

An Experimental Investigation of Group Processes In Witnessing Bullying

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Abstract

Drawing on Tajfel and Turner's Social Identity Theory and Harris' Group Socialization Theory, the current study examined how group processes (i.e., group membership and social status) contribute to schoolchildren's bystander reactions to hypothetical bullying. A between-groups experimental design was used to examine the effects of group membership (e.g., belonging to the same group as the bully, victim, both characters, or neither) as well as bully social status (e.g., more or less popular than the bystander) on the emotional and behavioural reactions of 357 middle-school students in grades 6 to 8. Identification with the victim was associated with greater likelihood of bystanders endorsing feelings of anger. However, witnesses who observed an in-group bully harassing an out-group victim reported the strongest feelings of shame. Feelings of shame and anger subsequently predicted bystanders' willingness to help the victim, whereas feelings of sadness and fear positively predicted intentions to talk to an adult. Results are discussed in light of the small but growing body of literature on the intersection of group processes, moral emotions and bystander behaviour. Implications and recommendations for school-based anti-bullying interventions are provided.

Lay Summary

The goal of this project was to understand the situations in which youth are more likely to defend a victim of peer bullying depending on their relationship with both the bully and the victim. An experiment was conducted in which 357 middle-school students read a fictional story about bullying from the perspective of a bystander. Before reading the story, participants were told that they belonged to the same group as the bully, the victim, both characters, or neither, and that the bully was more or less popular than they were. Results showed that group membership predicted the emotions that bystander's felt in response to the situation, and different patterns of emotions were associated with a greater likelihood of helping the victim and telling an adult. These findings can be used to improve bullying interventions through greater consideration of group-level factors, such as social status and group membership, in addressing bullying.

Preface

This work is based on research designed and conducted by the author, under the supervision of Dr. Shelley Hymel. I was responsible for coordinating and overseeing data collection, with assistance from trained graduate research assistants (Kate Morrison, Carolyn Taylor, Rachel King, and Rochelle Picardo) with funding provided by the Edith Lando Charitable Foundation. Ethics approval for the project was obtained from the University of British Columbia Office of Research Services Behavioural Ethics Research Board (certificate number H17-00406), as well as the participating school district.

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Dedication

This dissertation is dedicated to my family, and especially to my parents. Thanks to all my ancestors for giving me the good genes! Thanks also for passing on the values that have helped me get to this point: a love of learning, a deep sense of wonder about the world we live in, and everlasting curiosity about how things work.

Mom, you have always been there, through each and every step on the path. You are my cheerleader, my friend, and my most enduring confidante. This dissertation is as much yours as it is mine (yes, it is!). Thanks for always picking up the phone, no matter how late the call. You are my rock.

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Introduction

In recent years, research on bullying has expanded from a focus on the individual characteristics of bullies and victims, to an acknowledgment of the importance of peer group dynamics that shape youths experiences with bullying in schools (Sutton & Smith, 1999; Rodkin, 2004). Issues of dominance and power, central to the definition of bullying as an intentional and repetitive aggressive behaviour (Olweus, 1993), are acted out against the backdrop of the peer social ecology as bullies seek to enhance their status in the eyes of their peers by engaging in the intimidation, harassment, and coercion of weaker students (Rodkin, 2004). As such, peer bystanders represent both part of the problem of school-based bullying, as well as a potential solution (Hazler, 1996; Pellegrini, & Long, 2002; Rodkin & Hodges, 2003; Salmivalli, 1999).

Bystanders have been shown to wield an important influence on other students' reactions to bullying, both directly, by modeling prosocial or antisocial behaviour for peers, and indirectly by influencing other students in terms of perceptions of their school environment. For example, in classrooms where youth are more likely to defend victimized peers, bullying has been shown to occur less frequently (Salmivalli, Voeten, & Poskiparta, 2011). In contrast, in classrooms where bystanders encourage or support bullying, victims experience more negative effects as a result of being bullied, including more social anxiety and peer rejection (Karna, Voeten, Poskiparta, & Salmivalli, 2010). Even when bystanders do nothing, it sends a powerful message to peers; observing passive bystander behaviour has been associated with more negative attitudes toward victims as well as lower feelings of safety at school (Gini, Pozzoli, Borghi, & Franzoni, 2008). Similarly, students who witness bullying more frequently report lower perceptions of teacher support, poorer quality relationships among students in their class, and more safety problems at school (Smith, Hymel & Schneider, 2012; Trach, Lee, Groendal & Hymel, 2012).

Unfortunately, dissecting the multiple layers of interrelated social ecologies (e.g., family, friends, schools, communities, culture, etc.) that interact to produce situations where bullying takes place is an incredibly complex problem (Rocke Henderson, 2010; Swearer & Doll, 2001; see also Hong & Espelage, 2012). As a result of this complexity, to date our understanding of the peer group dynamics that facilitate or discourage bullying remains limited. This study builds upon what is known about group processes and bullying by considering the effect of group identification, group membership, and social status on bystanders' reactions and responses to bullying that they witness. Rather than considering *who* is most likely to be a defender, the current study seeks to understand *when*, or *under what conditions*, youth are more or less likely to defend a victimized peer by paying special attention to the group context that surrounds bullying.

The Importance of Belonging to Groups

Human beings have an innate drive to form and maintain lasting, positive, and significant interpersonal relationships, so much so that *belonging* has been identified as a basic and universal human need (Baumeister & Leary, 1995). Moreover, social groups have been, and continue to be central to our survival as a species. Recent advances in the field of neuropsychology have led social neuroscientists like Lieberman (2013) to conclude that, because cooperation is evolutionarily linked to both individual and group survival, the human brain has evolved to prioritize social connection. Similarly, Warneken and colleagues' research on the altruistic tendencies of young children has shown that children as young as three years of age have developed a sense of group-mindedness, or the understanding that they personally benefit when group members get along and work cooperatively with each other (Warneken &

Tomasello, 2014). Put simply, as human beings we are biologically and evolutionarily wired to connect and form social bonds with one another.

While there are clear advantages to living in groups (see Baumeister & Leary, 1995 for a discussion), our tendency to seek affiliation with others and to form group bonds also carries important consequences for individual growth and development. For example, decades of social psychology research on group dynamics has demonstrated that placing people in groups produces situations that predispose individuals to display in-group favouritism, out-group hostility and discrimination, and even to act in ways that contradict their personal values, beliefs and experiences (e.g., social conformity, Asch, 1956). Tajfel and Turner's Social Identity theory (1979) was developed to account for the ways in which group belonging can influence our thoughts, beliefs, attitudes and behaviour. Social Identity theory subsequently informed Group Socialization theory (Harris, 1995; 2009) and Social Identity Development theory (Nesdale, 2004), which describe the impact of inter- and intra-group processes on children's attitudes and behaviour, including bullying. Each of these theories and their relevance to the present study are outlined in the next section.

Theories of Group Influence

According to Social Identity theory (SIT; Tajfel & Turner, 1979), a group is defined as an abstract, cognitive category that individuals use to organize and make sense of their social world. Groups emerge as a fundamental property within ecological systems, and provide a means through which individuals sort themselves, and are sorted by others, according to various criteria such as physical characteristics (e.g., age, gender, ethnicity, appearance), common attitudes and behaviour, and shared interests and activities (Rodkin, 2004). Although group members often share patterns of affiliation and social interaction, SIT specifies that a group is simply an idea;

therefore, groups can exist in the absence of face-to-face contact among group members. Brown and Klute (2003) refer to groups as ‘crowds’, which are abstract social categories of indeterminate size based on a shared identity, as compared to ‘cliques’ which are interaction groups or friendship circles generally comprised of 3 to 10 individuals. A clique may *also* be a crowd, but a crowd is not necessarily the same as a clique. Although the term ‘peer group’ is often used interchangeably in the peer relations literature to refer to both crowds and cliques (e.g., Miller, Holcomb & Kraus, 2008), in the current study a ‘group’ is considered to be a social category or label that children apply to themselves. There are as many different types of group identities within the social network as there are ways of forming distinctions between people, and these groups play an essential role in individual identity development (Tajfel, 1974).

Social Identity Theory (SIT) holds that individuals are motivated to construct a positive image of themselves, and that one’s self-image is influenced by the groups to which they belong (Tajfel & Turner, 1979; Tajfel, 1982). Therefore, in addition to the issues of safety and survival mentioned above, SIT proposes that belonging to a group serves a second important psychological function – to provide the individual with a positive identity. Social identity is the term applied to the part of the self-concept that is derived from group membership. According to SIT (Tajfel & Turner, 1979), one’s social identity is derived from making social comparisons between groups, traditionally by comparing the in-group to an out-group on some valued dimension or characteristic. The degree to which social identity influences individual behaviour depends on the strength of the individual’s sense of belonging or identification with the in-group. Group identification in turn depends on the individual’s awareness of their membership in the group, as well as the value and emotional significance of group membership to their sense of self. Thus, group identification involves both a cognitive and an affective component.

Furthermore, individuals may simultaneously identify with multiple social categories, existing anywhere along an interpersonal-intergroup continuum, ranging from the smallest social category of 'a unique individual', to the most general category 'a member of the human race' (Turner, Hogg, Oakes, Reicher & Wetherell, 1987). Finally, group memberships are fluid such that any particular social identity is only meaningful (i.e., has the potential to impact behaviour) at a specific point in time, namely when that identity is made salient. According to this theory, a group identity is made salient 'in-the-moment' by the existence of a distinct out-group.

Social Identity theory (Tajfel & Turner, 1979) focused exclusively on between-group processes that produce in-group preference and, under certain conditions, hostility towards the out-group. Building on this framework, Group Socialization theory (GST; Harris, 1995; 2009) and Social Identity Development Theory (SIDT; Nesdale 2004) describe the contribution of both between *and* within-group processes on the development of children's attitudes and behaviour. Harris defined socialization as the process whereby individuals learn to become productive members of society (i.e., are 'socialized') by modifying their own behaviour, values, and beliefs to fit with self-identified social categories (groups). Where other developmental theories focus almost exclusively on the role parents play in socializing children, GST expanded on these notions to also address the socialization processes that occur within children's peer groups. Harris argued that, in addition to providing a safe and nurturing home environment that supports healthy child development, parents influence their children in two major ways: directly through the provision of genetic material, and indirectly through their capacity to influence the child's peer group network. According to GST, it is the peer group that has long-lasting effects on children's behaviour outside the home environment.

One of the basic tenets of GST is that learning is context-dependent, and children tailor their behaviour to the demands of their environment. If the values and expectations of the home environment are mirrored in the norms of the peer group, the child's behaviour will be relatively stable across contexts. If, however, the home and peer contexts differ, children will adopt the norms of the peer group whenever they are outside the home. The principle that behaviour is context-dependent also implies that children will alter their behaviour to fit the group, depending on which group identity happens to be salient at a given time.

According to GST (Harris, 1995; 2009), when groups form (as they do naturally whenever three or more individuals come together), three sets of group processes emerge to shape individual behaviour, one reflecting between-group effects and two reflecting within-group effects. As with SIT, GST posits that simply being aware of what it means to be a member of a particular group is enough to influence a person's beliefs, attitudes, and behaviour. First, between group processes occur that cause differences between groups to widen as *group contrast effects* (what Tajfel, 1974, termed *between groups social comparisons*) cause individuals to behave in ways that favor their own group (also known as *in-group preference* or *in-group bias*), and discriminate against other groups (also known as *out-group discrimination*). Between-group social comparisons produce a phenomenon often referred to as '*us vs. them*' thinking, which functions to preserve the individual's positive social identity by emphasizing or exaggerating the positive qualities of the in-group.

Second, GST outlines two sets of within group processes that operate concurrently to influence individual behaviour over the long-term. *Within group assimilation* is the tendency for group members to become more similar over time as individuals gradually adapt to think, feel, and act in ways that are consistent with the group's norms. Although individuals do tend to seek

out and form groups with others similar to themselves (Rodkin, 2004), Asch (1956) provided empirical evidence that even when people are arbitrarily placed in groups, individuals will tend to conform to the expectations of that group. Moreover, consistent with the predictions of GST, within-group assimilation effects have also been documented in naturalistic studies of the effects of groups on children's school engagement (Kinderman, McCollam & Gibson, 1996), and aggressive behaviour (Berger & Rodkin, 2012), suggesting that both children and adults will alter their behaviour to match the norms of the group. However, just as groups engage in social comparison processes with other groups, individuals also engage in social comparisons with other members of their own group as a means of comparing their abilities and identifying their role within the group. Known as *within group differentiation*, this second within-group process produces social hierarchies that are developed and maintained based on the nature, priorities and values of the group, as each individual within a group attempts to find their niche in the social order.

In terms of developmental influences, GST (Harris, 1995; 2009) speculates that the strength of group influence increases during middle to late childhood, peaks during adolescence, and then declines in magnitude during adulthood, although it never diminishes entirely. Taking this a step further, SIDT (Nesdale 2004) outlines a four phase developmental sequence of within- and between-group processes that begin in early childhood, and that correspond to children's increasing cognitive capabilities over the course of development. Prior to the age of 2 or 3 years, children are believed to be unaware of or unable to form social categories, a state termed *undifferentiated*. Around age 2 to 3 years of age, children begin to develop a sense of *social group awareness*. At this point children have developed the cognitive abilities to differentiate among people based on social markers like age, gender, skin colour, language, behaviour, etc.,

and begin to categorize themselves based on their shared characteristics (e.g., ‘I am a girl’, ‘I am a fast runner’).

By the time they enter school in Western society (e.g., age 4-5), children are adept at social categorization, and readily display *in-group preference* or increased liking of in-group compared to out-group members. Whereas in-group preference is believed to be a relatively consistent phenomenon, occurring whenever children’s group categories are made salient to them, the fourth phase of *out-group hostility*, or active disliking for out-group members, is only achieved under certain conditions. The likelihood that children will display hostility towards the out-group depends on five factors: 1) the strength of their identification with the in-group, 2) whether the in-group holds a norm of out-group prejudice, 3) whether out-group hostility will improve the in-group’s status in the ecological hierarchy, 4) whether engaging in out-group hostility will improve the individual’s social standing within the in-group, and 5) whether the out-group poses a threat to the identity or survival of the in-group. Of particular interest to the current study of group processes and bystander behaviour are the first and fourth conditions that pertain to the individual’s strength of group identification and relative social status within the group. An issue that has not yet been adequately considered in the research literature is how the relational context of the bullying situation affects the reactions of bystanders. For example, under what conditions does the relationship between the bystander, the bully, and the victim have an impact on bystander behaviour? Similarly, when do group dynamics (e.g., group identity and perceptions of peer social status) influence bystander responses? These two questions form the basis of the current study.

As with SIT (Tajfel & Turner, 1979), SIDT (Nesdale 2004) states that the individual’s personal identity is tied to group functioning and a threat to the group is interpreted as a threat to

the self. However, SIDT further specifies that children evaluate their group's success in terms of its status and dominance within the larger social network, and it is this process of within and between group social comparisons that explains at least some of the bullying behaviour observed among youth (Nesdale, Durkin, Maass, Kiesner, & Griffiths, 2008). From the perspective of group processes, peer-directed aggression represents an adaptive, functional, and goal-oriented behaviour (Huitsing & Veenstra, 2012; Volk, Camilleri, Dane & Marini, 2012), with the purpose of achieving or maintaining higher social status and dominance within the peer group (Closson, 2009; Olthof, Goosens, Vermande, Aleva, & van der Meulen 2011; Pellegrini & Long, 2002; Salimivalli, 2010). Thus, SIDT postulates that children engage in bullying others to improve either the social status of their group compared to other groups, or to enhance or maintain their own social standing within their own group. The current study seeks to extend this hypothesis about the function of bullying behaviour by examining whether differences in status between individuals also affects youth's behaviour when they witness bullying. In the next section, we turn to a review of the research on the effects of within and between group processes on bystander's reactions to bullying.

Group Processes, Bullying and Bystander Behaviour

As mentioned previously, current conceptualizations of bullying have expanded from a focus on individual bullies and victims and the bully-victim dyad, to a social-interactionist perspective that recognizes that bullying is a group-based phenomenon that exists within a larger social context, namely the peer group (see Swearer & Espelage, 2004). Bullying almost always takes place in the presence of peers (Craig & Pepler, 1998; O'Connell, Pepler, & Craig, 1999), and as bystanders to peer bullying, children participate in a variety of roles, including *assistants*, *reinforcers*, and *outsiders* that behave in ways that support and encourage bullying, or as

defenders, who actively discourage bullying behaviour among their peers (Salmivalli, 1999; Salmivalli, Lagerspetz, Björkqvist, & Osterman, 1996; Salmivalli, Lappalainen, & Lagerspetz, 1998). Using peer nomination procedures, only approximately 20-25% of elementary and middle-school aged children have been reliably classified as defenders, or those who have a reputation among their peers of intervening to defend victims of bullying (Salmivalli, Lappalainen, & Lagerspetz, 1998; Sutton & Smith, 1999). However, using a sample of children in grades 4 to 11, Trach, Hymel, Waterhouse, and Neale (2010) found that the most common bystander strategies endorsed by the majority of youth surveyed were active defending behaviours such as “helped the victim” (78% of youth) and “told the bully to stop” (72%). There are at least two explanations for this discrepancy between self and peer-reports of bystander behaviour.

First, students may be *overestimating* their own rates of helping behaviour using self-report methods. Indeed, in a comparison of self- and peer-report procedures for identifying participant roles, Sutton and Smith (1999) found that 60% of peer-nominated bullies and 41% of peer-nominated outsiders self-identified as defenders, suggesting that some children may view their own behaviour, more positively than peers do. However, extending the procedure pioneered by Salmivalli and colleagues, Sutton and Smith also identified youth’s secondary bystander roles. Up to 62% of children initially classified as outsiders and 51% as victims could be secondarily classified as defenders according to peers, suggesting that children’s participant role behaviour does indeed vary depending on the situation.

