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Bystander Intervention in Bullying: Role of Social Skills and Gender

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Abstract

The Bystander Intervention Model proposed by social psychologists Latané and Darley (1970) has been used to examine the actions of peer bystanders in bullying. The five stage model consists of notice the event, interpret event as an emergency, accept responsibility for intervening, know how to intervene, and implement intervention decisions. The current study examined associations among gender, social skills, and the bystander intervention model among 299 sixth-eighth grade students. Analyses revealed that girls reported significantly greater cooperation and empathy, and noticed bullying events, interpreted them as an emergency, and intervened more often than boys. The best fitting structural equation model included both empathy and cooperation, with significant positive path coefficients between empathy and bystander intervention. Students with greater empathy were more likely to engage with each step of the model, except noticing the event. Assertiveness was positively associated and cooperation was negatively associated with greater knowledge of how to intervene.

Keywords: bystander intervention, social skills, bullying, defending, empathy

Bystander Intervention in Bullying: Role of Social Skills and Gender

Bystanders have a powerful role in inhibiting or exacerbating bullying, and there is growing interest in understanding factors contributing to the likelihood that youth will help in these situations (Salmivalli, 2010). Research has begun to identify factors associated with peers' willingness or actual defending of victims of bullying, including the role of empathy (Barchia & Bussey, 2011; Nickerson, Aloe, & Werth, 2015; Nickerson, Mele, & Princiotta, 2008), social and moral development, social self-efficacy, cooperation, assertion, and popularity (Gini, Albiero, Benelli, & Altoè, 2008a; Gini, Hauser, & Pozzoli, 2011; Jenkins, Demaray, Fredrick, & Summers, 2014; Tani, Greenman, Schneider, & Fregoso, 2003). However, existing research has focused primarily on one or two specific factors (e.g., empathy and social self-efficacy) in relation to global measures of defending. Because bullying is a social interaction, the social skills of participants in this interaction are important to understand. Although research has revealed social skills deficits for both victims (Fox & Boulton, 2005) and perpetrators (Larke & Beran, 2006), relations are complex, and may vary depending on the specific social skill, gender, and developmental period (e.g., Faris & Felmlee, 2014; Juvonen & Graham, 2014; Sutton, Smith, & Swettenham, 1999).

To help understand the complex social behavior of bystander intervention in bullying (i.e., defending) researchers have developed and validated a measure to assess more specific defender behavior in bullying using Latané and Darley's (1970) classic 5-step bystander intervention model (Jenkins & Nickerson, 2016; Nickerson, Aloe, Livingston, & Feeley, 2014). The current study is the first to examine the extent to which social skills predict each step of the bystander intervention model for middle school boys and girls, which is important for understanding the context and process of defending in bullying.

Bystander Intervention in Bullying

Within a social ecological framework (Espelage & Swearer, 2009; Hong & Espelage, 2012), bullying is conceptualized as a social event implicitly and explicitly supported by peers (Jones, Bombieri, Livingstone, & Manstead, 2012; Salmivalli & Voeten, 2004). Bystanders are not the primary bully or victim, but play other roles such as reinforcer (e.g., encourages bullying), assistant (e.g., joins in), defender (e.g., tells teacher, comforts victim), or outsider (e.g., ignores or is unaware of bullying; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996). Students may engage in more than one participant role, such as victim and defender, or bully and victim (Huitsing & Veenstra, 2012; Veenstra et al., 2005). Dispositional and situational factors can influence the stability of bullying role behaviors (Gumpel, Zioni-Koren, & Bekerman, 2014).

Of particular interest from a prevention and intervention standpoint are the defenders that directly or indirectly try to stop bullying or mitigate its effects by stopping the perpetrator(s), reporting bullying, asking an adult for help, or providing support to students being victimized (Espelage, Green, & Polanin, 2012; Huitsing & Veenstra, 2012). These actions have been found to reduce bullying perpetration and victimization (Craig, Pepler, & Atlas, 2000; O'Connell, Pepler, & Craig, 1999; Salmivalli, Voeten, & Poskiparta, 2011) and contribute to students' feelings of safety (Gini, Pozzoli, Borghi, & Franzoni, 2008). As mentioned previously, research has advanced in identifying some of the variables that distinguish youth who defend from those who do not, but given the complexity of the phenomenon, theoretically grounded research that explores individual, interpersonal, and contextual effects is needed (Meter & Card, 2015).

Latané and Darley's (1970) bystander intervention model was developed based on social psychological research about the bystander effect, or the inhibiting effect of the presence of

others on helping people in emergency situations (Dovidio, Piliavin, Schroeder, & Penner, 2006; Darley & Latané, 1968). The model outlines five sequential steps involved in bystander intervention: (a) notice the event, (b) interpret the event as an emergency that requires help, (c) accept responsibility for intervening, (d) know how to intervene or provide help, and (e) implement intervention decisions. The model has been adopted and applied to bystander intervention in contexts such as drunk driving (Rabow, Newcomb, Monto, & Hernandez, 1990), sexual assault prevention (Burn, 2009), organ donation (Anker & Feeley, 2011), and bullying (Nickerson et al., 2014).

