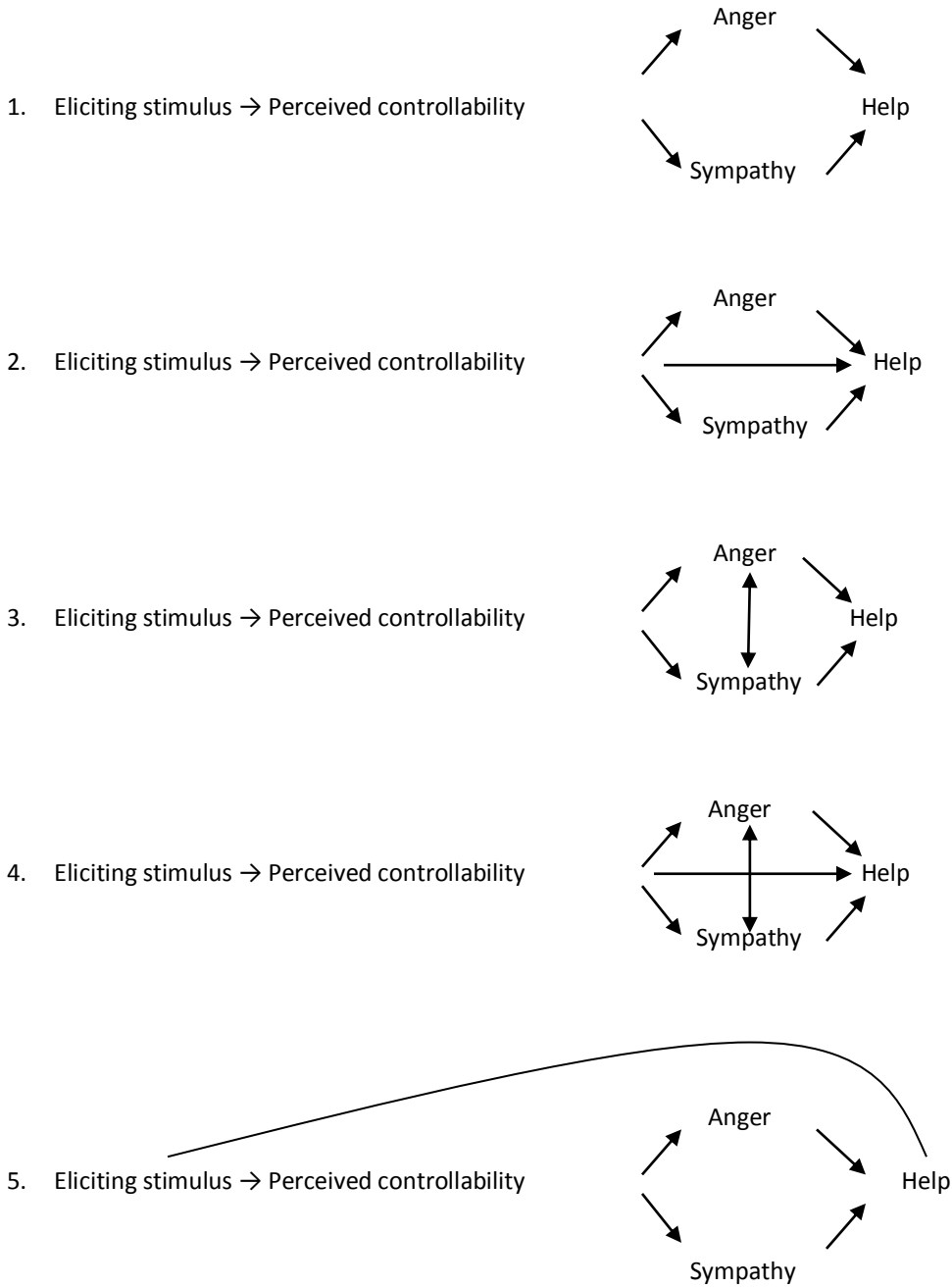


Figure 2. Attribution -> Emotion -> Action model.



Adapted from Weiner (1980a)

Figure 3. Models of helping behavior relating the eliciting stimulus, perceived controllability, and affective reactions to help giving behavior.

When considering bullying, we say **a student is being bullied when another student, or several other students**

- Say mean and hurtful things of him or her or call him or her mean or hurtful names
- Completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- Hit, kick, push, shove around, or lock him or her inside a room
- Tell lies or spread false rumors about him or her or send notes and try to make other students dislike him or her
- And other hurtful things like that

When we talk about bullying, these things happen **repeatedly**, and it is **difficult for the student being bullied to defend himself or herself**. We also call it bullying, when a student is teased repeatedly in a mean and hurtful way.

But, we **don't call it bullying** when the teasing is done in a friendly and playful way. Also, it is **not bullying** when two students of about equal strength or power argue or fight.

*Figure 4.* Definition of bullying provided by Olweus (1996).

