Priming Prosocial Behavior to Augment Bystander Interventions in Bullying Situations

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Abstract

Bullying is a harmful phenomenon wherein victims have difficulty defending themselves. Bystanders have been identified as a potentially effective group for reducing bullying. The goal of this research is to determine whether prosocial primes (operationalized as empathy and civility) have an effect on increasing bystander interventions among youth. A total of 52 participants between the ages of 10-14 were randomly assigned to two experimental groups or one control group. Participants either received neutral control stories or they were primed twice with stories showing characters acting empathetically or civilly. Testing measures involve a short video and questionnaire assessing willingness to act as a bystander. Results reveal that prosocial training can augment willingness to engage in defending behaviors when compared to the control $V = .19$, $F(2, 46) = 5.53$, p < .01, $\omega^2 = .19$, correcting for the sphericity violation. This finding represents a relatively easy and non-invasive way to potentially change the bullying-related attitudes of adolescents, thereby potentially reducing bullying behaviors.

Keywords: bullying, prosocial behavior, priming, empathy, civility

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As my dad would say – keep knocking on that same door, eventually it will open and what lies on the other side is exactly what you've been waiting for!

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Introduction

Adolescence is a time when youth are experiencing many changes as they transition into adulthood. Bullying has gained attention as a detrimental phenomenon for adolescents, affecting individuals across the globe and this has motivated researchers to take action by creating innovative interventions. Based on previous research, I propose that bystander interventions offer possibilities for reducing bullying among adolescents. Defending behaviors performed by bystanders often involve either intervening during the actual bullying situation or providing comfort and support for the victim. Specifically, I believe that through the use of prosocial skills, young adolescents can gain the necessary tools for acting as a positive bystander. Civility and empathy are among the specific prosocial skills that work in unique ways to encourage defending behaviors. In order to access prosocial behaviors priming psychology will be utilized as it can bring awareness to a formulized construct. That is, priming can make available a concept that adolescents already have an understanding of yet do not employ regularly. In view of the above, the goal of this research project is to demonstrate that priming prosocial attitudes can be used as an effective strategy to reduce bullying through bystander interventions.

Bullying

In recent years the phenomenon of bullying has gained a great deal of interest and researchers have begun to take note of this epidemic. This global problem directly affects between 100-600 million adolescents worldwide per year (Volk, Craig, Boyce, & King, 2006). Research dealing with modern hunter-gatherer societies have documented the presence of bullying, indicating that bullying may be an adaptive component since it has endured in all studied cultures (Volk, Camilleri, Dane, & Marini, 2012). Much of the

foundational knowledge related to bullying behaviors can be accredited to Olweus (1993) who conducted some of the first studies on the subject. While the definition of bullying has evolved from its original form, the basic structure remains the same. Bullying is defined as a relationship characterized by a power imbalance where a more dominate individual repeatedly and over time causes harm to a weaker individual (O'Connell, Pepler, & Craig, 1999; Olweus, 1994). Importantly, the victim cannot defend him/herself from this systematic abuse of power (O'Connell et al., 1999).

Bullying can be divided into a number of subtypes: physical, verbal, sexual, racial/ethnic, cyber, and social (Smokowski & Kopasz, 2005). Taken together, these subtypes represent the cumulative experience of bullying for an adolescent. The subtypes of bullying can either be direct or indirect with certain forms filling the requirements for both (O'Connell et al., 1999; Volk et al., 2006). The direct forms of bullying include physical (hitting, kicking, and/or punching), verbal (insults, threats, and/or name-calling), sexual (coercion) or racial (racist name-calling) abuse and indirect forms of bullying include social (gossiping and/or rumor spreading), racial (exclusion) or sexual (sexually suggestive rumors; O'Connell et al., 1999; Volk et al., 2006). Direct bullying is considered less sophisticated than indirect bullying because the former consists of behaviors that are visible and therefore easily identifiable as well as socially intolerable (Smokowski & Kopasz, 2005).

There appears to be distinct sex differences in bullying preferences as boys and girls produce different strategies in order to bully another individual. Boys tend to favor more direct forms of aggression usually involving hitting or punching, while girls are more likely to choose indirect forms of bullying such as gossiping and spreading rumors.

However, both sexes are equally likely to use verbal bullying tactics, for example name-calling or insults (Volk et al., 2006). Likewise, there appears to be clear age differences. Bullying and victimization appear to increase steadily in both sexes reaching a peak in middle adolescence (14-15 years old) followed by a systematic decline in the number of reported incidents (Boulton, Trueman, & Flemington, 2002). This decline may occur because adolescents tend to favor more covert types of aggression, while children are more likely to engage in overt forms of bullying (Boulton, 1993), due in part to the underdeveloped skills required for more subtle forms. Finally, students report more sympathetic attitudes for the victim after middle adolescence (Rigby, 1997).

Even though bullying appears to diminish as adolescents age, it has still been shown to encompass a wide range of harmful effects both for the victim and the bully. These effects can be witnessed in the short-term, but also can have lasting long-term effects. Research indicates that bullies face a higher risk of delinquency and crime in later years, along with continued social problems (Farrington, 1993). Additionally, bullies are more likely to engage in risky behaviors such as smoking, alcohol consumption, drug use, and unprotected sex (Volk et al., 2006). An alternate framework of bullying, borrowed from the evolutionary field has also been useful. In this light, bullies are less likely to show psychiatric problems and on average have greater positive outcomes such as better physical health and mental traits (i.e. social competency, leadership and cognitive empathy; Vaillancourt, Hymel, & McDougall, 2003). The adaptation allows ease for acquiring material resources (Volk et al., 2012). Moreover, bullies tend to display traits that are evolutionarily attractive such as dominance and strength, showcasing their potential as a good provider (Volk et al., 2012).

That said, it is victims who face the most detrimental effects as a consequence of bullying. Victims have been shown to avoid school for fear of being bullied (Furrer & Skinner, 2003). They also show greater levels of internalizing disorders, such as anxiety and depression. Furthermore, victims showed greater levels of somatic symptoms such as headaches or colds (Rigby, 1998). Most importantly, victims are put in jeopardy of psychiatric disorders potentially even turning to suicide (Meltzer, Vostanis, Ford, Bebbington, & Dennis, 2011). Thus, there is a need for intervention efforts in bullying, however not all programs have been successful in reducing the number of bullying incidents.

Bullying Interventions. The Olweus Bullying Prevention Program (OBPP) is a longitudinal anti-bullying program from Norway. It forms the basis for the Manifesto-I and Manifesto-II, which are government funded national anti-bullying interventions implemented in Norway between 2001-2004. The basic premise of the intervention was a complete restructuring of the school environment (Olweus & Limber, 2010; Roland, 2011). Results from the study reveal that bullying was dramatically reduced as a consequence of the program, however when long-term benefits of the Manifesto were assessed, the results show a different picture. Upon the completion of the Manifesto-I, the government initiated a new curriculum that no longer emphasized anti-bullying efforts. Once the strict regiment of the program was taken away, schools saw a rebound effect (Roland, 2011). Four years after the Manifesto was removed, the percentage of victims had risen significantly. Whether individuals are aware of it or not, social hierarchies are a natural part of how individuals group themselves and present several advantages in dealing with the physical environment (Milgram, 1974). Those at the top of the hierarchy

tend to dominate our interest (Abramovitch, 1980) and bullies may be particularly good at identifying what characteristics are admired. More importantly bullies may have the ability to adapt their behavior to ever-changing environments.

The failed OBPP demonstrates that shifting focus away from bullying prevention can be a major threat to the social sphere of a school (Roland, 2011). Framing bullying as an adaptive function provides a new lens from which to examine the school climate as students may revert to behaviors that have previously led to the attainment of goals in the absence of competing strategies. That is, when the new environment no longer favors cooperative strategies, adolescents will return to more competitive ones in an attempt to survive.

The OBPP was not the only program to have little impact on bullying prevention; there is also an entire cluster of strategies that produce little change, particularly zero-tolerance programs (Ellis et al., 2012). These programs attempt to extinguish an undesired behavior, however they fail to replace it with a behavior that adolescents might find more appealing. As researchers and the above case have established, bullying has an adaptive component, therefore, adolescents should continue to engage in bullying unless a different behavior that achieves the same goals comes about.

Recent research points to prosocial behavior as having similar effects to bullying, but in a positive way. Instead of conceptualizing prosocial and antisocial behavior as opposites, they can also be interpreted as sharing an underlying function (Ellis et al., 2012). Both can be used to obtain desired goals, resources, and status, however only prosocial behavior accomplishes this in a positive manner. For instance, being a positive bystander could be a strategy that allows adolescents to rise in status over bullies in a

prosocial fashion. Putting an end to bullying through the use of prosocial strategies can generate similar outcomes to bullying without having to engage in that behavior. This makes prosocial intervention efforts a more desirable strategy for reducing bullying (Ellis et al., 2012). Not only does it maintain the necessary organization of a social hierarchy with those at the top being the most prosocial, but it may also foster a more cooperative environment where the group strives to reach common internal goals (Rand, Dreber, Ellingsen, Fudenberg, & Nowak, 2009).

Prosocial Behavior

Social interactions help youth learn the necessary skills needed for success in social contexts. These social interactions can take part at school, on the playground or in any social domain. The abilities that are learned are often referred to as prosocial behaviors or social skills (Jackson & Tisak, 2001).

Prosocial behaviors encompass a wide range of actions that vary from cooperation and sharing to sympathy and comforting with helping behaviors being an integral part of prosociality (Jackson & Tisak, 2001). The formal definition of prosocial behavior stems from the pioneering work of Hay (1994) who stated that prosocial behavior is "any action that, as it happens, benefits others, or promotes harmonious relations with others, even if there is no sacrifice on the actor's part and even if there is some benefit to the actor" (p. 33). With the use of this definition a wider scope of actions falls under the umbrella of prosocial behavior (Hay, 1994).

As social animals, children tend to naturally organize themselves into groups. The ones at the top of the hierarchy are the most liked and command the most influence (Atzwanger, 1993). Initially, status is equated with toughness and this continues well into

adolescence; however some children climb the hierarchy through cooperative strategies (Atzwanger, 1993). These children are able to lead the group, as a bully might; however the strategies used tend to be more beneficial. As a result, prosocial strategies represent a way to influence the group to be more cooperative and diminish the condoning of bullying. Groups that are cooperative tend to go after a common goal together, thus forming a cohesive unit against competing groups (Johnson & Johnson, 1974). This cooperation is only successful if those who refuse to put the group's interests first do not get away with it for very long (Rand et al., 2009). Thus, rewarding cooperation is an effective strategy to reduce free riders (e.g. bullies).

For the purpose of this study, I have chosen to operationalize prosocial behavior as a combination of empathy and civility. This is not to say that other constructs cannot fall under the wide umbrella of prosociality, but these two constructs incorporate many of the key features of prosocial behavior (Hay, 1994) while at the same time each offers potentially distinct contributions to prosociality.

Empathy. Empathy is an aspect of prosocial behavior that has received a fair amount of attention in the literature (Barchia & Bussey, 2011). A broad definition of empathy is the ability to notice and share emotions of another person. Furthermore, empathy includes the ability to understand how these emotions come about, as well as playing a vital role in developing a social understanding (Staub, 1971). Recently, empathy has been characterized by both cognitive and affective components. The difference between these two types of empathy is that the former involves understanding the emotional states of others, while the latter involves experiencing these emotional

states in a similar manner as the afflicted person (Book, Quinsey, & Langford, 2007;

Jolliffe & Farrington, 2006).

The cognitive feature of empathy deals with perspective taking, defined as the

ability to see a situation from another person's perspective while still maintaining one's

own subjective perspective (Barr & Higgins-D'Alessandro, 2007). Parallels can be drawn

between this aspect of empathy and Theory of Mind; the realization that one's own

mental states are different from the mental states of others (Premack & Woodruff, 1978).

The emotional component of empathy involves warmth, compassion, and concern for

others (Barr & Higgins-D'Alessandro, 2007). Poor affective empathy has been linked

with narcissism on the Dark Triad, most likely due to the inability to connect with others'

emotions (Jonason & Krause, 2013). The underdeveloped of affective empathy is also

related to psychopathic traits (Book et al., 2007). That is, individuals with psychopathic

traits have the ability to understand the metal states of others yet do not experience these

states in a similar manner (Book et al., 2007). It is this lack of ability that obstructs

individuals from truly understanding another's plight.

Empathy can be shown to increase with age, and by late adolescence individuals

are able to take on the perspective of many people and incorporate them when analyzing

a situation. Additionally, early adolescence marks a time when youth develop a greater

sense of moral competence, potentially improving their willingness to help in a bullying

situation (Gini, Pozzoli, & Hauser, 2011). According to Hoffman (1990) at various ages,

empathy tends to take on different forms as it progresses through four distinct stages.

Infants may experience global empathy, whereby they are able to feel empathetic distress

through the simplest arousal modes. That is, during the first year of life infants may be

unable to differentiate someone else's distress from their own. In the second year, infants begin to understand that others are different from themselves. In the egoistic empathy stage, the young child is aware that even though he or she is distressed, it is actually someone else who is in pain. The third stage, known as empathy for another's feelings, begins when toddlers become increasingly aware of signals about what others are experiencing. This is seen through the development of language as children become capable of showing empathy during complex situations such as disappointing circumstances. Finally, by late childhood, children may realize that distress is not always tied to a situation. This stage is important for distributive justice as children can form social concepts about the dilemmas of entire classes of people (Hoffman, 1990). Therefore, when an individual has advanced to the highest empathetic stage they are able to use a network of information about the person's state, which includes both visual and nonvisual cues, linking it to both the cognitive and affective components of empathy.

However, there are some sex differences with girls showing stronger empathetic tendencies than boys. Barchia and Bussey (2011) found a relationship between empathy and defending behaviors in bullying for girls, but not for boys. Batanova, Espelage, and Rao (2014) reported similar results with girls' giving higher scores on self-reported willingness to intervene. Additionally, girls scored higher on perspective taking, emotional concern, and personal distress, which confirm previous research demonstrating that sex differences exist in self-reported empathy (Barr & Higgins-D'Alessandro, 2007). In order to confirm that empathy is correlated with the prosocial behavior construct, it is necessary to examine studies that have used both concepts relationally.

Empathy as Prosocial Behavior. Certain studies with empathy demonstrate links to prosocial behavior and Theory of Mind (Cavojova, Belovicova, & Sirota, 2011) potentially through a cognitive empathy pathway. Importantly, the connection between empathy and prosocial behavior shows that youth who are characteristically empathetic are also highly prosocial. A study by Barr and Higgens-D'Alessandro (2007) revealed that regardless of age and sex, prosocial behavior was highly related to perspective taking and empathetic abilities. Further, anti-bullying programs encourage students to take the perspective of victimized peers through communicating empathy (Kärnä, Poskiparta, & Salmivalli, 2010). This suggests that prosocial behavior is strongly tied with cognitive empathy, particularly when examining Hoffman's (1990) stage theory of empathy. Perspective taking is associated with greater mind-reading abilities, which allows children to understand others' emotions, even when they contrast those being expressed (Belacchi & Farina, 2012) or represent information about the victim outside the situation (Hoffman, 1990).