A second explanation for the discrepancy between self and peer-reports of bystander behaviour, is that peer nomination procedures (as originally implemented) may actually *underestimate* the frequency of peer intervention in bullying incidents by forcing peers to focus

on reputational characteristics rather than asking about their peer's behaviour during specific instances of bullying. Peer nominations may be biased by several confounding factors, including the amount of bullying within the peer group (which would affect a bystander's likelihood of witnessing bullying and therefore having an opportunity to take a stand against it; see Salmivalli et al., 1996), the type of bullying that students witness (e.g., physical, verbal, social, etc.), and who is involved in the bullying they observe (e.g., friends or non-friends, see Rock Henderson, 2010). For example, Ray and colleagues found that children evaluated bullying incidents in a 'here-and-now' mode, first considering whether the harmful behaviour was enacted with a hostile or accidental intent. When the intent of the behaviour was unclear (as is arguably the case in most bullying incidents, since bullies are likely to want to mask their hostile intentions to avoid punishment), children make decisions about the severity of the bullying they observe based on relationship information (e.g., whether the bully and victim are close friends, Ray & Cohen 1997; whether the bystander is friends with the victim, Ray, Norman, Sadowski, & Cohen, 1999). Relationship factors may also influence youth's behaviour as bystanders. For example, both outsiders and defenders claim that they would be more likely to intervene if a friend was victimized compared to a neutral peer (Pronk, Goosens, Olthof, De Mey, & Willemen, 2013), and, compared to defenders, passive bystanders are less likely to report being friends with either the victim or the bully (Lodge & Frydenberg, 2007). Similarly, Poyhonen, Juvonen, and Salmivalli (2012), found that bystanders who place a low value on bullying decreasing or the victim feeling better are more likely to reinforce and join in with the bullying.

Previous research also shows that the nature of *how* bystanders intervene varies depending on whether the victim is a friend or non-friend (Rocke Henderson, 2010). When a friend is victimized, witnesses are more likely to report using hostility and retaliation. In

contrast, when the situation does not involve a friend, bystanders are more likely to endorse joining in or doing nothing. In order to understand the reasons why witnesses choose to intervene in some bullying situations and not others it is necessary to consider the context within which bullying occurs, in addition to the characteristics of the children involved. To this end, a small but growing body of research is beginning to examine the ways in which the peer context influences youth's behaviour in bullying situations.

Between-group Processes and Bystander Behaviour. A small handful of researchers have recently begun to study the effects of between-group social comparisons on youth's reactions to bullying as bystanders using hypothetical bullying scenarios, with participants assigned to the same group as either the bully, the victim, and in some cases a third, uninvolved group. It has been shown, for example, that children tend to display an in-group bias that predisposes them to view a bully's behaviour more positively when they identify as a member of the bully's group rather than being an independent observer (Nesdale, Killen, & Duffy, 2013). Similarly, children who strongly identified with the bully's group have been found to express more pride at their group member's behaviour, which was then found to predict a stronger desire to be friends with the bully (Jones, Manstead, & Livingstone, 2009; 2011; Jones, Bombieri, Manstead, & Livingston, 2012). When the in-group was the target of bullying by the out-group, children also displayed in-group bias, expressed in terms of liking the victimized in-group more than the victimized out-group (Gini, 2006; Jones, Haslam, York, & Ryan, 2008), and viewing out-group bullies as more blameworthy (Gini, 2006; 2007) and more deserving of punishment (Gini, 2006; Jones et al., 2008) than an in-group bully. Moreover, compared to those assigned to the bully's group, children who identified with the victim's group felt more shame and anger in response to a hypothetical bullying scenario, though anger alone was positively associated with a

greater likelihood of telling a teacher about the bullying (Jones et al., 2009; 2011), or apologize to the victim (Jones et al., 2012).

A bystander's status within the social hierarchy also appears to influence their reactions when bullying takes place between groups. For both physical and relational bullying directed towards the out-group by an in-group peer, Correia et al. (2010) found that children were more likely to join in rather than try to help the victim as a strategy to enhance their own social status. On the other hand, youth's expectations that defending a victimized peer would lead to improvements in their social status has been associated with increased willingness to intervene as a bystander (Poyhonen, et al., 2012). Taking a different approach, Jones et al. (2008) showed middle-school students a hypothetical scenario in which two high-status members of an in-group bullied a child from another group. They found that bystanders' reactions varied depending on their own status within the group, which was manipulated to be a high-status member of the bully's group, a peripheral member of the bully's group, or not in the bully's group. Bystanders with high-status within the in-group demonstrated higher liking for the in-group than for the bullying group member, and felt that the bully deserved to be punished more than the group. Peripheral group members also liked the bullying group member less than the group, but felt that both deserved to be punished, whereas non-group members disliked both the bully and the group, and felt that they deserved equal punishment. Based on these findings, bystanders would be expected to be more likely to defend against an out-group bully than an in-group bully, particularly if the bully possesses high social status. However, they may be less likely to take action against an in-group bully, unless they are high status themselves (Poyhonen, et al., 2012), or believe that defending has the potential to improve their social standing within the in-group.

Within-group Processes and Bystander Behaviour. Homophily within groups has been shown through peer network analyses demonstrating that children tend to form social networks with other children who share similar participant roles in bullying situations (Salmivalli, Huttunen, & Lagerspetz, 1997). Pro-bullying attitudes and the bullying behaviour of one's friends have been found to significantly predict children's own attitudes about bullying (Pozzoli & Gini, 2013a). Children also tend to defend others who share the same participant role (e.g., victims defend other victims, and bullies who target the same victims support each other; Huitsing, & Veenstra, 2012). However, a study by Daniels and colleagues (2010) indicated that bullying also occurs within groups – approximately ¼ of middle-school children reported being relationally or physically victimized by a friend, suggesting that homophily is not the only process operating within groups.

In addition to homophily, within-group assimilation processes have also been shown to influence youth's behaviour as bystanders. Initial evidence for the effects of within-group assimilation is provided by the finding that the level of bullying in one's peer group at the beginning of the school year significantly predicted youths' personal involvement in bullying at the end of the school year, even after controlling for previous bullying involvement (Espelage, Holt, & Henkel, 2003). Higher levels of bullying within the peer group also predicted lower willingness to defend a victimized peer (Espelage, Green, & Polanin, 2012). In fact, merely *wishing* to affiliate with bullies without that wish being reciprocated was enough to induce an increase in bullying behaviour over time among middle-school students (Juvonen & Ho, 2009), providing initial evidence that group processes do operate at the abstract level of social categorization to influence bullying behaviour among youth. Within-group assimilation may also be a powerful predictor of youth's intentions *not* to bully. For example, Paluck and Shepard

(2012) have demonstrated that voluntarily associating with prosocial peers is an important mechanism of peer influence in the reduction of bullying behaviours, and that encouraging well-known and well-liked students to speak out against bullying results in a decrease in harassment behaviour among affiliated peers.

Finally, there is some research to suggest that children's social standing within the group may also be related to their behaviour as bystanders. For example, both bullying and aggression have been positively associated with perceived popularity among peers (Cillessen & Mayeux, 2004; Vaillancourt, Hymel, & McDougall, 2003). With respect to the three group processes described previously, social status may function to encourage both within-group assimilation and within-group differentiation. For example, in groups where bullying is considered normative, prototypical group members (children who are considered highly similar to other members of the group according to peer ratings) have been found to engage in more bullying than less central group members (Duffy & Nesdale, 2009). However, within-group aggression has also been shown to function as a strategy for maintaining one's status within the group, serving to differentiate oneself from lesser status group members who may be the target of within-group bullying (Cillessen & Rose, 2005; Closson, 2009; Olthof et al., 2011). Finally, bullying may also be a way of enhancing status within the group. In one study, students who associated peer-directed aggression with high social status at the beginning of middle school were found to be more likely to be involved in higher levels of bullying a year later compared to youth who did not associate bullying with status (Juvonen & Ho, 2009).

Not surprisingly, defending has also been associated with perceived popularity among peers (Caravita et al., 2009; Poyhonen, et al., 2012; Sainio, Veenstra, Huitsing, & Salmivalli, 2011). In fact, perceived popularity has been identified as a critical factor enabling youth to act

upon feelings of empathy and self-efficacy for defending (Poyhonen et al., 2012). Without the social power that accompanies high peer status, potential defenders are likely to remain passive when witnessing peer victimization. Thus, bystander reactions to bullying appear to depend, at least in part, on one's status within the group. Secure, high status individuals may be more likely to defend a victimized peer than those with lower status, whereas children who are seeking to enhance or maintain their status within the group may be more likely to encourage or reinforce within-group bullying.

Research Questions and Study Hypotheses

The present study extends the current research literature by exploring the interactive effects of group membership (whether the bystander is part of the same group as the bully and/or victim) and social status (whether the bystander is more or less popular than the bully) on bystander behaviour. Specifically, this study is designed to address the following research questions:

Research Question 1: How does group membership and bully social status affect bystander's emotional reactions when they witness bullying?

Research Question 2: How do group dynamics (e.g., group membership and bully social status) and bystanders' emotional reactions influence their endorsement of behavioural strategies after witnessing bullying?

It was expected that when the bully is a member of the participant's in-group and the victim is an out-group member, bystanders would be more likely to endorse feelings of excitement and pride compared to other study conditions, and will be more likely to endorse behaviours that actively or passively encourage the bully. In contrast, when the bully is an out-group member targeting an in-group victim, bystanders are expected to be more likely to

experience feelings of anger, and more likely to intervene to defend the victim. When *both* the bully and victim are members of the participant's in-group, bystanders are expected to feel a mix of unpleasant emotions including fear, sadness and shame, and to be more likely to endorse passive bystanding behaviour. Similarly, when both the bully and the victim are members of an out-group, bystanders are expected to feel more neutral about the bullying and endorse more passive response strategies to avoid getting involved. Differences in bully social status are also expected to influence bystander's response tendencies, such that bystanders are expected to be most likely to defend the victim when the out-group bully is low in popularity, and most likely to remain passive when an in-group bully is high in popularity.

Study Design

To test these hypotheses, the current study employed a 2 (bully group membership: In-group/Out-group) X 2 (victim group membership: In-group/Out-group) X 2 (bully social status: more or less popular than the participant) between-subjects experimental design. Following the procedure of Jones and colleagues (2008; 2009; 2011; 2012) participants were randomly assigned to one of eight experimental conditions and informed of their group membership and status. Participants read a hypothetical scenario that described one character repeatedly bullying another character, in the presence of themselves and other witnesses. Unlike previous studies that have examined children's reactions to ambiguous social aggression, the goal of the current research was to understand student's reactions to explicit and obvious forms of peer harassment. Following the recommendations of Vaillancourt et al. (2008), the bullying scenario employed in the current study was described as ongoing, involved a power differential between the bully and victim, and included physical, verbal, social and cyber-bullying behaviours. Participants were asked to describe how they would react in that situation.

Method

Participants

Middle-school students were selected as the sample for the current study as both bullying and victimization are reported with highest frequency among this age group (Craig & Harel, 2004). In addition, compared to the relatively structured setting of the elementary school classroom, middle schools provide a larger and more diffuse social network that is necessary for children to form social categories and groups (Eckert, 1989; Haynie, 2001), and studies of peer influence on bystander behaviour indicate that group processes may have a stronger effect on middle-school students' bullying attitudes compared to younger children (Pozzoli & Gini, 2013b).

An ethnically diverse sample of 410 middle-school students (46% male, 53% female, 1% other gender label) in grades 6 to 8 (41% Grade 6, 42% Grade 7, 17% Grade 8) who received parent permission to participate completed individual surveys during Phase 1 of data collection (39% Caucasian, 20% Asian, 17% Mixed, 9% South Asian, 6% Don't Know, 3% Aboriginal/Native People, 2% African/Caribbean, 2% Latin American, 2% Middle Eastern, 1% Other) with a mean age 12.14 years old. Of these, 358 participants (46% male, 53% female, 1% other gender label) completed the individual interviews in Phase 2 of the study (43% Grade 6, 42% Grade 7, 15% Grade 8; 39% Caucasian, 19% Asian, 17% Mixed, 9% South Asian, 7% Don't Know, 3% Aboriginal/Native People, 2% African/Caribbean, 2% Middle Eastern, 1% Latin American, 1% Other; mean age 12.11 years old). The final participation rate was approximately 45% (based on the total number of students who were invited to participate).

Procedure

University and school district ethics approvals were obtained prior to data collection. A copy of the ethics certificate is provided in Appendix A. Both parental consent and student assent were required for student participation in this study (see Appendix B). During each phase of data collection, participants were reminded that they could withdraw from the study at any time without consequence.

Data collection occurred over two sessions. During Session 1, participants completed a brief individual survey administered in a single, group testing classroom setting (a copy of the survey is provided in Appendix C). Session 2 involved individual student interviews completed in a secure location within the school (see Appendix D for the interview protocol and questions). Trained research assistants administered the student surveys and conducted the individual interviews. Prior to the second phase of data collection, participants were randomly assigned to one of eight experimental conditions based on their shared group membership with the bully and/or the victim, and the bully's social status relative to the participant (see Table 1).

Participant's activity preferences (provided during Session 1) were used to create the minimal group paradigm conditions in Session 2. Specifically, following the procedure used by Jones et al. (2008; 2009; 2011; 2012), participants were informed that their activity preferences indicated that they were most similar to students in one of two fictional peer groups, based on participant's self-reported activity preferences. For example, if a participant reported that they like reading and playing soccer they were told that they were most like the group of students that also preferred those activities. Characters in the out-group were described as enjoying doing activities that the participant did not endorse. To further enhance the authenticity of the scenario, participants were asked to provide a name for their group and to indicate their strength of

Table 1. *Final Cell-size by Experimental Condition*

GROUP MEMBERSHIP OF HYPOTHETICAL CHARACTERS		BULLY SOCIAL STATUS (relative to bystander social status)	
BULLY	VICTIM	HIGHER STATUS BULLY	LOWER STATUS BULLY
In-group	In-group	Condition 1 n= 41 44% Female	Condition 2 n= 44 61% Female
Out-group	Out-group	Condition 3 n= 50 56% Female	Condition 4 n= 39 54% Female
In-group	Out-group	Condition 5 n= 48 58% Female	Condition 6 n= 46 50% Female
Out-group	In-group	Condition 7 n= 43 44% Female	Condition 8 n= 47 51% Female

identification with their assigned group. The hypothetical scenario matching the participant's experimental condition was then read aloud to the participant. Participants were verbally asked a series of questions about the story and completed a token activity to indicate how they would feel and what they would do if they witnessed the situation in the story.

Measures

Sample Information. Participants reported their age, grade-level, gender (female, male, or other), and ethnic background (Aboriginal/Native People, African/Caribbean, Caucasian, Asian, South Asian, Latin American, Middle Eastern, Mixed, Other, or Don't Know). Participants also provided information about their experiences with school bullying during the previous month. This information was collected to provide feedback to participating schools about the frequency of bullying among students. These variables were not included as predictors in the current study as the focus of this research was on contextual predictors of bystander responses, rather than the effect of individual differences in bystander's experiences. However, this may be an important variable to include in future research studies.

Perceived Popularity. Participants provided a self-rating of their perceived popularity ("How popular are you compared to other students in your grade?") on a 5-point scale Likert scale (1= Least Popular, 5= Most Popular). This item was intended to enhance the authenticity of the social status manipulation in the hypothetical scenario. Depending on their experimental condition, the bystander was told that the hypothetical bully was either more or less popular than they were.

Group Membership. The minimal group paradigm task was used to randomly assign participants to membership in a hypothetical peer group. The minimal group paradigm is a social categorization task designed to examine intergroup processes (Tajfel, Billig, Bundy & Flament,

1971). To meet the minimal conditions of social categorization, this procedure involves having participants complete an arbitrary task that is then used to assign them to membership in a new group that is made up of people that have never met and will not meet (Otten, 2017). This procedure has been successfully used in previous research to assign children to membership in a fictional group for the purpose of evaluating their reactions to a hypothetical bullying scenario (see Jones et al., 2008; 2009; 2011; 2012). In order to enhance the likelihood of participants' identification with their assigned in-group, participants in the current study provided information about their recreational activity preferences by choosing from a selection of 14 developmentally appropriate leisure activities (e.g., swimming, riding bikes, etc.). Based on their responses to the activity survey, participants were informed that they were most like a fictional group of students who enjoy the same activities that they preferred. This procedure was intended to enhance the authenticity of the group membership manipulation by emphasizing participants' similarity with the fictional in-group.

Group Identification. Group identification is defined as the strength of belonging to a group and the importance of the group to the self. A 4-item measure of group identification adapted from Jones et al., (2009; 2011; Jones, Bombieri, Livingston, & Manstead, 2012; $\alpha=0.50-0.87$) was used to assess schoolchildren's level of identification with their assigned in-group (e.g., "I think this group is important"). Responses were recorded on a 5-point Likert Scale (1= Really disagree, 5= Really agree), and were averaged to create a mean composite score. Reliability analyses for the current study indicated that this adapted scale had limited internal consistency ($\alpha= 0.51$), suggesting that individual responses across items are not strongly correlated with each other and may not be measuring the same overall construct. As such, the

group identification score was not included as a unique predictor in the current analysis, but was included as a covariate to remove any additional variance associated with this variable.

Hypothetical Bullying Scenario. The hypothetical scenario featured two fictional characters that either belonged to the same fictional group as the participant (i.e., the in-group) or the other fictional group (i.e., the out-group). In addition, social status was manipulated such that the bullying character was described as being either more popular or less popular than the participant (relative to their self-ratings of individual perceived social status). The characters in the story were described using gender-neutral language and ethnically ambiguous names to control for the effect of gender and ethnicity on the participant's ability to identify with the characters. In all of the conditions, one of the characters (Tash) was described as engaging in physical, verbal, social and cyber-bullying behaviour towards the other character (Zade) in the presence of other students (see Appendix E).

Manipulation Checks. Several items were included as checks of the experimental manipulation. Specifically, participants were asked to identify which group they were most like, the group membership of the bully and victim characters, as well as the social status of the bully relative to themselves. Participants were required to provide the responses consistent with their study condition before proceeding with the interview. Participants were also asked to indicate whether they thought that the behaviour described in the story was bullying on a 5-point scale (1= Really Disagree, 5= Really Agree).

Bystander Reactions. Bystander reactions were assessed using a unique 'token activity' that allowed for the assessment of the degree to which participants reported experiencing multiple emotions (see Appendix F). To our knowledge, this method of assessing bystander reactions to bullying has not been used in the published literature in this way. This

activity was chosen over other, more traditional measurement strategies (i.e., Likert-type survey measures) for 2 reasons. First, traditional self-report measures of participants internal, emotional experience tend to elicit responses that ‘clump’ into one large category during factor analysis i.e., indicating the present or absence of emotional arousal), or into the broad categories of ‘positive’ and ‘negative’ emotions. Since the goal of this research was to distinguish between specific, unique emotional experiences of bystanders, this ‘clumping’ of emotions into one or two broad categories was not ideal. In contrast, the token activity (as described below) pits each emotion and behavioural strategy against the other response options, ensuring that the various emotional and behavioural reactions can be analyzed as separate dependent variables. Second, in order to ration out their tokens in accordance with the intensity or strength of each emotion or behaviour selected, this activity required participants to carefully consider what they believed they would do in the situation, thereby inducing a state of cognitive discomfort for participants. It was believed that the feelings of uneasiness that the token activity elicited might mimic the discomfort that bystander’s experience when witnessing bullying in real life, and was therefore deemed superior to a more traditional Likert-style self-report survey.