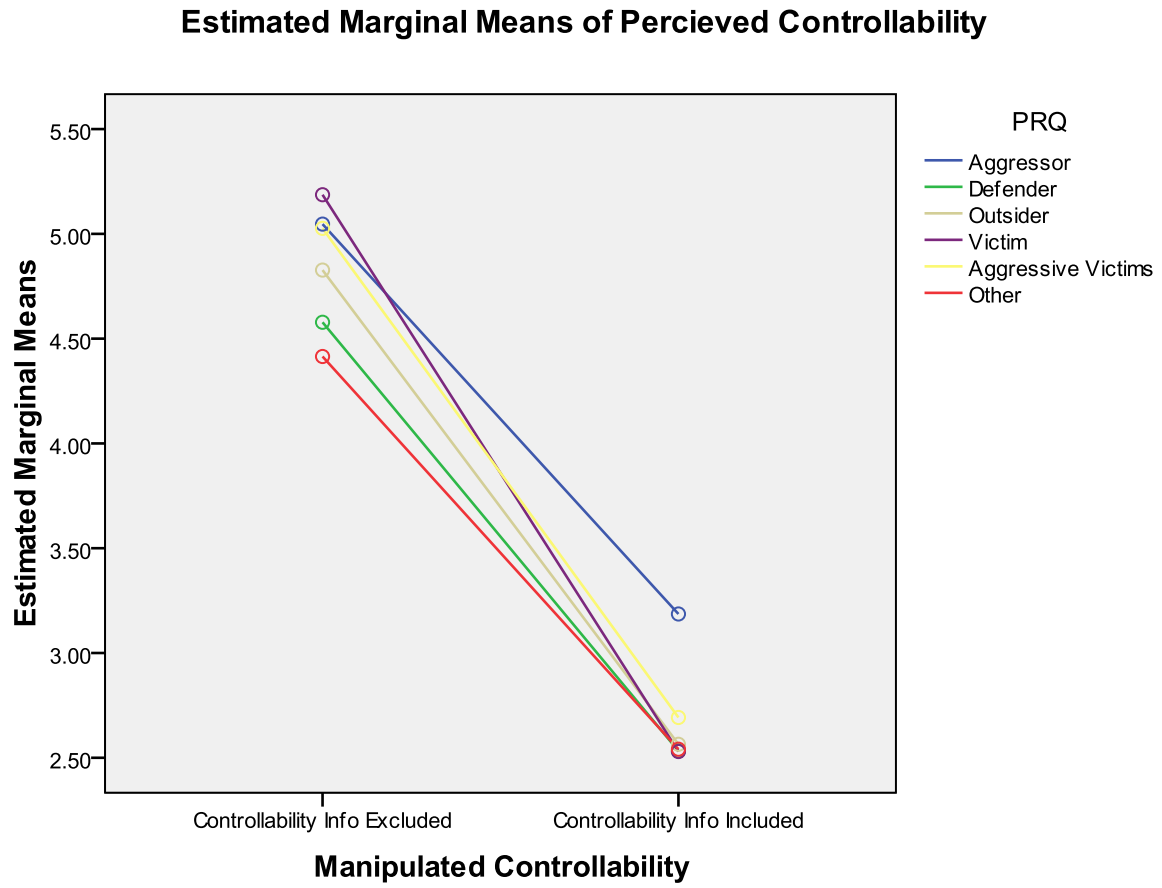


Figure 5. Mean levels of perceived controllability by manipulated controllability and participant roles.

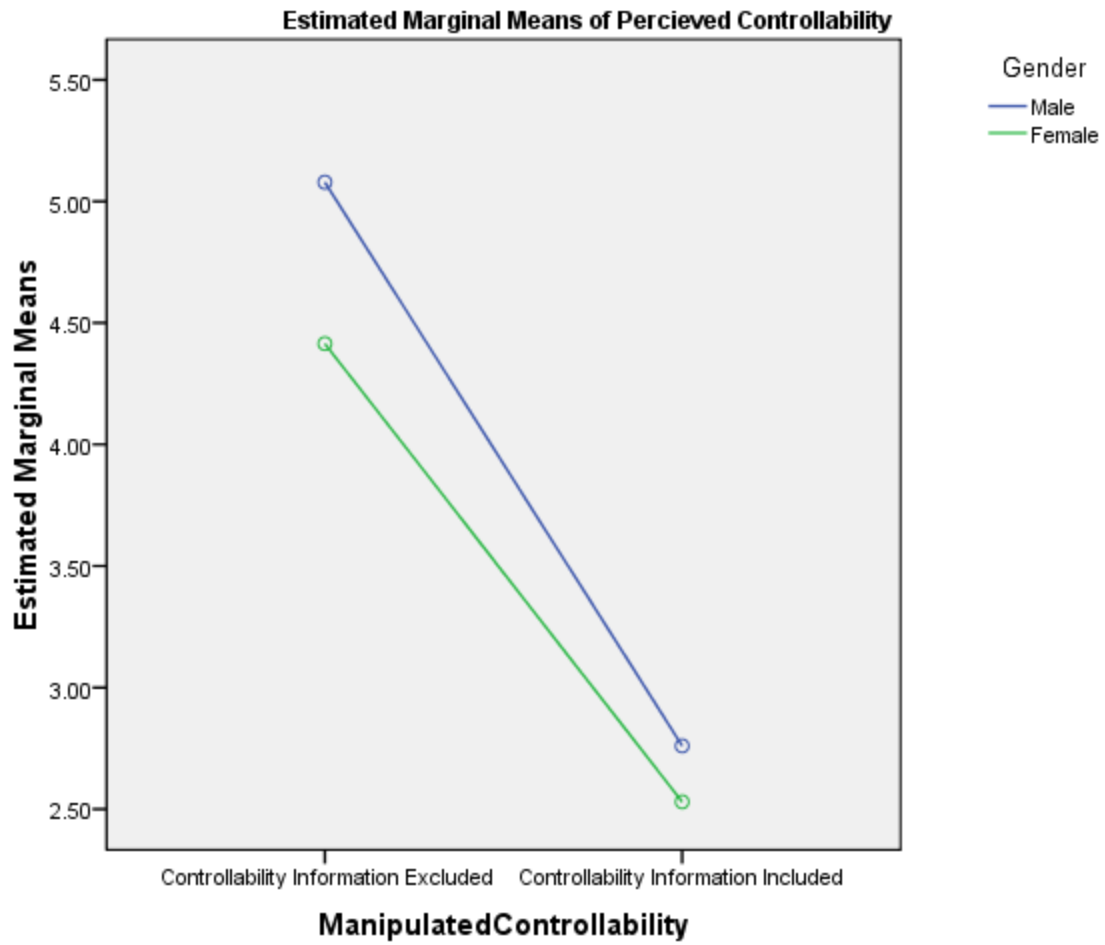


Figure 6. Mean levels of perceived controllability by manipulated controllability and gender.