Nickerson and colleagues (2014) applied the theoretical model proposed by Latané and Darley (1970) to examine bystander behavior in bullying and sexual harassment situations. They created a measure to assess students' reactions to a hypothetical situation corresponding to each step of the bystander intervention model. Structural equation modeling analyses revealed that the model provided a good fit to the data for a sample of high school students, with each step of the bystander intervention model in bullying and sexual harassment being influenced by the previous step. Empathy predicted the most variance in the model, followed by prosocial/anti-bullying attitudes and awareness of information about bullying and sexual harassment (Nickerson et al., 2014). The bystander intervention model was also applied to a middle school sample with regard to bystander intervention in bullying (not sexual harassment), with confirmatory factor analysis supporting the five factors, and positive correlations between each step of the bystander intervention modeling and a defender scale providing support for convergent validity (Jenkins & Nickerson, 2016). A next important step in this line of research is to identity some of the variables that predict each step of the bystander intervention model. Social skills are frequently studied in youth, particularly among victims and bullies, although

there is scant research on the relation of specific social skills and their relation to bystander intervention in bullying.

Social Skills in Relation to Bullying and Bystander Intervention

Social skills, or learned behaviors that allow individuals to interact with others in a positive, socially acceptable manner, include empathy, self-control, cooperation, assertion, responsibility, engagement, and communication (Gresham, Elliott, Vance, & Cook, 2011). Social skills include a broad spectrum of behaviors and abilities. Empathy includes the ability to recognize and show concern for another person's emotions and view things from another person's perspective. Self-control is the ability to monitor and/or restrain emotional reactions in social situations. Cooperation is the ability to collaborate with, support, and help others. Assertion refers to the ability to initiate conversations and stand up for oneself or others in social situations. Responsibility demonstrates an individual's ability to show regard for the property an work of others, while communication includes skills such as appropriate conversation skills (e.g., turn taking) and being polite (e.g., saying "please" and "thank you." Finally, engagement refers to joining activities, initiating conversations, and making friends (Gresham & Elliott, 2008; Gresham et al., 2011).

The social skills most relevant in the context of bullying and bystander intervention are empathy, assertion, and cooperation. Several researchers have found that empathy is a major contributor to defending behavior (Caravita, Blasio, & Salmivalli, 2009; Correia & Dalbert, 2008; Gini et al., 2008; Jenkins et al., 2014; Jolliffe & Farrington, 2011; Nickerson et al., 2008; Nickerson & Mele-Taylor, 2014). A recent meta-analysis revealed overall effect sizes of .33 to .35 for empathy and defending (Nickerson et al., 2015). This suggests that a youth's level of empathy is important in understanding his or her intervention as a bystander in bullying

situations. This is also consistent with the empathy-altruism theory whereby recognizing another person's perspective and negative emotional state contributes to a desire to alleviate stress by intervening (Batson, Turk, Shaw, & Klein, 1995; Lockwood, Seara-Cardoso, & Viding, 2014).

Less is known about the relation of cooperation and assertion to defending. In a recent study, Jenkins and colleagues (2014) found that higher levels of cooperation were associated with higher levels of defending, with no significant gender interactions. Elements of helping and supporting are part of bystander intervention with respect to the victim(s) of bullying, although youth that defend others are not cooperative in the traditional sense of the skill with regard to the perpetrator; therefore, this is an interesting social skill to assess. Defenders are non-cooperative in the sense that they are standing up against individuals that likely have more social, intellectual, or physical power and are taking a social risk of becoming the next victim. It would be easier, in many cases, to cooperate with the more powerful bully than to stand up against these peers that bully others.

Higher assertion was associated with both bullying perpetration and defending in Jenkins and colleagues' (2014) study, suggesting that this skill could be used for both antisocial and prosocial purposes. It is notable that social skills have been studied more often in relation to bullying and victimization as opposed to defending, which is arguably a prosocial behavior that may require certain skills in order to notice the bullying, interpret it as problem, and take responsibility for intervening (Meter & Card, 2015).

Contextual Considerations: Development, Gender, and Location

It is well documented that the prevalence of bullying peaks during the early adolescent years, particularly in middle school (Wang, Iannotti, & Nansel, 2009), but at the same time students are less likely to help a peer who is targeted by bullying, as aggression becomes more

accepted and related to higher social status (Batanova, Espelage, & Rao, 2014; Endresen & Olweus, 2001; Jeffrey, Miller, & Linn, 2001). In addition, girls are more likely to report recognizing the harm of bullying and experiencing more emotional distress when experiencing bullying as a victim and/or a bystander, whereas it is more likely for boys to disengage (Pozzoli & Gini, 2010; Thornberg & Jungert, 2013; Werth, Nickerson, Aloe, & Swearer, 2015). Longitudinal research has indicated that girls' empathetic concern remains stable and their perspective taking increases during adolescence, whereas boys' empathetic concern and perspective taking decreases from early to middle adolescence, and then rebounds after this time period (Van der Graaf et al., 2013). Therefore, exploring gender differences regarding social skills and bystander intervention during middle school is critical.

Some studies have reported higher rates of peer victimization among rural youth, ranging from 33% (Price et al., 2013) to 82.3% (Dulmus, Sowers, Theriot, & Blackburn, 2004), although Nansel et al. (2001) found no statistically significant differences between urban, suburban, and rural school bullying prevalence rates. Some evidence also suggests that youth in rural communities may experience or witness more serious peer victimization and have unique risk factors that impact social, emotional, and behavioral outcomes (Atav & Spencer, 2002; Smokowski, Cotter, Roberson, & Guo, 2013), which underscores the necessity of understanding bullying prevention in rural areas. Due to geographic, transportation, or economic reasons rural youth may have limited access to mental health services, attend schools that do not have resources (i.e., economic or staff expertise) to implement and sustain bullying prevention programs, and even community support for aggressive attitudes (Leadbeater, Sukhawathanakul, Smith, Yeung Thompson, Gladstone, & Sklar, 2013). The combination of little use of prevention programing, systemic support of aggression, and reduced access to mental health services put

rural youth at unique risk of experiencing or witnessing serious peer victimization.