On the other hand, there is a relationship between affective empathy and defending behaviors during bullying situations, but this relationship only exists for girls (Barchia & Bussey, 2011). The results could be related to the empathetic cues that are triggered when someone witnesses bullying. Without this trigger, people may be aware that harm is being caused, but the construct is not immediately available (Milgram, 1974). Visual cues can be one such powerful empathy prompt, but they can also cause sufficient arousal leading to abandoning the situation. It is this tension between two incompatible responses that causes people to either disregard the situation or carry out defending behaviors (Milgram, 1974).

As empathy is a powerful trigger of emotional connectedness and perspective taking, tapping into this ability may encourage adolescents to act when witnessing an individual suffering from bullying. The dual functionality of empathy may protect victims of bullying because those around them will be able to cognitively and emotionally understand their struggles, motiving onlookers to defend (Barr & Higgins-D'Alessandro, 2007). This kind of cooperation can be very important for both individual and group success in social contexts. Another important potential aspect of individual and group success in social contexts may be civility.

Civility. Civility is a highly underrepresented topic within psychology, yet it may provide information concerning how one should comport themselves in the company of others. Civility tends to be equated with interpersonal manners encompassing polite and courteous behaviors (Keyes, 2002). It is these interactions of positive behavior that function to benefit both the individual and the group (Marini, 2009). In contrast, incivility can be defined as low-intensity behaviors that do not possess intent to harm, but infringe on social norms and have the potential to cause harm (Andersson & Pearson, 1999). Notably, there is ambiguous intent with incivility, meaning that victims' perception of harm may be disassociated with the reality (Andersson & Pearson, 1999). Civility or incivility can take place almost anywhere including work, school or home (Ferriss, 2002). Civility lacks a clear framework, however it can be operationalized as a combination of social responsibility, social concern, and social involvement (Keyes, 2002). It is important to note that when there is a clear intent to harm another person incivility has much in common with psychological aggression (Cortina, 2008).

In terms of the civility trends, there are many age, sex, and ethnic tendencies. First, high school students face one of the lowest levels of civic concern. Researchers have discovered that civility tends to increase with age reaching a peak in late adulthood (Ferriss, 2002). Moreover, there appears to be a gender debate surrounding differences in civility. That is, according to one study, females are no more likely than males to act uncivilly (Ferriss, 2002). However according to another, females tend to display greater civility than males (Keyes, 2002). Generally uncivil behaviors do not have an overt reference to sex, race or any other social group (Cortina, 2008).

It is reasonable to conceptualize incivility as a precursor to bullying. Typically, classroom actions that fall into the category of incivility are believed to emerge from comparable cognitive and emotional structures (Hunt & Marini, 2012). In addition, the construct of civility may have certain personality traits associated with it, specifically the Honesty-Humility dimension of the HEXACO model. The low pole of this factor is defined by the ability to exploit and manipulate others. It is also associated with low levels of sincerity, cooperation, and the "Dark Triad" personality traits (i.e. neuroticism, Machiavellianism, and psychopathy; Ashton & Lee, 2007; Lee & Ashton, 2005). Individuals with low levels of civility see no problem manipulating other to obtain rewards. Thus, incivility has much in common with the Dark Triad. These individuals are also skilled at understanding social situations and use social cues to their advantage, demonstrating an underlying aspect of effortful control because the individual is able to inhibit automatic reactions that may cause harm to the actor (Terranova, Morris, & Sheffield, 2008). This notion has several parallels with bullying as both involve a good

understanding of social dynamics and the ability to control responses until the most opportune moment.

In order to better understand the relationship incivility has with bullying, two dimensions of incivility have been created; form and function. Form explains how acts are committed either overtly or covertly, while function explains why acts may be committed either proactively or reactively (Hunt & Marini, 2012). Overt incivility can take part in the open when both parties are present, while covert incivility usually involves the absence of one person, such as in the case of spreading rumors. Reactive incivility occurs when an individual interprets an action as provocation and in contrast proactive incivility involves the aggressor attempting to acquire resources or social status (Hunt & Marini, 2012). Civility, on the other hand is action oriented in nature; therefore, people high in civility will feel an urge to stop bullying when they see it because it is the right thing to do. Consequently, civility encourages more cooperation in a group because working together is what ties the social fabric of group cohesiveness together.

Empathy and civility are the two facets that have the potential to play a role in bystander interventions. These two constructs work on different processes, thus contributing in unique ways to defending behaviors. Empathy, especially cognitive empathy, requires an individual to take on the perspective of another (Barr & Higgins-D'Alessandro, 2007). Additionally, civility calls for appropriate behaviors in any given situation (Keyes, 2002), meaning that a civil person may wish to act as a bystander because it is the right thing to do in the given situation. One of the unanswered questions surrounding bullying interventions is how to encourage youth to take action. Simply possessing empathy and civility skills may not be enough. These skills need to be acutely

available in awareness so they can be called upon instantaneously during a bullying situation. Priming may be one way to achieve this.

Priming

Priming involves activating a concept unconsciously or unobtrusively in one context usually under strict supervision in order to influence subsequent attributes without the person's knowledge of this influence (Bargh, 2006). Donald Hebb has been accredited with building the foundation on priming with his pivotal work on internal mental representations. According to Hebb (1949), the internal working models could be activated in a top-down (internal) or bottom-up (external) manner. Additionally, these models could be kept active for a short period of time, which is essential for learning because different elements must be kept active while attention shifts from one to another. The ability to prime whole concepts rather than simply words represented a novel contribution to social psychology.

Priming research has evolved substantially since its early conceptualization and recent research has shown that environmental stimuli can activate mental constructs and shape behavior (Wheeler & DeMarree, 2009). It is important to note that the individual must already know of the concept being primed, thus the priming exercise merely creates a mental availability of the construct. By doing so, an availability bias may emerge, where an individual makes use of facts that are easy to recall (Wheeler & DeMarree, 2009). Furthermore, once a concept has been activated, it becomes more easily accessed and will likely be used to encode other information (Higgins, Rholes, & Jones, 1977). Particularly, aspects of the environment make certain constructs more accessible in memory, which in turn carries over into behavior (Wheeler & DeMarree, 2009). Parallels

can be drawn with schemas, in that once activated, schemas can be used to organize subsequent information. With regards to priming, only certain behavioral instances of the trait need to be primed as long as they are represented in the schema. Today, certain psychological concepts have been easily primed including social norms, goals, attitudes, stereotypes, and social behavior. These abstract concepts have been able to alter people's attitude and more importantly their behavior, such that they become more similar to the prime (Kawakami, Dovidio, & Dijksterhuis, 2003). Activating these constructs can occur both in an artificial lab setting and in a naturalistic environment such as the school. Among the most significant abstract constructs to be primed are labels that society attaches to people and events.

Applied Priming Examples. Labels are often used to prime individuals by changing their behavior. A primary example of this is the informal experiment conducted in the classroom of Jane Elliott. In the 1960s she demonstrated the ease with which children can learn to adopt new values about themselves simply by attaching a different label to them. During the height of the civil rights movement, Ms. Elliott found an innovative way to teach her third grade class about prejudice by one day announcing that the blue-eyed children were superior to the brown-eyed children. She gave the blue-eyed children privileges and enforced a sharp divide between them and their once brown-eyed friends. Before long, the children began to police their own interactions with the opposite group. The following day, Ms. Elliott reversed the roles and proclaimed the brown-eyed children superior. The children quickly adopted their new roles (Alter, 2012). The study clearly demonstrates how profoundly labels, even arbitrary ones, can shape the treatment of other people.

As can be seen from the above example, the aim is usually to alter behavior in some form or another. The most common manner to achieve this is through motor movement. Young people primed with the concept of "elderly" tended to have slower walking speeds after the prime compared to those who were not primed. This is because the prime of elderly activated the stereotype, which in turn led to the behavioral representation of slow (Bargh, Chen, & Burrows, 1996). In addition to motor movement, primes can also work on abstract constructs and affect a person's behavior indirectly through the usage of goals as long as the goal is associated to the prime in memory (Wheeler & DeMarree, 2009). Intelligence has been effectively primed showing the difference between priming a category (professor) and priming an exemplar (Einstein) with the former increasing intelligence and the latter reducing it due to a contrasting mechanism (Dijksterhuis et al., 1998).

Priming Children and Youth. One of the challenges with regard to priming research involves priming children and adolescents because they may be too young to fully understand the prime or they may have no experience with the concept that the prime is trying to activate. Young children between the ages of 9 to 11 showed similar results to adults in terms of false recognition, however 5 to 7 year olds did not (Dewhurst, Howe, Berry, & Knott, 2012), showing that priming effects generally increase with age. These developmental improvements to conceptual priming are indicated by data showing that as children's knowledge improves on a construct, so does their ability to be primed with it (Mechlenbrauker, Hupbach, & Wippich, 2003). This was seen in another study only for atypical primes in the form of uncommon household pictures (Mechlenbrauker et al. 2003). Another study examined automatic activation of prejudice in children and

adolescent. Priming of in-group and out-group members was used to measure affective

attitudes according to age of participants. Participants reacted more accurately to targets

of the same valance than to targets of a different valance, meaning that in this study,

children evaluated affective stimuli in a comparable manner to adults when unconscious

primes were used (Degner & Wentura, 2010). Yet, another study examined alcohol-

related priming and its relation to aggression in adolescents, using visual primes of

alcohol and non-alcoholic beverages. Results showed that even though young

adolescents had little direct experience with alcohol, teenagers primed in this condition

were equally as aggressive as adults in the same condition due to the socio-cultural

transmission of scripts (Brown, Coyne, Barlow, & Qualter, 2010). These important

findings are twofold because they show that older children have a similar capacity to

adults in terms of priming abilities and demonstrate that even though youth have little

first-hand experience with a construct, priming is still possible. These results can be

transferred to bullying by showing that all children may be affected by primes regardless

of whether they have had direct exposure to bullying or victimization.

Naturalistic priming goes beyond investigator manipulations to illustrate that

individuals in the environment can serve as priming agents on their own (Alter, 2012).

Humans tend to mimic the behaviors of others in their surrounding; often mirroring the

facial expressions and posture of those they are engaged in conversation with (Alter,

2012). Significantly, classic examples of bystander behaviors have shown that depending

on the number of participants present, people were less likely to recognize and react to a

probable emergency situation, especially if others were unsure of appropriate action as

well (Alter, 2012). Therefore, environmental cues particularly others behavior may act as marker from which people base their actions.

Bystander

Bystanders constitute an important area of research in the field of social psychology. The notion of the bystander first surfaced in 1960s research after the brutal murder of Kitty Genovese in New York City. The New York Times reported that Kitty was murdered outside her apartment and at least 38 witnesses watched the attack, however none of them intervened (Darley & Latané, 1968a). Researchers analyzed the situation and hypothesized that onlookers were in a state of conflict. The three main factors that appear to discourage helping as a positive bystander are: 1) diffusion of responsibility, 2) audience inhibition and 3) social influence (Darley & Latané, 1968a). Humanitarian norms called for action, however, fear of unknown risks hindered a response. Moreover, no member of the crowd wanted to risk failure or embarrassment by helping and finally witnesses observed their fellow onlooker yielding responsibility, thus causing a collective lack of action reinforced by each individual's non-response (Darley & Latané, 1968a). This would indicate that an explanation might be a function of the bystanders' response to other observers rather than any indifference to the victim (Darley & Latané, 1968a).

To provide scientific evidence for their hypothesis Darley and Latané (1968b) devised an experiment whereby a group of university students were brought into a holding room, while they waited for an experiment to begin. Unbeknownst to the students, the others in the room were confederates who were instructed not to leave or show a sense of urgency. Moreover, the participants were unaware that the true

experiment was taking place in the waiting room itself. As the room filled with smoke, all students remained causally in their seats including the one true participant, a reaction that was not seen when the participant was in the room alone (Darley & Latané, 1968b). This now classic study demonstrates that when others are not sure how to respond in a situation, they often turn to others for guidance. If those in the surrounding do not view the situation as an emergency, neither will the individual participant. This demonstrates that figures in the environment serve as important references for behavior (Alter, 2012).

Not only do average people in the environment serve as cues for behavior, but those in positions of power can be prominent sources of influence as well. The work of Milgram (1974) has shown that an experimenter is a powerful source of influence, but a regular man taking part in the study is not. When the regular man gave orders, participants had no problem refusing to shock the other participant. According to Milgram (1974), "only a third as many subjects followed the common man as follow the experimenter" (p. 97). Therefore, bystanders hold a lot of power, but it is key figures in the environment that average individuals turn to for guidance. It is not uncommon among adolescents for these key figures to sometimes be the bully themselves. When this is the case, the popular phrase "there are strengths in numbers" holds true. In experiments where a subject shares responsibility of administering shocks with two other people (confederates), defying the experimenter is more likely to occur if the two confederates also abandon their part in the experiment (Milgram, 1974). Thus, the strength of bystanders has the potential to challenge those who hold authority, namely the bully given the ability to utilize the skills needed for action.

Bystanders can be defined as the third party involved in a high intensity situation. They are neither the victim nor the aggressor, however they can participate by either reinforcing the situation or remaining silent observers (Rigby & Johnson, 2006). Traditional bystander paradigms have created a psychological process model that is needed in order for an individual to act. This process involves five key steps, which are "1) notice a critical situation, 2) construe the situation as an emergency, 3) develop a feeling of personal responsibility, 4) believe that he/she has the skills necessary to succeed and 5) reach a conscious decision to help" (Fischer, et al., 2011, p. 518). Bystander interventions focus on increasing items three and four of the model in order to boost participation in situations with the presences of others.

Bystanders in a bullying context. Several researchers have found that targeting the bystanders of bullying can be an effective intervention strategy (Rigby & Johnson, 2006; Kärnä et al., 2011b; Voeten, Poskiparta, & Salmivalli, 2011). Twemlow, Fonagy, and Sacco (2004) have attempted to redefine bullying situations from dyadic (bully-victim) to triadic (bully-victim-bystander) in order to demonstrate that bystanders play an unavoidably active role. They attempt to turn bullying into a group process because youth may view bullying from a "not us" perspective. Naturalistic observations of children on the playground demonstrate that 54% of onlookers passively reinforced the bully by watching on the sidelines (O'Connell et al., 1999). Thus, even without awareness, bystanders can play an important role in bullying.

Numerous researchers have investigated the possible roles that bystanders can hold and four significant roles have been outlined. Reinforcers are those who actively encourage the bully, assistants are individuals who follow the bully and aid in certain

circumstances, defenders are members who intervene on the victim's behalf, and outsiders are passive observers of the situation (Lappalainen, Lagerspetz, & Salmivalli, 1998). Importantly, defenders are not only individuals who intervene during a bullying incidence; they can also be those who provide comfort and support to the victim as well as encouraging them to tell an adult (Kärnä, et al., 2011b). The varying forms of intervening in a bullying situation may be a result of the current strategies produced by adolescents as well as the ability to accurately model appropriate intervention techniques. Bystanders should be aware of the difference in these intervention strategies, particularly the notion of defending as a more overt form and comforting as a covert form. As many as 87% of students could be labeled as taking part in the bullying process in one of the four bystander roles (Lagerspetz, Bjorkqvist, Osterman, Kaukianen, & Salmivalli, 1996) depending on the strategy they enact.