The token activity was completed after participants were presented with the scenario. Participants were given a set of 10 tokens and asked to indicate the degree to which they believed they would feel each of eight emotions if they observed the events described in the story: Ashamed, Angry, Excited, Indifferent, Guilty, Proud, Sad, and Scared, with follow-up interview questions asking them to identify the target of each felt emotion (e.g., “You indicated that you would feel sad. Who would you feel sad towards?”). Participants were instructed that they had to use all 10 tokens to complete the task, and that they could put as many or as few tokens as they wished on each of the possible emotional reactions. A participant’s score for a

particular emotion was calculated as the number of tokens used to endorse each emotion (ranging from 0 to 10). The number of tokens used to endorse a specific emotion was interpreted as the intensity with which the participant anticipated feeling each emotion.

Participants completed a similar task to indicate the strength of their endorsement of nine different bystander behaviours: Stay and Watch, Walk Away, Talk to a Friend, Laugh, Make Fun of the Victim, Talk to an Adult, Tell the Bully to Stop, Get Back at the Bully (Hurt the Bully), and Stick Up for the Victim (Help the Victim). The bystander behaviours selected for consideration in the current study were based on the work of Rocke Henderson (2002), Rocke Henderson and Hymel (2003), and the Participant Role Approach (Salmivalli et al., 1996; 1998), to include a range of passive/active, and helpful/unhelpful bystander response strategies. As with emotions, a participant's score for a particular behaviour was calculated as the number of tokens used to endorse each behaviour (ranging from 0 to 10), and was interpreted as the strength of their belief that they would engage in each behaviour.

Results

Plan for Analysis

To address the current research questions, three sets of results are presented. First, descriptive results specifying the frequency with which bystander's endorsed specific emotional and behavioural reactions are reported to provide context for the main analyses. Second, to address the first research question regarding whether group membership and bully social status affect bystander's emotional reactions, a series of analyses of covariance (ANCOVAs) were conducted to examine the relationship between group factors and bystanders' emotional reactions to bullying events. The final set of analyses addressed the question of how group membership, bully social status, and bystanders' emotional reactions impact their endorsement

of behavioural responses to bullying that they witness. Specifically, following procedures previously used by Jones and colleagues (2009; 2011; 2012) each behavioural strategy was regressed separately onto the group factors and emotional responses using hierarchical linear modeling. As this study examined a greater number of emotions and behaviours than previous research, and employed a novel approach to measuring bystander's emotional and behavioural reactions (i.e., the token activity), these analyses were conducted in an exploratory capacity. As a result, all tests have been interpreted using a significance value (α) of 0.05, as per the recommendation of Bender and Lange (1999; see also Cabin & Randall, 2000; Moran, 2003).

Descriptive Analyses

One-way analyses of variance (ANOVA) were conducted to ensure random assignment of groups across demographic characteristics. Results indicated no statistically significant differences across the eight experimental conditions in terms of student grade, $F(7, 350) = 0.46$, *n.s.*, gender, $F(7, 350) = 0.51$, *n.s.*, or age, $F(7, 348) = 0.53$, *n.s.*, indicating that random assignment resulted in equal distribution of gender and grade across study conditions. These individual factors were included as covariates in the main analyses to control for any associated variance in the final models.

In order to verify that students within each of the experimental groups were comparable in terms of their level of identification with their assigned in-group, independent t-tests were conducted to evaluate group differences in students' group identification relative to their group membership or the bully's social status. To assess whether participants across conditions were equally likely to believe that the events depicted in the hypothetical scenario constituted bullying, chi-square analyses were conducted comparing the proportion of participants who either agreed or did not agree that the situation was bullying relative to their group membership

and bully social status. In total, 95% of participants in the current study either *agreed* or *really agreed* that the events depicted in the hypothetical scenario constituted bullying. When comparing those who believed that the situation was bullying to those who did not, there were no statistically significant differences related to bully group membership, $\chi^2(1) = 2.11$, *n.s.*, victim group membership, $\chi^2(1) = 0.34$, *n.s.*, or bully social status, $\chi^2(1) = 2.32$, *n.s.* Consequently, all participants were retained in the final analyses.

The unadjusted means, standard deviations, range, and frequency of responses for bystander emotions and behaviours are presented in Table 2. On average, participants endorsed 3-4 emotions ($M = 3.41$, $SD = 1.06$) and 3-4 behaviours ($M = 3.60$, $SD = 0.98$). The most commonly endorsed emotions were anger and sadness, followed by feelings of guilt and shame. Less frequent were reported feelings of fear and indifference. A very small percentage of participants (approximately 2% of the total sample) endorsed feelings of excitement or pride. Accordingly, these two variables were excluded from subsequent analyses due to lack of variability.

As shown in Table 2, the most commonly endorsed bystander behaviours were Stick Up for the Victim, Tell the Bully to Stop, and Talk to an Adult, followed by Talk to a Friend. A smaller number of participants indicated that they would Walk Away or just Stay and Watch, and even fewer students indicated that they would do something to Hurt the Bully. Again less than 2% of the total sample endorsed the behaviours Laugh and Join the Bully, so these variables

Table 2. Descriptive Statistics for Bystander Reactions (n=358)

Bystander Reaction	Sample Mean (SD)	Range (Min-Max)	Frequency of Participant Endorsement (Number of Tokens)										
			0	1	2	3	4	5	6	7	8	9	10
Ashamed	1.33 (1.63)	7 (0-7)	49%	11%	17%	10%	8%	3%	1%	1%	0%	0%	0%
Angry	3.31 (2.21)	10 (0-10)	13%	10%	14%	17%	18%	15%	7%	1%	1%	1%	2%
Excited	0.03 (0.29)	3 (0-3)	98%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Guilty	1.37 (1.72)	10 (0-10)	50%	11%	13%	12%	8%	4%	1%	<1%	0%	0%	<1%
Indifferent	0.46 (1.18)	10 (0-10)	78%	13%	3%	3%	1%	1%	<1%	0%	<1%	0%	<1%
Proud	0.03 (0.31)	4 (0-4)	99%	<1%	1%	<1%	<1%	0%	0%	0%	0%	0%	0%
Sad	2.54 (1.73)	8 (0-8)	18%	11%	18%	23%	17%	10%	2%	1%	<1%	0%	0%
Scared	0.90 (1.26)	0 (0-10)	55%	17%	20%	6%	2%	1%	<1%	0%	0%	0%	<1%
Stay and Watch	0.43 (1.04)	8 (0-8)	79%	10%	5%	4%	1%	1%	<1%	0%	<1%	0%	0%
Walk Away	0.62 (1.47)	10 (0-10)	75%	9%	8%	2%	3%	1%	1%	<1%	0%	0%	1%
Talk to a Friend	0.88 (1.22)	6 (0-6)	59%	12%	16%	10%	2%	1%	<1%	0%	0%	0%	0%
Laugh	0.03 (0.26)	3 (0-3)	99%	1%	<1%	1%	0%	0%	0%	0%	0%	0%	0%
Make Fun of Victim	0.01 (0.12)	2 (0-2)	99%	<1%	<1%	0%	0%	0%	0%	0%	0%	0%	0%
Talk to an Adult	2.28 (1.62)	8 (0-8)	21%	10%	21%	28%	14%	5%	1%	1%	<1%	0%	0%
Tell Bully to Stop	2.39 (1.41)	7 (0-7)	14%	11%	22%	32%	16%	5%	0%	<1%	0%	0%	0%
Hurt the Bully	0.31 (0.86)	5 (0-5)	85%	8%	3%	3%	1%	1%	0%	0%	0%	0%	0%
Help the Victim	3.05 (1.61)	10 (0-10)	10%	5%	17%	30%	22%	13%	1%	1%	0%	<1%	<1%

were also excluded from the main analyses due to lack of variability. Based on result of these preliminary analyses, subsequent analyses in the present study only considered six emotional reactions (Ashamed, Angry, Guilty, Indifferent, Sad, Scared) and seven behavioural reactions (Stay and Watch, Walk Away, Talk to a Friend, Talk to an Adult, Tell the Bully to Stop, Hurt the Bully, Help the Victim) to observed bullying.

Group Dynamics Predicting Bystander's Emotional Reactions

The relationship between participants' group membership, relative social status (compared to the bully), and their emotional reactions to the hypothetical bullying scenario were examined using a series of six analyses of covariance (ANCOVAs). The experimental conditions of bully group membership (in-group or out-group), victim group membership (in-group or out-group), and bully social status (more or less popular than the bystander) were included as independent variables, with participants' degree of endorsement of a specific emotion included as the dependent variable in each analysis. Participant's gender, grade level, and level of group identification was included as covariates in the models to reduce within-group variance.

Tests of Assumptions. Prior to conducting the ANCOVA analysis, the data were examined for outliers and the following assumptions were tested. The distribution of the sample data was examined using histograms and Q-Q plots. Although the data were positively skewed for all outcomes, in most cases the residuals were normally distributed, except for the outcome variables feeling Indifferent, Sad, and Scared, which deviated from normal at the higher ends of the distribution. To test the assumptions of linearity and homogeneity of variance, scatterplots of the predicted residuals were plotted against the standardized residuals for each model. Although no obvious deviations from linearity were observed, there was a trend towards heteroscedasticity for all outcome variables indicating that the error terms did not have equal variance. As a result

the model estimates are unbiased, may be less efficient and should be interpreted with caution. An additional test of homogeneity of variances was performed using Levene's test. Statistically significant differences were observed for feeling Ashamed, $F(7, 350) = 2.52$, Indifferent, $F(7, 350) = 4.17$, and Scared, $F(7, 350) = 2.92$, indicating a violation of the assumption of homogeneity of variance for these outcomes. Homogeneity of variance was observed for feeling Angry, $F(7, 350) = 1.42, n.s.$, Guilty, $F(7, 350) = 1.57, n.s.$, and Sad, $F(7, 350) = 1.09, n.s.$ Fortunately, ANOVA is relatively robust to violations of the assumption of homogeneity of variance when cell sizes are generally equal, as is the case in the current study (see Table 1).

The assumption of independence of predictors was assumed due to the random assignment of participants to condition. Independence of the predictor and the covariate variables was assessed using independent t-tests to determine if the mean level of group identification was consistent across experimental groups. There were no statistically significant differences in group identification for students assigned to the bully's in-group compared to the bully's out-group, $t(356) = -1.33, n.s.$, or students assigned to the victim's in-group compared to the victim's out-group, $t(356) = -1.26, n.s.$ However, there was a significant difference for bully popularity, $t(356) = 2.18, p = 0.03$, such that students assigned to the condition in which the bully was more popular reported stronger group identification than students in the less popular bully condition ($M = 4.18, SD = 0.43$; $M = 4.08, SD = 0.47$). As a consequence of this association, any relationships observed between bully popularity and group identification should be interpreted with caution.

An additional assumption for ANCOVA is that the relationship between the covariate and dependent variables is consistent for all groups, (i.e., homogeneity of regression slopes). Examination of the regression slopes for each group suggested that homogeneity of regression

slopes could be assumed for most emotion outcomes. The only situation where homogeneity of regression slopes was violated was a statistically significant interaction between group identification and bully popularity for the dependent variable feeling Ashamed, $F(1, 343) = 5.05$. Specifically, when the bully was more popular than the participant there was a negative relationship between group identification and feeling ashamed, whereas there was a positive relationship between group identification and feeling ashamed when the bully was less popular. The violation of the assumption of homogeneity of regression slopes for this outcome suggests that the effect of bully social status on bystander reports of feeling ashamed should be interpreted with caution.

Results of the six ANCOVA analyses conducted for each of the remaining emotion variables are presented in the subsections below. Separate models were estimated for each of the six emotion outcomes, with participant gender, grade, and group identification entered as covariates, and bully group membership, victim group membership, and bully social status entered as predictors. For simplicity, only statistically significant effects are described for the main analyses and post hoc tests. See Tables 3 and 4 for a full summary of the findings.

Feeling Ashamed. There was a positive, statistically significant relationship between the covariate of student grade level and feeling Ashamed, $B= 0.27$, $SE= 0.12$, indicating that older students were more likely to endorse feeling Ashamed than younger students. After adjusting for all covariates, statistically significant main effects were observed for bully group membership and victim group membership. Specifically, participants were more likely to report feeling Ashamed when the bully was an in-group member, or the victim was an out-group member. These main effects were qualified by a significant two-way interaction between these predictors, which was examined using post hoc t-tests. As shown in Figure 1, bystanders were

significantly more likely to report feeling Ashamed when an in-group bully attacked an out-group victim compared to an out-group bully, $t(181) = -5.41$. In addition, bystanders were significantly more likely to feel Ashamed when an in-group bully was observed harassing an out-group victim compared to situations where an in-group bully attacked an in-group victim, $t(177) = 4.14$. The proportion of variance accounted for by the predictors indicated that this was a medium-sized effect ($\text{Adj}R^2 = 0.11$; see Cohen, 1988).

Feeling Angry. A significant positive effect was observed between the covariate group identification and feeling Angry, $B = 0.64$, $SE = 0.26$, such that students who reported higher levels of group identification were also more likely to report feeling Angry about the bullying depicted in the story. The main effects of bully group membership and victim group membership were also statistically significant. Post hoc t-tests indicated that bystanders were more likely to report feeling Angry when the bully was a member of the out-group as compared to the in-group, $t(356) = 4.05$. In contrast, they were more likely to feel Angry when the victim was a member of the in-group compared to victims who were members of the out-group, $t(356) = -2.12$. The eta-squared statistic indicated that this was a small to medium effect ($\text{Adj}R^2 = 0.06$).

Feeling Guilty. A significant negative relationship between gender and reports of feeling Guilty was observed $B = -0.65$, $SE = 0.17$, indicating that boys were more likely to report feeling Guilty compared to girls. Although there were no significant main effects for bully group, victim group or bully popularity, there was a statistically significant three-way interaction between bully group, victim group, and bully social status on bystander reports of feeling guilty (see Figure 2). To examine this three-way interaction, pairwise comparisons for the effects of bully and victim group membership were run separately for the conditions where the bully had lower

Table 3. Results of Analyses of Covariance (ANCOVAs) of Group Factors Predicting Bystander Emotional Reactions

Source	df	Ashamed F-Value, Sig. (Partial Eta Squared, η_p^2)	Angry F-Value, Sig. (Partial Eta Squared, η_p^2)	Guilty F-Value, Sig. (Partial Eta Squared, η_p^2)	Indifferent F-Value, Sig. (Partial Eta Squared, η_p^2)	Sad F-Value, Sig. (Partial Eta Squared, η_p^2)	Scared F-Value, Sig. (Partial Eta Squared, η_p^2)
Covariate							
Gender	1	2.74, <i>n.s.</i>	0.01	14.38* (0.04)	2.67, <i>n.s.</i>	18.36* (0.05)	12.08* (0.03)
Grade	1	5.40* (0.02)	0.58	1.94, <i>n.s.</i>	0.72, <i>n.s.</i>	2.99, <i>n.s.</i>	2.74, <i>n.s.</i>
Group ID	1	0.19, <i>n.s.</i>	6.09* (0.02)	3.50, <i>n.s.</i>	29.80* (0.08)	10.34* (0.03)	0.13, <i>n.s.</i>
Main Effects							
Bully Group	1	22.04* (0.06)	14.99* (0.04)	3.09, <i>n.s.</i>	3.99* (0.01)	1.10, <i>n.s.</i>	4.80* (0.01)
Victim Group	1	10.76* (0.03)	4.74* (0.01)	2.50, <i>n.s.</i>	0.17, <i>n.s.</i>	3.34, <i>n.s.</i>	0.02, <i>n.s.</i>
Bully Popularity	1	0.04, <i>n.s.</i>	0.83, <i>n.s.</i>	0.44, <i>n.s.</i>	0.67, <i>n.s.</i>	0.01, <i>n.s.</i>	4.51* (0.01)
Interaction Terms							
Bully Group X Victim Group	1	10.78* (0.03)	1.42, <i>n.s.</i>	1.53, <i>n.s.</i>	2.00, <i>n.s.</i>	4.33* (0.01)	0.17, <i>n.s.</i>
Bully Group X Bully Popularity	1	0.09, <i>n.s.</i>	0.13, <i>n.s.</i>	0.04, <i>n.s.</i>	0.73, <i>n.s.</i>	0.31, <i>n.s.</i>	0.50, <i>n.s.</i>
Victim Group X Bully Popularity	1	0.65, <i>n.s.</i>	2.19, <i>n.s.</i>	0.24, <i>n.s.</i>	0.19, <i>n.s.</i>	0.51, <i>n.s.</i>	0.93, <i>n.s.</i>
Bully Group X Victim Group X Bully Popularity	1	0.95, <i>n.s.</i>	0.16, <i>n.s.</i>	6.07* (0.02)	3.26, <i>n.s.</i>	5.54* (0.02)	5.89* (0.02)
Error**	347	2.37	4.61	2.77	1.26	2.72	1.50
AdjR ² †		0.11	0.06	0.06	0.10	0.09	0.06

* significant at $p < 0.05$

** Note: Error df is reported based on model estimates for the corrected total (n=357)

† Note: effect sizes obtained in the current study are comparable to those obtained in previous studies using a similar research design (e.g., Jones et al. 2008; 2009; 2011; 2012).