Present Study

The purpose of this study was to extend the limited research base on the process of bystander intervention in bullying by examining the extent to which empathy, assertion, and cooperation predicted the bystander intervention model in bullying for a sample of middle school students in a rural school. Structural equation modeling was used to assess the best fitting model for these social skills predicting the 5-step bystander intervention model as a whole (see Figure 1). All three social skills were included initially, but additional models were tested to determine which combination of social skills predicted bystander intervention the best. Other research has shown that empathy is a consistent predictor of defending, so empathy was included in each model. Significant differences in gender were also assessed for each path in the model. An additional purpose was to assess more specifically the impact of empathy, assertion, and cooperation, and their interactions with gender, on each step of the bystander intervention model.

We hypothesized that empathy, cooperation, and assertion would predict the 5-step bystander intervention model, with empathy having the strongest effect size due to previous research and theory. We further predicted that these effects would be stronger for girls than boys. With relation to specific steps of the bystander intervention model, we expected empathy to predict each of the five steps, whereas cooperation and assertion were predicted to relate more to accepting responsibility, knowing what to do, and taking action as opposed to noticing the bullying and interpreting it as a problem.

Method

Participants

There were 299 students in sixth (34.4%), seventh (33.8%), and eighth grade (31.8%) that participated in the study. The sample included 171 girls (57.2%) and 128 boys (42.8%). The school was 91.1% White, 1.2% African American, 3% Hispanic American, and 4.7% multi-racial and 47.8% of the students received free or reduced cost meals at school. The socio-economic and ethnic makeup of the school was representative of rural Midwestern community in which the school is located. According to 2010 Census data, the community is 85% White and 20% of the residents (of all ages) lived below the poverty line.

Procedure

Data were collected as part of an evaluation of all students at a middle school. The school engaged in an evaluation of the social and emotional functioning of its students and hoped to use the information to create a multi-tiered system of social and emotional support for all students, including bullying prevention and intervention programming. The school procedure dictated that parents sign consent or opt out of social, emotional, behavioral, and academic screening at the beginning of the school year when registering their student; no parents opted out at registration. One week prior to the social and emotional evaluation, a letter was sent home with all students explaining the evaluation. One parent denied their child's participation at that time. All students completed the surveys on a laptop during their PE period. A short cut to the survey was on the desktop of the computer. Survey questions were administered using a web-based survey program, Qualtrics, under the guidance of the school counselor. Students were given an identification number for the study and no identifying information was provided by the student. After the first author was done consulting with the school on the results of the screening data, the Institutional Review Board at her institution granted approval to use the extant data for research purposes. The very little missing data (N = 6, 2% of sample) that occurred was when a

student chose to not answer a set of questions, and cases were deleted listwise for analyses if there were missing data.

Measures

Social Skills Improvement System Rating Scale – Student Version (SSIS; Gresham & Elliott, 2008). Participants completed the 46 self-rated social skills items. These items assess acquired behaviors that positively benefit social interactions and include subscales for communication, cooperation, assertion, responsibility, empathy, engagement, and self-control. Due to their theoretical and empirical relevance for this study, only the subscales of cooperation (e.g., "I pay attention when others present their ideas"), assertion (e.g., "I ask for information when I need it"), and empathy (e.g., "I feel bad when others are sad") were included in analyses. For each item, a statement is presented, individuals decide how true it is for them, then respond using a four-point Likert scale (*Not True* to *Very True).* Psychometric evidence for the SSIS student version is strong and the manual contains very detailed reliability and validity evidence. Internal consistency estimates for all subscales range from .72 to .95. There is evidence to support the factor structure and validity of the scales. In the current study, alpha coefficients were .81, .84, and .85 for the Assertion, Cooperation, and Empathy scales, respectively.

Bystander Intervention in Bullying (Nickerson et al., 2014). The *Bystander Intervention in Bullying* measure is a 16-item scale that measures the five steps of the bystander intervention model: Notice, Interpret, Accept Responsibility, Know how to Act, Intervene. The measure was originally developed for high school students and focused on bystander behavior in bullying and sexual harassment situations (Nickerson et al., 2014). Jenkins and Nickerson (2016) adapted the survey for use with middle school students with a focus on bullying and not sexual harassment. Example items include: "I have seen other students being bullied at my school this

year" (Notice), "It is evident to me that someone who is being bullied needs help" (Interpret), "If I am not the one bullying others, it is still my responsibility to try and stop it" (Accept Responsibility), "I know what to say to get someone to stop bullying someone else" (Know how to Act), and "I would say something to a student who is acting mean or disrespectful to a more vulnerable student" (Intervene). Confirmatory factor analyses and convergent validity analyses with the high school and middle school measures have supported the five-factor structure and its positive correlations with measures of similar constructs (Jenkins & Nickerson, 2016; Nickerson et al., 2014). Internal consistency of the subscales were above .77 for the current sample.

Data Analyses

A multi-group structural equation modeling method was used in AMOS 22.0 to determine if social skills (Assertion, Cooperation, and Empathy) were related to bystander intervention. Three models were tested: Model 1 included all three social skills (see Figure 2), Model 2 included only Assertion and Empathy, and Model 3 included Cooperation and Empathy. For each model, individual social skills served as predictors and Bystander Intervention was the outcome variable. For each social skill, respective items from the SSIS served as indicators and for Bystander Intervention, the summed score for each of the five steps of the model served as indicators.