One study examined the differences in the limited strategy production among children and adolescents acting as bystanders across age and sex (Trach, Hymel, Waterhouse, & Neale, 2010). Results from this study reveal that older children and boys were inadequate at generating any bystander intervention techniques. These children reported ignoring the situation to a greater extent than younger children and girls, but were more likely to take indirect approaches to handling bullying situations such as getting back at the bully in a later circumstance. Alternatively, younger children and girls were more likely to disclose defending behaviors in support of the victim as well as informing an adult of the situation. Even though younger children were more likely to generate positive bystander strategies compared to older children, it is unknown whether the differences reflect age-related changes within the person (Trach, et al., 2010). The

lack of strategy production may not reflect insensitivity to the situation, as many youth express a desire to help, but are unable to generate appropriate strategies (Rigby & Johnson, 2006). Thus, there is a wide-range of strategies that youth can produce in order to stop bullying, however these strategies need to be encouraged through the use of intervention programs. No intervention program accomplishes this better than the KiVa project (Kärnä et al., 2011a).

Bystanders should be able to positively impact school-bullying scenarios; however the first group to test this hypothesis on a large scale was Kärnä and colleagues (2011a). They were the first who observed that if children intervene in bullying situations, it greatly reduced the number of incidents in the future when compared to reinforcing behaviors. Socialization is theorized as the driving force behind this result. As previously mentioned, according to the bullying literature bullies are often on a quest for power. They may view reinforcement as an indication of their achieved status among peers (Lappalaine et al., 1998). Therefore, when the target behavior no longer produces the desired effect, it greatly reduces the frequency of that behavior occurring in the future, meaning the behavior is no longer adaptive.

A school-wide anti-bullying program implemented in Finland demonstrates the use of bystander interventions as a means of reducing the adaptability of bullying. By targeting bystanders, researchers observed a decrease in the number of both victims and bullies (Kärnä et al, 2011a). The government funded KiVa program was carried out with children from grade 1 to grade 9 in 888 schools across Finland and emphasized the importance of building empathy, self-efficacy and anti-bullying attitudes both in the classroom and on the playground. This was done through the use of techniques that

encourage students to support all victimized peers, communicate to bullies that this form of behavior is no longer tolerated and provide adults with the necessary information about bullying and preventative measures (Kärnä et al, 2011a). Preliminary findings from the intervention reveal that the KiVa program has positively influenced the lives of a great number of children and adolescents. Therefore, this nation-wide study supports the notion that creating tactics to increase bystander responses should dramatically decrease the number of both bullies and victims. Finding ways to augment bystander interventions would seem like a reasonable next step, and priming represents a unique way of generating bystander responses. Priming is an area of research that encompasses many different methods, making it a plausible fit for bystander interventions.

The current study

Ultimately, the purpose of this study is to use prosocial behavior as a way to increase bystander interventions for adolescents in bullying situations. As previously stated, adolescents are the least likely group to interfere in bullying situations. However it has been shown that bullying systematically increases until it reaches a peak in middle adolescence. Thus, the target participants for my study are at an age when they are most likely to witness a bullying occurrence (Boulton et al., 2002), while at the same time being the least likely to respond in a positive way (Trach et al., 2010). This makes them an important cohort to study. Furthermore, prosocial strategies may be viewed as an equally adaptive function for gaining power and prestige within a group, although it is accomplished through more cooperative forms. As seen, priming is a potentially effective tool to tap into the prosocial strategies that adolescents may possess, but do not employ

regularly, leading to more bystander interventions. This fosters an environment conducive to harmonious relations (Hay, 1994).

The project not only provides a novel contribution to the theoretical literature on both bullying and bystander behaviors, but it is also a potentially viable avenue for creating intervention strategies to increase bystander responses through prosocial behavior. Thus, the specific research question addressed in this thesis is: Does priming youth with prosocial behavior operationalized as empathy and civility increase bystander interventions from baseline measures immediately following the administration of the primes?

Due to the novel nature of this research project, the main goal was to explore the potential short-term benefits of using storytelling as a way to prime prosocial behavior. However, this is only the first step toward implementing an intervention program and more research must be conducted before this idea is put into practice. With this in mind, the literature can contribute to the practical application of prosocial priming, which has been shown to be important in short-term experiments as it provides a convincing argument for causality and may expose underlying processes that influence long-term effects (Gentile et al., 2009). Priming effects have been shown to be successful in the long-term, with studies demonstrating a maintained effect from one week (Kaschak, Kutta, & Schatschneider, 2011) to six weeks (Cava, 1997) with only one exposure. Additionally, repetition appears to be vital in order to prolong the duration of the priming effect. When a prime is reinforced with several exposures, the effect is persuasive and lasts longer (Brown, Jones, & Mitchell, 1996).

Hypotheses

I have several primary hypotheses for the current study. I predict that the use of storytelling as a form of priming both empathy and civility will create a positive increase from pretest baseline levels of empathy and civility. This increase will relate to adolescents' willingness to act as a bystander in proxy bullying situations, as the two constructs should be easily available to the participant (Wheeler & DeMarree, 2009). This willingness to act could be in the form of defending behaviors or to provide comfort for the victim after the situation has occurred (Voeten et al., 2011). Finally, I predict that empathy and civility will positively predict bystander intervention in a regression model after both primes have been administered.

Aside from the main purpose of the study, there are various secondary hypotheses that I will put forward concerning the sample and demographic characteristics. I predict age and sex to be significantly correlated with a variety of both baseline measures (bullying history, friendship quality, hypercompetitive, and social goals) as well as important predictor variables (empathy and civility). With regard to the construct of prosociality, I predict that girls will globally be more likely to take action in comparison to boys because of their stronger empathetic abilities (Barr & Higgins-D'Alessandro, 2007) and lack of clear sex difference in previous civility studies (Ferriss, 2002; Keyes, 2002). Additionally, I predict to see a range in civility scores from overt to covert as young children increasingly develop the skills for more subtle forms of aggression (Boulton, 1993).

Methods

Participants

The sample consisted of 52 youth: 17 males (32.7%) and 35 females (67.3%). Their ages range from 10 to 14 ($M = 11.73$; $SD = 1.28$), with a majority of youth self-declaring as Caucasian (76.9%) and a minority being biracial (13.5%) and African (1.9%). Furthermore, a majority of participants claimed to be "about the same" as others in socio-economic status (59.6%). All participants were recruited through local summer camps and a variety of extracurricular activities including dance and swimming lessons as well as after school programs in the Niagara Region. Youth were equally and randomly assigned to one of three conditions including two experimental and one control condition. Six boys and 12 girls were in each of the experimental groups, which differed only in the alternation of the priming story used while five boys and 11 girls were assigned to the control condition. Finally, youth who participated in the study were each given an identification number in order to maintain anonymity.

Material

Before the intervention, participants were given a pretest to take home and fill out. Adolescents reported on various demographic aspects including age, grade, and ethnic/racial background. Also included was a basic assessment of previous bullying and victimization (See Appendix A).

The Friendship Quality Questionnaire. (Parker & Asher, 1993): A one-page questionnaire was used for measuring six modes of support (caring, conflict resolution, conflict and betrayal, help and guidance, companionship and recreation, and intimate exchange). The original measure is made up of 41-items divided among the different modes of support. For the purpose of this study a modified short version was administered consisting of only 21 items. Two sample items read, "my best friend makes

me feel good about my ideas; my best friend and I always get over our arguments

really quickly." Adolescents rated the extent to which they agree with each phrase on a 5-

point scale ranging from 1 (*not at all true*) to 5 (*very true*). This questionnaire has shown

excellent internal consistency with a published mean Cronbach alpha of .82 for the

different modes of support (refer to Appendix B).

Hypercompetitive Attitude Scale. (Ryckman, Hammer, Kaczor, & Gold, 1990):

The pretest included the short version of this questionnaire measuring the level of

agreement with extreme competitive attitudes measured on a 5-point scale ranging from 1

(*strongly disapprove*) to 5 (*strongly approve*). The Hypercompetitive Attitude Scale

consists of 25-items dealing with competitive attitudes in various contexts (e.g. I find

myself being competitive even in situations that do not call for competition; I can't stand

to loose arguments; I feel myself turning a friendly game or activity into a serious contest

or conflict). This questionnaire has demonstrated strong internal consistency with a

published Cronbach's alpha of .91 (refer to Appendix C).

The In/Civility Questionnaire. (Marini, Polihronis, Dane, & Volk, 2010): The

two aspects of prosocial behavior that I chose to measure were incivility and empathy.

The pretest package included this short (10-item) questionnaire measuring baseline

incivility, divided into two factors (unintentional incivility and intentional incivility).

Items include: "sleeping in class (unintentional); spreading rumors about a teacher

because you don't like them (intentional)." Youth reported on the extent that these

statements are acceptable to them on a 5-point scale ranging from 1 (*definitely wrong)* to

5 (*definitely OK*). This questionnaire has shown good internal consistency with published

Cronbach alphas of .81 and .92 for each factor respectively (refer to Appendix D).

The Multidimensional Empathy Scale.: Also included in the pretest package is this 15-item questionnaire assessing empathy. The questionnaire was constructed using items from several validated sources including the Multi-Dimensional Emotional Empathy Scale (Caruso & Mayer, 1998), the Toronto Empathy Scale (Spreng, McKinnon, Mar, & Levine, 2009) and The Social-Emotional Questionnaire for Children (Wall, William, Morris, & Bramham, 2011). Items include: I get a strong urge to help when I see someone who is upset; when I see someone being treated unfairly, I do not feel much pity for them. Adolescents responded to questions on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The study-specific Cronbach's alpha is .52, showing good internal consistency (refer to Appendix E).

Social Goal Questionnaire. (Jarvinen & Nicholls, 1996): This 33-item questionnaire is broken down into six subscales measuring dominance (6 items), intimacy (7 items), nurturance (4 items), leadership (5 items), popularity (5 items) and avoidance (6 items). The purpose of this scale is to determine the goals pursued by adolescents in their relationships with their peers. Sample items include, "I like it when I make them do what I want (dominance); I like it when someone understands how I feel (intimacy); I like it when I can make them happy (nurturance); I like it when I am in charge (leadership); I like it when they like me better than anyone else (popularity) and I don't like it when the tease me (avoidance)." All items are measured on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The questionnaire has shown good internal consistency for each dimensional independently and the published Cronbach alphas are .85 (dominance), .84 (intimacy), .83 (nurturance), .81 (leadership), .78 (popularity), and .80 (avoidance; refer to Appendix F).

Self-Efficacy of Defending Questionnaire.: Finally, the pretest package included a questionnaire examining bystanders' responses to bullying whether it is through intervening (4-items) or providing comfort to the victim after the instance (4-items). This 8-item questionnaire was developed using several different scales as a reference including The Handling Bullying Questionnaire (Bauman, Rigby, & Hoppa, 2008), the Revised Pro-Victim Scale (Rigby, 1997) and The Participant Role Questionnaire (Lagerspetz et al, 1996). Each item is measured on a 5-point likert scale ranging from 1 (*very unlikely*) to 5 (*very likely*). Two sample items from each subcategory are: "I would insist the bully cut it out; I would encourage him/her to tell the teacher about the bullying." The study-specific Cronbach's alpha is .79, showing good internal consistency. Finally, at the end of the questionnaire, there was a question asking youth why they have chosen to respond in that manner (refer to Appendix G).

The Social Support, Hypercompetitive and Social Goal questionnaires were included in the pretest package for several reasons. Primarily, defining a group of interest is essential. More importantly, the difference between intervening and providing comfort demonstrates that two distinct forms of intervention that may exist. These questionnaires are designed to tap into the goals sought by adolescents when they interact with others.

Priming Stories.: In addition to the pretest, material included a short story corresponding to empathy (Appendix H), civility (Appendix I) or two neutral scenarios (Appendix J and K). The civility story deals with a saying the magic words, while the empathy story is about how one small act can change a life. The neutral stories were adapted from two famous novels, Rip Van Winkle and Treasure Island. All experimental stories received a validity check before their use in the study to ensure their measurement

of the given constructs. This was carried out with 10 youth: 4 males (40%) and 6

females (60%) whose ages ranged from 10 to 14. These youth were selected because they

fit the criteria for the experimental study, however they were not allowed to take part in

the main study, as they were aware of the purpose of the priming stories. Raters scored

each story on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*) measuring how

much each story reflected the constructs. Results reveal that *The Magic Words* (civility)

story had a mean rating of 3.60 on civility, making it the highest rated construct, while

The Freshman (empathy) story had a mean rating of 4.40 on empathy, which is the

highest ranked construct. Therefore, overall results from the validity check reveal that

both stories were appropriate for use in the main study as participants rated each story as

matching its designated construct.

Additionally, the short duration of the priming paradigm has been effective in

studies priming elderly, aggression and alcohol with young individuals. Specifically,

those primed with aggressive words for 10 minutes were more likely to select violent

movies (Langley, O'Neal, Craig, & Yost, 1992). Similar results were found for those

primed with alcohol related pictures when the condition lasted only 30 seconds (Brown et

al., 2010).

Bullying Videos.: In order to assess whether youth would act as a bystander,

participants watched two short 1-2 minute Youtube clips of an adolescent being bullied

regardless of their condition. The first experimental clip is from the movie She's all That

(Abrams, Gladstein, Levy, & Iscove, 1999) and deals with verbal bullying among girls,

while the second is from the movie Back to the Future (Gale, Canton, & Zemeckis,

1985), where a group of boys both verbally and physically bully an unpopular boy. The

clip with a female as the main character was always played first regardless of which story the participant read. As with the priming stories, these videos received a validity check to ensure that the main construct of bullying was prevalent throughout. This was once again done with the same ten youth: 4 males (40%) and 6 females (60%) who were matched with the target experimental group, however did not participate in the main study. As with the stories, raters scored each video on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much*). Results demonstrate that both the She's all That and Back to the Future clips are a fair representation of the bullying construct that they were meant to portray ($M = 4.80$ and $M = 5.00$) respectively.

Procedure

Upon receiving ethical clearance (see Appendix L), local summer camps and extracurricular activity centers in the Niagara region were contacted and asked to participate in the study. Pretest packages were distributed to youth from institutions that agreed to participate after an explanation of the study and role expectations were given to both organizers and youth. Additionally, parental consent forms (Appendix M) on the true nature of the experiment was obtained prior to any data being used in the study and child assent was also obtained (Appendix N). Once the majority of pretest packages had been returned, the principal investigator and trained research assistants began the testing phase. For a detailed diagram depicting the organization of procedures, see Figure 1.

The intervention involved randomized control trials comprising of 3 conditions; the civility prime and girl video followed by the empathy prime and boy video, the empathy prime and girl video followed by the civility prime and boy video and a control condition. Participants were brought into a quiet room and asked to read the first of the

short stories out loud. Youth were informed that the study was on IQ and bullying so they do not to question the use of short stories. A trained research assistant remained in the room should there have been any questions pertaining to the story. Following the story, participants watched the short video clip relating to bullying. After the video played to its completion, the participant was given the Self-Efficacy of Defending Questionnaire, but with reordered questions in order to avoid automatic responses based on its previous administrations in the pretest material. The questionnaire served as my proxy measure for a willingness to help in present and future situations as a bystander.

Following this questionnaire, participants attempted to solve several math problems (Appendix O), which will add to the IQ and bullying pretense. The problems lasted approximately two minutes and were of an appropriate level of difficulty, as well as not requiring the same set of skills needed to read a short story. Thus, this phase of the experiment is known as the Brown-Peterson paradigm (1959) or more commonly as a distractor task. Its primary use is diverting the participant's attention from the primary situation that preceded it, therefore eliminating carryover effects that may emerge. One study looking at health behaviors and prevention research on youth driving-under-the-influence demonstrated that performing a distractor task for only two minutes was sufficient enough to mask information from the previous activity, however the researchers emphasis that the task should be adequately difficult to capture the participant's full attention (Stacy & Ames, 2001). Martin and colleagues (1993) demonstrated that a one-minute distractor task of drawing one's college campus was enough to distract the participant from previous mood responses rating and upcoming performance on an impression formation task.