Table 4. *Adjusted Means (M_{ADJ}) and Standard Errors (SE) for Bystander Emotions*

Bystander Emotion	Bully Group Membership		Victim Group Membership		Bully Social Status	
	In-Group <i>M_{ADJ} (SE)</i>	Out-Group <i>M_{ADJ} (SE)</i>	In-Group <i>M_{ADJ} (SE)</i>	Out-Group <i>M_{ADJ} (SE)</i>	Higher Status <i>M_{ADJ} (SE)</i>	Lower Status <i>M_{ADJ} (SE)</i>
Ashamed	1.71 ^a (0.15)	0.94 ^b (0.12)	1.06 ^a (0.12)	1.59 ^b (0.11)	1.34 (0.12)	1.31 (0.12)
Angry	2.89 ^a (0.16)	3.77 ^b (0.16)	3.58 ^a (0.16)	3.08 ^b (0.16)	3.23 (0.16)	3.44 (0.16)
Guilty	1.52 (0.13)	1.21 (0.13)	1.23 (0.13)	1.51 (0.13)	1.43 (0.12)	1.31 (0.13)
Indifferent	0.58 (0.08)	0.34 (0.08)	0.44 (0.09)	0.49 (0.08)	0.41 (0.08)	0.51 (0.09)
Sad	2.45 (0.12)	2.64 (0.12)	2.70 (0.13)	2.38 (0.12)	2.53 (0.12)	2.55 (0.13)
Scared	0.74 ^a (0.09)	1.03 ^b (0.09)	0.88 (0.09)	0.90 (0.09)	1.03 (0.09)	0.75 (0.09)

Post hoc significant pairwise comparisons denoted by superscript (a/b)

social status and higher social status than the bystander. Results of post hoc t-tests revealed significant differences only when the bully had higher social status than the participant. Specifically, witnesses reported that they would feel more Guilty about a higher-status in-group bully picking on an out-group victim compared to a higher-status out-group bully picking on an out-group victim, $t(96) = -2.59$. In addition, bystanders reported stronger feelings of Guilt towards a higher-status in-group bully when they picked on an out-group victim compared to an in-group victim, $t(87) = 2.34$. In follow-up discussions with participants about why they felt guilty, youth frequently mentioned that their feelings of guilt stemmed from a personal belief that they would not intervene to stop the bullying in real life. The proportion of variance accounted for by the predictors indicated that this was a small to medium effect ($\text{AdjR}^2 = 0.06$).

Feeling Indifferent. A significant covariate effect revealed a negative relationship between group identification and bystander reports of feeling Indifferent, $B = -0.74$, $SE = 0.14$. A significant main effect of bully group membership was also observed. Post hoc t-tests indicated that bystanders were more likely to report feeling Indifferent when the bully was a member of the in-group rather than the out-group, $t(356) = -2.35$. The proportion of variance accounted for by the predictors indicated that this was a medium effect ($\text{AdjR}^2 = 0.10$).

Feeling Sad. A significant positive relationship was observed between gender and student reports of feeling Sad, $B = 0.73$, $SE = 0.17$, indicating that girls endorsed feelings of sadness more strongly than boys did. A significant positive effect of group identification was also observed on reports of Sadness, $B = 0.64$, $SE = 0.20$, such that students with higher levels of identification with their in-group reported feeling more Sad than students with lower levels of group identification. Although there were not significant main effects, a significant two-way interaction between bully and victim group membership was observed. However follow-up

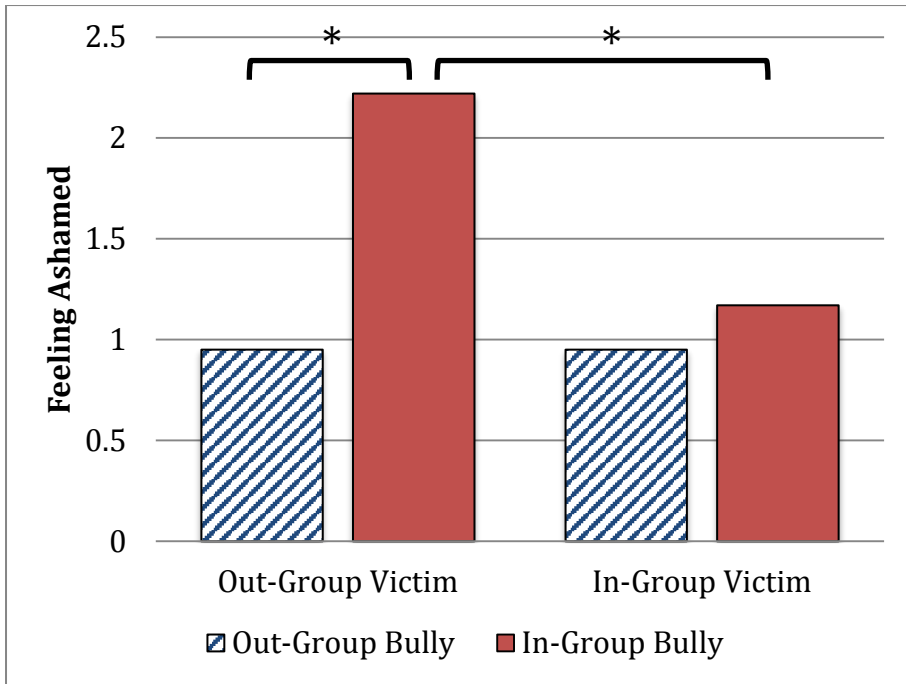


Figure 1. Effects of group membership on bystander reports of feeling ashamed

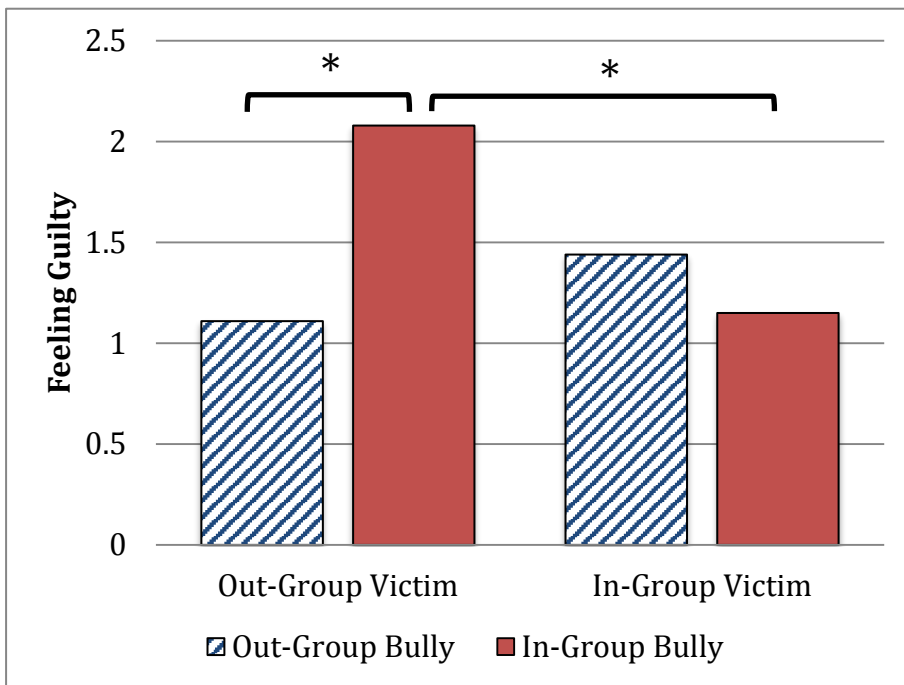


Figure 2. Effects of group membership on bystander reports of feeling guilty when the bully is more popular

pairwise comparisons did not reveal any statistically significant effects due to a significant three-way interaction between bully group membership, victim group membership, and bully social status. To examine this three-way interaction, pairwise comparisons for the effects of bully and victim group membership were run separately for the conditions in which the bully was lower in social status compared to situations in which they had higher social status than the bystander. Results of post hoc t-tests revealed that there were no differences in bystander reports of feeling Sad when the bully was lower in social status. However, bystanders were significantly more likely to endorse feeling Sad when a high-status out-group bully was observed harassing an out-group victim, compared to when a high-status in-group bully attacked an out-group victim, $t(96) = 2.28$ (see Figure 3). This finding suggests that youth who were not relationally connected to either party reported the greatest sympathy for victims of bullying. The proportion of variance accounted for by the predictors indicated that this was a medium effect ($AdjR^2 = 0.09$).

Feeling Scared. A significant positive relationship was observed between participant gender and reports of feeling Scared, $B = 0.44$, $SE = 0.13$, indicating that girls were more likely to report feelings of fear compared to boys. Significant main effects of bully group membership and bully social status were also observed. Post hoc tests indicated that witnesses reported being more afraid when the bully was a member of the out-group rather than the in-group, $t(356) = 2.28$, and when the bully had higher social status than the bystander, $t(356) = -2.05$. These main effects were qualified by a significant three-way interaction between bully and victim group membership, and bully social status. Follow-up pairwise comparisons, run separately for lower-status and higher-status bullying scenarios, revealed that bystanders reported feeling more Scared when a lower-status out-group bully picked on an in-group victim compared to a lower status in-group bully picking on an in-group victim, $t(81) = 2.47$ (see Figure 4). Follow up analyses also

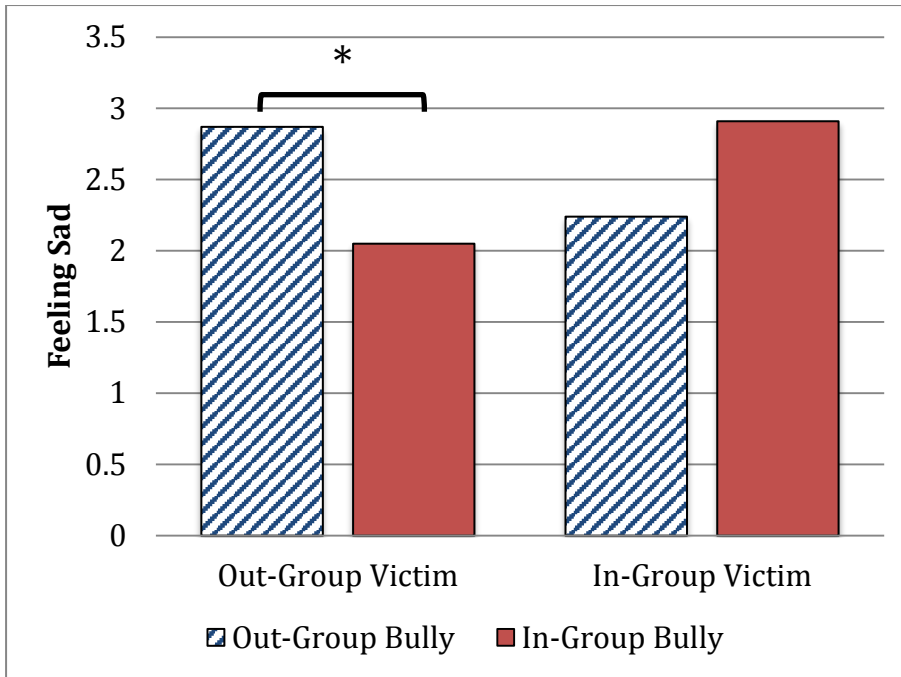


Figure 3. Effects of group membership on bystander reports of feeling sad when the bully is more popular

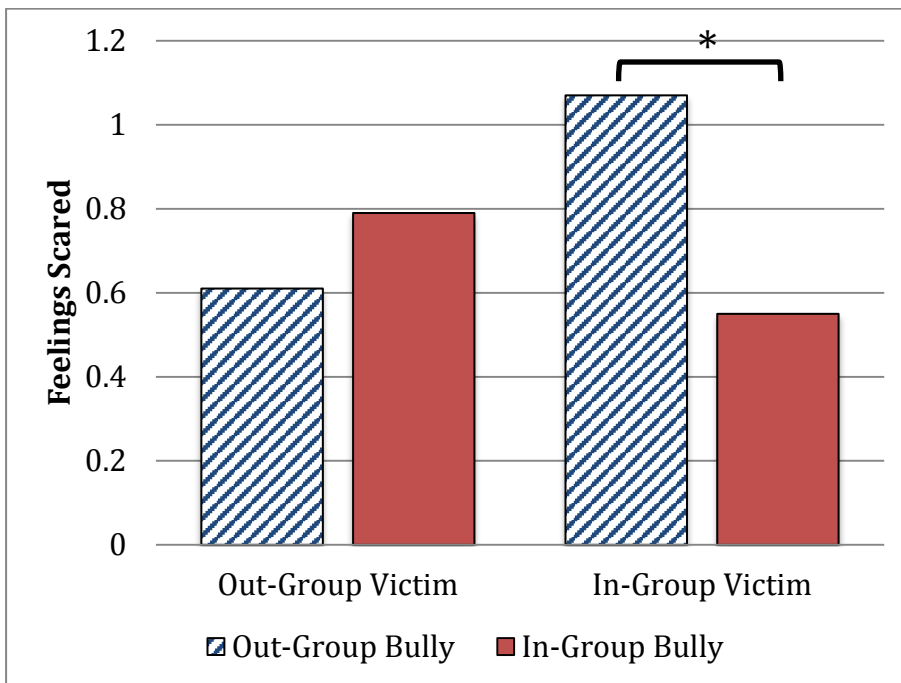


Figure 4. Effects of group membership on bystander reports of feeling scared when the bully is less popular

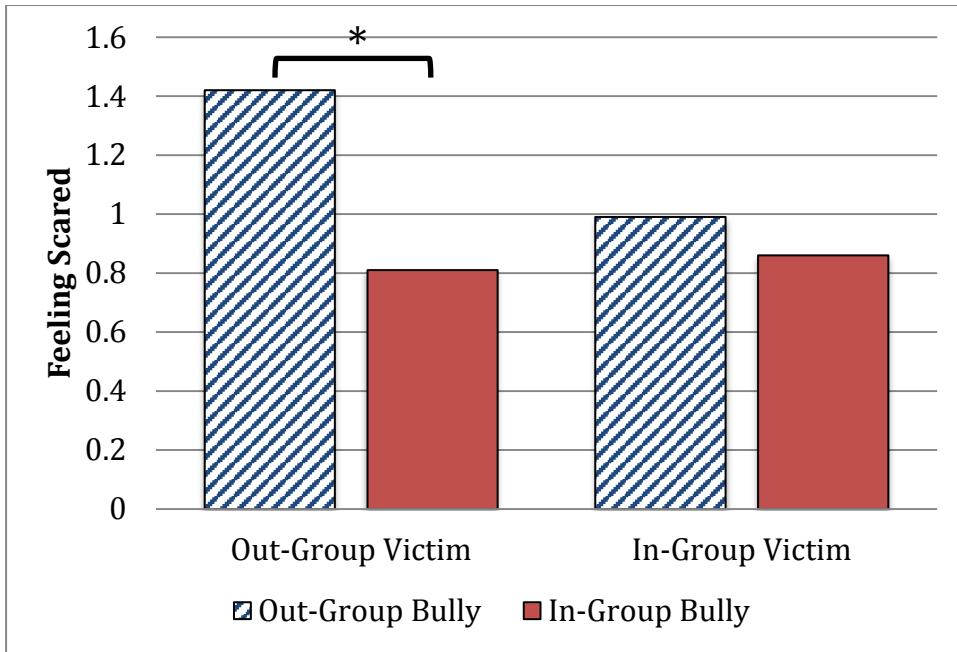


Figure 5. Effects of group membership on bystander reports of feeling scared when the bully is more popular

revealed a greater likelihood of witnesses endorsing feeling Scared when a higher-status, out-group bully picked on an out-group victim compared to when a higher-status in-group bully harassed an out-group victim, $t(96) = 2.04$ (see Figure 5). The proportion of variance accounted for by the predictors indicated that this was a small to medium effect ($A_{dj}R^2 = 0.06$).

Group Variables and Emotional Reactions Predicting Bystanders' Behavioural Responses

To test the relationship between group factors (e.g., group membership, bully social status, and group identification) and bystanders' emotional reactions to the bullying scenario on their anticipated behavioural responses as a witness, a series of hierarchical multiple regression analyses were conducted using the following bystander responses as dependent variables: Stay and Watch, Walk Away, Talk to A Friend, Talk to an Adult, Tell the Bully to Stop, Hurt the Bully, Help the Victim. Grade and gender were entered in Step 1 of each of the models, followed by group membership, bully social status and group identification in Step 2, and bystander emotions in Step 3. As before, all analyses were conducted with $\alpha = 0.05$.

Tests of Assumptions. The assumption of normality was tested by examining histograms, boxplots and probability plots (P–P plots) of raw scores, residuals plots, and statistics for skewness and kurtosis for each outcome variable. The behavioural outcomes Stay and Watch, Walk Away, Talk to a Friend, and Hurt the Bully were positively skewed, whereas the variables Talk to an Adult, Tell the Bully to Stop, and Help the Victim were normally distributed. Further examination of the residuals plots indicated that the assumption of linearity was met for the dependent variables Talk to an Adult, Tell the Bully to Stop, and Help the Victim. For the variables Stay and Watch, Walk Away, Talk to a Friend, Hurt the Bully, the residuals did not conform to a normal distribution, suggesting that the model estimates may not represent the best linear unbiased estimators and results should be interpreted with caution.

The Durbin-Watson statistic, computed for each model tested, ranged between 1.79 and 2.14, indicating independence of residuals. The assumption of homoscedasticity was tested by examining scatterplots of the standardized residuals versus the predicted residuals and was violated for each of the models. Violation of this assumption means that the residuals do not have a constant variance, which may affect estimates of model parameters, and the statistical significance of predictors should be interpreted with caution (Field, 2013).

Correlations between the independent variables were examined to determine if multicollinearity was present among the predictors. As shown in Table 5., there were a number of statistically significant correlations observed among predictors, but the magnitude of the correlations were small to medium (e.g., the largest was $r = -0.39$ between the variables Angry and Guilty), and should be taken into account when interpreting the results. The assumption of non-multicollinearity was further examined using the variance inflation factor (VIF) and tolerance index ($VIF/1$), and revealed that this assumption was violated for the following predictors: Ashamed, Angry, Guilty and Sad. A certain amount of multicollinearity was expected as the use of the token activity in the original research design resulted in dependent observations among the emotion variables. Participants had a maximum of 10 tokens, or 10 total possible opportunities to endorse any of the emotions under study. This created a situation where the endorsement of each emotion was dependent on all of the other possible emotions (i.e., if a participant placed 8 tokens on Angry they could not also place 3 tokens on Guilty and 2 on Sad). While interesting from a research design perspective, the multicollinearity created among the predictors has several important consequences for model interpretation (see Field, 2013). First, the standard errors of the b coefficients increase when collinearity is present. More error associated with the model estimates means that the b -values are less stable and more likely to

Table 5. Correlations Among Continuous Variables Used as Predictors in Regression Analysis

	Gender	Grade	Group ID	Ashamed	Angry	Guilty	Indifferent	Sad
Gender	--							
Grade	0.01	--						
Group Identification	0.09	0.04	--					
Ashamed	-0.08	0.09*	-0.02	--				
Angry	0.01	-0.01	0.13*	-0.37*	--			
Guilty	-0.20*	0.05	-0.09*	0.06	-0.39*	--		
Indifferent	-0.10*	0.02	-0.29*	-0.04	-0.25*	-0.11*	--	
Sad	0.23*	-0.07	0.16*	-0.37*	-0.13*	-0.34*	-0.19*	--
Scared	0.17*	-0.08	0.03	-0.14*	-0.26*	-0.18*	-0.11*	0.02

* significant at $p < 0.05$

vary across samples, indicating that findings may not generalize to other samples, will require replication, and should be interpreted with caution. The presence of multicollinearity among the predictors may also limit the observable effect size (i.e., R^2) as separate predictors may be accounting for the same explained variance. This also makes it difficult to assess the unique contribution of each individual predictor to the overall model. These results further support the decision to treat this project as an exploratory study, and interpret the findings as preliminary.