Model fit for the structural equation model was evaluated based on five measures of fit based on recommendations by Hooper, Coughlan, and Mullen (2008): χ^2, the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Parsimonious Normed Fit Index (PNFI). It is desirable to have a nonsignificant χ^2 value (Barrett, 2007); however, χ^2 is sensitive to sample size and is likely to be significant with large samples, thus, other fit indices were considered. Models have adequate fit with CFI values above .90 (Browne & Cudeck,

1989) or .95 (Schermelleh-Engel, Moosbrugger, & Müller, 2003), RMSEA values below .06 (Hu & Bentler, 1999), and PNFI values greater than .50 (Mulaik et al., 1989). To test for significant differences in the strength of the paths for boys and girls, critical ratios were calculated. Critical ratios employ a *z*-test to test for differences between path coefficients, thus absolute values exceeding 1.96 indicate a significant difference in the path coefficients.

Follow up analyses were conducted using a set of five multiple regression analyses in SPSS (v 21.0). The goal of the follow up analyses was to examine which social skills were related to the individual steps of the Bystander Intervention Model. Assertion, Cooperation, and Empathy served as predictor variables and each step of the model served as outcome variables (Notice, Interpret, Accept Responsibility, Know how to Respond, and Act). Gender was a dummy-coded predictor with Girls coded as 0 and Boys as 1, and gender interaction variables were created and entered as predictors to examine for possible gender differences in the association between social skills and bystander intervention steps. A Bonferroni correction was used since the model was tested five times (once for each of the five steps of the bystander intervention model); therefore, a *p* value of .01 was used.

Results

Preliminary Results

Table 1 provides intercorrelations by gender for the variables in the study and Table 2 presents means, standard deviations, and results of an ANOVA to examine gender differences in mean levels of the study variables. Cohen's *d* was utilized to calculate effect sizes. Effect sizes are considered small in magnitude if *d* was below .20 and large in magnitude if *d* was .80 and greater; otherwise they are medium in magnitude (Cohen, 1988). Preliminary analyses indicated that Noticing was not correlated with any social skills for neither boys nor girls with the

exception of one significant, weak correlation between notice and cooperation for boys. There were weak to moderate significant positive correlations between each bystander behavior and each social skill for both boys and girls, with the exception of one nonsignificant correlation between Cooperation and Know how to Intervene for girls. Boys and girls had similar scores (i.e., nonsignificant mean differences) for Assertion, Accept Responsibility, and Knowledge. Girls had significantly higher scores for Cooperation, Empathy, Notice the Event, Interpret the Event as an Emergency, and Intervention.

Structural Equation Models

Model One tested the association of Assertion, Cooperation, and Empathy with Bystander Intervention. Chi-square was significant, $\chi^2 (835) = 930.86$, $p < .001$. The CFI value (.88) was below the recommended range, but RMSEA (.05) and PNFI (.632) were within recommendations. Since the CFI was below the recommended range, the path coefficients and structural components of the model were not interpreted.

Model Two tested the association of Assertion and Empathy with Bystander Intervention. Chi-square was significant, $\chi^2 (264) = 498.99$, $p < .001$. The CFI value (.890) was below the recommended range, but RMSEA (.055) and PNFI (.620) were within recommendations. Since the CFI was below the recommended range, the path coefficients and structural components of the model were not interpreted.

Model Three tested the association of Cooperation and Empathy with Bystander Intervention. Chi-square was significant, $\chi^2 (264) = 405.71$, $p < .001$. The CFI value (.939), RMSEA (.043), and PNFI (.65) were within the recommended ranges. Since this was the best fitting model, the structural components of the model were interpreted. Table 3 contains the standardized and unstandardized coefficients, standard errors, and *p*-values for the measurement

and structural models and Figure 3 visually depicts the model and corresponding standardized coefficients. All path coefficients for both boys and girls were significant and in the expected direction, except for the paths between Cooperation and Bystander Intervention, which were not significant for both boys and girls. The path between Empathy and Bystander Intervention was positive and significant for boys and girls. The critical ratio *z*-test demonstrated that there was not a significant difference between girls and boys for any path coefficients.

Follow-up Analyses

To assess the degree to which each social skill was related to the individual steps of the bystander model, five regressions were conducted (see Table 4). The regression for Notice the Event was significant, F (7, 265) = 3.925, $p < .001$. Social skills and gender accounted for a significant amount of variance (Adjusted $R^2 = .072$, $p < .001$). There were no significant individual predictors.

The regression for Interpret the Event as an Emergency was significant, F (7, 264) = 13.285, $p < .001$, with social skills and gender accounting for a significant amount of variance (Adjusted $R^2 = .246$, $p < .001$). Empathy was a significant positive predictor of Interpreting the Event as an Emergency indicating that individuals with greater empathy also tended to interpret bullying as an emergency event. There were no significant gender interactions. The regression for Responsibility was significant, F (7, 256) = 9.716, $p < .001$, Adjusted $R^2 = .188$, $p < .001$. Empathy was positively related to Accepting Responsibility indicating that individuals with more empathy were also more likely to accept responsibility for intervening. There were no significant gender interactions.

The regression for Know how to Act was also significant, F (7, 263) = 9.075, $p < .001$, Adjusted $R^2 = .177$, $p < .001$. Assertion and Empathy were significantly and positively related to

Know how to Act, indicating that greater assertiveness and empathy was associated with greater knowledge of how to intervene in bullying. Cooperation was negatively and significantly associated with Know how to Act. Finally, the regression for Intervene was significant, F (7, 260) = 12.706, $p < .001$, Adjusted $R^2 = .240$, $p < .001$. Empathy was significantly positively related to Intervene. There were no significant gender interactions.

Discussion

Results of this study extend past research that has found some social skills relate to defending (e.g., Jenkins et al., 2014) by examining the role of empathy and cooperation in relation to the five-step bystander intervention model in bullying and specifying the steps of the model for which each skill is most important. The study also elucidated some important gender differences in both social skills and bystander intervention for early adolescents attending a rural middle school.