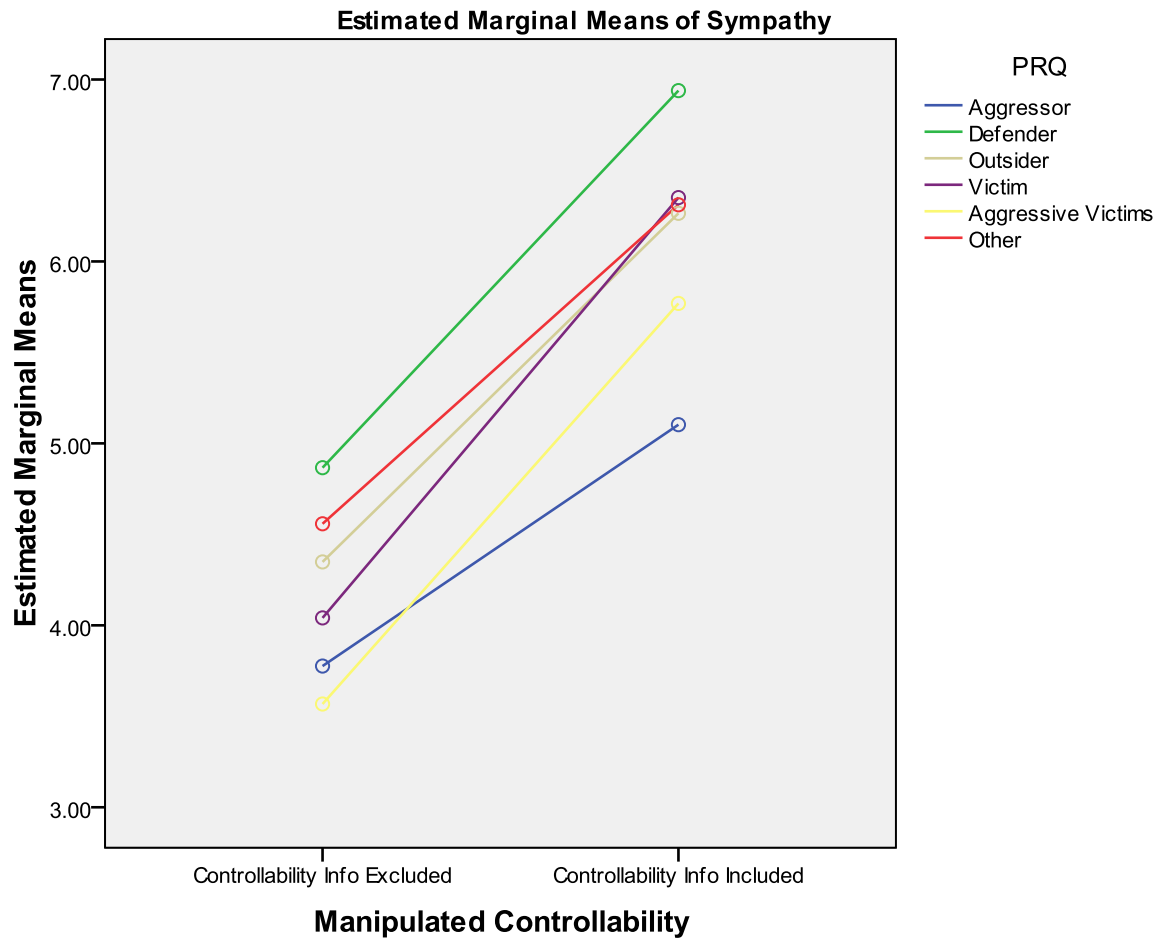


Figure 7. Mean levels of sympathy by manipulated controllability and participant role.

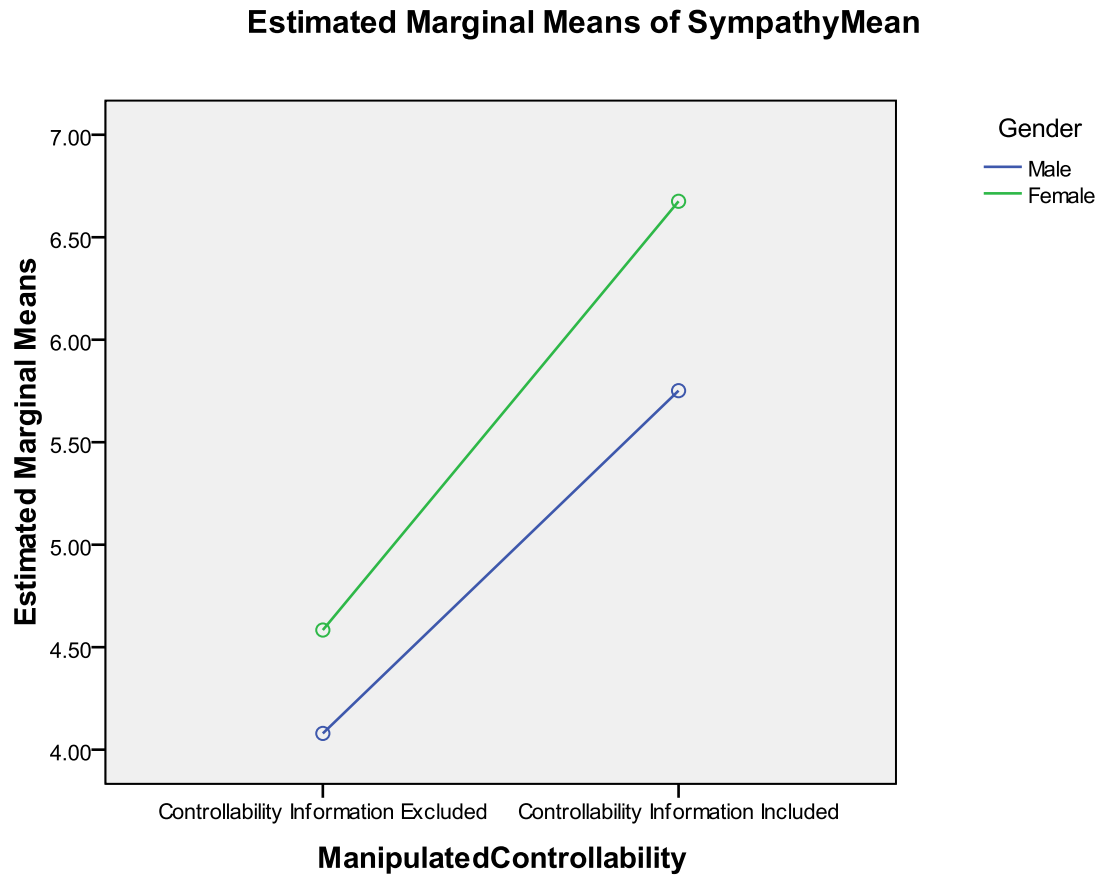


Figure 8. Mean levels of sympathy by manipulated controllability and gender.

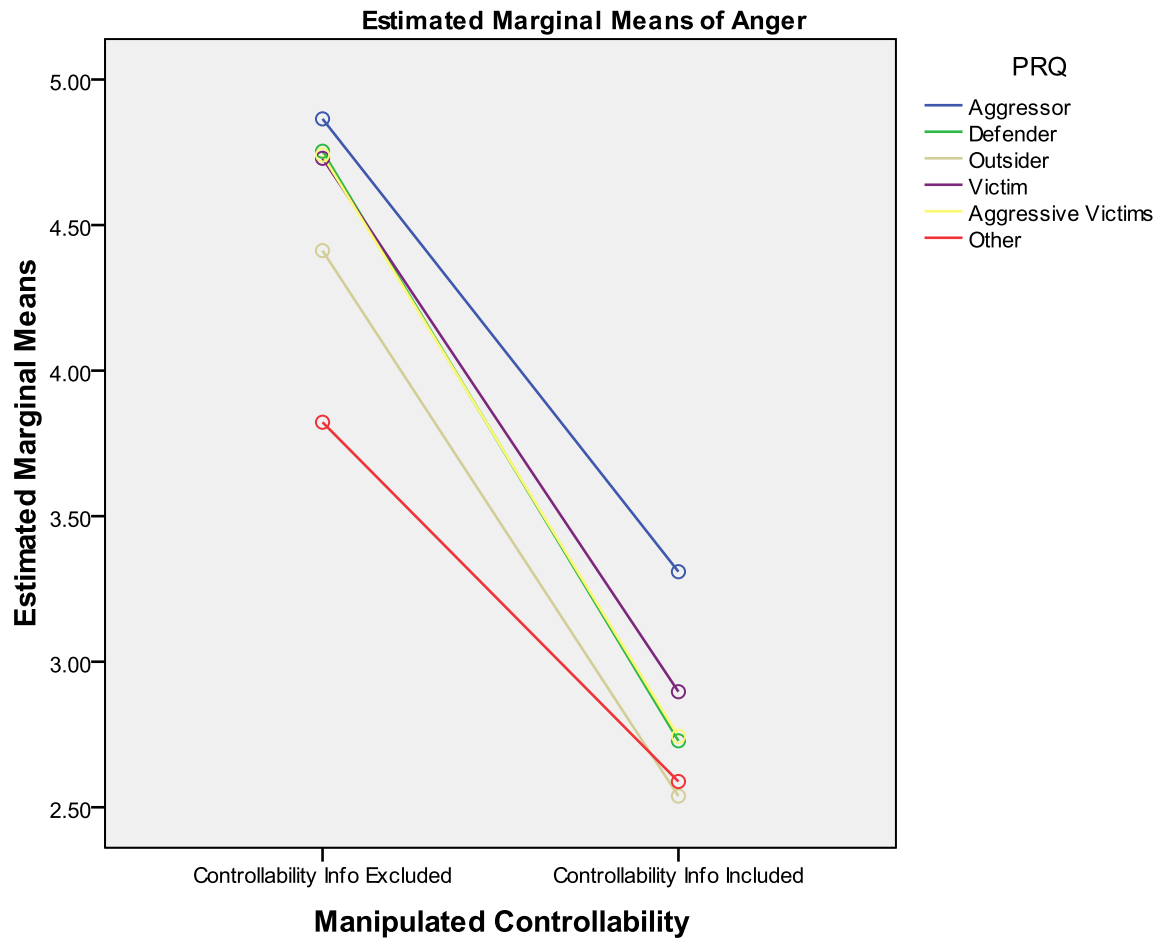


Figure 9. Mean levels of anger by manipulated controllability and participant roles.