Results of the seven hierarchical regression analyses conducted for each of the behavioural outcomes are presented in the subsections below. As with the analyses reported above, only statistically significant effects are described for the regression analyses and post hoc tests. See Table 6 for a full summary of the findings, including the unstandardized regression coefficient (B), observed t -value, and effect size (R^2 and $\Delta_{\text{adj}}R^2$).

Stay and Watch. The final regression model conducted for the behavioural strategy Stay and Watch was statistically significant, $F(12, 344) = 4.48$. All six of the emotional reactions were statistically significant negative predictors of bystanders' reports that they would Stay and Watch the situation, and accounted for 7% of the variance in student's endorsement of this strategy. This finding suggests that more intense emotional arousal is associated with less passive bystanding. However, it is not clear from these results which of these emotions was a stronger predictor of staying and watching, or whether all six emotions must be recognized in order for bystanders to avoid engaging in this behaviour. Together these predictors explained 7% of the variability in student reports of walking away, representing a small to medium effect.

Walk Away. The overall model for Walk Away was statistically significant, $F(12, 344) = 9.28$. Bystander's group identification (assessed before being exposed to the bullying scenario) was a significant, negative predictor of the strength of their intention to Walk Away,

Table 6. Group Variables and Emotional Reactions Predicting Bystanders' Behavioural Responses

	Stay and Watch		Walk Away		Talk to A Friend		Talk to an Adult		Tell the Bully to Stop		Hurt the Bully		Help the Victim	
	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>	<i>B</i>	<i>t</i>
Step 1														
Grade	-0.001	-0.02	0.06	1.33	0.10	1.95	-0.08	-1.58	-0.02	-0.33	0.01	0.26	-0.56	-1.12
Gender	0.02	0.43	0.08	1.68	0.03	0.49	0.02	0.36	-0.04	-0.74	-0.12	-2.16*	-0.01	-0.16
Step 2														
Bully Group	-0.01	-0.16	-0.02	-0.32	-0.001	-0.10	-0.03	-0.49	-0.004	-0.07	-0.03	-0.47	0.06	1.13
Victim Group	0.06	1.20	0.01	0.22	-0.01	-0.13	0.03	0.48	-0.03	-0.49	0.01	0.24	-0.05	-1.05
Bully Popularity	-0.08	-1.48	-0.07	-1.48	-0.50	-0.96	-0.004	-0.08	0.15	2.92*	0.02	0.42	0.01	0.13
Group ID	-0.04	-0.69	-0.15	-2.93*	-0.03	-0.46	0.02	0.40	0.08	1.39	-0.08	-1.43	0.14	2.70*
Step 3														
Ashamed	-0.56	-3.61*	-0.12	-0.84	-0.55	-3.52*	0.28	1.75	0.22	1.42	0.003	0.02	0.30	2.03*
Angry	-0.88	-4.32*	-0.24	-1.26	-0.87	-4.19*	0.45	2.18*	0.38	1.82	0.01	0.05	0.52	2.63*
Guilty	-0.45	-2.70*	-0.11	-0.69	-0.45	-2.68*	0.32	1.91	0.16	0.96	-0.05	-0.31	0.16	1.01
Indifferent	-0.32	-2.54*	0.24	2.03*	-0.37	-2.88*	0.04	0.34	0.02	0.15	0.06	0.46	0.05	0.39
Sad	-0.65	-3.97*	-0.23	-1.47	-0.60	-3.61*	0.43	2.54*	0.30	1.77	-0.09	-0.50	0.31	1.94
Scared	-0.41	-3.31*	0.10	0.82	-0.32	-2.53*	0.31	2.42*	0.05	0.36	-0.09	-0.66	0.03	0.25
Step 1 R ²	0.01		0.0		0.01		0.02*		0.0		0.02*		0.0	
Change														
Step 2 R ²	0.01		0.08*		0.01		0.01		0.05*		0.02		0.07*	
Change														
Step 3 R ²	0.07*		0.16*		0.10*		0.07*		0.06*		0.02		0.12*	
Change														
Total AdjR ^{2†}	0.07*		0.22*		0.08*		0.07*		0.08		0.03*		0.16*	

* significant at $p < 0.05$

† Note: effect sizes obtained in the current study are comparable to those obtained in previous studies using a similar research design (e.g., Jones et al. 2008; 2009; 2011; 2012).

indicating that youth who reported higher levels of group identification were less likely to endorse this strategy. In contrast, bystander reports of feeling Indifferent was also a significant positive predictor of the desire to Walk Away, such that youth who reported feeling Indifferent about the bullying they ‘witnessed’ were more likely to endorse this passive bystander behaviour. Together these predictors explained 22% of the variability in student reports of walking away, representing a medium to large effect.

Talk to a Friend. The final model assessing student reports of talking to a friend about the bullying that they ‘witnessed’ was statistically significant, $F(12, 344) = 3.68$. However bystander reports that they would Talk to a Friend about the bullying they ‘witnessed’ were only predicted by the emotions they reported experiencing in reaction to the bullying event. As with Staying and Watching, all six of the emotion outcomes were negatively associated with participants’ intentions to speak to their friends about the situation. That is, the more strongly that participants felt either Ashamed, Angry, Guilty, Sad, Scared or Indifferent the less likely they were to indicate that they would Talk to a Friend about the bullying they witnessed. Together these predictors accounted for approximately 8% of the variability in student reports that they would Talk to a Friend when they witnessed bullying, representing a small to medium effect.

Talk to an Adult. The final model evaluating student reports that they would Talk to an Adult about the bullying they ‘witnessed’ was statistically significant, $F(12, 344) = 3.17$. Youths’ endorsement of the strategy Talk to an Adult was positively and significantly associated with feeling Angry, Sad, and Scared about the bullying situation. Altogether, these predictors accounted for 7% of the variability in student reports that they would Talk to an Adult about the bullying they witnessed, representing a small to medium effect.

Tell the Bully to Stop. The overall model exploring the factors contributing to the likelihood that participant bystanders would Tell the Bully to Stop was statistically significant, $F(12, 344) = 6.41$. However, the only significant predictor of bystander's intention to Tell the Bully to Stop was the social status of the bully. Specifically, the positive relationship between bully status and trying to stop them indicates that youth were more likely to say that they would intervene to stop the harassment when the bully was described as being more popular than the participant.

Hurt the Bully. Although the overall model examining student reports that they would take action to Hurt the Bully was statistically significant, $F(12, 344) = 1.79$, the only statistically significant predictor of bystander reports that they would try to Hurt the Bully was participant gender. Specifically, girls were significantly less likely to endorse this form of aggressive bystander behaviour compared to boys. Altogether, these predictors accounted for 3% of the variability in student reports that they would Hurt the Bully, representing a small effect.

Help the Victim. The final regression model exploring the factors contributing to the likelihood that bystanders would do something to Help the Victim was statistically significant, $F(12, 344) = 6.70$. Student reports that they would take steps to comfort or support the victim positively predicted by group identification. Specifically, youth with higher levels of group identification were more likely to report that they would try to Help the Victim compared to youth with lower group identification. In addition, stronger feelings of shame and anger were also positively associated with student reports that they would try to Help the Victim. The more strongly that participants reported feeling these emotions in response to the story, the more likely they were to endorse this active witnessing strategy. Together, these predictors accounted for

16% of the variability in student reports that they would Talk to an Adult about the bullying they witnessed, representing a medium effect.

Discussion

A critical component of creating safe and supportive school environments involves effectively addressing bullying. By applying an ecological systems lens (Swearer & Espelage, 2004) to understand the problem of bullying, this project adds to the growing body of literature examining the social conditions that impact how peer bystanders respond when they witness bullying. Of particular interest to the current investigation was the relationship between group dynamics (e.g., participant's social status, and inter and intra-group relationships) and bystanders' emotional and behavioural reactions to a hypothetical bullying scenario. It was expected that both the social status of the bully and youth's group membership with the bully, victim, both actors, or neither, would influence their emotional reactions when witnessing bullying. Further, these emotional reactions were expected to differentially predict their likelihood of endorsing either passive or active bystander response strategies. More specifically, when an in-group bully attacked an out-group victim, bystanders were expected to endorse feelings of pride and happiness, and to act in ways that supported their bullying group member. In contrast, when an in-group victim was hurt by an out-group bully, bystanders were expected to endorse feelings of anger, which would subsequently motivate an intention to defend the victim. In situations when both the bully and victim were members of the bystander's own group, witnesses were expected to feel greater indifference about the harassment, and endorse more passive response strategies. When both the bully and victim were member's of the out-group, bystanders were expected to feel a mix of uncomfortable emotions, including fear, sadness, and shame, which was also expected to predict passive bystanding behaviour. Finally,

youth were expected to be more likely to intervene to defend the victim against a lower-status bully, and less likely to defend against a bully that was more popular than the bystander.

Results of this exploratory study were partially consistent with the experimental hypotheses. As expected, the middle-school students in our study were more likely to report feeling angry in situations when the victim was someone from their group or the bully was from a different group. This finding is consistent with previous research on bullying group processes showing that children who strongly identify with their group report experiencing more anger towards an out-group bully, whereas those in the bully's group tend to feel less angry (Jones et al., 2009; 2011; 2012). This finding is also consistent with the tenets of Social Identity Theory (Tajfel & Turner, 1979) and Social Identity Development Theory (Nesdale, 2004), in that an individual would be expected to defend their group to the extent that belonging to the group is important to their sense of identity. According to emotion scholars, anger functions to increase an organism's ability to take action in response to immediate threats to the self (Hutcherson & Gross, 2011). In this study, bystanders' who felt angry about the bullying were *more* likely to both take immediate action to help the victim "in-the-moment" and to report the incident to an adult. They were also *less* likely to endorse passive behaviour, such as staying and watching the bullying without intervening. This finding aligns with a small but growing body of research demonstrating that, in addition to protecting oneself, anger also functions to motivate individuals to act in defense of a victimized peer (e.g., Jones et al., 2009; 2012; Pozzoli, Gini & Thornberg, 2017; Rocke Henderson, 2010; Vitaglione & Barnett, 2003).

Bystander feelings of shame (but not guilt) were also positively associated with a desire to help the victim. In previous research, children who strongly identify with the bully's group reported the lowest levels of shame (Jones et al., 2009; 2011), and the capacity to acknowledge

feelings of shame has been associated with greater empathy and willingness to defend the victim (Ahmed, 2008; Ahmed & Braithwaite, 2004; Pronk et al., 2014), but also with a goal of avoiding the bully (Jones et al., 2011). In contrast, guilt (Jones et al., 2009) and regret (Jones et al. 2012) have each been shown to positively predict a desire to apologize to the victim. Therefore it was somewhat surprising that bystanders in the current study reported experiencing the greatest feelings of shame when an in-group bully was observed harassing an out-group victim. Participants in this situation also reported the highest levels of guilt, but only when the in-group bully was higher in social status than the witness, which is also the situation in which witnesses would be least likely to intervene based on previous literature (e.g., Poyhonen et al., 2012).

Whereas anger typically functions to propel individuals to exact justice by attacking a perpetrator, both shame and guilt have been classified as “self-conscious” moral emotions that function to motivate individuals to withdraw from social interaction as a way of signaling awareness that one’s behaviour has violated a social norm in order to avoid social judgment (Haidt, 2003). Although not included as one of the behavioural response options, anecdotal evidence from the interviews conducted with participants revealed a desire among youth in this condition to distance themselves from the in-group bully out of a concern that this person’s behaviour would reflect negatively on their group as a whole, and on themselves by association. Known as the ‘black sheep effect’, this social process causes in-group individuals to view bullying group members more negatively and as more deserving of punishment than the rest of the group (Jones et al., 2008). The ‘black sheep effect’ may also help to explain why shame and anger were each associated with plans to help the victim – youth may be using this situation as an opportunity to either leave the group or possibly increase their own social status within the group by standing up to the bully. Indeed, recent research on bystanders has demonstrated that

youth who defend tend to possess high social status among their peers and are also rewarded with increased status when they defend against an aggressor (van der Ploeg, Kretschmer, Samivalli & Veenstra, 2017). Anticipated gains in social status may also help to explain why witnesses in the current study were more likely to say that they would try to stop a more popular bully compared to a less popular one. Whether youth are actually more likely to stand up to higher status bullies in real-life is an important question for future research.

It was hypothesized that bystanders in the current study would feel a mix of uncomfortable emotions (e.g., sad, scared) in situations of within-group bullying (e.g., in-group bully/in-group victim or out-group bully/out-group victim). This hypothesis was only supported for the out-group condition, and only when the bully was described as being more popular than the witness. Feelings of fear and sadness were subsequently associated with a stronger desire to talk to an adult about what they had witnessed. It may be that bystanders felt the most helpless in this scenario, and were therefore more likely to appeal to authority, because they have the least amount of information about the relationship between the bully and victim (e.g., Ray & Cohen, 1997). Participants also reported feeling more scared when a less popular out-group bully attacked an in-group victim compared to a low-status in-group bully. This situation may have represented the most severe violation of social expectations, as bullying is generally carried out by higher status peers (Cillisen & Mayeux, 2007; Vaillancourt, Hymel & McDougall, 2003). For a lower-status individual to behave in such a way may imply that the in-group is particularly vulnerable to attack. Although Thornberg and colleagues (2015) found that feelings of sadness and guilt were positively associated with a willingness to defend, neither sadness, fear, nor guilt predicted a greater likelihood to defend the victim in the current study.

In addition to group membership and bully social status, group identification was also found to be an important factor affecting youth's reactions to the hypothetical bullying scenario. Previous research by Jones and colleagues (2009; 2011; 2012) has examined the moderating effect of group identification on bystander reactions, revealing that in-group preference is especially evident at high levels of group identification such that highly identified bully group members prefer the bully, whereas victim and third-party group members tend to empathize with the victim. In the current study, stronger group identification (i.e., feelings of importance of and belonging to the group) was associated with a greater likelihood of reporting feelings of anger and sadness, and reduced feelings of guilt and indifference in response to the story. In addition, higher group identification was negatively associated with walking away and positively associated with helping the victim. The current findings suggest that, in addition to signaling in-group preference, stronger group identification may also help to buffer the relationship between emotional disengagement and passive behaviour, thereby motivating passive bystanders to become active defenders. Of course, it will be important to consider which group identity is most salient at the time of the incident, as well as the norms of the group. For example, although anger is generally reported more by individuals from the victim's group compared to the bully's group when group identification is high (Jones et al., 2009), bystanders have been shown to display higher levels of regret and anger towards an in-group bully when the bully's behaviour violates a group norm of cooperation and group identification is low (Jones et al., 2012). Taken together, these findings provide further insight into group-based strategies that may be used to improve school anti-bullying interventions.

Study Implications

Emotion Regulation Skills. The results of this study highlight the importance of self-awareness and emotion regulation skills as important avenues to promote peer bystander intervention. Participants in the current study endorsed feelings of indifference relatively rarely, whereas anger and sadness were commonly reported by bystanders. Furthermore, participants endorsed 3 to 4 emotions on average, providing further confirmation that witnessing bullying is an emotionally charged event that elicits a range of potentially conflicting emotional reactions. The fact that these emotional reactions varied depending on the group membership of the bully and victim provides initial evidence for the importance of assessing both the social *and* emotional processes that operate on bystander behaviour. Numerous evidence-based social-emotional learning (SEL) curricula exist that can be implemented effectively by classroom teachers to improve students' emotion identification and self-management skills (e.g., PATHS, Greenberg, Kusche, & Riggs, 2004; Second Step, Committee for Children, 2011; RULER, Brackett, Rivers, Reyes, & Salovey, 2012). However, the potential for emotion regulation programs to augment school-based anti-bullying interventions has only recently begun to receive attention in the research literature.

One recent study using facial recognition technology found that bullies were better at recognizing fear and happiness, whereas defenders were better at recognizing a wider range of emotions, including anger, disgust, fear, and sadness (Pozzoli, Gini & Altoe, 2017). Similarly, teacher ratings of student's social-emotional skills have indicated that bullies and bully-victims possess poorer emotion self-regulation skills than victims and uninvolved children (Garner & Hinton, 2010). In particular, poor emotion regulation for anger among victims of cyber-bullying (e.g., blaming others, ruminating over their experience) has been shown to predict higher rates of

later cyber-bullying perpetration (den Hamer & Konijn, 2016). Taken together, the existing literature suggests that the ability to recognize, process, regulate, and safely express a full range of comfortable and uncomfortable emotions may be critical for promoting healthier student relationships that are free of bullying dynamics. Unfortunately, a recent randomized control trial of an intervention designed to increase the emotional intelligence skills of self-identified bullies showed no improvement in children enrolled in the program compared to controls, suggesting that established bullies may be relatively resistant to this type of intervention (Lang, 2018). To prevent these behaviours from taking root, it is vital that adults develop the skills to recognize the signs of bullying early and take steps to intervene by explicitly teaching the SEL skills that children need to successfully navigate the complexities of their social relationships.