Gender Differences in Social Skills and Bystander Intervention in Bullying

Analyses of gender differences revealed that girls reported higher social skills than boys in terms of cooperation and empathy. Other studies have found significant differences in empathy between boys and girls (e.g., Jenkins et al., 2014), but one study found that there were only gender differences in empathy when self-report measures are used, but no gender differences with peer-assessment (Caravita et al., 2009). Caravita and colleagues also noted a decrease in empathy among boys in adolescence, with Van Der Graaf and colleagues' (2013) longitudinal study supporting this. The present cross-sectional study supports this gender difference in empathy among middle school students. Girls also reported noticing bullying, interpreting it as an emergency, and intervening more frequently than boys, though there were no significant gender differences for accepting responsibility and knowing what to do. Although past research has found girls to be more likely than boys to intervene in bullying (e.g., Nickerson

et al., 2008; Pozzoli & Gini, 2010; Salmivalli et al., 1996), no studies to date have examined gender differences at each step of the bystander intervention model. These novel findings suggest that girls may be more attuned to bullying and its potential impact, which is consistent with Thornberg and Jungert's (2013) findings that girls demonstrate higher moral sensitivity (e.g., recognizing harm of bullying, sympathizing with victims) than boys during bullying incidents.

Interestingly, accepting responsibility and knowing what to do did not differ by gender, yet taking action to intervene was more likely to be reported by girls. This may relate to contextual factors that may inhibit boys from intervention despite knowing what to do. In early adolescence, bullying and other aggressive behavior in boys is often accepted and approved of by the peer group (Rodkin & Hodges, 2003), so boys may be less motivated to see it as a problem or intervene. In addition, girls have been shown to be more likely to cope with bullying by seeking social support, problem solving, and internalizing, whereas boys are more likely to distance themselves from the victim's negative experiences (Hunter & Borg, 2006; Hunter, Boyle, & Warden, 2004; Pozzoli & Gini, 2010).

Social Skills as Predictors of Bystander Intervention in Bullying

Hypotheses regarding the role of empathy, cooperation, and assertion as predictors of bystander intervention were partially supported. The best fitting structural equation model included both empathy and cooperation (but not assertion), with significant positive path coefficients between empathy and bystander intervention but not cooperation and bystander intervention for boys and girls. Together, these results suggest that empathy fits best for the entire bystander intervention model, although cooperation also contributes to model fit. Findings from the follow-up regression analyses analyzing the extent to which the social skills predicted each step of the model further elucidate the findings.

Empathy predicted all steps of the bystander intervention model except noticing the event. This suggests that empathy may not be as important for observing bullying in the environment, yet when it is noticed, middle school students with more empathy are more likely to view it as a problem, accept responsibility for helping, know what to do, and intervene. These findings are consistent with prior research about gender and defending (Gini, Albiero, et al., 2008a; Jenkins et al., 2014; Nickerson & Mele-Taylor, 2014; Nickerson et al., 2008), yet extend them by pinpointing specific steps of bystander intervention in which empathy is most pronounced. There were no significant interaction effects of gender and empathy, suggesting that empathy is important for both boys and girls in predicting the likelihood of intervening as a bystander.

Interestingly, empathy and assertion were significant positive predictors while cooperation was a significant negative predictor of Know how to Act. This step assesses an individual's self-assessed skills in supporting a student being bullied by both knowing what to say to get someone to stop bullying someone and to get someone out of a situation where he or she is being bullied. Cooperation is about collaborating and supporting others, whereas assertion involves initiation and standing up in social situations, which may help explain why this social skill is related to knowing what to do. Knowing how to defend a peer who has been bullied requires some level of risk given that it may require standing up against someone in power and going against the perceived norm of acceptance by the peer group (Pozzoli & Gini, 2010, 2013; Werth, Nickerson, Aloe, & Swearer, 2015).

It is likely that students who have developed the skill of assertion are in a better position to know what to do in challenging and potentially confrontational situations. It should be noted that Jenkins and colleagues (2014) found that assertion predicted both defending and bullying

behaviors, suggesting that assertion may be used to exacerbate or ameliorate the problem of bullying. In contrast, students who are skilled in cooperation may be good at knowing how to support others, but not necessarily in situations that require both help and opposition to others. It is also important to consider the context of early adolescent development and the rural school setting. Cooperation in middle school may be seen as not wanting to stand out from peers or take the risk of standing up to a student in power. Because students and families tend to know each other well in rural settings, cooperation may be inconsistent with calling someone out about their behavior as this could have repercussions in the social network. Notably, none of the interactions of gender and social skills were significant predictors of the steps of bystander intervention, suggesting that the main effects of gender mentioned previously and the significant unique predictors of social skills may be more important than certain social skills being more influential for boys or girls in these situations.

Implications for Practice

Findings from this study suggest that individual students, depending on the skills and personality characteristics they possess, may respond differently as bystanders. Meter and Card (2015) elucidated how motives, attitudes, and tendencies affect bystander behavior, particularly in situations of interdependence. This has important implications for practice, in that bystander intervention training should delineate different options available for helping to stop bullying. For example, individuals who are cooperative may not know how to intervene directly with the person bullying if they are not assertive. However, if they are taught that offering social support and comfort to the victim is another way of intervening more indirectly, they may be more likely to take action in a way that is more comfortable.