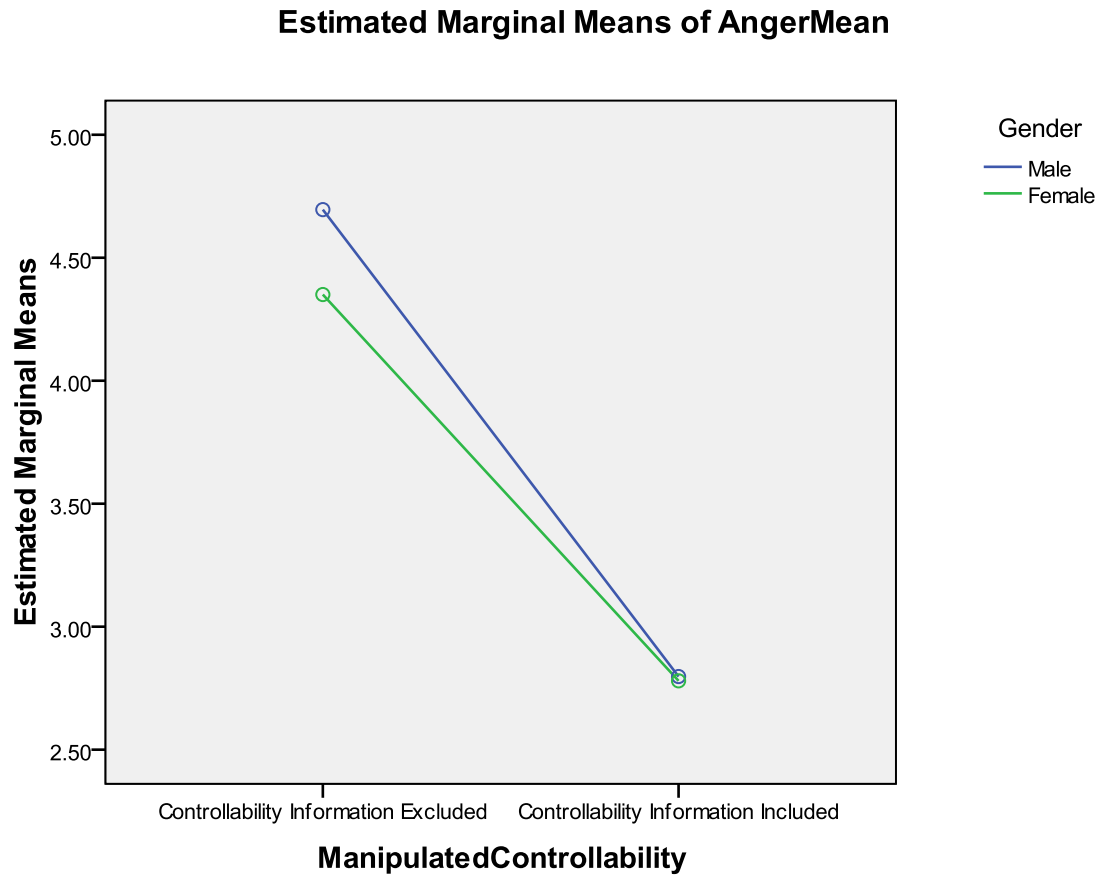


Figure 10. Mean levels of anger by manipulated controllability and gender.

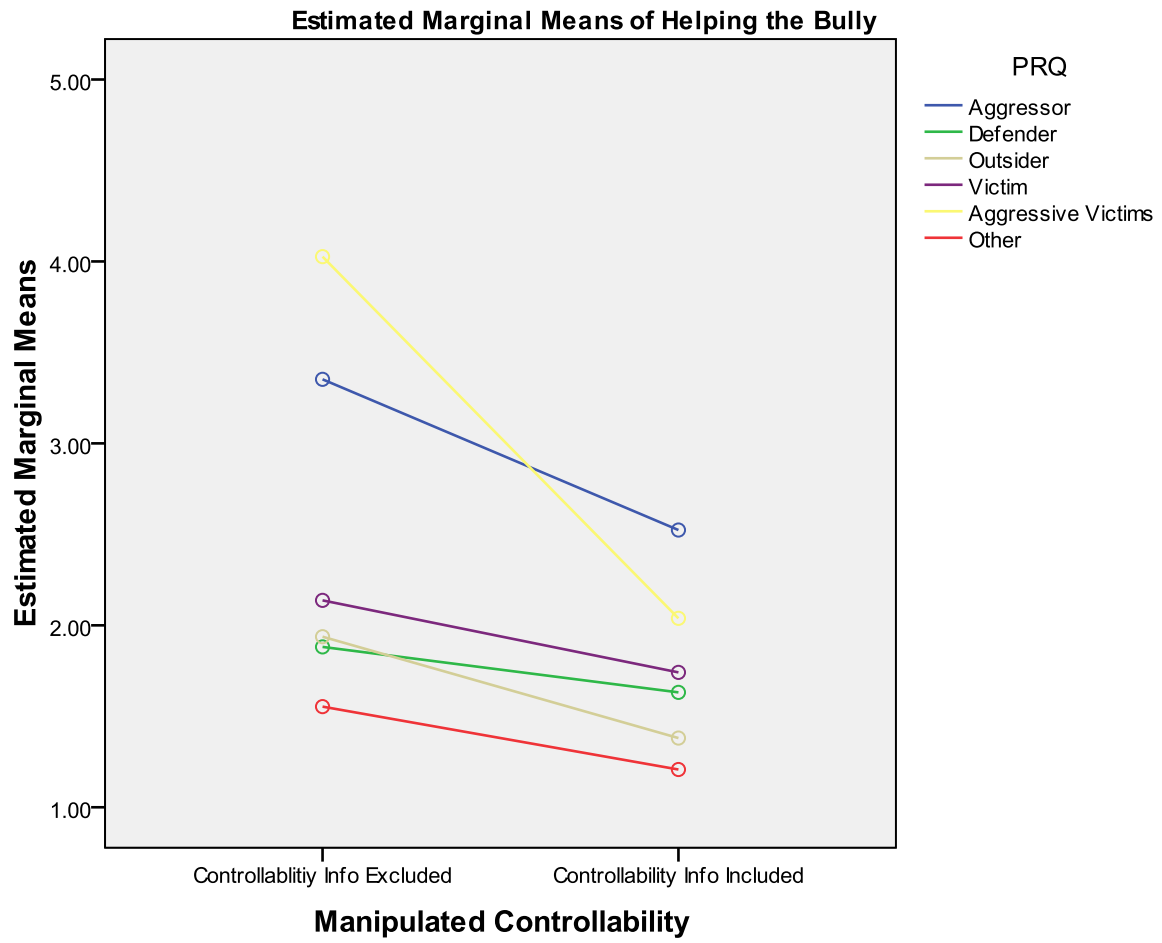


Figure 11. Mean levels of helping the bully by manipulated controllability and participant roles.