Pretest-Baseline

- Bullying history
- Friendship Quality Questionnaire
- Hypercompetitive Attitide Scale
- In/Civility Questionnaire
- Multidimentiaonal Empathy Scale
- Social Goal Questionnaire
- Self-Efficacy of Defending Questionnaire

Prime 1

- Short story on empathy (The Freshman) OR civility (The Magic Words)

Test 1

- Video on bullying incident (girl version)
- Self-Efficacy of Defending Questionnaire

Distractor Task

- 1-2 minutes of math problems

Prime 2

- Remaining short story empathy (The Freshman) OR civility (The Magic Words)

Test 2

- Video on bullying incident (boy version)
- Self-Efficacy of Defending Questionnaire

Posttest

- Reordered In/Civility Questionnaire
- Reordered Multidimentiaonal Empathy Scale

Figure 1. Experimental procedure of the priming intervention for the experimental group

Following the brief distractor task, the entire experiment was conducted once more, however this time the prime consisted of whichever story was not used during the first round and the other video was used. The Self-Efficacy of Defending Questionnaire (with a new order of questions) was re-administered in order to assess the impact of this second prime.

The purpose for using two separate primes and by consequence two administrations of the questionnaire was to assess the individual contributions of both empathy and civility on bystander behaviors. The goal was to understand whether these two aspects of prosocial behavior had unique effects on bystander interventions. At the end of the experiment the In/Civility Questionnaire and the Multidimensional Empathy Scale were re-administered in order to assess if both constructs increased from baseline. Once the experiment was complete, participants were debriefed and asked to sign a new assent form now having full disclosure (Appendix P). Participants received $10 as a sign of gratitude for their participation.

Design and Analysis

This research project employed an experimental design, specifically; a three-group pretest-posttest design was used. This design is often used to explore new intervention techniques, which is the underlying practical implication of this project. This design is appropriate considering I am interested in performance change. Furthermore, the study employed a mixed factorial design ANOVA as the main analysis, which contains both a within subject and between subject variable. This method was chosen because each participant was exposed to both primes. Moreover, deviations from baseline scores are required in order to ensure that primes are actually fulfilling their required

function. Finally, as a confirmation that empathy and civility are significant predictors

of bystander intervention, a hierarchical linear regression was conducted with empathy

entered in the first step and incivility entered in the second.

<div align="center">

Results

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Data Preparation and Univariate Assumptions

Ahead of data analysis all variables were examined through SPSS for accuracy

and missing data. First, descriptive statistics and boxplots were examined for skewness,

kurtosis, and potential outliers. Variables with a skewness and kurtosis value above or

below 3/-3 were dealt with either through transformation or the removal of outliers in

order to render the skewness and kurtosis as close to zero as possible (Tabachnick &

Fidell, 2007). Only the victimization history variable required a log transformation to

meet this criterion, creating a skewness of .95 ($SE = .36$) and kurtosis of 1.06 ($SE = .70$).

All other cases had normal skewness and kurtosis following the removal of outliers.

Alternatively, in cases where only one, two or three extreme outliers existed, the

values were recoded as one more than the next most extreme score that was not an outlier

(Tabachnick & Fidell, 2007). This is an attractive option not only because it preserves the

outlier as an extreme value, but also, it lessens the severity of the outlier (Tabachnick &

Fidell, 2007). This step not only rendered the need for transformations unnecessary, but

also solved the skewness and kurtosis issue that dramatically increased normality.

Variables undertaking this path were bullying history (three outliers), intimacy social

goal (one outlier), pretest incivility (one outlier), pretest empathy (two outliers), pretest

bystander comforting (two outliers), first posttest bystander comforting (one outlier), and

second posttest bystander comforting (one outlier). In the circumstances of

hypercompetitive and second posttest bystander defending where non-extreme outliers were present, their scores were converted to *z*-scores to check if any were above or below three standard deviations from the mean (Tabachnick & Fidell, 2007). This resulted in *z*-scores of 3.09 and -3.29 respectively, however these scores are not seen as an issue because of their close proximity to the three standard deviations target. Therefore, both variables were left unaltered. Final mean and standard deviations of independent and dependent variables are presented in Table. 1.

Table 1
Means and Standard Deviations of Independent and Dependent Variables

	Civ/Emp		Emp/Civ		Control	
	M	*SD*	*M*	*SD*	*M*	*SD*
Age	11.76	1.35	11.56	1.25	11.88	1.31
Victimization History	.97	.12	.98	.21	1.01	.13
Bullying History	5.94	2.15	6.83	2.41	7.31	2.15
Friendship Quality	77.89	12.82	77.17	17.40	77.43	18.73
Hypercompetitive	60.67	15.89	60.56	8.49	61.69	12.62
Dominance	10.03	3.40	10.39	3.18	11.06	3.97
Intimacy	21.87	7.92	22.28	5.20	23.88	7.35
Nurturance	15.04	3.97	16.33	3.20	15.75	3.26
Leadership	13.16	5.39	15.00	3.41	14.00	3.65
Popularity	16.00	4.85	16.39	4.79	15.69	4.11
Avoidance	10.07	6.22	12.18	9.13	10.00	7.26
Pretest Incivility	14.83	4.93	14.22	3.96	16.81	6.18
Pretest Empathy	60.67	6.80	58.89	8.93	57.31	9.25
Pretest Bystander	32.94	4.72	30.56	5.00	29.75	5.70
Pretest Comforting	16.56	1.95	15.56	2.26	15.13	2.37
Pretest Defending	16.39	3.07	15.17	2.77	14.68	3.59
Posttest Bystander 1	32.18	4.62	31.00	6.35	29.75	5.70
Posttest Comforting 1	16.41	2.06	16.38	2.57	15.13	2.36
Posttest Defending 1	15.76	2.88	14.81	3.60	14.69	3.00
Posttets Bystander 2	31.71	5.14	31.56	6.66	30.94	6.10
Posttets Comforting 2	15.00	3.81	15.31	3.86	15.06	4.02
Posttest Defending 2	16.71	1.79	16.06	3.09	15.88	2.47
Posttest Incivility	15.94	5.07	15.31	3.57	16.00	4.75
Posttest Empathy	60.94	8.10	59.25	6.43	58.81	5.31

Note. n = 52; civ/emp = Civility prime then empathy prime; emp/civ = Empathy prime then civility prime

Moreover, missing data was analyzed and a mean substitution was carried out for variables missing less than 5% of data points as recommended by Tabachnick and Fidell (2007). These variables include victimization history; and dominance, intimacy, nurturance, leadership and popularity social goals. As a final step, a Shapiro-Wilks test of normality was conducted and the majority the variables met the criteria for normality, however some of the variables did not at $p < .05$. These include victimization history, bullying history; dominance, nurturance and avoidance social goals, pretest incivility, first posttest bystander defending; and second posttest bystander defending and comforting. Therefore, results should be interpreted with caution as there is an increased risk of making a Type I error, indicating a rejection of the null hypothesis when it is true.

Descriptive Statistics

Sample characteristics including age, sex, grade, SES, ethnicity, bullying history, and victimization history were recorded. Several significant pretest correlations were found to be of particular interest. Sex was positively correlated with friendship quality and pretest empathy ($r = .37$, $p < .01$; $r = .43$, $p < .01$) in that girls were more likely to have a higher quality of friendships as well as more empathy at baseline. Age was positively correlated with incivility ($r = .40$, $p < .01$) in the direction that older adolescents ranked higher on incivility. Race was not significantly correlated with any of the pretest measures and SES was only negatively correlated with victimization history ($r = -.30$, $p < .05$) revealing that as SES drops the frequency of victimization rises. Furthermore, social goals were analyzed and sex was significantly positively correlated with intimacy ($r = .51$, $p < .01$), nurturance ($r = .46$, $p < .01$), leadership ($r = .30$, $p < .05$),

Table 2

Correlations of Baseline Empathy and Incivility with Secondary Variables

	Pre Empathy	Pre Incivility	Bully History	Victim History	Friend	Hyper-competitive	Dom	Int	Nurt	Lead	Pop	Avoid
Pre Empathy	-	-.285*	-.115	-.002	.454**	-.538**	-.178	.465**	.628**	.282*	.374**	.105
Pre Incivility		-	.042	-.001	-.205	.348*	.295*	.059	-.156	.059	-.062	.200
Bully History			-	.553**	-.449**	.234	.165	-.198	-.140	-.103	-.361**	.329*
Victim History				-	-.283*	.220	.347*	-.037	-.019	-.010	-.216	.158
Friend					-	-.251	-.041	.516**	.457**	.456**	.467**	-.108
Hyper-competitive						-	.430**	-.044	-.271	.119	.058	.056
Dom							-	.043	.007	.317*	.127	.269
Int								-	.537**	.474**	.628**	-.126
Nurt									-	.455**	.603**	.136
Lead										-	.511**	.168
Pop											-	-.169
Avoid												-

Note. Dom = dominance; Int = intimacy; Nurt = Nurturance; Lead = leadership; Pop = popularity; Avoid = avoidance.
* $p < .05$.
** $p < .01$.

and popularity ($r = .35$, $p < .05$). In all cases girls scored higher on significant social goal variables indicating that these social factors appear to be more developed for girls.

Aside from sample characteristics, there were several noteworthy correlations. These are found in Table 2 and reflect the positive relationship between baseline empathy and negative relationship between incivility with the following variables: friendship quality, hypercompetitive behavior, and each of the six social goals.

Finally, in preparation for the main analysis, correlations were conducted between all major outcome variables in prime one and prime two with the corresponding pretest version. Results reveal that pretest empathy had a positive correlational pattern with both pre- and posttest measures as opposed to incivility, which was only correlated with a few variables, most of which were negative (see Table 3). The only correlations to reach statistically significant differences were between pretest incivility and posttest empathy with pretest incivility and posttest incivility (Steiger, 1980). In addition, pretest bystander intervention shows good strength with both comforting and defending components and its pre- and post counterparts. Interestingly, pretest bystander was positively correlated with pretest empathy ($r = .40$, $p < .01$), but had no relation to pretest incivility. However, a significant relationship was observed for posttest bystander one and two with posttest empathy and posttest incivility, potentially showing a priming effect (Table 3).

Mixed Factorial ANOVAs

Three mixed factorial ANOVAs as a function pretest-posttest were conducted in order to determine the effectiveness of prosocial primes to augment bystander interventions among youth. Specifically, a 2 (prime/control) X 3 (pretest/midway/posttest) mixed factorial ANOVA was used in all instances. In each

Table 3

Correlations of Pretest Predictors With Corresponding Posttest

	Pre Emp	Pre Inciv	Pre Bystand	Pre Comfort	Pre Defend	Post Bystand 1	Post Comfort 1	Post Defend 1	Post Bystand 2	Post Comfort 2	Post Defend 2	Post Emp	Post Inciv
Pre Emp	-	-.285*	.401**	.377**	.348*	.250	.289*	.164	.202	.072	.343*	.645**	-.018
Pre Inciv		-	-.230	-.259	-.184	-.321*	-.384**	-.256	-.267	-.215	-.274	-.390**	.462**
Pre Bystand			-	.891**	.943**	.472**	.372**	.459**	.390**	.300**	,502**	.365**	-.115
Pre Comfort				-	.699**	.489**	.455**	.437**	.412**	.297*	.549**	.350*	-.199
Pre Defend					-	.387**	,258	.414**	.315*	.249	.376**	.300*	-.033
Post Bystand 1						-	.913**	.955**	.781**	.719**	.750**	.359*	-.381**
Post Comfort 1							-	.762**	.676**	.569**	.716**	.440**	-.369**
Post Defend 1								-	.757**	.747**	.663**	.228	-.348*
Post Bystand 2									-	.952**	.865**	.429**	-.482**
Post Comfort 2										-	.678**	.330*	-.479**
Post Defend 2											-	.486**	-.389**
Post Emp												-	-.351*
Post Inciv													-

Note. Pre Emp = Pretest Empathy; Pre Civ = Pretest Incivility; Post Emp = Posttest Empathy; Post Civ = Posttest Incivility.
* $p < .05$.
** $p < .01$.

ANOVA, the dependent variables were change in bystander behavior (i.e. comforting, defending and bystander intervention as a whole) from pretest to posttest. The between subjects independent variable in each case remained the same; that is the prime versus control group. The within subject independent variable in each case was the time from pretest to posttest; that is the three testing phases. In the analysis, the two priming groups were collapsed to represent a prime group regardless of priming order and a control group, as the two priming groups were not significantly different in either empathy or civility at posttest. In all cases no significant interactions were found.

The results of the first ANOVA show that the difference in comforting behavior was not significantly affected by the prime shown, $F(1.56, 73.27) = 1.03, p > .05$. Mauchly's test indicating that the assumption of sphericity was violated $\chi^2(2) = 15.30, p > .05$, therefore multivariate tests are reported ($\varepsilon = .78$). The results show that the difference in comforting behavior was not significantly affected by the type of prime shown $V = .05, F(2, 46) = 1.23, p > .05, \omega^2 = .05$. Therefore the hypothesis that priming may alter comforting behavior was not supported.

The same mixed factorial ANOVA was carried out with defending as the dependent variable and results show that the difference in defending behavior was significantly affected by whether the prime was shown $F(1.74, 81.62) = 3.65, p < .05$. Mauchly's test indicated that the assumption of sphericity was violated $\chi^2(2) = 7.56, p > .05$, therefore multivariate tests are reported ($\varepsilon = .87$). The results show that the difference in defending behavior was significantly affected by the type of prime shown $V = .19, F(2, 46) = 5.53, p < .01, \omega^2 = .19$. Therefore the hypothesis that priming may alter defending behavior was supported.

A final mixed factorial ANOVA was done with overall bystander intervention as the dependent variable. Results from this analysis show that the difference in bystander behavior as a whole was not significantly affected by the prime shown $F(1.65, 77.77) = .65, p > .05$. Mauchly's test indicated that the assumption of sphericity was violated $\chi^2(2) = 10.77, p > .05$, therefore multivariate tests are reported ($\varepsilon = .83$). The results show that the difference in overall bystander behavior was not significantly affected by the type of prime shown $V = .02, F(2, 46) = .53, p > .05, \omega^2 = .02$. Therefore the hypothesis that priming may alter overall bystander intervention was not supported.

The results from this portion of the analysis demonstrate that only the defending behavior was affected by the prime, therefore further procedures were conducted in order to provide a comprehensive understanding of the above results. According to psychotherapy research, there is a distinction between statistical significance in the means of groups and clinical significance at an individual level between pre- and posttest (Jacobson & Truax, 1991). Thus, a reliability change index was used to calculate whether individual participants were affected by the prime (Jacobson & Truax, 1991) through observing a difference in their empathy and civility scores.

Reliability Change Index

The difference between statistical significance and clinical significance is relevant here especially since this study is concerned with the efficacy of an intervention technique. Therefore, it is important to determine the point at which an individual's change from pre- to posttest is statistically meaningful. This is established through a reliability change index, first introduced by Jacobson and Truax (1991), which measure how much change has happened over the course of the intervention. The calculation of a

reliable change (RC) provides an unambiguous criterion for establishing improvement, thus when the RC is 1.96 or greater, there is a real change from pretest to posttest scores (Jacobson & Traux, 1991).