Gender differences in several areas of social skills and bystander intervention, but not in interacting with social skills to predict bystander intervention helps to understand the importance of context. Although female gender norms tend to value empathy, cooperating, and helping someone in distress (Meter & Card, 2015; Rigby & Johnson, 2006), the findings from this study suggest that social skills predicted bystander intervention similarly for boys and girls. Therefore, focusing on these important social skills, particularly empathy and also assertiveness, may build an important foundation for bystander intervention. However, by early adolescence and continuing into high school, bullying and other forms of peer aggression are strongly associated with moderate to high social status (Faris & Felmlee, 2011; Juvonen & Graham, 2014). It is possible that changing norms by providing youth with accurate information about their peers' views on bullying (i.e., youth report that peers are more accepting about bullying than they are; Perkins, Craig, & Perkins, 2011) may be important in shifting the conversation and actions, particularly for boys.

Empathy and assertion appear to be the most critical social skills for bystander intervention. Social-emotional learning programs have been shown to be effective in increasing these important skills, decreasing behaviors that interfere with learning (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). It is likely that direct teaching of social skills and generalizing programming to reinforce these skills may make students more likely to increase prosocial behavior and bystander intervention in bullying (Ragozzino & O'Brien, 2009). Although bullying prevention programs showed some effectiveness for youth in grades 7 and below, these results were nullified in grade 8, and were even harmful in grades 9-12 (Yeager, Fong, Lee, & Espelage, 2015). Therefore, it may be particularly important to focus on bullying prevention and teaching social skills in the elementary and early middle school grades. In

contrast to Yeager and colleagues' (2015) findings of lower effects of bullying prevention programs for adolescents, Polanin, Espelage, and Pigott's (2012) meta-analysis revealed high school students showed greater treatment effects from bystander intervention training compared to elementary school students. Drawing from disciplines such as mass communication to make the bystander intervention message resonate with youth (see Nickerson, Feeley, & Tsay-Vogel, 2016) and to respect the autonomy and importance of the peer group (Yeager et al., 2015) will be important in these efforts.

Limitations and Directions for Future Research

Some limitations of this research include the lack of racial and ethnic diversity in the sample, and the reliance on self-report of both social skills and bystander intervention. Because the study was cross-sectional in nature, it is unclear whether the social skills directly cause the bystander intervention behaviors or if these are more bidirectional relationships. This would be important to test in future longitudinal studies, as this could inform the timing and content of relevant interventions. Although we examined predictors of each step of the bystander intervention model, various ways of intervening (e.g., confronting the person bullying, reporting the bullying to an adult, comforting the victim; Rock & Baird, 2011) were not examined separately. It is possible that social skills would differentially predict each of these options of responding. The relationship of the potential bystander with the victim and the bully is another important contextual consideration that should be taken into account in future studies on this topic.

Conclusion

Understanding the factors that contribute to each step of the bystander intervention model in bullying is critical in informing prevention and intervention approaches. This study reinforces

the importance of empathy, or the ability to recognize and show concern for another person's emotions and view things from another person's perspective, in middle school students' tendency to interpret bullying as a problem, accept responsibility for intervening, knowing what to do, and reported intention to intervene. A novel finding is the contribution of assertion in knowing what to do and intervening in bullying, whereas cooperation was inversely related to this knowledge. Building a foundation of these key social skills, in combination with bystander intervention training that takes into account important contexts related to gender, interpersonal relationships, and norms, may hold promise in bullying prevention and intervention.

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Table 1. Correlations among study variables.

	1. Assertion	2. Cooperation	3. Empathy	4. Notice	5. Interpret	6. Accept Responsibility	7. Knowledge	8. Intervene
1	1	.641**	.656**	.039	.308**	.319**	.401**	.432**
2	.675**	1	.657**	-.024	.315**	.170*	.153	.372**
3	.694**	.693**	1	.078	.395**	.407**	.383**	.488**
4	.070	-.195*	.121	1	.442**	.439**	.403**	.326**
5	.415**	.365**	.507**	.241**	1	.644**	.589**	.611**
6	.326**	.345**	.450**	.197*	.638**	1	.709**	.666**
7	.355**	.324**	.390**	.183*	.436**	.647**	1	.700**
8	.396**	.319**	.497**	.187*	.557**	.591**	.635**	1

Note: Correlations for girls are above the diagonal, boys below the diagonal.

Table 2. Means, Standard Deviations, and Sex Differences in Main Study Variables

		N	*M*	*SD*	Min.	Max.	*F*	*p*	*Cohen's d*
Assertion	Girls	157	19.71	4.52	7.00	28.00	.396	.530	.076
	Boys	121	19.36	4.50	9.00	28.00			
	Total	278	19.56	4.51	7.00	28.00			
Cooperation	Girls	159	22.59	3.97	7.00	28.00	4.946	.027	.271
	Boys	118	21.50	4.13	11.00	28.00			
	Total	277	22.13	4.07	7.00	28.00			
Empathy	Girls	161	19.63	3.64	8.00	24.00	15.289	.000	.472
	Boys	121	17.85	3.94	8.00	24.00			
	Total	282	18.86	3.87	8.00	24.00			
Notice	Girls	169	10.38	3.31303	3.00	15.00	4.515	.034	.25
	Boys	127	9.55	3.37523	3.00	15.00			
	Total	296	10.03	3.35967	3.00	15.00			
Interpret	Girls	169	13.15	2.36706	3.00	15.00	10.062	.002	.374
	Boys	127	12.22	2.59789	3.00	15.00			
	Total	296	12.75	2.50626	3.00	15.00			
Accept Responsibility	Girls	167	11.41	2.75341	3.00	15.00	3.541	.061	.222
	Boys	128	10.78	2.99063	3.00	15.00			
	Total	295	11.14	2.87098	3.00	15.00			
Knowledge	Girls	167	11.38	2.78035	3.00	15.00	.958	.329	.115
	Boys	128	11.05	2.99043	3.00	15.00			
	Total	295	11.23	2.87309	3.00	15.00			
Intervene	Girls	168	15.68	3.58861	4.00	20.00	4.043	.045	.239
	Boys	124	14.84	3.44383	4.00	20.00			
	Total	292	15.32	3.54633	4.00	20.00			