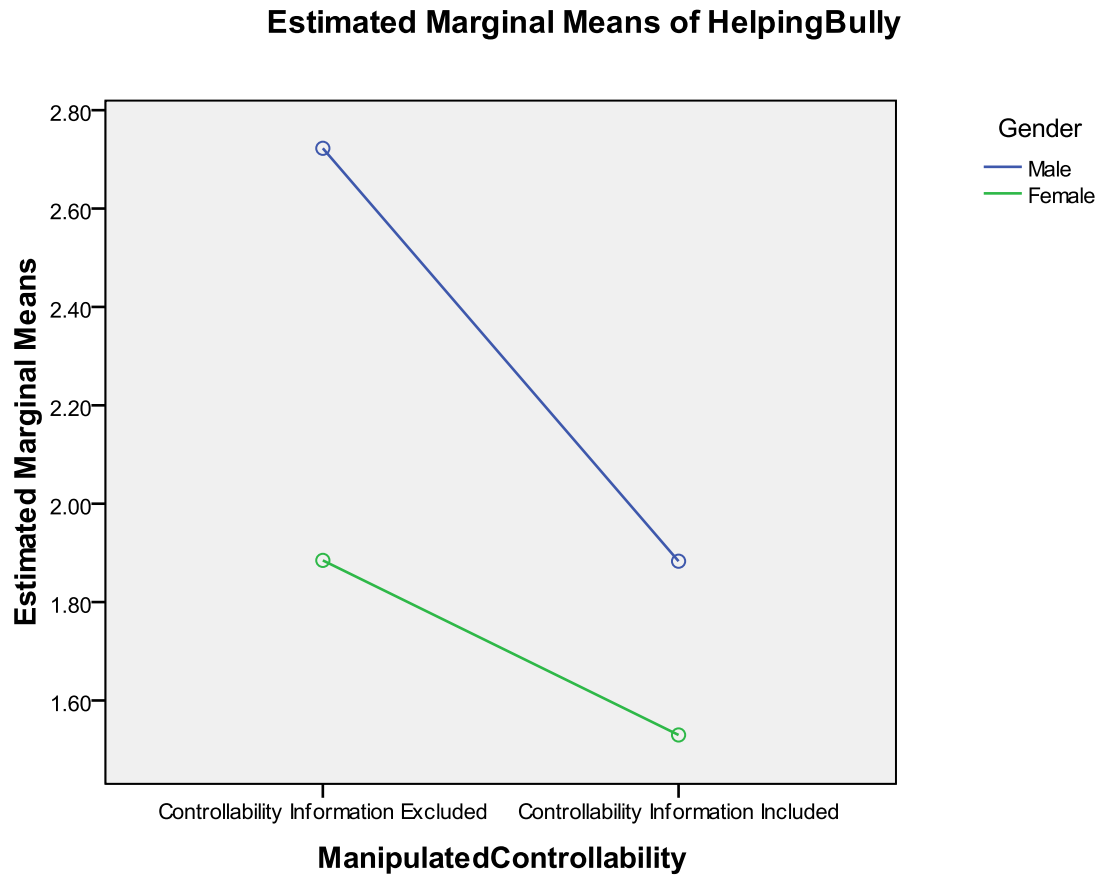


Figure 12. Mean levels of helping the bully by manipulated controllability and gender.

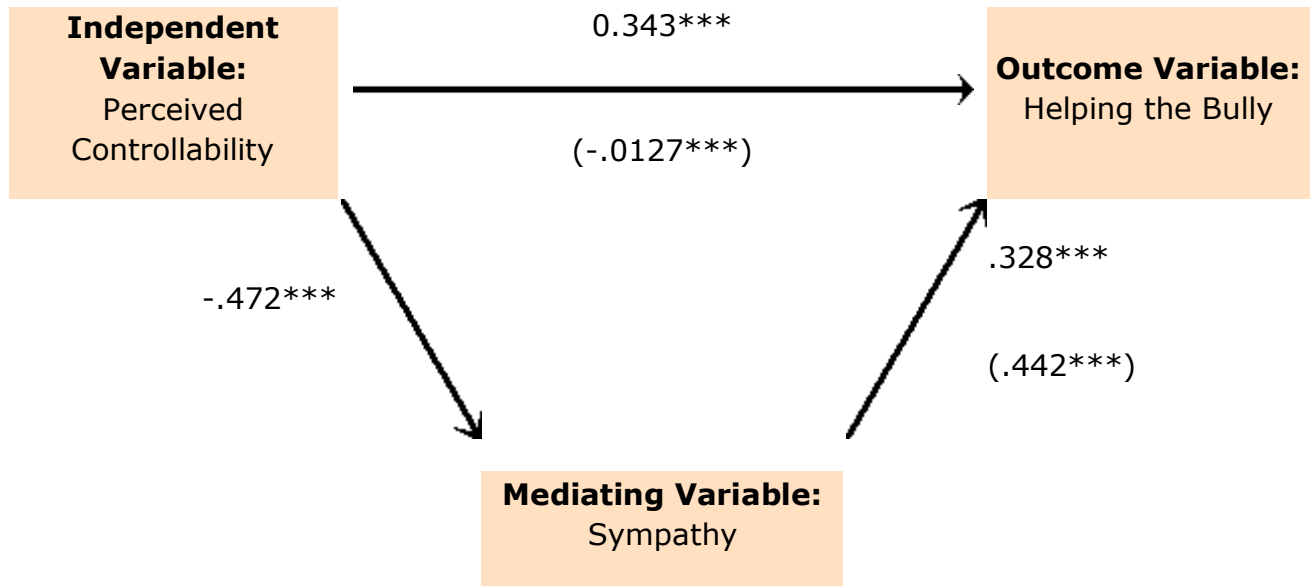


Figure 13. Mediation model of helping with sympathy functioning as a mediating variable.