As only one factor was affected by the prime, RCs were computed for each participant to determine if clinical significance could be uncovered. The difference between pre- and posttest empathy and civility were calculated and an RC was assigned to each participant. This score parallels a priming effect since it shows whether the stories were successful in augmenting prosociality. In both cases, roughly 40% of the sample (42% empathy, 40% civility) had a statistically significant pre-post increase as witnessed by significant RC scores. Based on these percentages, I examined potential differences in characteristics between the group that were successfully primed and that which were not. Significant differences in equality of variances with $p < .05$ were observed in all cases. For empathy, effectively primed participants were younger ($M = 11.59$; $SD = 1.01$) and more of them were female. For civility, those who were primed successfully tended to be females with higher nurturing and avoidance social goals.

In summary, even though there was no difference in the means between pre- and posttest for empathy and incivility, there was still a significant difference for a substantial minority of the sample. This difference appears to be, in part, related to sex and social goals.

Regression

Finally, I conducted a regression to examine the importance of empathy and civility in predicting bystander interventions in the second posttest. The regression was conducted because of the significant correlations of pretest empathy and incivility with

various pre- and posttest variables, as well as the successful priming of these constructs at an individual level.

Prior to analysis, the assumptions of a regression were inspected. The assumptions of coliniearity at $r = .7$ was met (Tabachnick & Fidell, 2007). Moreover, the assumptions of normality, linearity and homoscedasticity were verified. As stated earlier, the criteria for univariate normality was met for a majority of variable. Linearity and homoscedasticity were assessed through the use of scatterplots and both were found to be adequately represented (Tabachnick & Fidell, 2007). Additionally, the Durbin-Watson statistic was performed to ensure that the residuals of any two observations were uncorrelated. The resulting score is 1.65 indicating a slightly positive, yet acceptable correlation. As a final step, the case to variable ratio was also scrutinized and found to satisfy the amount of cases needed using the formula $30 + k(10)$. Hence, a minimum of 50 cases is needed to run any further analyses.

Table 4

Regression Predicting Overall Bystander Intervention From Posttest Empathy and Incivility

Predictor	ΔR^2	β	sr^2
	Overall Bystander Intervention		
Step 1	.18**		
Empathy		.43**	.18
Step 2	.13**		
Empathy		.30*	.08
Incivility		-.38**	.12
Total R^2	.31**		
n	52		

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

To determine which prosocial factor best predicted overall bystander interventions, a hierarchical linear regression was conducted with empathy in the first

step and incivility in the second step. The significant model was that of the second bystander posttest. The regression model accounted for 30.9% of the variance $F(1, 2) = 10.30, p < .01$. As predicted, empathy and incivility were both significant predictors in the model, with empathy being a positive predictor and incivility being a negative one (refer to Table 4).

Discussion

The primary goal of this research was to demonstrate that storytelling as a form of priming can be used to increase the prosocial intervention attitudes of youth between the ages of 10 to 14. Priming was operationalized as cues of empathy and civility. By bringing the constructs forward (Wheeler & DeMarree, 2009), I hypothesized it would lead to an increase in bystander interventions on behalf of the victim. The findings of the study agree with the hypothesis that prosocial primes can augment defending among youth, and that empathy and civility are significant predictors of overall bystander intervention. While the intervention may not have been effective for the entire group, there was still a significant difference for a substantial minority of the sample. This implies that priming empathy and civility might be an effective strategy for augmenting bystander intervention among adolescents. The findings are discussed in greater detail below.

Demographics and Baseline Measures

Several significant demographic results were found, including a lack of civility among older adolescents and the negative relationship between SES and victimization. First, even though civility tends to increase with age (Ferriss, 2002), adolescence marks a time for identity formation. This makes it a crucial period to educate youth on the

importance of civility; specifically what constitutes as appropriate behavior. In schools, low intensity aggressive behaviors often go unpunished or unnoticed by educators. Uncivil adolescents can manipulate others in social situations, and it is these small acts of incivility that witnesses register as appropriate (Wilkins, Caldrarella, Crook-Lyon, & Young, 2010). Therefore, adolescents may require information about their community and should be taught skills to settle their differences in a polite manner (Wilkin et al., 2010). Without this training, incivility spikes in adolescence as presented in the findings. Second, the relationship between SES and victimization is common with the social hierarchy weighing heavily on those from impoverished areas. Individuals from low-income families tend to be victims of bullying (Elgar et al., 2013) presumably because they cannot defend themselves on an economic level. Wealthy children quickly learn the importance of the social hierarchy and may use their economic advantage to exert their dominance over those at the bottom of the system (Due et al., 2009). The stratification of the social group means that those at the top of the hierarchy are the most powerful, and wealth represents one way to assert this power (Due et al., 2009).

Other significant demographic results include sex differences, which were found mainly in favor of girls. Girls showed higher friendship quality, more empathy at baseline, and a variety of positive social goals, including intimacy, nurturance, leadership, and popularity. The first two findings agree with previous literature that girls show stronger empathetic tendencies than boys by proposing to defend victims of bullying to a greater extent (Barchia & Bussey, 2011). This extends to friendship quality, as girls report having more friends and higher friendship quality (Parker & Asher, 1993). One reason for the discrepancy between the sexes may be a social desirability effect

where there is not only more pressure for girls to act in an agreeable manner (Belacchi & Farina, 2012), but also a relationship oriented attitude thrust upon girls. Accordingly, the different ethical orientations of girls and boys may contribute to the different social goals expressed by each sex (Karniol, Grosz, & Schorr, 2003). Girls are geared more toward the ethic of caring which emphasizes empathy, nurturance, and concern for others well-being, while boys are orientated more toward the ethic of justice, which highlights universality and the application of formal rules (Karniol et al., 2003). With increasing age, girls learn to define themselves in terms of feminine characteristics, which may explain why girls are adapted to take on more sensitive social goals. Additionally, girls' relationship oriented socialization leads to higher perceived intimacy in the quality of their friendships at a younger age compared to boys (Way & Greene, 2006). These cooperative strategies can also lead to more popularity and leadership as they help maintain the necessary organization of a social hierarchy with those at the top being the most prosocial (Rand et al., 2009).

Throughout the results, empathy represented an important contributing factor to bystander intervention. Thus, it is not surprising that this construct relates to a variety of baseline measures. The positive relationship between empathy and friendship quality indicates that empathetic individuals may be better equipped at making friends. These individuals use cooperative strategies to maintain social networks as well as a cohesive social group (Atzwanger, 1993). In addition, adolescents who have a matured Theory of Mind may be able to resolve their egotistic perspective and experience the emotions of close friends (Hoffman, 1990; Premack & Woodruff, 1978). It is these characteristics that build satisfying relationships based on harmonious interactions and prosociality (Hay,

1994). Moreover, those who are hypercompetitive and believe social interactions are a contest, tend to have greater difficulty making friends because a competitive drive undermines the ability to form intimate bonds with others (Hibbard & Buhrmester, 2010). While, hyper-competitiveness may be desirable in academic or career settings, it may also restrict creating close ties (Hibbard & Buhrmester, 2010). This group lacks affective empathy and the ability to understand another's plight (Jonason & Krause, 2013). Consequently, these individuals tend to rank higher on incivility, as was found in the results. This is probably because they lack the basic social underpinnings of appropriate conduct (Keyes, 2002; Marini, 2009). Those low in civility tend to use their competitive drive to manipulate others and get ahead. Finally, empathy is related to positive social goals demonstrating that possessing the ability to understand others' mental states relates to a higher quality of intimacy (Hibbard & Buhrmester, 2010). This may allow for more cooperative strategies leading to more popularity and leadership (Atzwanger, 1993), which in this circumstance is tied to likeability. This demonstrates that popular individuals can be empathetic while still being assertive.

Taken together, the correlational data presented demonstrates the importance of demographic influences on bystander interventions. It is these baseline measures that create a context for which to understand the priming effects of storytelling.

Priming Effects

Results from the ANOVAs show that there was a statistically significant difference in defending behavior based on the prime versus the control group. However, the predicted difference was not supported for either comforting behavior or overall bystander behavior. Successfully primed youth showed an increase in defending

behaviors due in part to the inherently blatant nature of defending and the implications defending has for the actor.

Defending behaviors are an effective way to gain status in a prosocial manner. By using cooperative strategies, adolescents are able to reach or maintain a dominant position in the peer network (Rand et al., 2009). Thus, defenders who use overt prosocial tools may be gaining favor among their peers and are perceived as more popular than other non-bullies (Olthof, Goossens, Vermande, Aleva, & van der Meulen, 2011). It is for this reason that defending is seen as reputation building from an evolutionary perspective (Rand et al., 2009). Additionally, children most often suggest that confronting the bully directly is the most appropriate course of action (Rock & Baird, 2011). When presented with successful bystander stories, youth responded to the "confront the bully" scenario more positively. This strategy was also chosen most frequently in future hypothetical examples because it was the option that could be modeled the easiest (Rock & Baird, 2011). Defending behaviors are relatively linear in depiction, which may make them easier to see through. The replicability of tasks required for defending in a bullying incident makes them more accessible to a wider range of children while at the same time having evolutionary advantages. Defending behaviors are the most tangible and direct forms of intervention. This should make them ideal for both the individual who intentionally or unintentionally climbs the social hierarchy as well as the individual who may have difficulty generating other appropriate strategies.

Youth that successfully integrated the empathy and civility primes showed a pattern of using defending behaviors to a greater extent than comforting. This pattern of using defending behaviors is in line with research claiming that defenders are higher in

empathy (Barchia & Bussey, 2011; Porter & Smith-Adock, 2011), perspective taking

(Barr & Higgins-D'Alessandro, 2007), and resource control (Olthof et al., 2011). This

suggests that overt defending may be beneficial to those with high prosocial skills

because they are better equipped at understanding the cognitive and emotional motives of

the bully and can use their resources to help the victim. Helping behaviors are defined as

positive responses to people faced with negative outcomes and can occur in a broad

context (Hay, 1994). Empathy has been linked to a variety of helping behaviors that

include giving money to charity (Verhaert & Van den Poel, 2011) and assisting an

individual who explicitly requests aid (Paciello, Fida, Cerniglia, Tramontano, & Cole,

2013). Therefore, exposure to empathy fosters a personal responsibility for others, which

may trigger an altruistic motive with the goal of enhancing the victim's welfare.

Furthermore, the pattern of using defending behaviors may be seen as more civil

because confronting the bully is the right thing to do (Keyes, 2002). Civility tends to

encourage more cooperation in a group because working together is what ties the social

fabric of group cohesiveness together (Marini, 2009). Generally, civility has been

incorporated into the definition of a good citizen (Malin, 2011); hence witnessing an

injustice whether it is an act of micro-aggression or threats to another's well-being is

cause for action given the collective interests of the group.

The notion that defending is a more attractive bystander strategy is in direct

opposition to comforting behaviors that tend to be more covert and less identifiable. This

supports the concept that covert bystander strategies are not an ideal approach for

ascending the social hierarchy (Atzwanger, 1993). The bystander who chooses to comfort

the victim is often not recognized by his/her peers as a prosocial defender because the

intervention is commonly happening in a private forum. Cooperative strategies aimed at augmenting social cohesion are only effective if the entire group witnesses the prosocial behavior (Atzwanger, 1993; Ellis et al., 2012). Additionally, comforting is a much more complex form of intervention as it involves reading the emotional cues of the victim and acting accordingly (Barr & Higgins-D'Alessandro, 2007). There is no single way to comfort a victim, as with defending because each individual has a particular preference for reassurance. Therefore, it is not such a straightforward strategy, making it a less desirable option for bystanders.

Comforting behaviors often involve telling another person usually a teacher that bullying is taking place. This is referred to as tattling, which is the defined as "the reporting to a second party of a third party's counter-normative behavior" (Ingram & Bering, 2010, p. 945). Even though tattling is more common among young children, it occurs to a lesser extent in adolescence. Reporting the transgressions of others to an adult is negatively correlated with peer likeability and positively correlated with social rejection by the peer group (Friman et al., 2004). Therefore, even though it may seem that defending a victim is a risky behavior, in fact comforting the victim by telling an adult is considered riskier because it may involve isolation from the entire peer network with only minor benefits for this action. Plus, the benefits of reaching the top of the social hierarchy outweigh any possible risks of confronting the bully directly.

Since defending behavior was the only bystander strategy affected by the prime, it is essential to understand any individual differences in empathy and incivility that may have altered the effect on bystander interventions for the primed group versus the control

group. As previously stated, the prime worked for a substantial minority of youth. The successfully primed groups varied in age and bullying history from the entire group.

The empathy group tended to be younger and was more likely to be female. This finding is in line with research on priming, establishing that priming occurs without difficulty if an individual already possesses some understanding of the construct (Wheeler & DeMarree, 2009). Therefore, it is not surprising that empathy is easier to prime in girls, as girls have higher self-reported empathy (Barr & Higgins-D'Alessandro, 2007). Similarities can be made with schemas in that once activated, schemas can be used to organize subsequent information. This tool is not uncommon with abstract constructs such as empathy used to alter people's attitude and more importantly their behavior (Kawakami et al., 2003). The girls in the current study likely possessed a strong empathetic schema. It is this alignment with the schema that encouraged their willingness to uptake the concept with ease.

Empathy primed children also tended to be younger, demonstrating that even though empathy increases with age (Hoffman, 1990), younger youth can still be primed with the construct. This occurs because even though youth may not have a crystalized conception of empathy, they may still be exposed to it through other media. This agrees with previous literature on alcohol and aggression, showing that even though young adolescents have little experience with alcohol, those primed are equally as aggressive as adults in the same condition (Brown et al., 2010). Therefore, a psychological concept can still be primed even if adolescents have little experience with it. It is this indirect form of contact that allows younger children to be primed with the same amount of ease as older children who have a solid conception of empathy.

The civility group was characterized as generally being females with more nurturing and avoidance social goals. In the article by Keyes (2002), civility was found to be more common among females. Specifically, women possessed higher levels of social responsibility, social concern, and social involvement when compared to men (Keyes, 2002). Thus, it is not uncommon for girls to respond more intensely to a civility prime. Successfully primed adolescent females also tended to rate higher on nurturing and avoidance. This can be related to a sense of nurturing that girls acquire. This is once again seen through the ethic of caring, in which girls are socialized to display more nurturance and concern for others well-being (Karniol et al., 2003). The definition of civility also implies a sense of avoiding or minimizing conflict in that polite and courteous actions are not rude or hostile (Ferriss, 2002). Therefore, in situations where conflict may escalate, these individuals may be more susceptible to intervening. Civility keeps relationships stable, therefore when there is a clear intent to harm another person, incivility has much in common with aggression and confrontation (Cortina, 2008). Thus, caring and non-combative girls were better able to uptake the civility prime because they generally have a greater awareness of the construct, which is important for maximal uptake.

In sum, the successful priming of empathy and civility encouraged an increase in mean defending. Furthermore, a substantial minority of youth possessed certain demographic characteristics and varying social goals that allowed priming to occur with greater ease. The regression further highlights the importance of empathy and civility in predicting bystander interventions.

Empathy and Incivility as Predictors

As predicted, empathy and incivility were both significant predictors of bystander intervention. Empathy was a positive predictor and incivility was a negative predictor. In total, the model accounted for almost 31% of the variance in bystander interventions in the second posttest, once participants had been exposed to both primes. Thus, prosocial behavior may be seen as an effective way to augment bystander responses among youth.