Table 3. Standardized and unstandardized coefficients, standard error, and p-values for boys and girls

	Girls				Boys				
	B	S.E.	*p*	β	B	S.E.	*p*	β	*z*-score
Cooperation									
Item 42	1			0.584	1			0.666	
Item 32	1.129	0.15	***	0.801	1.319	0.163	***	0.849	0.861
Item 22	1.186	0.163	***	0.759	1.208	0.162	***	0.764	0.097
Item 19	1.116	0.159	***	0.721	1.203	0.163	***	0.756	0.381
Item 12	1.037	0.146	***	0.727	1.108	0.153	***	0.736	0.335
Item 9	1.035	0.182	***	0.534	0.844	0.178	***	0.462	-0.751
Item 2	0.885	0.151	***	0.558	0.889	0.164	***	0.531	0.018
Empathy									
Item 32	1			0.729	1			0.789	
Item 27	1.274	0.126	***	0.821	1.293	0.136	***	0.803	0.103
Item 17	0.749	0.104	***	0.587	0.748	0.112	***	0.595	-0.003
Item 13	1.247	0.123	***	0.823	1.162	0.128	***	0.773	-0.481
Item 7	1.177	0.122	***	0.777	1.021	0.145	***	0.623	-0.823
Item 3	0.719	0.134	***	0.435	0.988	0.138	***	0.627	1.393
Bystander Intervention Steps									
Notice	1			0.478	1			0.251	
Interpret	1.116	0.188	***	0.746	2.217	0.844	**	0.723	1.274
Accept Responsibility	1.458	0.235	***	0.84	2.87	1.079	**	0.812	1.278
Knowledge	1.453	0.235	***	0.83	2.626	0.996	**	0.744	1.147
Intervene	1.849	0.301	***	0.815	3.399	1.279	**	0.814	1.181
Structural components									
Cooperation → Bystander Intervention	-0.502	0.436	0.25	-0.16	-0.484	0.374	0.196	-0.288	0.031
Empathy → Bystander Intervention	1.639	0.48	***	0.56	1.213	0.533	*	0.843	-0.595

Notes: *** p-value < 0.001; ** p-value < 0.01; * p-value < 0.05.

Table 4. *Standardized and Unstandardized Regression coefficients with p values and Confidence Intervals*

						95% CI for B	
		B	SE	β	*p*	Lower	Upper
Notice	Gender	1.222	2.340	.181	.602	-3.386	5.829
	Assertion	-.009	.084	-.012	.918	-.174	.156
	Cooperation	-.109	.095	-.131	.254	-.296	.078
	Empathy	.166	.106	.190	.118	-.043	.375
	Assertion x Gender	.106	.131	.319	.418	-.151	.363
	Cooperation x Gender	-.343	.145	-1.128	.019	-.629	-.057
	Empathy x Gender	.185	.158	.512	.241	-.125	.495
Interpret	Gender	-2.928	1.562	-.590	.062	-6.005	.148
	Assertion	.035	.056	.063	.530	-.075	.145
	Cooperation	.021	.063	.034	.744	-.104	.145
	Empathy	.190	.070	.295	**.007**	.051	.328
	Assertion x Gender	.043	.087	.175	.622	-.128	.214
	Cooperation x Gender	-.047	.096	-.208	.629	-.237	.143
	Empathy x Gender	.131	.105	.489	.213	-.075	.336
Accept Responsibility	Gender	-2.664	1.819	-.476	.144	-6.246	.919
	Assertion	.085	.066	.136	.200	-.045	.216
	Cooperation	-.131	.074	-.191	.080	-.277	.016
	Empathy	.300	.084	.414	**.000**	.135	.465
	Assertion x Gender	-.090	.102	-.326	.380	-.291	.112
	Cooperation x Gender	.151	.113	.600	.182	-.072	.374
	Empathy x Gender	.047	.124	.156	.704	-.196	.290
Knowledge	Gender	-1.911	1.878	-.334	.310	-5.609	1.787
	Assertion	.212	.068	.331	**.002**	.079	.345
	Cooperation	-.197	.076	-.280	**.010**	-.347	-.047
	Empathy	.256	.085	.345	**.003**	.089	.423
	Assertion x Gender	-.150	.105	-.533	.153	-.357	.056
	Cooperation x Gender	.241	.116	.933	.039	.012	.470
	Empathy x Gender	-.026	.126	-.086	.834	-.275	.222
Intervene	Gender	.605	2.229	.086	.786	-3.785	4.995
	Assertion	.158	.079	.203	.047	.002	.314
	Cooperation	-.006	.090	-.007	.949	-.182	.171
	Empathy	.316	.099	.347	**.002**	.120	.512
	Assertion x Gender	-.118	.126	-.341	.352	-.366	.131
	Cooperation x Gender	-.072	.138	-.229	.601	-.343	.199
	Empathy x Gender	.158	.150	.423	.294	-.138	.453

Note: Bold *p*-values were significant at $p < .01$. Gender was a dummy-coded predictor with Girls coded as 0 and Boys as 1, larger B and β values indicate a greater difference between boys and girls.