Theoretical support for programs that teach emotion regulation to children as a means of reducing participation in bullying comes from Shame Management theory (Ahmed & Braithwaite, 2004; 2006), which states that *how* an individual *regulates* their feelings of shame is critical for promoting prosocial behaviour. In accordance with this theory, the ability to acknowledge feelings of shame by accepting responsibility for wrongdoing and recognizing a need to make amends for harm caused to others was found to negatively predict bullying behaviour (Ahmed & Braithwaite, 2006), and positively predicted students' intentions to intervene as a defender (Ahmed, 2008). In contrast, these same studies found that shame displacement (i.e., feeling anger towards and blaming others for one's own misbehaviour) was positively associated with bullying others and negatively associated with defending. Perhaps most importantly, children's shame acknowledgement skills were found to be stronger predictors of *future* bullying participation than individual personality factors (Ahmed & Braithwaite, 2012), suggesting that developmental environments that provide instruction and support for youth to

struggle with, and eventually reconcile feelings of shame, may indeed have a stronger influence over long-term behaviour than in-born traits (e.g., see Harris, 1995/2009).

Finally, Roos, Salmivalli and Hodges (2015) have argued that there may exist a ‘dark side’ to emotion regulation, in that the ability to effectively regulate feelings of guilt and shame through emotion suppression may also enable individuals to disengage from these emotions, thereby limiting the inhibitory effect of these emotions on behaviour. In effect, when misapplied, emotion regulation may permit individuals to ignore the uncomfortable signals of moral emotions in order to carry out aggressive acts. Clearly, the role of emotions and emotion regulation in the reduction of school bullying is a complex issue, deserving of future study. The results of the current study suggest that future interventions should consider the type, valence, and intensity of emotions, as well as their function within the social environment. For example, it will be important to determine whether it is possible to teach youth to channel feelings of righteous anger at the unjust treatment of another into prosocial actions (i.e., helping, comforting, defending) without simultaneously increasing the risk of hostility and aggression in some children.

Meeting Individual Needs for Power and Status. In addition to emotion regulation, the findings related to bystander social status lend support to evolutionary theories of bullying, which posit that this form of aggressive, dominance-motivated behaviour represents a functional adaptation that provides perpetrators with certain advantages that are linked to increased success in the peer group (Hawley, 2011; Volk, et al., 2012). Youth in this study were significantly more likely to indicate that they believed they would intervene directly to try to stop the bully only when the bully was of higher social status. This finding suggests that, for some bystanders, defending may be associated with a desire for increased status. In a similar vein, Hawley and

colleagues (2002) examined power control strategies of children and found distinct groups that varied in the extent to which they employed prosocial (e.g., cooperative) and coercive (e.g., hostile) behaviours to influence others. Children who primarily used prosocial strategies had significantly more positive outcomes compared to coercive controllers, and children who used a combination of *both* strategies (i.e., bistrategic controllers) displayed a mix of both positive and negative characteristics. Fascinatingly, despite achieving their goals via the strategic use of aggression, bistrategic children were also rated as highly popular and well-accepted by peers (Hawley, 2003). Applying the evolutionary approach to bullying led Ellis et al., (2016) to develop the “Meaningful Roles” intervention, whereby youth who bully are provided with alternative prosocial activities that meet their intrinsic need for power, status, and peer acceptance. This program is currently in the pilot-testing stage, though the potential for such strategies to peacefully redirect youth before they establish a hostile reputation among peers is promising.

Defining Group Boundaries and Norms. Finally, returning to central tenets of SIT and GST, which informed this research, the current study adds to the literature illustrating the ways in which group identity has the power to influence individual behaviour. Drawing on this previous body of literature on this topic revealed that one way to counteract problematic group dynamics, such as those that contribute to passive bystander effect, is to activate a superordinate group norm that transcends the norms of smaller social cliques. Possibly the most famous example of this is the Robber’s Cave experiment (Sherif, 1958; Sherif, Harvey, White, Hood, & Sherif, 1961), that involved randomly dividing a group of young male campers into two groups to study the impact of group processes on behaviour. As a result of between group differentiation, each sub-group developed distinct group norms, including specific ways of

dressing and acting, that effectively distinguished the two groups from each other. Over the course of the project, as group tensions mounted and between-group conflicts escalated in intensity, the researchers scrambled to find a way to undo the group membership and group identification effects before the campers were sent home at the end of the summer. The solution that ultimately proved effective was to provide a ‘superordinate goal’ that required both groups to cooperate in order to solve a mutual problem – in this case fixing a broken pipe that affected the camp’s water supply. The same principle could potentially be applied to addressing bullying problems in schools. When situations of between or within-group bullying give rise to group processes that promote bystander inaction, adults should intervene early to counteract these processes.

Specifically, as the formal leader of the classroom teachers can learn to create situations where superordinate norms of kindness, cooperation, and compassion are dominant. In fact, it has been argued previously that it is by defining the group norms and social boundaries (i.e., criteria for membership) that teachers and other adults are able to influence children’s behavior (Harris; 2009). Farmer and colleagues (2011) termed the process that teachers use to guide the development of peer group norms the ‘invisible hand’. When peer group conflicts arise, teachers have the power to draw student’s attention to the norms of the larger social group (e.g., classroom or whole-school community) to promote peaceful resolution and reduce the likelihood of future misconduct. For example, teachers can be taught to respond to bullying in the early stages of conflict by engaging their students in discussions about how such behaviour affects the wellbeing of every member of the classroom, as well as the functioning of the class as a whole. Youth can then participate in developing a plan of action for addressing the current problem, as well as a framework for preventing future bullying incidents. This approach is similar to the

Method of Shared Concern (Pikas, 2002; Rigby & Griffiths, 2011), except that it involves the whole classroom rather than a smaller committee of peers. Intervening in this way to shift the group processes from an “us versus them” dynamic to a sense of “we” also has the benefit of preserving and strengthening relationships among and between group members by preserving the dignity and belonging of bullies and victims, as well as defenders and passive bystanders.

Study Limitations and Strengths

The use of an experimental between-groups design is an important strength of the current research that has been under-utilized in the study of peer relationships. Building on the work of Jones and colleagues (2009; 2011; 2012), this project sought to disentangle some of the social processes that contribute to bullying in order to provide insight into strategies that could be applied to minimize these problematic group dynamics. However, as with all scientific endeavors, the current study has certain limitations that constrain the generalizability of these findings. First, the method of measurement for the emotion and behaviour outcomes (i.e., the token activity) created a problem of dependence of observations among the emotion variables that were used as predictors in the regression analyses. As a consequence, the relationships between the bystander emotions and specific bystander behaviours should be interpreted with caution and will require further replication using a more traditional measurement approach that allows for independence of observations (e.g., surveys using a Likert-style scale).

Although the approach used in the current study introduced certain (not insignificant) statistical issues, it was nevertheless considered to be both a strength and weakness of the current design. The token activity was used in an attempt to create a situation of inner conflict or cognitive unease that might mimic the uncertainty and discomfort bystanders might feel when witnessing bullying events in real life. Of course, in actual bullying situations bystander’s would

have unlimited opportunities to endorse an even wider range of emotions and strategies than were included in the current study. Yet bystanders often have to make split-second decisions about what to do, often with incomplete information about the situation (Jenkins & Nickerson, 2017). The forced-choice inherent in the token activity was intended to replicate this feeling of internal conflict and required the “witnesses” in our study to consciously reflect on their options while they considered their reactions. For this reason, I argue that this activity was successful at enhancing the validity of the hypothetical bullying scenario in a manner that would not have been possible using a traditional measurement technique. Future studies could extend this research and attempt to create a similar feeling of cognitive unease by employing hypothetical vignettes that depict more ambiguous social conflict (i.e., where the actions of the bully are still hurtful but less obviously aggressive), or by incorporating actual peer relationships into the study design (e.g., see Nickerson & Mele-Taylor, 2014; Rocke Henderson, 2010).

The measurement approach employed in the current study also provided an opportunity to probe participants for additional information about how and why they endorsed specific emotions and strategies, providing new and interesting insights that will contribute to future studies designed to test more specific hypotheses. For example, when asked how they felt about the scenario, many youth reported feeling ashamed or guilty because they anticipated that they would not intervene to help the victim in real-life. However, once they were shown the card with the behavioural strategies, these same youth often chose a diverse range of reactions, usually including a mix of both passive and active responses. In future studies, qualitative analytic techniques could be applied to examine both the motivation and sequencing of youth’s reactions. For example, do defenders move through a particular scope and intensity of emotions, ending with the necessary level of emotional arousal to motivate intervention? If so, could passive

witnesses be taught to regulate their emotions in a similar fashion? Regarding behaviour, does the order of strategy employment vary depending on the situation? And, are there particular constellations of strategies that are more effective at reducing bullying over the short and long term?

Another limitation of the current research was the low reliability of the group identification measure used in the current study. This measure was adapted from previous research that achieved adequate reliability with similar age groups using similar sets of items (e.g., Jones et al., 2009; 2011). It is unknown why the participants in the current study demonstrated greater variability in their responses to the group identification measure. In their follow-up interviews many participants reported that they were happy to belong to their in-group but felt that they were a unique individual who was not necessarily similar to other group members despite their shared interests. Moreover, many youth indicated that they would feel badly if others spoke negatively about their group, while also acknowledging that their group was not more or less important than other groups that existed within the school ecosystem. Whether this represents a cultural or age cohort-effect, or an effect specific to this particular school sample is another area for future research to explore.

The use of hypothetical scenarios compared to real life bullying events also limits the generalizability of these results, as it is not possible to know if the events depicted in the scenario are similar to student's actual lived experiences of witnessing school bullying. The use of hypothetical vignettes is recommended for research involving sensitive topics like bullying, as it allows participants to place themselves in the situation while at the same time providing an increased sense of psychological safety compared to real-world situations (Finch, 1987; Hughes, 1998; Barter & Renold, 1999). Since it would be unethical to expose children to bullying in order

to study their reactions, hypothetical vignettes were determined to be the next best option. It is encouraging that the vast majority of the students in this sample identified the events in the story as bullying, suggesting that it at least matched their idea of what bullying *should* look like. However, this approach is vulnerable to self-report bias, as the willingness to intervene does not always translate into actual behavioural intervention (Bellmore, Ma, You, & Hughes, 2012).

Finally, the bystander response task may have presented participants with demand characteristics that could have impacted their responses. For example, the fact that they knew that they were participating in a research study about bullying, and assuming a general awareness of the social norms that prohibit such behaviour, the youth in this study may have felt a desire to “please” the researchers by answering in a prosocial manner. Similarly, the fact that relatively few individuals in the current study were willing to endorse emotions and behaviours consistent with the participant roles of ‘reinforcer’ and ‘assistant’ to the bully (e.g., pride, excitement, laughing, and joining in) may reflect a desire to view oneself in a positive light, rather than true prosocial tendencies. In reviewing the interview transcripts, it does appear that youth were answering the questions with integrity and out of a desire to honestly portray their reactions to the hypothetical bullying scenario. For example, many admitted that they would be unlikely to intervene directly, and shared that they felt quite guilty about this choice. Nevertheless, it is important that future studies consider alternative approaches to the assessment of bystander roles and behaviours so that we can learn more about when and why some students join in with the bullying instead of helping to stop it. Other research designs that could be employed in future studies to corroborate the current findings include observational approaches, retrospective accounts, and daily diary studies. Through a combination of carefully and systematically

designed studies, using a variety of methodological approaches, we will continue to untangle the complexities of our social realities, including the influence of social relationships on behaviour.

Conclusion

Previous research suggests that children frequently *do* act to defend victimized peers (e.g., Sutton & Smith, 1999; Trach, Hymel, Waterhouse & Neale, 2010) – the real problem is that they do not appear to do so consistently across situations. Building on previous research, the current study provided the beginnings of an answer to the question: when are children more likely to defend a victimized peer? As expected, the answer is somewhat complicated. Children defend for a variety of reasons, and in different ways under different conditions. Based on an analysis of current and previous research, it appears that group processes contribute to bystander defending by creating a feeling of social responsibility due to a) shared group membership with the victim (motivated by feelings of anger), or b) shared group membership with the bully (motivated by feelings of shame). We are just beginning to understand the role that these emotions play in the experiences of bullies, defenders, passive bystanders, and victims. Rather than focusing on the behaviour of a few individual actors, it is incumbent that we continue to study the influence of group dynamics on school bullying. As human beings we are social creatures, with an inherent need to belong (Baumeister & Leary, 1995). When we have a better understanding of our group functioning, we will have a better understanding of ourselves.

References

- Ahmed, E. (2008). Stop it, that's enough: Bystander intervention and its relationship to school connectedness and shame management. *Vulnerable Children and Youth Studies, 3*(3), 203-213.
- Ahmed, E., & Braithwaite, V. (2004). "What, me ashamed?" Shame management and school bullying. *Journal of Research in Crime and Delinquency, 41*(3), 269–294.
- Ahmed, E. & Braithwaite, V. (2006). Forgiveness, reconciliation, and shame: three key variables in reducing school bullying. *Journal of Social Issues, 62*(2), 347-370.
- Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs: General and Applied, 70*(9), 1–70.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529.
- Barter, C. & Renold, E. (1999). The use of vignettes in qualitative research. *Social Research Update, 25*,
- Bellmore, A., Ma, T., You, J., & Hughes, M. (2012). A two-method investigation of early adolescents' responses upon witnessing peer victimization in school. *Journal of Adolescence, 35*(5), 1265–1276.
- Bender, R. & Lange, S. (1999). Multiple test procedures other than Bonferroni's deserve wider use. *British Medical Journal, 318*(7183), 600.
- Berger, C., & Rodkin, P. C. (2012). Group influences on individual aggression and prosociality: Early adolescents who change peer affiliations. *Social Development, 21* (2), 396-413.
doi:10.1111/j.1467-9507.2011.00628.x

- Brackett, M.A., Rivers, S.E., Reyes, M.R., & Salovey, P. (2012). Enhancing academic performance and social and emotional competence with the RULER feeling words curriculum. *Learning and Individual Differences, 22*, 218-224.
- Brown, B., & Klute, C. (2003). Friendships, cliques, and crowds. In G. Adams & Berzonsky, M. (Eds.), *Blackwell Handbook of Adolescence* (pp. 330–348). Malden, MA: Blackwell.
- Cabin, R. & Mitchell, R. (2000). To Bonferroni or not to Bonferroni: When and how are the questions. *Bulletin of the Ecological Society of America, 81(3)*, 246-248.
- Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18(1)*, 140–163.
doi:10.1111/j.1467-9507.2008.00465.x
- Cillessen, A. H., & Rose, A. J. (2005). Understanding popularity in the peer system. *Current Directions in Psychological Science, 14(2)*, 102–105.
- Cillessen, A. H., & Mayeux, L. (2007). Expectations and perceptions at school transitions: The role of peer status and aggression. *Journal of School Psychology, 45(5)*, 567–586.
doi:10.1016/j.jsp.2007.05.004
- Closson, L. (2009). Aggressive and prosocial behaviours within early adolescent friendship cliques: What's status got to do with it? *Merrill-Palmer Quarterly, 55(4)*, 406–435.
doi:10.1353/mpq.0.0035
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Committee for Children (2011). *Second Step: Review of research*. <http://www.secondstep.org>
- Correia, I., Alves, H., De Almeida, A. T., & Garcia, D. (2010). Norms regarding secondary victimization of bullying victims: Do they differ according to the victim's categorization? *Scandinavian Journal of Psychology, 51(2)*, 164–170. doi:10.1111/j.1467-9450.2009.00732.x

- Craig, W., & Harel, Y. (2004). Bullying, physical fighting, and victimization. In *Young people's health in context: International report from the HBSC 2001/02 survey*. (Vol. 4). Copenhagen: WHO Regional Office for Europe.
- Craig, W. M., & Pepler, D. J. (1998). Observations of bullying and victimization in the school yard. *Canadian Journal of School Psychology, 13*(2), 41–59. doi:10.1177/082957359801300205
- Daniels, T., Quigley, D., Menard, L., & Spence, L. (2010). “My best friend always did and still does betray me constantly”: Examining relational and physical victimization within a dyadic friendship context. *Canadian Journal of School Psychology*. doi:10.1177/0829573509357531
- Duffy, A. L., & Nesdale, D. (2009). Peer groups, social identity, and children's bullying behaviour. *Social Development, 18*(1), 121–139. doi:10.1111/j.1467-9507.2008.00484.x
- Ellis, B., Volk, A., Gonzalez, J-M., & Embry, D. (2015). The meaningful roles intervention: an evolutionary approach to reducing bullying and increasing prosocial behavior. *Journal Of Research On Adolescence, 26*(4), 622–637.
- Espelage, D., Green, H., & Polanin, J. (2012). Willingness to intervene in bullying episodes among middle school students: Individual and peer-group influences. *The Journal of Early Adolescence, 32*(6), 776–801. doi:10.1177/0272431611423017
- Espelage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer–group contextual effects on aggression during early adolescence. *Child Development, 74*(1), 205–220.
- Farmer, T.W., McAuliffe Lines, M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology, 32*, 247–256, <http://dx.doi.org/10.1016/j.appdev.2011.04.006>.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics, 4th edition*. Los Angeles: Sage.
- Finch, J. (1987). The vignette technique in survey research. *Sociology, 21*(1), 105-114.

- Garner, P. & Hinton, T. (2010). Emotional display rules and emotion self-regulation: associations with bullying and victimization in community-based after school programs. *Journal of Community & Applied Social Psychology, 20*, 480–496.
- Gini, G. (2006). Bullying as a social process: The role of group membership in students' perception of inter-group aggression at school. *Journal of School Psychology, 44*(1), 51–65.
doi:10.1016/j.jsp.2005.12.002
- Gini, G. (2007). Who is blameworthy?: Social identity and inter-group bullying. *School Psychology International, 28*(1), 77–89. doi:10.1177/0143034307075682
- Gini, G., Pozzoli, T., Borghi, F., & Franzoni, L. (2008). The role of bystanders in students' perception of bullying and sense of safety. *Journal of School Psychology, 46*(6), 617–638.
doi:10.1016/j.jsp.2008.02.001
- Greenberg M., Kusche, C., & Riggs, N. (2004) The PATHS curriculum: Theory and research on neurocognitive development and school success. In: Zins JE, Weissberg RP, Wang MC and Walberg HJ (Eds.) *Building Academic Success on Social and Emotional Learning: What Does the Research Say?* New York, NY: Teachers College Press, pp. 170–188.
- Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (852-870). Oxford: Oxford University Press.
- den Hamer, A. & Konijn, E. (2016). Can emotion regulation serve as a tool in combating cyberbullying? *Personality and Individual Differences, 102*, 1–6.
- Harris, J. R. (1995). Where is the child's environment? A group socialization theory of development. *Psychological Review, 102*(3), 458–489.
- Harris, J. R. (2009). *The Nurture Assumption: Why children turn out the way they do*. New York: Free Press.