Prosocial behavior is a powerful tool for encouraging the group to be more cooperative and diminish the harsh effects of bullying. As noted, prosocial behavior could be a strategy that allows adolescents to demonstrate their dominance over bullies in a positive fashion. From an evolutionary perspective, bystanders may impose collective sanctions that become part of a social bond through rejecting those who do not have the best interests of the group (Wright, 1994). This occurs more frequently among hunter-gatherer societies (Wilson, O'Brien, & Sesma, 2009), however it has been shown to work with segments of the adolescent population as well (Ellis et al., 2012). It is a crucial part of creating a moral system. Thus, prosociality encourages similar outcomes to bullying without having to engage in that behavior, making it a more desirable strategy for reducing bullying (Ellis et al., 2012). Prosocial behavior has been operationalized as the combination of empathy and civility because they represent two facets that have the potential to play a role in bystander interventions. These two constructs work in different ways, thus uniquely contributing to bystander interventions.

The regression confirms that priming empathy leads to bystander intervention and this may be because adolescents have become increasingly aware of another's mental states (Barr & Higgins-D'Alessandro, 2007). Moreover, by making empathy easily

available, youth were better able to connect with the victim on both an emotional and cognitive level (Barr & Higgins-D'Alessandro, 2007). These environmental cues trigger the bystander to intervene now that there is an availability bias in favor of prosocial behavior. The dual functionality of empathy provides a global understanding to bystanders who are able to cognitively and emotionally comprehend the victims' struggles. Additionally, from an evolutionary standpoint, empathy fosters social capital, where there are perceived benefits to investing in social relationships. For the bystander, these benefits include dominance and resources within the group.

The civility prime was also successful in increasing bystander intervention and this may be because becoming aware of interpersonal manners that encompass polite and courteous behaviors (Keyes, 2002) is essential for driving an individual to action. The action-oriented nature of civility compels youth to stop bullying when they see it because it is the right thing to do. The small act of kindness does not involve a great exertion of energy and the reputation that proceeds helping a victim of bullying may alter the status of the helper, potentially making them more influential in the social group. When a member of the group behaves in an uncivil manner, the effects are felt throughout the network. Incivility, especially frequent and repetitive incidents of such behavior may trigger feelings of perceived injustice and social ostracism. These harmful experiences may lead to the eventual breakdown of the group (Caza & Cortina, 2007). Therefore, civility may function to uphold the integrity of the peer group, while a lack of civility may potentially cause an unraveling of our social fabric. Thus, the hypothesis that priming empathy and civility would predict bystander intervention was supported.

Conclusion

The results of the current study offer evidence that priming through the use of storytelling may be an effective way to boost defending behaviors when witnessing bullying among adolescents. Empathy and incivility were both significant predictors of bystander behaviors, with empathy positively predicting and incivility negatively predicting bystander intervention. The current results emphasize both the importance of prosocial behavior in reducing bullying and the ability of priming to bring forward the prosociality construct. Although the current study provides an initial step toward understanding the relationship between prosocial behavior, priming, and bystander behavior, there remains much to be clarified on the connection.

Limitations. There are a few limitations that should be addressed. First, the generalizability of the results should be limited to populations resembling the sample, as those who completed the study were mainly White, middle class and over half the sample was female. Furthermore, the relatively modest sample size may reduce the generalizability as well. The next limitation is the self-report nature of the data, particularly for baseline measures. This is coupled with the presentation of only one item used to assess each subtype of bullying and victimization for the bullying history questionnaire. However, previous research has found self-report measures to be valid for assessing bullying (Pellegrini & Bartini, 2000). Additionally, the use of only one item to measure each subtype of bullying has been shown to produce accurate assessment (Book, Volk, & Hosker, 2012). While the research has attempted to explore the practical application of prosocial priming in short-term experiments (Gentile et al., 2009), the intervention was only successful at priming empathy and civility for a substantial minority of youth. Moreover, the priming effect only translated to defending as a

bystander behavior, not comforting. While an explanation for this finding is given, it remains a point of further investigation. Therefore readers should take this into consideration when determining the efficacy of the intervention. The final limitation is the understanding of age as a possible factor in civility research. This applies to both the questionnaire and the construct itself. The questionnaire is specific to a particular age group and the school context, which may affect how the different participants decoded the questions. The construct of civility may be interpreted and expressed differently at different stages of development.

Future Directions

For Theory. Bystander interventions have become popular as a tool for reducing bullying behavior and the use of prosocial skills to foster bystander behavior has gained attention. Future research should therefore attempt to replicate my results with a larger and more diverse sample. Researchers should also examine other constructs under the definition of prosocial behavior (Hay, 1994) that may similarly play a role in bystander intervention. These could include nurturance, comforting, and particularly cooperation, as it is the underlying structure to a cohesive social network (Atzwanger, 1993). Additionally, the priming stories should be further analyzed in order to verify that the majority of participants are able to uptake the prime. Finally, a deeper understanding of youth bystander strategies for preventing bullying is needed. This should include differences among benefits and risks of each type of strategy, particularly for the importance of defending over comforting. These findings will help confirm the explanation given for an effect seen in defending, but not in comforting.

Additionally, based on the goal of this project to change attitudes regarding bystander behavior immediately following the prime, long-term benefits should also be analyzed before the study can be used as an intervention program. Past research has identified priming effects to be successful in the long-term, with studies showing an enduring effect from one week (Kaschak, et al., 2011) to six weeks (Cava, 1997). Moreover, repetition of the prime appears to be important to affect the duration of its effect. When the prime is reinforced with multiple exposures, the effect is stronger and lasts longer (Brown, et al., 1996). Finally, research on supraliminal priming suggests that a prime does not continue to influence judgment in the future, but rather the judgment required for the prime becomes increasingly available in future tasks that call for a similar type of judgment (Smith & Branscombe, 1987). In sum, future research should examine the long-term effects of storytelling as a form of priming. Future studies should also attempt to understand how judgments in favor of bystander intervention could influence future scenarios that call for bystanders to act.

For Practice. This project could be used in designing future counseling interventions as a way to reduce bullying. Although, this is only the first step toward implementing an intervention program, my results show adequate success. Schools and community outreach programs can benefit from this intervention as it represents a relatively easy and non-invasive way to change the behavior of adolescents. Specifically, there are several implications for the classroom structure showing that reading about and potentially encouraging empathy and civility could lead to a reduction in bullying as students may become increasingly aware of these constructs.

Observers of bullying may actually provide direct reinforcement by laughing, clapping or encouraging the situation to escalate. Furthermore, bystanders may watch along the sidelines while an individual is being victimized and this attention is usually perceived as reinforcing (Lappalaine et al., 1998). Thus, schools can implement formal changes into their daily curriculum in order to target the outsider and reinforcer bystander groups with the intention of moving these individuals into the defender bystander category. This can be achieved through storytelling or other modes of teaching positive messages that encourage bystander intervention. As intervening can take many different forms, students can find the one that is most comfortable to them. Teachers or others in the education field, should particularly focus on defending behaviors as opposed to comforting because children report confronting the bully directly to a greater degree in past literature (Rock & Baird, 2011) as well as in this project. That is, youth already have a certain affinity for defending actions. Thus, teachers require minimum effort for maximum payout. Moreover, comforting is a complex strategy to teach and involves an understanding of complicated mental structures. Defending is not only simpler to teach, but is also easier to model, making defending replicable in future scenarios.

Importantly, the behavior of bullies is a viable option to gain status unless better alternatives (prosocial behavior) are enforced. Therefore, defending can work toward making bullying less adaptive as behaviors that once produced a desired effect no longer have the same reaction. Finally, those who intervene in a prosocial manner will be awarded with the desired goals. Youth learn that bullying behaviors are not reinforcing and schools can reinvent bullying as a group phenomenon, which no longer tolerates these behaviors and has the tools to act.

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Appendix A: Demographic and Bullying History

1. How old are you?

_____

2. What grade are you in?

_____

3. What is your ethnic/racial background?

_____

4. Compared to the average Canadian, do think your family is (circle ONE):

a lot less rich   less rich   about the same   more rich   a lot more rich

For the questions below, please answer with respect to your school/after school activities in the last year? **Check the box** that you feel is most appropriate for you. Don't forget to turn the page to finish all the questions and remember there are no right or wrong answers; I just want to see what you think and feel. No one outside the research will ever see your answers.

	Not at all	*Only a few times this year*	*Every month*	*Every week*	*Many times a week*
1. Overall, how often have you been bullied by someone much stronger or more popular than you?					
2. How often have you been physically bullied by being hit, kicked, shoved by someone who was much stronger or popular than you?					
3. How often have you been verbally bullied by insults, put down or threatened by someone who was much stronger or more popular than you?					
4. How often have you been bullied by exclusion (being left out), rumors or someone getting others not to like you who was much stronger or more popular than you?					
5. How often have you been bullied by unwanted sexual jokes, comments or gestures aimed at you by someone who was much stronger or more popular than you?					
6. How often have you been bullied on the computer by using text messages, the computer or email messages/pictures to threaten you or to make you look bad by someone who was much stronger or popular than you?					

	Not at all	Only a few times this year	Every month	Every week	Many times a week
7. Overall, how often have you taken part in bullying someone who was much weaker or less popular than you?					
8. How often have you taken part in physically bullying someone by hitting, kicking shoving etc. who was much weaker or less popular than you?					
9. How often have you taken part in verbal bullying by insults, putting down or threatening someone who was much weaker or less popular than you?					
10. How often have you taken part in bullying by exclusion (being left out), rumors or getting others not to like someone who was much weaker or less popular than you?					
11. How often have you taken part in bullying by making unwanted sexual jokes, comments, or gestures aimed at someone who was much weaker or less popular than you?					
12. How often have you taken part in bullying on the computer by using text messages, computer or email messages/pictures to threaten someone or make them look bad who was much weaker or less popular than you?					

Appendix B: The Social Support Behavior Scale

Think about your friendship with your very best friend.

These questions are not a test; there are no right and wrong answers. We just want to know what you think about your friendship with your friend. Please answer each statement by thinking of the same friend for all questions. Then write how much you think each statement is true. 1= not at all true and 5= really true. Please circle one answer per question. Please remember that your answers are confidential and your friend, or anyone else outside the research, will never see your answers.

	Not at all true	A little true	Somewh at true	Mostly true	Really true
1 _____ and I live close to each other	1	2	3	4	5
2. _____and I always sit together at lunch. If _____ was in my school/class, we would always sit together at lunch	1	2	3	4	5
3. _____ and I get mad at each other a lot	1	2	3	4	5
4. _____ tells me I'm good at things.	1	2	3	4	5
5. If other kids were talking behind my back, _____ would always stick up for me.	1	2	3	4	5
6. _____and I make each other feel important and special.	1	2	3	4	5
7. _____ and I always pick each other as partners. If _____ was in my class we would always pick each other as partners.	1	2	3	4	5
8. _____ tells me I'm pretty smart.	1	2	3	4	5
9. _____ and I are always telling each other our problems.	1	2	3	4	5
10. _____ makes me feel good about my ideas.	1	2	3	4	5
11. When I'm mad about something that happened to me, I can always talk to _____ about it.	1	2	3	4	5
12. _____ and I argue a lot.	1	2	3	4	5
13. When I'm having trouble figuring something out, I usually ask _____ for help and advice.	1	2	3	4	5
14. _____ and I always make up easily when we fight.	1	2	3	4	5
15. _____ and I fight.	1	2	3	4	5
16. _____ and I loan each other things all the time.	1	2	3	4	5
17. _____ often helps me with things so I can get done quicker.	1	2	3	4	5
18. _____ and I always get over our arguments quickly.	1	2	3	4	5
19. _____ and I always count on each other for ideas on how to get things done.	1	2	3	4	5
20. _____ doesn't listen to me.	1	2	3	4	5
21. _____ and I tell each other private things a lot.	1	2	3	4	5

Appendix C: Hypercompetitive Attitude Scale

Think about your behavior and attitudes in competitive situations.

These questions are not a test; there are no right and wrong answers. Read each question carefully and circle the answer that best represents the way you feel. Only choose one answer per question. **Don't forget to turn the page; the questionnaire continues on the other side.** Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Strongly disapprove	*Disapprove*	*Neutral*	*Approve*	*Strongly approve*
1. Winning in competition makes me feel more powerful as a person.	1	2	3	4	5
2. I find myself being competitive even in situations that do not call for competition.	1	2	3	4	5
3. I do not see my opponents in competition as my enemies.	1	2	3	4	5
4. I compete with others even if they are not competing with me.	1	2	3	4	5
5. Success in athletic competition does not make me feel superior to others.	1	2	3	4	5
6. Winning in competition does not give me a greater sense of worth.	1	2	3	4	5
7. When my competitors receive rewards for their accomplishments, I feel envy.	1	2	3	4	5
8. I find myself turning a friendly game or activity into a serious contest or conflict.	1	2	3	4	5
9. It's a dog-eat-dog world. If you don't get the better of others, they will surely get the better of you.	1	2	3	4	5
10. I do not mind giving credit to someone for doing something that I could have done just as well or better.	1	2	3	4	5
11. If I can disturb my opponent in some way in order to get the edge in competition, I will do so.	1	2	3	4	5
12. I really feel down when I loose in athletic competition.	1	2	3	4	5
13. Gaining praise from others is not an important reason why I enter competitive situations.	1	2	3	4	5

	Strongly disapprove	Disapprove	Neutral	Approve	Strongly approve
14. I like the challenge of getting someone to like me who is already going out with someone else.	1	2	3	4	5
15. I do not view my relationships in competitive terms.	1	2	3	4	5
16. I can't stand to loose an argument.	1	2	3	4	5
17. In school, I do not feel superior whenever I do better on tests than other students.	1	2	3	4	5
18. I feel no need to get even with a person who criticizes or makes me look bad in front of others.	1	2	3	4	5
19. Loosing in competition has little effect on me.	1	2	3	4	5
20. Failure or lose in competition makes me feel less worthy of a person.	1	2	3	4	5
21. People who quit during competition are weak.	1	2	3	4	5
22. Competition inspires me to excel.	1	2	3	4	5
23. I do not try to win arguments with members of my family.	1	2	3	4	5
24. I believe you can be a nice guy and still win in competition and be successful.	1	2	3	4	5
25. I do not find it difficult to be fully satisfied with my performance in a competitive situation.	1	2	3	4	5

Appendix D: The In/Civility Questionnaire

Think about your attitudes about being polite in different places.