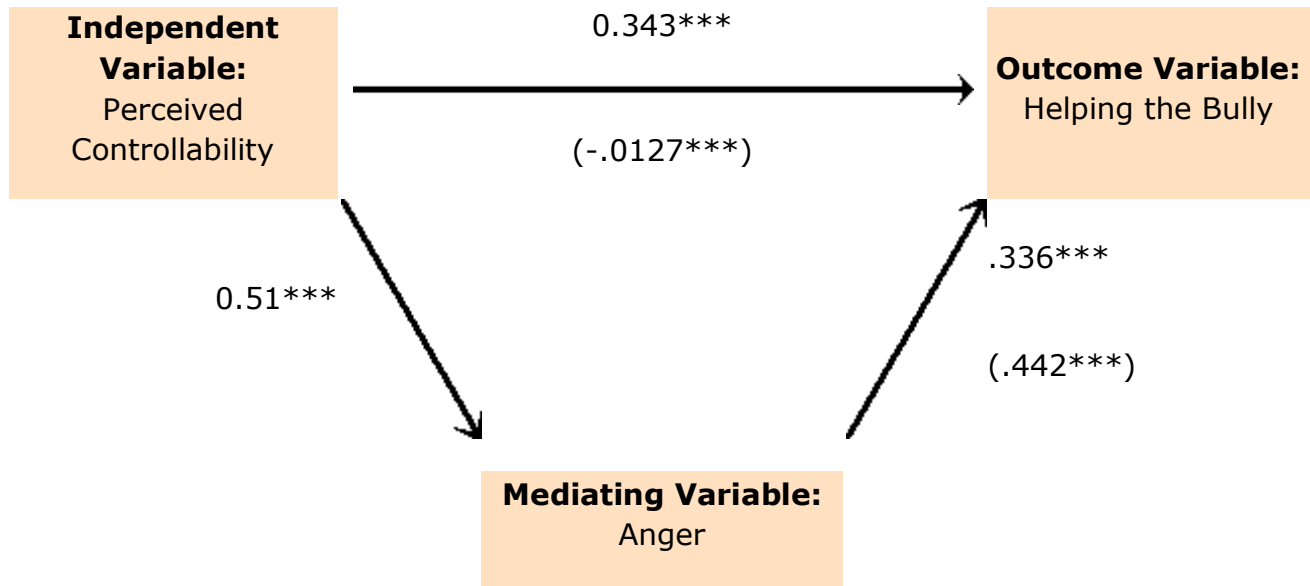


Figure 14. Mediation model of helping with anger functioning as a mediating variable.



Table 1. Correlation coefficients for perceived controllability, sympathy, anger, and help-giving.

Variables	Correlation Coefficient			
	Controllability	Sympathy	Anger	Helping
1. Controllability	—			
2. Sympathy	-.472**	—		
3. Anger	.510**	-.297**	—	
4. Helping	.343**	-.328**	.336**	—

\*\* $p < .01$

*Table 2.* Bootstrapped results for all participants using anger and sympathy as mediators.

Mediator	Mean Indirect Effect	Confidence Interval*
1. Sympathy	.0841	.0505 to .1199
2. Anger	.0916	.0549 to .1369

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 3.* Bootstrapped results by gender for the vignette not containing controllability information using sympathy as a mediator.

Gender	Mean Indirect Effect	Confidence Interval*
1. Males	.0668	.0091 to .1336
2. Females	.0566	.0181 to .1203

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 4.* Bootstrapped results by gender for the vignette containing controllability information using sympathy as a mediator.

Gender	Mean Indirect Effect	Confidence Interval*
1. Males	.0758	.0345 to .1525
2. Females	.0339	.0040 to .1177

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 5.* Bootstrapped results by gender for the vignette not containing controllability information using anger as a mediator.

Gender	Mean Indirect Effect	Confidence Interval*
1. Males	.0768	.0156 to .1526
2. Females	.0263	-.0219 to .0947

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 6.* Bootstrapped results by gender for the vignette containing controllability information using anger as a mediator.

Gender	Mean Indirect Effect	Confidence Interval*
1. Males	.0890	.0309 to .1892
2. Females	.1348	.0613 to .2683

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 7.* Bootstrapped results by participant role for the vignette not containing controllability information using sympathy as a mediator.

Participant Role	Mean Indirect Effect	Confidence Interval*
1. Aggressor	.0025	-.0392 to .0073
2. Defender	.1017	.0457 to .1889
3. Outsider	.0629	.0164 to .1414
4. Victim	.1375	.0278 to .3715
5. Aggressive Victim	.0425	-.1366 to .1583
6. Other	.0205	-.0094 to .1013

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 8.* Bootstrapped results by participant role for the vignette containing controllability information using sympathy as a mediator.

Participant Role	Mean Indirect Effect	Confidence Interval*
1. Aggressor	.0997	-.0056 to .2552
2. Defender	.0215	-.0138 to .1157
3. Outsider	.0188	-.0147 to .0821
4. Victim	.0031	-.0857 to .0789
5. Aggressive Victim	.0034	-.1052 to .0714
6. Other	.0237	-.0014 to .0908

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.



*Table 9.* Bootstrapped results by participant role for the vignette not containing controllability information using anger as a mediator.

Participant Role	Mean Indirect Effect	Confidence Interval*
1. Aggressor	.1096	-.0114 to .3226
2. Defender	-.0331	-.1510 to .0384
3. Outsider	.0424	-.0013 to .1350
4. Victim	.0293	-.0219 to .2629
5. Aggressive Victim	.1832	-.0160 to .5090
6. Other	.0014	-.0551 to .0663

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

*Table 10.* Bootstrapped results by participant role for the vignette containing controllability information using anger as a mediator.

Participant Role	Mean Indirect Effect	Confidence Interval*
1. Aggressor	.1250	.0059 to .3322
2. Defender	.1508	.0593 to .3475
3. Outsider	.0117	-.0075 to .0734
4. Victim	.0462	-.0426 to .4402
5. Aggressive Victim	.6905	.2065 to 1.2194
6. Other	-.0202	-.0027 to .0700

\* If CI does not contain zero (0) it indicates that the mean indirect effect is significant at the  $p < .05$  level.

Table 11. Descriptive statistics by gender.

Variables	Males						Females					
	No Controllability Information			Controllability Information			No Controllability Information			Controllability Information		
	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
1. Perceived Controllability	5.08	2.27	8	2.76	1.6	8	4.41	2.03	8	2.53	1.51	8
2. Sympathy	4.07	2.08	8	5.75	2.16	8	4.58	1.99	8	6.68	1.92	8
3. Anger	4.69	2.37	8	2.8	1.87	8	4.35	2.29	8	2.78	1.99	8
4. Helping	2.72	2.14	8	1.88	1.49	8	1.88	1.41	8	1.53	1.24	8

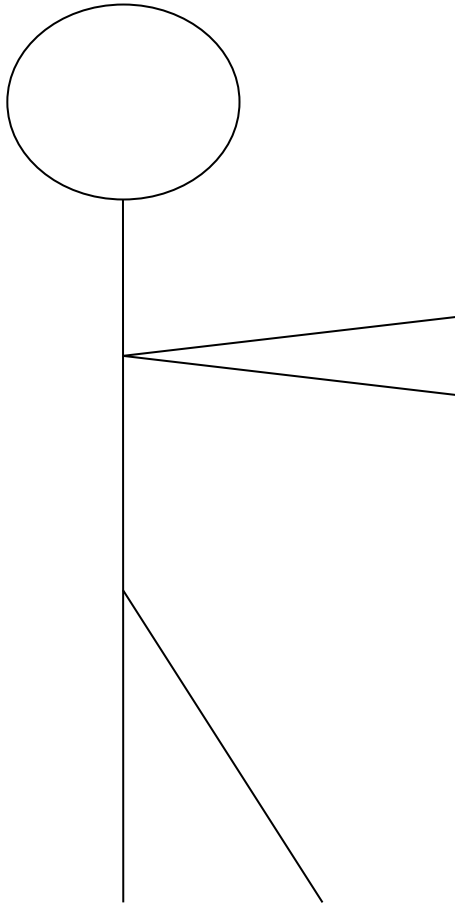
*Table 12. Descriptive statistics for the vignette not containing controllability information by participant role.*