- Hawley, P. (2003). Prosocial and coercive configurations of resource control in early adolescence: A case for the well-adapted machiavellian. *Merrill Palmer Quarterly*, 49(3), 279–309.
- Hawley, P. (2011). The evolution of adolescence and the adolescence of evolution: The coming of age of humans and the theory about the forces that made them. *Journal Of Research On Adolescence*, 21(1), 307-316.
- Hawley, P., Little, T., & Pasupathi, M. (2002). Winning friends and influencing peers: Strategies of peer influence in late childhood. *International Journal of Behavioral Development*, 26(5), 466–474.
- Hazler, R. (1996). Bystanders: An overlooked factor in peer on peer abuse. *The Journal for the Professional Counselor*, 11(2), 11–21.
- Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and Violent Behaviour*, 17(4), 311–322.
doi:10.1016/j.avb.2012.03.003
- Hughes, R. (1998). Considering the vignette technique and its application to a study of drug injecting and HIV risk and safer behaviour. *Sociology of Health & Illness*, 20(3), 381–400.
- Huitsing, G., & Veenstra, R. (2012). Bullying in classrooms: Participant roles from a social network perspective: Social networks and participant roles in bullying. *Aggressive Behaviour*, 38(6), 494–509. doi:10.1002/ab.21438
- Hutcherson, C. A., & Gross, J. (2011). The moral emotions: A social–functionalist account of anger, disgust, and contempt. *Journal of Personality and Social Psychology*, 100(4), 719–737.
- Jenkins, L. & Nickerson, A. (2017). Bullying Participant Roles and Gender as Predictors of Bystander Intervention. *Aggressive behaviour*, 43, 281–290.

- Jones, S.E., Bombieri, L., Livingstone, A., & Manstead, A.R. (2012). The influence of norms and social identities on children's responses to bullying. *British Journal of Educational Psychology*, 82, 241–256.
- Jones, S. E., Haslam, S. A., York, L., & Ryan, M. K. (2008). Rotten apple or rotten barrel? Social identity and children's responses to bullying. *British Journal of Developmental Psychology*, 26(1), 117–132. doi:10.1348/026151007X200385
- Jones, S.E., Manstead, A.S., & Livingstone, A. (2009). Birds of a feather bully together: Group processes and children's responses to bullying. *British Journal of Developmental Psychology*, 27(4), 853–873. doi:10.1348/026151008X390267
- Jones, S.E., Manstead, A.S., & Livingstone, A. (2011). Ganging up or sticking together? Group processes and children's responses to text-message bullying. *British Journal of Psychology*, 102(1), 71–96.
- Juvonen, J., & Ho, A. Y. (2008). Social motives underlying antisocial behaviour across middle school grades. *Journal of Youth and Adolescence*, 37(6), 747–756. doi:10.1007/s10964-008-9272-0
- Karna, A., Voeten, M., Poskiparta, E., & Salmivalli, C. (2010). Vulnerable children in varying classroom contexts: Bystanders' behaviours moderate the effects of risk factors on victimization. *Merrill-Palmer Quarterly*, 56(3), 261–282.
- Kindermann, T. A., McCollam, T., & Gibson, E. (1996). Peer networks and student's classroom engagement during childhood and adolescence. In J. Juvonen & K. Wentzel (Eds.), *Social motivation: Understanding children's school adjustment* (pp. 279–312). NY: Cambridge.
- Lang, J. (2018). The efficacy of emotional intelligence training for the emotion regulation of bullying students: a randomized controlled trial. *NeuroQuantology*, 2, 83-88.

- Lieberman, M. D. (2013). *Social: Why our brains are wired to connect*. New York: Crown.
- Lodge, J., & Frydenberg, E. (2005a). The role of peer bystanders in school bullying: Positive steps toward promoting peaceful schools. *Theory into Practice, 44*(4), 329–336.
- Lodge, J., & Frydenberg, E. (2005b). The role of peer bystanders in school bullying: Positive steps toward promoting peaceful schools. *Theory into Practice, 44*(4), 329–336.
- Miller, T., Holcomb, T., & Kraus, R. (2008). Cliques and cults as contributors to violence in the school environment. In T. Miller (Ed.), *School Violence and Primary Prevention*. Springer.
- Moran, M. (2003). Arguments for rejecting the sequential Bonferroni in ecological studies. *OIKOS, 100*(2), 403-405.
- Nesdale, D. (2004). *The development of the social self*. New York: Psychology Press.
- Nesdale, D., Durkin, K., Maass, A., Kiesner, J., & Griffiths, J. A. (2008). Effects of group norms on children's intentions to bully. *Social Development, 17*(4), 889–907. doi:10.1111/j.1467-9507.2008.00475.x
- Nesdale, D., Killen, M., & Duffy, A. (2013). Children's social cognition about proactive aggression. *Journal of Experimental Child Psychology, 116*(3), 674–692. doi:10.1016/j.jecp.2013.07.003
- Nickerson, A. B., & Mele-Taylor, D. (2014). Empathetic responsiveness, group norms, and prosocial affiliations in bullying roles. *School Psychology Quarterly, 29*(1), 99–109. doi:10.1037/spq0000052
- O'Connell, P., Pepler, D., & Craig, W. (1999). Peer involvement in bullying: Insights and challenges for intervention. *Journal of Adolescence, 22*, 437–452.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Blackwell.

- Olthof, T., Goossens, F. A., Vermande, M. M., Aleva, E. A., & van der Meulen, M. (2011). Bullying as strategic behaviour: Relations with desired and acquired dominance in the peer group. *Journal of School Psychology, 49*(3), 339–359. doi:10.1016/j.jsp.2011.03.003
- Paluck, E. L., & Shepherd, H. (2012). The salience of social referents: A field experiment on collective norms and harassment behaviour in a school social network. *Journal of Personality and Social Psychology, 103*(6), 899–915. doi:10.1037/a0030015
- Pellegrini, A. D., & Long, J. D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology, 20*(2), 259–280.
- Pikas, A. (2002). New developments of the shared concern method. *School Psychology International, 23*(3), 307-326.
- Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2012). Standing up for the victim, siding with the bully or standing by? Bystander responses in bullying situations: Outcome expectations and values. *Social Development, 21*(4), 722–741. doi:10.1111/j.1467-9507.2012.00662.x
- Pozzoli, T., & Gini, G. (2013a). Friend similarity in attitudes toward bullying and sense of responsibility to intervene. *Social Influence, 8*(2-3), 161–176.
doi:10.1080/15534510.2012.716372
- Pozzoli, T., & Gini, G. (2013b). Why do bystanders of bullying help or not? A multidimensional model. *The Journal of Early Adolescence, 33*(3), 315–340. doi:10.1177/0272431612440172
- Pozzoli, T., Gini, G., & Altoe, G. (2017). Associations between facial emotion recognition and young adolescents' behaviors in bullying. *PLoS ONE 12*(11), e0188062.

- Pozzoli, T., Gini, G., & Thornberg, R. (2017). Getting angry matters: Going beyond perspective taking and empathic concern to understand bystanders' behavior in bullying. *Journal of Adolescence*, 61, 87–95. <https://doi.org/10.1016/j.adolescence.2017.09.011>
- Pronk, J., Goossens, F. A., Olthof, T., De Mey, L., & Willemen, A. M. (2013). Children's intervention strategies in situations of victimization by bullying: Social cognitions of outsiders versus defenders. *Journal of School Psychology*, 51(6), 669–682. doi:10.1016/j.jsp.2013.09.002
- Ray, G., & Cohen, R. (1997). Children's evaluations of provocation between peers. *Aggressive Behaviour*, 23, 417–431.
- Ray, G., Norman, M., Sadowski, C., & Cohen, R. (1999). The role of evaluator-victim relationships in children's evaluations of peer conflict. *Social Development*, 8, 380–394.
- Rigby, K & Griffiths, C. (2011). Addressing cases of bullying through the method of shared concern. *School Psychology International*, 32(3), 345-357.
- Rocke Henderson, N. (2002). *Peer response to bullying conflict: Identifying early adolescents' strategies and goals*. (Unpublished master's thesis). University of British Columbia, Canada.
- Rocke Henderson, N. (2010). *Social Problem-solving and emotion processes among early adolescent bystanders in hypothetical bullying situations*. (Unpublished doctoral dissertation). University of British Columbia, Canada.
- Rocke Henderson, N., & Hymel, S. (2003, April). *Peer response to bullying conflict: Early adolescents' strategies and goals*. Paper presented at the biennial meeting of the Society for Research in Child Development, Tampa, Florida.
- Rodkin, P. (2004). Peer Ecologies of aggression and bullying. In *Bullying in American schools: A social-ecological perspective on prevention and intervention*. Lawrence Erlbaum Associates.

- Rodkin, P., & Hodges, E. (2003). Bullies and victims in the peer ecology: Four questions for psychologists and school professionals. *School Psychology Review*, 32(3), 384–400.
- Roos, S., Salmivalli, C., & Hodges, E. (2015). Emotion regulation and negative emotionality moderate the effects of moral(dis)engagement on aggression. *Merrill-Palmer Quarterly*, 61(1), 30-50.
- Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2011). Victims and their defenders: A dyadic approach. *International Journal of Behavioural Development*, 35(2), 144–151.
doi:10.1177/0165025410378068
- Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of Adolescence*, 22, 453–459.
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behaviour*, 15(2), 112–120. doi:10.1016/j.avb.2009.08.007
- Salmivalli, C., Huttunen, A., & Lagerspetz, K. M. (1997). Peer networks and bullying in schools. *Scandinavian Journal of Psychology*, 38(4), 305–312.
- Salmivalli, C., Lagerspetz, K. M., Bjorkqvist, K., Osterman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behaviour*, 22, 1–15.
- Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. (1998). Stability and change of behaviour in connection with bullying in schools: A two-year follow-up. *Aggressive Behaviour*, 24, 205–218.
- Salmivalli, C., Voeten, M., & Poskiparta, E. (2011). Bystanders matter: Associations between reinforcing, defending, and the frequency of bullying behaviour in classrooms. *Journal of Clinical Child & Adolescent Psychology*, 40(5), 668–676. doi:10.1080/15374416.2011.597090

- Sherif, M. (1958). Superordinate goals in the reduction of intergroup conflict. *American journal of Sociology*, 349-356.
- Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The Robbers Cave experiment (Vol. 10)*. Norman, OK: University Book Exchange.
- Smith, J. D., Hymel, S., & Schneider, B. (2012, July). *School climate, school attachment, and bullying*. Paper presented at the bi-annual meeting of the International Society for Research on Aggression, Walferdang, Luxembourg.
- Summers, K.H., Demaray, M.K., & Becker, L.D. (2010, February). *The assessment of bystander participant roles in bullying situations*. Paper presented at the annual meeting of the National Association of School Psychologists, Chicago, IL.
- Sutton, J., & Smith, P. K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behaviour*, 25(2), 97–111.
- Swearer, S. M., & Doll, B. (2001). Bullying in schools: An ecological framework. *Journal of Emotional Abuse*, 2(2-3), 7–23. doi:10.1300/J135v02n02_02
- Swearer, S. M., & Espelage, D. L. (2004). A social-ecological framework of bullying among youth. In D. L. Espelage & S. M. Swearer (Eds.), *A social-ecological framework of bullying among youth*. New Jersey: Lawrence Erlbaum Associates.
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 13(2), 65–93. doi:10.1177/053901847401300204
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1–39.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1, 149–177. doi:10.1002/ejsp.2420010202

- Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations*. Monterey, CA: Brooks-Cole.
- Thornberg, R., Pozzoli, T., Gini, G., & Jungert, T. (2015). Unique and interactive effects of moral emotions and moral disengagement on bullying and defending among school children. *The Elementary School Journal*, 116(2), 322-337.
- Trach, J., Hymel, S., Waterhouse, T., & Neale, K. (2010). Bystander responses to school bullying: A cross-sectional investigation of grade and sex differences. *Canadian Journal of School Psychology*, 25(1), 114–130. doi:10.1177/0829573509357553
- Trach, J., Lee, M., Groendal, R., Hymel, S., & Smith, J. D. (2012, April). *Examining the links between school climate and student's experiences with bullying*. Poster presented at the biannual meeting of the Society for Research in Adolescence, Vancouver, BC.
- Turner, J., Hogg, M., Oakes, P., Reicher, S., & Wetherell, M. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
- Vaillancourt, T., Hymel, S., & McDougall, P. (2003). Bullying is power: Implications for school-based intervention strategies. *Journal of Applied School Psychology*, 19(2), 157–176. doi:10.1300/J008v19n02_10
- Vaillancourt, T., McDougall, P., Hymel, S., Krygsman, A., Miller, J., Stiver, K., & Davis, C. (2008). Bullying: Are researchers and children/youth talking about the same thing? *International Journal of Behavioral Development*, 32, 486–495.
- van der Ploeg, R., Kretschmer, T., Salmivalli, C., & Veestra, R. (2017). Defending victims: What does it take to intervene in bullying and how is it rewarded by peers? *Journal of School Psychology*, 65, 1-10.

Vitaglione, G. D. & Barnett, M.A. (2003). Assessing a new dimension of empathy: Empathic anger as a predictor of helping and punishing desires, *Motivation and Emotion*, 27 (4), 301-325.

<https://doi.org/10.1023/A:1026231622102>

Volk, A. A., Camilleri, J. A., Dane, A. V., & Marini, Z. A. (2012). Is adolescent bullying an evolutionary adaptation? *Aggressive Behaviour*, 38(3), 222–238. doi:10.1002/ab.21418

Warneken, F., & Tomasello, M. (2014). The developmental and evolutionary origins of human helping and sharing. *Oxford Handbooks Online*, 1-16.

Appendix A

University and School District Ethics Approval Certificates



The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
 Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR: Shelley Hymel	INSTITUTION / DEPARTMENT: UBC/Education/Educational & Counselling Psychology, and Special Education	UBC BREB NUMBER: H17-00408
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
<small>Institution</small>	<small>Site</small>	
Other locations where the research will be conducted: N/A		
CO-INVESTIGATOR(S): Jessica Trach		
SPONSORING AGENCIES: Edith Lando Charitable Foundation - "Edith lando professorship in social and emotional learning"		
PROJECT TITLE: Student Relationships and Bullying		
CERTIFICATE EXPIRY DATE: July 4, 2018		
DOCUMENTS INCLUDED IN THIS APPROVAL:		DATE APPROVED: July 4, 2017
<small>Document Name</small>	<small>Version</small>	<small>Date</small>
Protocol:		
Trach Dissertation Research Proposal	N/A	February 23, 2017
Consent Forms:		
Parent Consent Form	3	June 29, 2017
Assent Forms:		
Student Assent Form	3	June 29, 2017
Advertisements:		
Recruitment Flyer	2	March 28, 2017
Questionnaire, Questionnaire Cover Letter, Tests:		
Student Interview Response Materials	N/A	February 23, 2017
Student Survey	2	March 28, 2017
Student Interview Form	2	March 28, 2017
<p>The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.</p> <p style="text-align: center;"><i>This study has been approved either by the full Behavioural REB or by an authorized delegated reviewer</i></p>		



April 12, 2018

Behavioural Research Ethics Board
Office of Research Services
University of British Columbia
102-6190 Agronomy Road
Vancouver, BC, V6T 1Z3

To Whom it May Concern,

I am writing to verify Langley School District's (SD 35) willingness to collaborate on the proposed UBC research study entitled "Group Relationships and Bullying", conducted by Jessica Trach (M.A.) and Dr. Shelley Hymel.

Of interest to the current study are the social conditions (i.e., peer relationships) that promote prosocial behaviour when students witness bullying at school. The information that is gained from this research is of interest to Langley SD's efforts to promote student wellbeing and create safe, inclusive, and supportive learning environments.

Director of Instruction
School District No. 35 (Langley)

Appendix B

Parent Consent and Student Assent Forms

THE UNIVERSITY OF BRITISH COLUMBIA



Department of Educational & Counseling Psychology & Special Education
Faculty of Education
2125 Main Mall
Vancouver, B. C. Canada V6T 1Z4

Tel: (604) 822-6022 | Fax: (604) 822-3302

April 2018

Dear Parent(s),

We are writing to ask your permission for your child to take part in a research project on “Student Relationships and Bullying” at your child’s school conducted by Jessica Trach, MA, and Dr. Shelley Hymel in the Faculty of Education at UBC.

Bullying is a serious problem facing youth today. The World Health Organization estimates that 1/3 of youth worldwide are bullied, and 1/3 have bullied others. As a nation, Canada ranks in the top third in terms of prevalence rates for bullying and victimization. In this project we are working with schools to understand the social group dynamics that contribute to bullying so that we can develop more effective interventions to address it. To do this, we will ask students to tell us what they would do if they saw bullying at their school.

Who Participates: All students in grades 6, 7 and 8 are invited to take part in this project, but only students who receive parent/guardian permission and who indicate that they are willing to participate will be able to participate. Participation is voluntary and students can stop at any time if they wish. To help you decide whether your child can participate, we provide a short description below.

Description: For this project, students will be asked to fill out a questionnaire about their experiences with bullying at school and what they like to do for fun. The survey takes around 10 minutes to fill out and will be done at school, at a time arranged with the teacher. After filling out the survey, students will be invited to take part in individual interviews where they will be told a made-up story about bullying and then answer questions about how they would feel and what they would do if they saw that situation. Students will be reminded that the story is made up, and did not really happen. The individual interviews will take 15-20 minutes, and will happen at school at a time arranged with the classroom teacher.

Confidentiality and anonymity: All answers provided by students are treated as confidential and will only be seen by the researchers. Names and other personal information will not be included on the survey or interview forms and individual answers will not be reported; we are only interested in group results. We are happy to share a copy of the results with parents who request them.

Benefits: This study gives students a voice in helping educators to understand their experiences with bullying at school, providing valuable information that can guide efforts to improve students’ social experiences at school.

Consent: Please complete the consent form on the next page indicating whether or not you give permission for your child to participate, and have your child return the form to the teacher by **this Friday**. ***Please return the form even if you do not want your child to participate so that we know you received our request.*** You may keep this letter and one copy of the consent form for your records.