These questions are not a test; there are no right and wrong answers. Read each question carefully and circle the answer that best represents what you think about politeness. Only choose one answer per question. Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Definitely wrong	*Wrong*	*Neutral*	*OK*	*Definitely OK*
1. Packing books up before a lesson is over	1	2	3	4	5
2. Sending text messages/notes during class	1	2	3	4	5
3. Posting nasty notes on bulletin boards about a classmate.	1	2	3	4	5
4. Spreading rumors about teachers because you do not like them.	1	2	3	4	5
5. Reading, going online or playing a game during a lesson.	1	2	3	4	5
6. Calling a classmate names because they did not agree with your opinion.	1	2	3	4	5
7. Bullying your group into accepting your ideas.	1	2	3	4	5
8. Sleeping in class.	1	2	3	4	5
9. Generally disrupting the class (acting out, making noise, etc.).	1	2	3	4	5
10. Arriving late to class or leaving early without a good reason.	1	2	3	4	5

Appendix E: The Multidimensional Empathy Scale

Think about how other people may feel and how you would react to others' emotions. These questions are not a test; there are no right and wrong answers. Read each question carefully and circle the answer that best represents what you think about empathy. Only choose one answer per question. Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Strongly disagree	*Disagree*	*Neutral*	*Agree*	*Strongly agree*
1. When someone else is feeling excited, I tend to get excited too.	1	2	3	4	5
2. Other people's misfortunes do not disturb me a great deal.	1	2	3	4	5
3. It upsets me to see someone being treated disrespectfully.	1	2	3	4	5
4. I enjoy making other people feel better.	1	2	3	4	5
5. I become irritated when someone cries.	1	2	3	4	5
6. I get a strong urge to help when I see someone who is upset.	1	2	3	4	5
7. When I see someone being treated unfairly, I do not feel much pity for them.	1	2	3	4	5
8. I notice when other people are sad	1	2	3	4	5
9. When others are sad, I comfort them.	1	2	3	4	5
10. Kids who are picked on a lot usually deserve it.	1	2	3	4	5
11. It makes me angry when a kid is picked on without reason.	1	2	3	4	5
12. The suffering of others deeply disturbs me.	1	2	3	4	5
13. I feel good when I help someone or when I do something nice for someone.	1	2	3	4	5
14. Seeing other people smile makes me smile.	1	2	3	4	5
15. I find it annoying when people cry in public.	1	2	3	4	5

Appendix F: Social Goal Questionnaire

For the questions below, think about <u>how much you like it</u> when each of the following statements happen to you. Try to think of times of when the statements actually happened, if you can.

These questions are not a test; there are no right and wrong answers. Read each question carefully and circle the answer that best represents how much you like each statement. Only choose one answer per question. **Don't forget to turn the page; the questionnaire continues on the other side.** Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Dislike a lot	*Dislike*	*OK*	*Like*	*Like a lot*
1. They are afraid of me.	1	2	3	4	5
2. I can tell my private thoughts.	1	2	3	4	5
3. I go out of my way to help them.	1	2	3	4	5
4. I'm in charge.	1	2	3	4	5
5. Everyone wants me for a friend.	1	2	3	4	5
6. They worry that I'll hurt them.	1	2	3	4	5
7. We know each other's private feelings.	1	2	3	4	5
8. I can make their lives easier.	1	2	3	4	5
9. They say I'm the boss	1	2	3	4	5
10. Everyone wants to be with me.	1	2	3	4	5
11. They know I'm tougher than them.	1	2	3	4	5
12. Someone understands how I feel.	1	2	3	4	5
13. I can make them happy.	1	2	3	4	5
14. I'm the leader.	1	2	3	4	5
15. A lot of them say I'm their best friend.	1	2	3	4	5
16. I hurt people who threaten me.	1	2	3	4	5
17. They tell me about their feelings.	1	2	3	4	5
18. I make them feel good.	1	2	3	4	5
19. I organize what they do.	1	2	3	4	5

	Dislike a lot	Dislike	OK	Like	Like a lot
20. I'm the most popular.	1	2	3	4	5
21. I make them do what I want.	1	2	3	4	5
22. Someone can tell how I feel without having to ask.	1	2	3	4	5
23. They look up to me.	1	2	3	4	5
24. They like me better than anyone else.	1	2	3	4	5
25. I trick them into doing things my way.	1	2	3	4	5
26. I really know someone's feelings.					
27. I can tell them my secrets.	1	2	3	4	5

For the questions below, think about how much you DON'T like it when your classmates do the following things to you. Try to think of times of when the statements actually happened, if you can.

These questions are not a test; there are no right and wrong answers. Read each question carefully and circle the answer that best represents how much you don't like each statement. Only choose one answer per question. Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Dislike a lot	Dislike	OK	Like	Like a lot
1. The pick on me.	1	2	3	4	5
2. They laugh at me.	1	2	3	4	5
3. They tease me.	1	2	3	4	5
4. They tell me to go away.	1	2	3	4	5
5. They are unfair to me.	1	2	3	4	5
6. The say I'm dumb.	1	2	3	4	5

Appendix G: The Self-Efficacy of Defending Questionnaire

For the following questions, think about how you would act if you saw another youth was being bullied by someone in their class.

Read each question carefully and circle the answer that best represents how you would act. Only choose one answer per question. Remember, your answers are confidential, which means no one outside the research, will ever see your answers.

	Very unlikely	*Unlikely*	*Not sure*	*Likely*	*Very likely*
1. I would encourage the victim to show that s/he could not be intimidated.	1	2	3	4	5
2. I would insist that the bully 'cut it out'.	1	2	3	4	5
3. I would comfort the victim.	1	2	3	4	5
4. I would make it clear to the bully that his/her behavior would not be tolerated.	1	2	3	4	5
5. I would encourage him/her to tell the teacher about the bullying.	1	2	3	4	5
6. I would try to make the others stop bullying.	1	2	3	4	5
7. I would tell the victim to stand up to the bully.	1	2	3	4	5
8. I would make sure the bully was suitably punished.	1	2	3	4	5

Please explain in one or two sentences why you chose to circle those answers above? Please be as detailed as possible.

_____

_____

_____

_____

_____

_____

_____

Appendix H: The Freshman

One day, when I was a freshman in high school, I saw a kid from my class was walking home from school. His name was Kyle. It looked like he was carrying all of his books. I thought to myself, "Why would anyone bring home all his books on a Friday?" I had quite a weekend planned (parties and a football game with my friends tomorrow afternoon), so I shrugged my shoulders and went on. As I was walking, I saw a bunch of kids running toward him. They ran at him, knocking all his books out of his arms and tripping him so he landed in the dirt. His glasses went flying, and I saw them land in the grass about ten feet from him. He looked up and I saw this terrible sadness in his eyes. My heart went out to him. So, I jogged over to him as he crawled around looking for his glasses, and I saw a tear in his eye. As he picked up his glasses, I felt really bad for him and I said, "Those guys are jerks. They really should get lives." He looked at me and said, "Hey thanks!" There was a big smile on his face.

He then picked up his books, and I asked him where he lived. As it turned out, he lived near me, so I asked him why I had never seen him before. He said he had gone to private school before. I would have never hung out with a private school kid before. We walked all the way home, and we had a really good talk. He turned out to be a pretty cool kid. I asked him if he wanted to play football on Saturday with me and my friends. He said yes.

We hung out all weekend and the more I got to know Kyle, the more I liked him and my friends thought the same.

Over the next four years, Kyle and I became best friends. When we were seniors, we began to think about college. He was going to be a doctor and I was going for business on a football scholarship. Kyle was valedictorian of our class. He had to prepare a speech for graduation.

On graduation day, I saw Kyle. He looked great. He was one of those guys that really found himself during high school. He filled out and actually looked good in glasses. He had more dates than me and all the girls loved him! Boy, sometimes I was jealous.

Today was one of those days. I could see that he was nervous about his speech. So, I smacked him on the back and said, "Hey big guy, you'll be great!" He looked at me and smiled. "Thanks," he said.

As he started his speech, he cleared his throat and began. "Graduation is a time to thank those who helped you make it through those tough years. Your parents, your teachers, your siblings, maybe a coach but mostly your friends.

I am here to tell all of you that being a friend to someone is the best gift that you can give them. I am going to tell you a story." I just looked at my friend in disbelief as he told the story of the first day we met. He had planned to drop out of school to avoid the torment. He talked about how he had cleaned

his locker and was carrying his stuff home. He looked hard at me and gave me a smile. "Thankfully, I was saved. My friend saved me from dropping out." I heard the gasp go through the crowds as this handsome, popular boy told us all about his weakest moment. I saw his mom and dad looking at me and smiling. Not until that moment did I realize its depth.

Appendix I: The Magic Words

Miss Carmichael was the teacher for the fourth graders at Liver Spoon Grade School. Her students had a serious problem. None of them ever said please or thank you. They never said it to the teacher, to each other, or anyone. She decided to see if she could find a way to get them to start saying it, so she came up with a plan.

"Starting today," she told her class, "we are going to have a contest. Here on my desk is a very nice prize. It is a popular videogame system and three of the coolest games they make. Anyone can win this; all you have to do is say the magic words. The first person who says the magic words will win the prize."

Well, as you can imagine, the kids were very excited. And every one of them was certain that he or she could guess the words. The kids started calling out every word that they could think of. "AARDVARK! TORTOISE! HAMBURGER! CHOCOLATE!" they shouted all at once.

This went on for quite some time until the teacher finally said, "Enough! From now on, you cannot just shout out words. You have to use the magic words in a sentence during conversation with each other or with me."

It was amazing how many words were used that the students had never said before. "Miss Carmichael, you look SPIFFY today," one boy said.

"Miss Carmichael, I am going to eat TURKEY for lunch."

Things were rather strange for a long time after that day. However, after a month had gone by without any of the children guessing the magic words, it seemed that no one was going to win the prize.
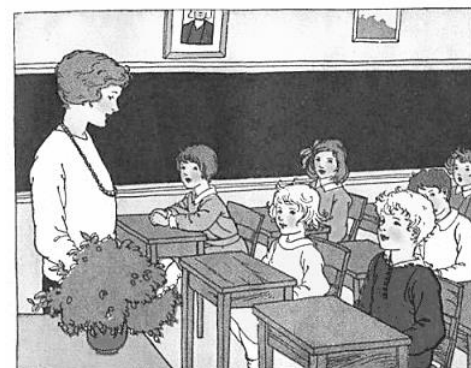
Then one day, a new boy transferred from another school. It was his first day and the kids laughed at him when he came into the room because he had red, bushy hair, wore thick glasses, and dressed in clothes that the kids said were un-cool. The teacher was angry with her class for being so rude. "That will be quite enough! Now, I want you all to make Pierpont feel…," When she said his name, the class broke into laughter again. "STOP IT! Pierpont is new here, and I want you to make him feel welcome."

Then the teacher said to Pierpont, "We are very glad to have you in our class. Do you have a pencil?"

Pierpont said, "No. I haven't had a chance to get any school supplies yet. May I borrow one, please."

"Well, here is a pencil you can have," the teacher said as she handed him a plain yellow pencil. Pierpont took it and said, "Thanks."

"Well, we have a winner!" Miss Carmichael announced.

The kids in the class were shocked. "WHAT? WHAT DID HE SAY?"

"He said the magic words. It was please and then thanks. That's all anyone of you had to say, and not one of you ever said please or thank you for anything. You didn't say it to me or to each other."

Pierpont became very popular after that. Everyone wanted to come over to his house and play the new video games with him. He was a very friendly person and was happy to have the guys come over to his house. The kids from school found out that Pierpont was a pretty good guy after all, and they ended up liking him and learning to be more polite.

Appendix J: Rip Van Winkle

Rip Van Winkle was a lazy boy. He was so lazy that he slept the whole day. His mother tried her best to get Rip Van Winkle to get a job. When he did get a job, he was asked to leave because he slept too much.

One day, Rip Van Winkle, tired of his mother insisting on him getting a job, ran up a mountain with his favorite companion, his dog. He reached the top, crossed a stream, went to a spot where nobody ever came and sat down panting. He had never had so much exercise in all his life.

He was just getting back his breath, when he heard someone call his name. "Strange, nobody ever comes here and surely no one that I know," thought Rip Van Winkle. He turned to see a funny looking man carrying a big barrel. The funny looking man said, "Please help me carry this barrel to my friends below the stream." He first decided to refuse but then thought, "Let's help the poor chap, then I can come and rest." So, he

and the funny looking man walked down to a cave in the mountain, below the stream.

There Rip Van Winkle saw many other funny looking men, all of them were playing a game. They ignored him. As soon as the barrel was placed in the ground, the men pulled out mugs, dipped it into the barrel and drank. It was grape juice. Rip Van Winkle too dipped a mug in the barrel and drank the juice. It tasted good. He thought he should have one more mug, then another and another. It made him tired so Rip Van Winkle went to sleep.

When he awoke, he saw that all the funny looking men had gone. He called out to his

dog but there was no response. He could not believe he had slept the whole day and night. He got up, but his joints ached.

As he started trudging back home, he saw the village down below, which seemed somehow changed. When he entered the village he saw new faces; all of them looked at him and rubbed their chins. Seeing them do this, Rip Van Winkle did the same. To his astonishment he found he had grown a foot long beard overnight.

Rip Van Winkle was puzzled; he believed that he knew most of the village folks well but there did not seem to be anyone he knew around. This was the same village, where he could see the mountains and the streams. The children made fun of him, running behind him, pulling his beard.

Rip Van Winkle stopped by a place where there had been a school and asked the crowd that had gathered, "Where is Schooner, the school master?" Somebody said,

"Oh! Schooner, he went to war in sixty three and never came back." "And Van Dammel?" asked Rip Van Winkle. "He moved away eighteen years back," said another voice in the crowd. Rip Van Winkle thought he was going mad. "Had he slept all these years on the mountain?"

Finally Rip Van Winkle asked, "Does any one here remember Rip Van Winkle?" A very old woman said, "Yes, he was my son. He went up the mountains twenty-one years back but never returned. His dog came back without him."

Rip Van Winkle was overjoyed. He said, "Mother, it is me Rip Van Winkle. Don't you recognize me?" "Oh! My son. It is really you." Mother and son hugged each other. Rip Van Winkle had indeed slept for twenty-one years.

Appendix K: Treasure Island

Jim Hawkins loved adventure. When a blind man by the name of Black Dog came to live with him and his mother in their Inn, Jim had no idea he was to get into one great big dangerous adventure.

Black Dog was an unfriendly old man. One morning, Black Dog mysteriously left his room. Jim and his mother opened his trunk and found an old map. It looked like a treasure map. Jim was excited and told his mother that he would go and look for the treasure. But before that he went to meet the village Professor. "Sir, this is what I have found in the blind man's trunk. It looks to me like a map of some hidden treasure," said Jim to the Professor pulling out the map.

" Indeed it does," agreed the Professor. "We should set sail immediately to look for this treasure."

So, the next day, Jim and the Professor boarded a ship, to set sail to an unknown island, looking for treasure. It was a long journey. In the ship Jim met a one-legged sailor who was the ship's cook. His name was Long John Silver. He always had his pet parrot perched on his shoulder. Silver was very friendly and had Jim rolling with laughter with his stories.

One stormy night Jim was feeling hungry so he walked up to one of the barrels that contained apples. Suddenly, he heard voices, Jim felt suspicious

and jumped inside the barrel. Once inside he froze. Long John Silver was talking. He was saying, "Tomorrow we will reach Treasure Island. As soon as I give the signal we will take all passengers on board as prisoners. Then we can take the map and dig up the treasure. Let us go back to our rooms before anyone sees."

When Jim was sure everyone had gone, he climbed out of the barrel. He immediately warned the Professor of Long John Silver's plan. The next morning, the island was visible in the distance; Jim jumped off the ship and swam to shore. There he met a ragged old man, who said, "I am Ben Gunn, I have been shipwrecked in this island for twenty years. I suppose you have come to look for the treasure." Jim nodded and said, "I jumped off that ship because there are dangerous men aboard. Please help me and my friend the Professor who is on the ship too."