Participant Role	Variable	Mean	SD	Range
1. Aggressor	Controllability	5.04	2.19	8
	Sympathy	3.78	1.96	8
	Anger	4.86	2.19	8
	Helping	3.35	2.11	8
2. Defender	Controllability	4.58	2.28	8
	Sympathy	4.87	2.06	8
	Anger	4.75	2.44	8
	Helping	1.88	1.59	8
3. Outsider	Controllability	4.83	2.13	8
	Sympathy	4.35	1.93	8
	Anger	4.41	2.16	8
	Helping	1.94	1.46	8
4. Victim	Controllability	5.19	2.02	8
	Sympathy	4.04	1.85	8
	Anger	4.73	2.32	8
	Helping	2.14	1.84	8
5. Aggressive Victim	Controllability	5.03	2.48	8
	Sympathy	3.57	1.95	8
	Anger	4.74	2.51	8
	Helping	4.03	2.48	8
6. Other	Controllability	4.41	1.85	8
	Sympathy	4.56	2.14	8
	Anger	3.82	2.25	8
	Helping	1.55	1.02	8

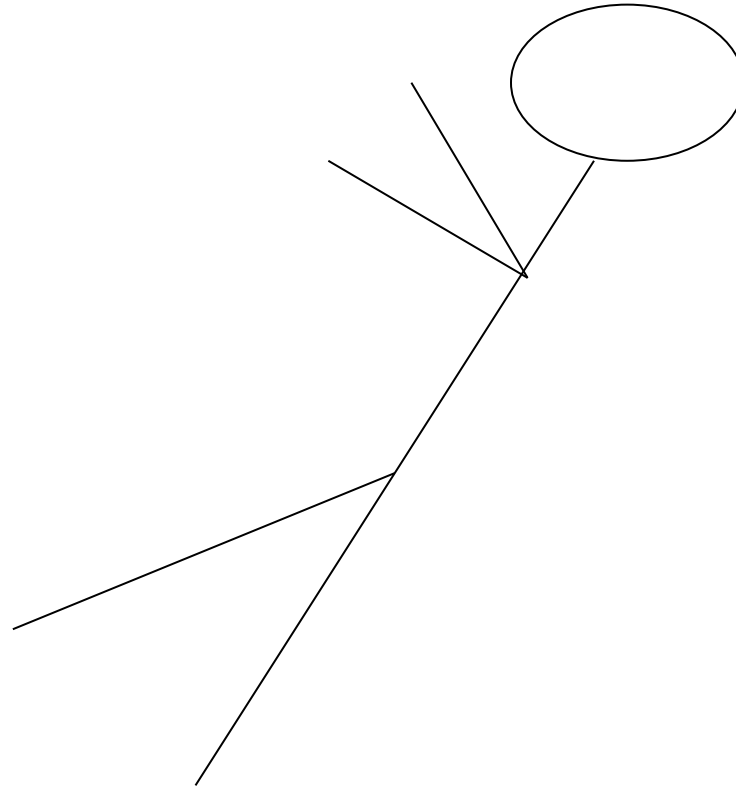
*Table 13. Descriptive statistics for the vignette containing controllability information by participant role.*

Participant Role	Variable	Mean	SD	Range
1. Aggressor	Controllability	3.19	1.97	8
	Sympathy	5.10	2.10	8
	Anger	3.31	1.99	8
	Helping	2.52	1.88	8
2. Defender	Controllability	2.53	1.44	8
	Sympathy	6.94	1.86	8
	Anger	2.73	1.99	8
	Helping	1.63	1.53	8
3. Outsider	Controllability	2.56	1.49	8
	Sympathy	6.26	1.95	8
	Anger	2.54	1.85	8
	Helping	1.38	.85	8
4. Victim	Controllability	2.53	1.36	8
	Sympathy	6.35	1.94	8
	Anger	2.90	2.01	8
	Helping	1.74	1.35	8
5. Aggressive Victim	Controllability	2.69	1.42	8
	Sympathy	5.77	2.30	8
	Anger	2.74	1.86	8
	Helping	2.04	1.43	8
6. Other	Controllability	2.54	1.63	8
	Sympathy	6.31	2.10	8
	Anger	2.59	1.76	8
	Helping	1.20	.49	8

Appendix A



**“Fred”**



**“Art”**

**Fred and Art are in the same grade. Fred is bigger and stronger than Art. Art enjoys interrupting class. He often runs around class to distract others, and likes to make it hard for others to learn. Sometimes, Art will even play mean tricks on the teacher to make her mad. When they are on the playground, Fred is always picking on Art by shoving and pushing him.**

Please answer the following questions regarding Fred and Art using THIS SCALE:

1 2 3 4 5 6 7 8 9

**For FRED:**

1. How responsible is Fred for picking on Art?

1 2 3 4 5 6 7 8 9

**1=None/Not responsible**

**9=A lot/Very responsible**

2. How much can you understand why Fred acted this way?

1 2 3 4 5 6 7 8 9

**1=Cannot Understand**

**9=Can Understand A lot**

3. How much do you agree with what Fred did to Art?

1 2 3 4 5 6 7 8 9

**1=Totally Disagree**

**9=Agree A lot**

4. How angry would you feel at Fred?

1 2 3 4 5 6 7 8 9

**1=None/No Anger**

**9=A lot of Anger/Very Angry**

5. How likely is it that you would join Fred in picking on Art?

1 2 3 4 5 6 7 8 9

**1=Not Likely/Would Not Join**

**9= Very Likely to Join**

**For ART:**

1. How much control do you feel that Art has in GETTING picked on by Fred?

1 2 3 4 5 6 7 8 9

**1=No control**

**9=A lot/total control**

2. How responsible is Art for getting picked on by Fred?

1 2 3 4 5 6 7 8 9

3. How much do you think that it is Art's own fault that he gets picked on?

1 2 3 4 5 6 7 8 9

4. How much sympathy would you feel for Art?

1 2 3 4 5 6 7 8 9

5. How much pity would you feel for Art?

1 2 3 4 5 6 7 8 9

6. How much concern would you feel for Art?

1 2 3 4 5 6 7 8 9

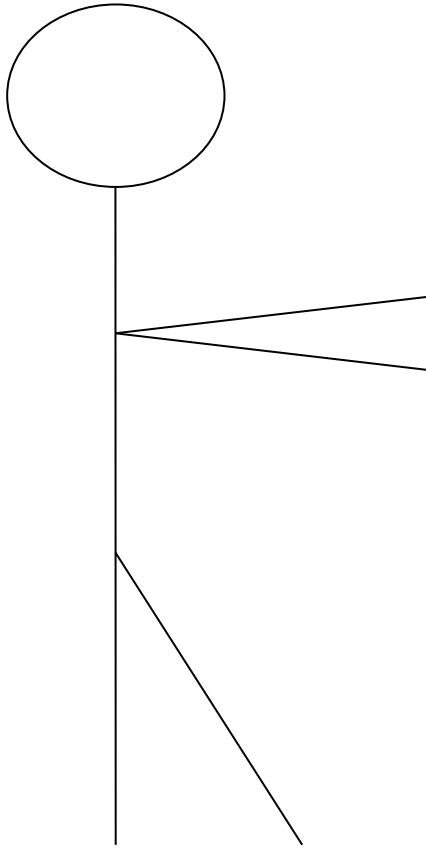
7. How angry would you feel at Art?