Contact: We would be grateful if your child takes part in this project and hope that you will give permission for them to do so. If you have any questions about the project, feel free to call Dr. Shelley Hymel (604-822-6022). If you have any concerns about your child’s rights as a research participant and/or their experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Sincerely, Shelley Hymel, Professor

*** **KEEP THIS COPY FOR YOUR RECORDS** ***

PARENT/GUARDIAN CONSENT FORM

Project Title: Student Relationships and Bullying

Principal Investigator: Shelley Hymel, Professor, University of British Columbia

Consent: I have read and understood the information about the project called “Student Relationships and Bullying”. I understand that my child’s participation in the project is voluntary and they may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my child to participate in this research project. Please check one:

YES, I consent to my child’s participation in this project.

NO, I do not consent to my child’s participation in this project.

Child’s Name (please print)

Teacher/Division

Parent/Guardian Signature

Date

*** PLEASE COMPLETE AND RETURN THIS COPY TO THE SCHOOL ***

PARENT/GUARDIAN CONSENT FORM

Project Title: Student Relationships and Bullying

Principal Investigator: Shelley Hymel, Professor, University of British Columbia

Consent: I have read and understood the information about the project called “Student Relationships and Bullying”. I understand that my child’s participation in the project is voluntary and they may stop at any time without any penalty. I have a copy of this form for my records.

I give my permission for my child to participate in this research project. Please check one:

YES, I consent to my child’s participation in this project.

NO, I do not consent to my child’s participation in this project.

Child’s Name (please print)

Teacher/Division

Parent/Guardian Signature

Date

THE UNIVERSITY OF BRITISH COLUMBIA



Department of Educational & Counseling Psychology & Special Education
Faculty of Education
2125 Main Mall
Vancouver, B. C. Canada V6T 1Z4

Tel: (604) 822-6022 | Fax: (604) 822-3302

Dear Student,

We are researchers from the University of British Columbia who are interested in understanding why bullying happens and how we can stop it. To do this we need to know about students' experiences with bullying at school. So, we invite you to be part of a project called "Student Relationships and Bullying". In this project we want to find out about what students do when they see someone bullied at school.

What's it about? We are asking all students in grade 6, 7 and 8 to tell us about their experiences in school by filling out a survey and completing an interview. The survey asks about your experiences with bullying at school and what you like to do for fun. During the interview you will read a made-up story about bullying and answer some questions about how you might feel and what you might do in that situation. The story is made up, it did not really happen.

Who takes part? Only students who have parent/guardian permission and who want to take part will be in the project. It is voluntary, and you can stop at any time without penalty.

Confidentiality? All of your answers are confidential or private. That means that no one other than the researchers will know your answers. When we talk about the results of this project, it will be about students your age in general, not about individual students.

Contact: It would be great if you can help this research project by participating in this survey; your input can really help teachers and researchers to better understand the experiences of students in school. If you have any questions, feel free to call Dr. Shelley Hymel (604-822-6022). If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you can contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Thank you very much for your help with this project.

Sincerely,
Shelley Hymel, UBC Professor

I am willing to participate in this research project (please check one box):

YES, I consent to participate in this project.

NO, I do not consent to participate in this project.

Print your name (first and last): _____

Signature: _____ Date: _____

Appendix C

Student Survey

Instructions

All responses on this survey are confidential (private)— do not put your name on it.

Make sure to read every question. This is not a test and there are no right or wrong answers. but it is important to answer honestly. If you are not comfortable answering a question or you don't know what it means, you can ask for help or leave it blank.

Please do not look at other students' answers.

If there is anything you need help with or you have any questions, please raise your hand and we will come over to help you.

It is important to colour the circles completely,

like this: ●

Please DO NOT use ✓, Please DO NOT use X.

Tell us about yourself...

1. What is the name of your school? _____

2. What grade are you in? (Choose one) 6 7 8

3. How do you identify your gender? (Choose one)

Male (boy) Female (girl) Other Gender Label (tell us) _____

4. How old are you (in years)? 10 11 12

13 14 15

5. How do you identify your racial or ethnic background? (Please choose <u>one</u> .)	YES
A) Aboriginal / Native People (North American Indian, Metis, Inuit, etc.)	<input type="radio"/>
B) African / Caribbean (Black)	<input type="radio"/>
C) Asian (Chinese, Korean, Japanese, Taiwanese, etc)	<input type="radio"/>
D) Caucasian (White, European)	<input type="radio"/>
E) Latin American (Mexican, South American)	<input type="radio"/>
F) Middle Eastern (Arabic, Iranian, Kuwaiti, Israeli, etc)	<input type="radio"/>
G) South Asian (Indian, Indonesian, Pakistani, Filipino, etc)	<input type="radio"/>
H) Mixed (more than one of the above)	<input type="radio"/>
I) Other (tell us) : _____	<input type="radio"/>
J) I don't know	<input type="radio"/>

6. How POPULAR are YOU compared to other students in your grade?

Not At All Popular	A Little Popular	Average	Very Popular	The Most Popular
①	②	③	④	⑤

Experiences with Bullying...

The next few questions ask about your experiences with bullying at school.

There are lots of different ways to bully someone. A bully might tease or make fun of other students, spread rumours about them, punch or hit them, or use the internet or texting to do this. Bullying is not an accident – a bully wants to hurt the other person, and does so repeatedly and unfairly (bullies have some advantage over the person they hurt). Sometimes a group of students will bully another student.

Think about the LAST MONTH (30 days) when you answer the following questions about bullying.

How often have <u>you been...</u>	Never	1-2 Times	3 -4 Times	5-6 Times	7 or More Times
7. <u>physically bullied</u> ? When someone: - hit, kicked, punched, pushed you - physically hurt you - damaged or stole your property	①	②	③	④	⑤
8. <u>verbally bullied</u> ? When someone: - said mean things to you - teased you or called you names - threatened you or tried to hurt your feelings	①	②	③	④	⑤
9. <u>socially bullied</u> ? When someone: - said bad things behind your back - gossiped or spread rumours about you - got other students not to like you - ignored you or refused to play with you	①	②	③	④	⑤
10. <u>cyber-bullied</u> ? When someone: - used the computer, websites, emails, text messages or pictures online to threaten you, hurt you, make you look bad, or spread rumours about you	①	②	③	④	⑤

How often have you seen <u>other students</u> being...	Never	1-2 Times	3 -4 Times	5-6 Times	7 or More Times
11. physically bullied?	①	②	③	④	⑤
12. verbally bullied?	①	②	③	④	⑤
13. socially bullied?	①	②	③	④	⑤
14. cyberbullied?	①	②	③	④	⑤

How often have <u>you</u> taken part in...	Never	1-2 Times	3 -4 Times	5-6 Times	7 or More Times
15. physically bullying others?	①	②	③	④	⑤
16. verbally bullying others?	①	②	③	④	⑤
17. socially bullying others?	①	②	③	④	⑤
18. cyber-bullying others?	①	②	③	④	⑤

What do you like to do for fun?

Put a check mark next '✓' to your 5 MOST FAVOURITE activities.

Put an 'X' next to your 5 LEAST FAVOURITE activities.

	Like MOST (✓)	Like LEAST (X)
Playing Music	<input type="checkbox"/>	<input type="checkbox"/>
Painting or Drawing	<input type="checkbox"/>	<input type="checkbox"/>
Reading Books	<input type="checkbox"/>	<input type="checkbox"/>
Watching TV	<input type="checkbox"/>	<input type="checkbox"/>
Playing Videogames	<input type="checkbox"/>	<input type="checkbox"/>
Doing Crafts	<input type="checkbox"/>	<input type="checkbox"/>
Riding Bikes	<input type="checkbox"/>	<input type="checkbox"/>
Fashion (Dressing Up)	<input type="checkbox"/>	<input type="checkbox"/>
Swimming	<input type="checkbox"/>	<input type="checkbox"/>
Playing Soccer	<input type="checkbox"/>	<input type="checkbox"/>
Playing Baseball	<input type="checkbox"/>	<input type="checkbox"/>
Skiing or Snowboarding	<input type="checkbox"/>	<input type="checkbox"/>
Going Camping	<input type="checkbox"/>	<input type="checkbox"/>
Cooking	<input type="checkbox"/>	<input type="checkbox"/>

Thank You!



Do You Need Help?

If you are having problems with other students at school,
please know that you do not have to face it alone; you can get help.

You can talk to your parents or others family members;
they may have some ideas that you have not yet thought about.

You can talk to any adult that you trust at the school –
a counsellor, a teacher or coach, a custodian, a youth worker, a bus driver, etc.

We want to help.....contact us.

Do you want help with problems you are having with other students?

NO, everything is OK

YES, I would like help → Tell us your name

Print your name (FIRST NAME, LAST NAME)



If you would like help from someone outside of the school you could call one of the following help lines.

Help Line for Children (24 Hours) 604-310-1234
Kids Help Phone 1-800-668-6868

(*1-800 numbers can be called FREE from payphones, no money needed).

THANK YOU FOR COMPLETING THIS SURVEY!

Your feedback will help us to make this school safe for all students.

Appendix D

Interview Protocol

REVIEW CONFIDENTIALITY AND OBTAIN STUDENT ASSENT

****GROUP MEMBERSHIP****

Remember the survey you filled out earlier today about what you like to do for fun? Your answers showed that you are most like other kids who enjoy _____ and _____.

Now we are going to read a story about other kids who also like doing those things.

I am going to read the story to you. Remember that everything we talk about today is confidential. No one will know what your answers are. There are no right or wrong answers. Listen carefully to the story and imagine what it would be like if you saw this happening.

This is a story about the students at Mountainside Middle School. Mountainside Middle School is located in a large city on the West Coast of Canada. There are different groups of kids who like hanging out together at Mountainside School.

Like you, one group of kids also like _____ and _____. Let's think of a name for this group. What should we call them? Good!

There is another group of kids at Mountainside School who prefer doing _____ and _____. What should we call them? Good!

You are most like [NAME OF IN-GROUP] because you like doing the same things they do.

GROUP IDENTIFICATION

Think about the group of students who like the same things you do [in-group name]. Choose the answer that best tells us what you think using a scale of 1 to 5.

REALLY DISAGREE: 1 means that you “really disagree” with the sentence; it’s not true at all
disagree: 2 means that you “disagree” with the sentence; it’s hardly ever true
neither: 3 means that you neither agree or disagree with the sentence
agree: 4 means that you “agree” with the sentence; it’s true a lot of the time
REALLY AGREE: 5 means that you “really agree” with the sentence; it’s always true

How do you feel about your group?	REALLY DISAGREE	<i>disagree</i>	<i>neither agree nor disagree</i>	<i>agree</i>	REALLY AGREE
6. I think this group is important	①	②	③	④	⑤
7. I am happy to be in this group	①	②	③	④	⑤
8. I would feel bad if other people said mean things about the kids in my group	①	②	③	④	⑤

9. I am similar to other kids in this group.	①	②	③	④	⑤
--	---	---	---	---	---

PRESENT SCENARIO CARDS AND READ SCENARIO OUT LOUD.

(Note: You can repeat the story as many times as necessary).

In-Group Name: _____

Out-Group Name: _____

GROUP MEMBERSHIP MANIPULATION CHECK:

1. **Which group are YOU most like?** In-Group Out-Group
2. **Which group is ZADE in? (target)** In-Group Out-Group
3. **Which group is TASH in? (bully)** In-Group Out-Group
4. **Are you more popular or less popular than TASH?** More Pop Less Pop

SITUATION APPRAISAL

5. Imagine you saw this happen. Why do you think TASH would behave this way toward ZADE?

6. If you saw this happen... WOULD YOU think TASH was bullying ZADE?

REALLY DISAGREE (Disagree A Lot)	<i>disagree</i> (Disagree A Little)	<i>Not Sure</i> (Neither Agree or Disagree)	<i>agree</i> (Agree a Little)	REALLY AGREE (Agree A Lot)
①	②	③	④	⑤

7. What was it about the story that made you think that TASH *WAS* or *WASN'T* bullying ZADE?

Bystander Reactions

7. **How do you think you would you FEEL if you saw this happen? Use these 10 tokens to show how much you would feel any of the following emotions: ashamed, angry, excited/happy, guilty, don't care/indifferent, proud, sad/upset and scared.**

[WRITE # OF TOKENS PLACED IN EACH CATEGORY BELOW]

Note: must use all 10 tokens.

8. *For each emotion endorsed ask “What makes you feel {EMOTION}?”*

[WRITE REASON FOR EMOTION BELOW]

	# Tokens	Reason for Emotion
Ashamed		
Angry		
Excited/Happy		
Guilty		
Don't Care/Indifferent		
Proud		
Sad/Upset		
Scared		

Bystander Behaviour

9. **What do you think you would you DO if you saw this happen? Use these 10 tokens to show how much you would be likely to do any of the following things: stay and watch, walk away/leave the situation, talk to a friend, laugh, make fun of ZADE, talk to an adult, tell TASH to stop, get back at TASH, stick up for ZADE.**

[WRITE # OF TOKENS PLACED IN EACH CATEGORY BELOW]

Note: must use all 10 tokens.

10. *If they indicated that they would talk to someone, ask “Who Would You Talk To?”*

11. *For each behaviour they endorse, ask “If you do {BEHAVIOUR} what do you think might happen next?”*

	# Tokens	Who Would you Talk to?	What Next?
Stay and Watch			
Walk Away/Leave the Situation			
Talk to a Friend About It			
Laugh			
Make Fun of ZADE			
Talk to an Adult About It			
Tell TASH to Stop			
Get Back at TASH			
Stick up for ZADE			

DEBRIEF TO PARTICIPANT:

Thank you for your help today, and for answering my questions!

Remember, this story was made-up and these events did not really happen. We made up the story about TASH and ZADE because we wanted to find out what you think you would do IF you saw something like that. We were using our imaginations. It wasn't real. It didn't happen in real life.

Remember that everything you shared today is confidential – that means that I'm not allowed to tell anyone what you said. We will use an ID number so that your answers are anonymous. That also means that you should not talk to anyone else about your answers. Please don't talk to other students about the story.

If you are having problems with other kids at school we would like to help.

Are you having problems with other kids at school? Would you like help from an adult?

If you say YES we will tell an adult at your school about your concerns and they will follow up with you.

Yes ***No***

Thanks for taking part in our research!

Appendix E

Hypothetical Bullying Scenario

This is a story about the students at Mountainside Elementary School. Mountainside Elementary is located in a large city on the West Coast of Canada. There are different groups of kids who like hanging out together at Mountainside.

Like you, one group of kids also like _____ and _____. Let's think of a name for this group. What should we call them? Good! You are like [name of in-group] because you like doing the same things they do.

There is another group of kids at Mountainside Elementary who prefer doing _____ and _____. What should we call them? Good!

Scenario 1: In-group Bully & In-group Victim

This is a story about two kids named TASH and ZADE. They go to school at Mountainside Elementary.

Like you, TASH and ZADE are [in-group name]. [But TASH is more popular than you are – other kids look up to TASH and think that they are really cool / But TASH is less popular than you are – other kids look down on TASH and think that they are not cool.]

When walking down the hall at school TASH often bumps into ZADE and knocks their bag to the floor so that their stuff spills everywhere. When this happens other kids from the [in-group name] watch and laugh at ZADE. It seems like TASH is always picking on ZADE. There is even a group online where TASH and other [in-group name] have posted mean photos and comments making fun of ZADE and warning other kids to stay away from them. Today after class, in front of everyone, TASH trips ZADE, laughs and says “What a loser!” ZADE looks really upset. Other kids who are standing around after class see this happen too.

Scenario 2: In-group Bully & Out-group Victim

This is a story about two kids named TASH and ZADE. They go to school at Mountainside Elementary.

Like you, TASH is also a [in-group name]. [But TASH is more popular than you are – other kids look up to TASH and think that they are really cool / But TASH is less popular than you are – other kids look down on TASH and think that they are not cool.] ZADE is a [out-group name].

When walking down the hall at school TASH often bumps into ZADE and knocks their bag to the floor so that their stuff spills everywhere. When this happens other kids from the [in-group name] watch and laugh at ZADE. It seems like TASH is always picking on ZADE. There is even a group online where TASH and other [in-group name] have posted mean photos and comments making fun of ZADE and warning other kids to stay away from them. Today after class, in front of everyone, TASH trips ZADE, laughs and says “What a loser!” ZADE looks really upset. Other kids who are standing around after class see this happen too.

Scenario 3: Out-group Bully & In-group Victim

This is a story about two kids named TASH and ZADE. They go to school at Mountainside Elementary.

Like you, ZADE is a [in-group name]. TASH is a [out-group name]. [But TASH is more popular than you are – other kids look up to TASH and think that they are really cool / But TASH is less popular than you are – other kids look down on TASH and think that they are not cool.]

When walking down the hall at school TASH often bumps into ZADE and knocks their bag to the floor so that their stuff spills everywhere. When this happens other kids from the [out-group name] watch and laugh at ZADE. It seems like TASH is always picking on ZADE. There is even a group online where TASH and other [out-group name] have posted mean photos and comments making fun of ZADE and warning other kids to stay away from them. Today after class, in front of everyone, TASH trips ZADE, laughs and says “What a loser!” ZADE looks really upset. Other kids who are standing around after class see this happen too.

Scenario 4: Out-group Bully & Out-group Victim

This is a story about two kids named TASH and ZADE. They go to school at Mountainside Elementary.

TASH and ZADE are both [out-group name]. [But TASH is more popular than you are – other kids look up to TASH and think that they are really cool / But TASH is less popular than you are – other kids look down on TASH and think that they are not cool.]

When walking down the hall at school TASH often bumps into ZADE and knocks their bag to the floor so that their stuff spills everywhere. When this happens other kids from the [out-group name] watch and laugh at ZADE. It seems like TASH is always picking on ZADE. There is even a group online where TASH and other [out-group name] have posted mean photos and comments making fun of ZADE and warning other kids to stay away from them. Today after class, in front of everyone, TASH trips ZADE, laughs and says “What a loser!” ZADE looks really upset. Other kids who are standing around after class see this happen too.

Appendix F

Token Activity Response Cards

How would you FEEL if you saw this happen?

Use the tokens (10) to show how much you would feel the following emotions:

Ashamed	Angry	Excited (Happy)	Guilty
Don't Care (Indifferent)	Proud	Sad (Upset)	Scared

What would you DO if you saw this happen?

Use the tokens (10) to show how much you would be likely to do any of these things:

Stay and Watch	Walk Away / Leave the Situation	Talk to a Friend About It
Laugh	Make Fun of ZADE	Talk to an Adult About It
Tell TASH to Stop	Get Back at TASH (try to hurt them)	Stick up for ZADE (say or do something to make them feel better)