Ben Gunn knew the island very well. He laid out traps for Long John Silver and his men. When they came shouting and waving their swords they fell into a hole in the ground dug by Ben Gunn. They were trapped. Jim and Ben Gunn unearthed the treasure and swam to the ship. Jim, Ben, and the Professor sailed back home leaving Long John Silver and his men on the island. It took them three months to get out of the trap and build a boat. When they returned home, they found that Jim had become a rich and important because of the treasure he found.

Appendix L: Ethical Clearance
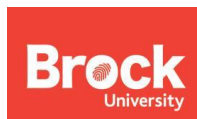
Brock University
Research Ethics Office
Tel: 905-688-5550 ext. 3035
Email: reb@brocku.ca

Social Science Research Ethics Board

Certificate of Ethics Clearance for Human Participant Research

DATE: 7/22/2013

PRINCIPAL INVESTIGATOR: VOLK, Anthony
Child and Youth Studies

FILE: 12-312 - VOLK

TYPE: Masters Thesis/Project STUDENT: Victoria Della Cioppa
SUPERVISOR: Anthony Volk

TITLE: Priming Prosocial Behavior to Augment Bystander Interventions in Bullying Situations

ETHICS CLEARANCE GRANTED

Type of Clearance: NEW   Expiry Date: 7/31/2014

The Brock University Social Sciences Research Ethics Board has reviewed the above named research proposal and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement. Clearance granted from 7/22/2013 to 7/31/2014.

The Tri-Council Policy Statement requires that ongoing research be monitored by, at a minimum, an annual report. Should your project extend beyond the expiry date, you are required to submit a Renewal form before 7/31/2014. Continued clearance is contingent on timely submission of reports.

To comply with the Tri-Council Policy Statement, you must also submit a final report upon completion of your project. All report forms can be found on the Research Ethics web page at
http://www.brocku.ca/research/policies-and-forms/research-forms.

In addition, throughout your research, you must report promptly to the REB:
   a) Changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
   b) All adverse and/or unanticipated experiences or events that may have real or potential unfavourable implications for participants;
   c) New information that may adversely affect the safety of the participants or the conduct of the study;
   d) Any changes in your source of funding or new funding to a previously unfunded project.

We wish you success with your research.

Social Sciences Research Ethics Board

Note: Brock University is accountable for the research carried out in its own jurisdiction or under its auspices and may refuse certain research even though the REB has found it ethically acceptable.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of research at that site.

Appendix M: Letter of Parental Consent

Principal Investigator: Dr. Anthony Volk, Associate Professor
Department of Child and Youth Studies
Brock University
tvolk@brocku.ca
(905) 688-5550 EXT. 5368

Principal Student Investigator: Victoria Della Cioppa, B. A.
Masters of Arts Candidate
Department of Child and Youth Studies
Brock University
vd12sd@brocku.ca

Your son/daughter has been invited to participate in a study that involves research into adolescent bullying. The purpose of this study is to better understand the strategies that teenagers use when confronted with bullying. What follows are the specific goals of the study. ***In order to avoid influencing your son/daughter's answers, we ask that you DO NOT discuss these specific goals with him/her until after the study is completed (when these goals will be revealed to them).***

We are interested in understanding how youth act when watching someone being victimized and the types of strategies they come up with in order to end the bullying situation. Firstly, we believe that by increasing empathy (the ability to put yourself in someone else's shoes) and civility (having good manners and being polite and courteous to other people), adolescents will be more likely to respond as the third party involved in bullying. Therefore they will either actively stop the bullying or will provide comfort and support for the victim afterwards. Secondly, we think this can be accomplished by bringing these concepts forward in an individual's mind, through a tool called priming. This technique involves showing youth examples of empathy and civility, but not explicitly informing them of the purpose of the examples.

WHAT'S INVOLVED

As a participant, your son/daughter has been asked to fill out questionnaires about themselves, their friends, their peers and their basic demographics (e.g., age) followed by a visit to my lab on a separate occasion where they will read short priming stories and fill out other questionnaires. I will try to arrange a time to usher youth to my lab, but if this is not possible, an adult must accompany them on a mutually arranged date/time. Participation will take approximately 1 hour and 30 minutes of their time. We have included the participant questionnaires for you to view before they are filled out by your son/daughter. Any ties to participant names will be destroyed immediately after the data has been entered to preserve confidentiality.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include getting to know about the problem of bullying as a whole and examining ways to reduce it by acting on the victims' behalf. There also may be risks associated with participation in that some bullying situations are stressful to think about. If they find any part of this study to be stressful, they may contact the researcher, the Brock University Ethics board, or simply stop their participation. We also tell your son/daughter that "[they] may also freely discuss the study with parents or friends if [they] need to, although we would ask that [they] try not to talk to someone before [they] complete the study on [their] own (e.g., don't share answers until both have completed the study). Sharing answers before the study ends can complicate and/or change their own natural answers.

The study does involve not telling your son/daughter our specific goals and what we expect to find until after they complete the study. This is done to minimize any responses that may be unnatural. After completion, they will be completely informed of the study goals and asked to sign another assent form to acknowledge that they has been informed of the goals and that they are still OK with their information being used. If they are not OK with their data being used it will be shredded, and they will still receive $10 for participating. Thus, all participants will be offered $10 for their participation if they have completed all steps of the study. They will receive this payment once ALL the completed forms are returned, even if they are shredded afterwards.

CONFIDENTIALITY

Participants in this study will only be identified by a unique number that is tied to a master list kept by Victoria Della Cioppa.

As a parent, you will have to consent to your son/daughter's participation, **but you will not gain access to their answers. You may only control whether WE are able to view their answers or not by providing or withdrawing your consent**. *We feel that it is very important for the participants in our study to be able to know that their answers are completely confidential.* This will hopefully encourage them to be as honest as possible so we can really understand what is going on in their relationships. To this end, we again ask that you don't discuss the study with your son/daughter until they have completed it in order to avoid influencing their answers. Once the study is completed you may of course discuss any related topic you feel fit. In the form labeled "Youth Assent", we encourage participants to talk to people whom they trust (including parents) about any related issues.

Data collected during this study will be stored on a secure computer and hard copies will be kept in a locked filing cabinet. Data will be kept for the duration of 5 years, after which time the data will be deleted or shredded. Access to this data will be restricted to Victoria Della Cioppa, Dr. Volk and his collaborators. Parents, friends and participants will not have access to any individual data, although they may have access to the overall study results.

VOLUNTARY PARTICIPATION

Your teenager's participation is voluntary. They need not participate, even if you give parental consent. There are no organizational or personal consequences for not participating other than not receiving the $10. Your child can withdraw from the study at any time or during any part of the study and they have the right to decline answering any questions that they don't want to answer. **Again, as a parent, you do NOT have access to your adolescent's individual results. You control whether or not we are able to view them by providing or withdrawing your consent for their participation at any time.**

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available by late Spring or Early Summer 2014 on Dr. Volk's research web page (http://www.brocku.ca/vrbaby/research.html) and in the Brock University Library.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions or concerns about this study, please contact the study coordinator, Victoria Della Cioppa, using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [# 12-312-VOLK]. If you have any comments or concerns about the study ethics, or your adolescent's rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca

If you have any concerns about your adolescent participating as a bully, or being a victim of bullying, please feel free to discuss the matter with other parents, teachers, friends, and/or any trusted individuals. For advice on how to talk to your teen or other individuals about bullying, we recommend www.bullying.org, http://www.lfcc.on.ca/bully.htm, and the Niagara Youth Connection (905-641-2118 ext. 5592). You may also feel free to contact my supervisor, Dr. Anthony Volk, at tvolk@brocku.ca (905-688-5550 ext. 5368) with any related questions or concerns.

Thank you for your help in this project!

Please keep this form for your records.

CONSENT FORM

I agree to allow my teen to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time and request that my son/daughter's data be removed from the study.

Name: _____

Signature: _____ Date: _____

Please return this form. If you consent to your son/ daughter's participation, please provide them with the envelope marked "Participant". If you do not consent to their participation, you may dispose of that envelope as you see fit.

Appendix N: Letter of Adolescent Assent-Incomplete

Principal Investigator: Dr. Anthony Volk, Associate Professor
Department of Child and Youth Studies
Brock University
tvolk@brocku.ca
(905) 688-5550 EXT. 5368

Principal Student Investigator: Victoria Della Cioppa, B. A.
Masters of Arts Candidate
Department of Child and Youth Studies
Brock University
vd12sd@brocku.ca

You are invited to participate in a science project that involves research into adolescent bullying. The purpose of this science project is to better understand how adolescent bullying occurs and how it can be stopped.

WHAT'S INVOLVED
As a participant, you will be asked to fill out questionnaires about yourself, your friends, and your basic demographics (e.g., things like your age, who you live with, etc.) as well as coming to my lab on another day to watch some videos and read some stories. It should take you about 1 hour and 30 minutes to complete the forms. You will be given a special number so I know who you are and anything that has your name on it will be destroyed right after your answers have been entered in the computer.

POTENTIAL BENEFITS AND RISKS
Possible benefits of participation include getting to know about bullying better. There also may be risks that go with participation. Some bullying situations are tough to think about. If you find any part of this science project to be stressful, you may contact the people doing the research, the Brock University Ethics board, or just stop participating. You may also talk about the science project with parents or friends if you need to, but we would ask that you don't share answers until <u>both</u> of you have completed the science project unless you feel it's really necessary. Sharing answers <u>before</u> the science project ends can change your own natural answers.

If you have any worries about specific behaviours or situations, we strongly suggest that you talk about them with someone you trust a lot. These people could be parents, teachers, friends, or other trusted adults. You may also contact the Kids Help Phone at: http://www.kidshelpphone.ca/en/ (1-800-668-6868). **It is important to know that you do not need to tolerate any form of abuse!**
You will receive $10 for your participation. You will get this money once you have finished the whole science project, even if you do not want your answers used after they are all handed in.

CONFIDENTIALITY

You will get a special number that is tied to your name. There is no way for anyone to know the data beyond this number. Your parents will have to give permission before you can participate, **but they will not be able to read your answers** (*although they can ask that any answers be thrown away*). You also do not have to tell your answers to any of your friends, peers, or anyone else other than the people doing the research. The only exception is that Victoria Della Cioppa and Dr. Volk will have a copy of your consent form, with your special number, kept in a locked, separate cabinet so that you can ask that your answers be thrown away if you want. No other people will have access to this special number, and Victoria Della Cioppa or Dr. Volk will ONLY look at this information if you ask them to throw it away. Your name will not be in the final paper or in any speeches given about the science project.

Your answers will be kept on a safe computer and papers will be kept in a locked filing cabinet. Data will be kept for 5 years then it will all be thrown away. Only Victoria Della Cioppa, Dr. Volk and his partners will be able to see your answers. Your parents, friends and participants will not have access to your answers, although they may have access to the overall results. So you do not have to worry about anyone finding out your answers, or about anyone following up on your answers, or about any consequences of the answers you provide.

VOLUNTARY PARTICIPATION

Being in this science project is completely voluntary. That means you can stop participating at any time or during any part of the science project and you have the right to not answer questions that you don't want to answer. If you want to stop participating, you may do so without any punishment other than not receiving the $10.

However, before you can participate in this science project, you <u>MUST</u> get parental consent. If you are reading this form, you should have already gotten your parents to sign a form saying it is OK for you to answer these questions. If you haven't, please give your parents the form right now. If you do not provide parental consent, you may NOT participate in this science project. Again, your parents will not see your answers, but they do control whether WE are able to see your answers or not. Even if your parents give consent, you can choose to not participate. That is your own decision. So you need their consent to participate, but that consent doesn't force you to participate.

PUBLICATION OF RESULTS

Findings of this science project may be published in books and presented at conferences. Whatever we find will be available by late Spring or Early Summer 2014 on Dr. Volk's research web page (http://www.brocku.ca/vrbaby/research.html) and in the Brock University Library.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this science project or need more information, please contact either Victoria Della Cioppa or Dr. Volk using the contact information on top of the page. If you have any questions while you are filling out the forms, please feel free to contact us. This science project has been reviewed and received ethics clearance through the Research Ethics Board at Brock University [# 12-312-VOLK]. If you get any

stress while participating in this science project, please use the Kids Help Phone number.

If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your help in this project!

Please keep this form for your records.

<u>ASSENT FORM</u>

I agree to participate in this science project described above. I have made this decision based on the information I have read in the Information-Assent Letter. I have had the opportunity to receive any additional details I wanted about the science project and understand that I may ask questions in the future. I understand that I may withdraw at any time.

Name: _____

Signature: _____ Date: _____

Please return this form.

Appendix O: Distractor Task

Please answer as many of the following problems as you can. This is not a test and you will not be graded on your answers. If there is a question you cannot answer, skip it.

A. 5200- 2345=

G. 100 - 4 x 4 =

B. 3 x (4+6)=

H. 35 + x = 73

C. 4 x 4 + 8 ÷ 4=

I. 25 + 35 + 15=

D. x + 27 = 34 =

J. 46 ÷ 4 = _____ R _____

E. 40 x 80=

K. 67 + 12 =

F. 25÷3= _____ R _____

Appendix P: Letter of Adolescent Assent-Debriefing

PLEASE READ THIS ONLY AFTER YOU HAVE FINISHED THE STUDY

Prosocial Priming Bystander Intervention Debriefing

Thank you for your participation in our science project of adolescent bullying behaviors! While we told you our main goal right away, we can now tell you the specific details we were interested in studying. We think that by increasing empathy (the ability to put yourself in someone else's shoes) and civility (having good manners and being polite and courteous to other people), young people will help when they see someone being bullied by either stopping the bully or supporting the victim. We also think this can happen by reading stories about empathy and civility as examples. This is called priming in psychology.

Parts of this science project may have been uncomfortable and/or difficult to complete. Bullying and victimization are unfortunately a common experience for many adolescents, but they aren't pleasant. If you have any concerns about participating as a bully, or being a victim of bullying, please feel free to discuss the matter with your parents, teachers, friends, and/or any trusted individuals. We can recommend www.bullying.org, http://www.kidshelpphone.ca/en/ (1-800-668-6868), and Niagara Youth Connection (905-641-2118 ext. 5592). In general, you can help prevent bullying by: not participating as a bully, intervening when others are being bullied (e.g., report the behaviour to an adult), and by actively disapproving of the bully's behaviour (e.g., telling them it's not cool). You may be able to reduce victimization by: talking to your parents, teachers, and/or friends and by trying to make supportive friendships.

Should you have any further questions or concerns, you may freely contact the study coordinator, Victoria Della Cioppa (vd12sd@brocku.ca), or if regarding the study's ethics, the Brock University Research Ethics Board at (905) 688-5550 ext. 3035 (reb@brocku.ca).

Please keep this form for your records.

<u>Prosocial Priming Bystander Intervention Informed Assent</u>

Thank you again for participating in our science project of adolescent relationships. We didn't tell you the full reason for why we were doing this project because we didn't want to influence any of your answers. It is very ordinary in psychology for people to change their answers if they know what the researchers are looking for.

Because this science project involved not telling you the whole truth, we have to ask again if you are still interested in participating in the science project now that you know the whole truth. If you are still OK with the science project, sign your name on the line. If you are not OK with the science project after knowing all the information, you may ask that your answers be thrown away. In this case, your data will be immediately removed.

I have read the pages above and understand the why I was not told the whole truth right away. I now:

GIVE MY PERMISSION TO USE MY DATA _____
DO NOT GIVE MY PERMISSION TO USE MY DATA _____

SIGNED: _____
DATE: _____

Please return this form