1 2 3 4 5 6 7 8 9

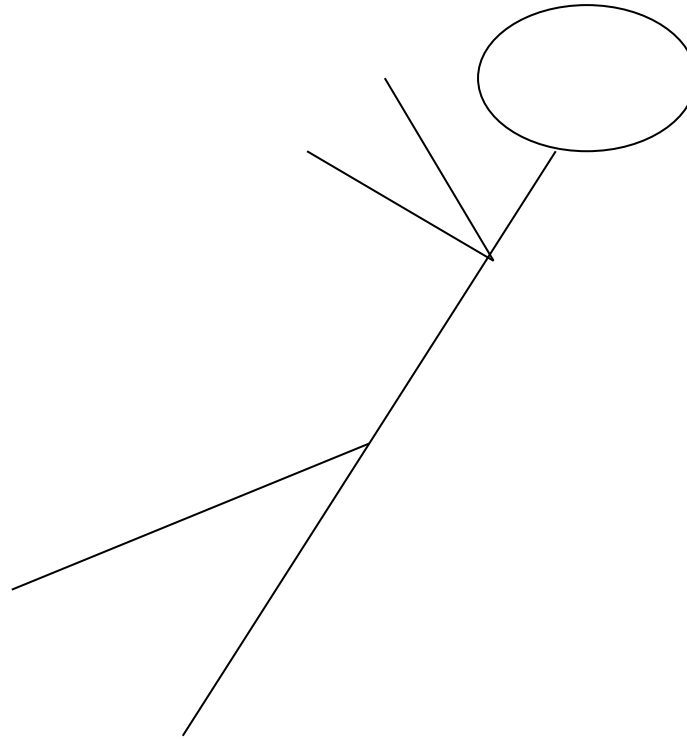
8. How irritated would you feel by Art?

1 2 3 4 5 6 7 8 9

2



**“Fred”**



**“Art”**

Fred and Art are in the same grade. Fred is bigger and stronger than Art. Art often interrupts class. For example, Art may run around and be out of his seat, making it hard for others to learn. Sometimes, his behavior makes the teacher mad. However, the principal says that Art has a medical condition and he can't help his behavior. Because of his condition, he has to take special medication to help him stay in his seat and help him be less disruptive. When they are on the playground, Fred is always picking on Art by shoving and pushing him.



Please answer the following questions regarding Fred and Art using THIS SCALE:

1 2 3 4 5 6 7 8 9

**For FRED:**

1. How responsible is Fred for picking on Art?

1 2 3 4 5 6 7 8 9

**1=None/Not responsible**

**9=A lot/Very responsible**

2. How much can you understand why Fred acted this way?

1 2 3 4 5 6 7 8 9

**1=Cannot Understand**

**9=Can Understand A lot**

3. How much do you agree with what Fred did to Art?

1 2 3 4 5 6 7 8 9

**1=Totally Disagree**

**9=Agree A lot**

4. How angry would you feel at Fred?

1 2 3 4 5 6 7 8 9

**1=None/No Anger**

**9=A lot of Anger/Very Angry**

5. How likely is it that you would join Fred in picking on Art?

1 2 3 4 5 6 7 8 9

**1=Not Likely/Would Not Join**

**9= Very Likely to Join**

**For ART:**

1. How much control do you feel that Art has in GETTING picked on by Fred?

1 2 3 4 5 6 7 8 9

**1=No control**

**9=A lot/total control**

2. How responsible is Art for getting picked on by Fred?

1 2 3 4 5 6 7 8 9

3. How much do you think that it is Art's own fault that he gets picked on?

1 2 3 4 5 6 7 8 9

4. How much sympathy would you feel for Art?

1 2 3 4 5 6 7 8 9

5. How much pity would you feel for Art?

1 2 3 4 5 6 7 8 9

6. How much concern would you feel for Art?

1 2 3 4 5 6 7 8 9

7. How angry would you feel at Art?

1 2 3 4 5 6 7 8 9

8. How irritated would you feel by Art?

1 2 3 4 5 6 7 8 9

## Participant Role Questionnaire (PRQ): Self-Report Version

**Bullying** can be defined as . . .

*. . . one student is repeatedly exposed to harassment and attacks from one or several other students. Harassment and attacks may be, for example, shoving or hitting the other one, calling him/her names or making jokes about him/her, leaving him/her outside the group, taking his/her things, or any other behavior meant to hurt the other one. It is not bullying when two students with equal strength or equal power have a fight, or when someone is occasionally teased, but it is bullying, when the feelings of one and the same student are intentionally and repeatedly hurt.*

When thinking about **your** behavior when bullying happens at school, please answer the following questions using these numbers: **0 = never, 1 = sometimes, 2 = often**

Please circle the best choice

- How often do you start the bullying? (0    1    2)
- How often do you assist the bully? (0    1    2)
- How often do you tell the others to stop bullying? (0    1    2)
- How often do you always find new ways of harassing the victim? (0    1    2)
- How often do you join in the bullying when someone else has started it? (0    1    2)
- How often do you not take sides with anyone? (0    1    2)
- How often do you help the bully, maybe by catching the victim? (0    1    2)

- How often do you come around to see (watch) the bullying situation? (0 1 2)
- How often do you laugh at the bullying situation? (0 1 2)
- How often do you stay outside the situation? (0 1 2)
- How often do you make others join in the bullying? (0 1 2)
- How often do you try to make others stop the bullying? (0 1 2)
- How often do you encourage the bully by shouting or saying: "Show him/her!"? (0 1 2)
- How often do you comfort the victim, maybe by encouraging the victim to tell the teacher about the bullying? (0 1 2)
- How often are you not really present in bullying situations? (0 1 2)

\*\*Think about the definition of bullying above. How often have you **been bullied** at school in the past couple of months?

- I haven't been bullied at school in the past couple of months
- It has only happened once or twice
- 2 or 3 times a month
- about once a week
- several times a week

\*\*Think about the definition of bullying above. How often do you **take part in bullying** another students(s) in the past couple of months?

- I do not bully another student(s)
- It has only happened once or twice
- 2 or 3 times a month
- about once a week
- several times a week