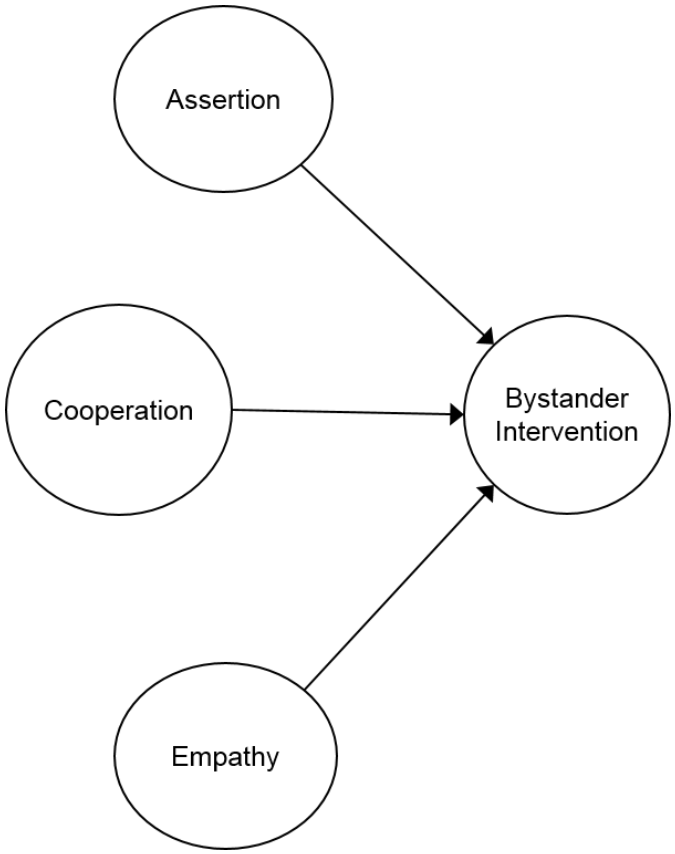

Figure 1. Conceptual Model

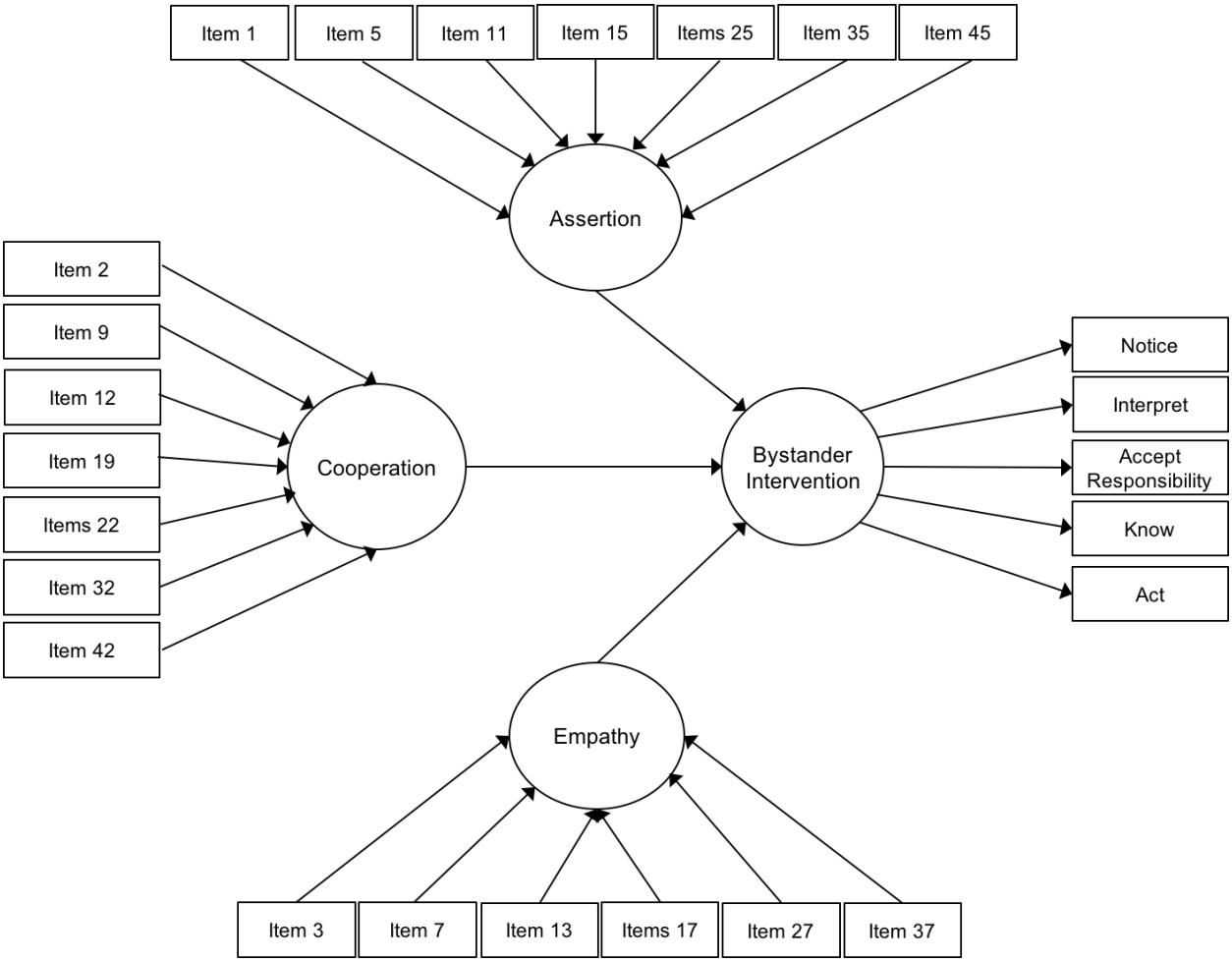

Figure 2. Measurement Model for Model 1

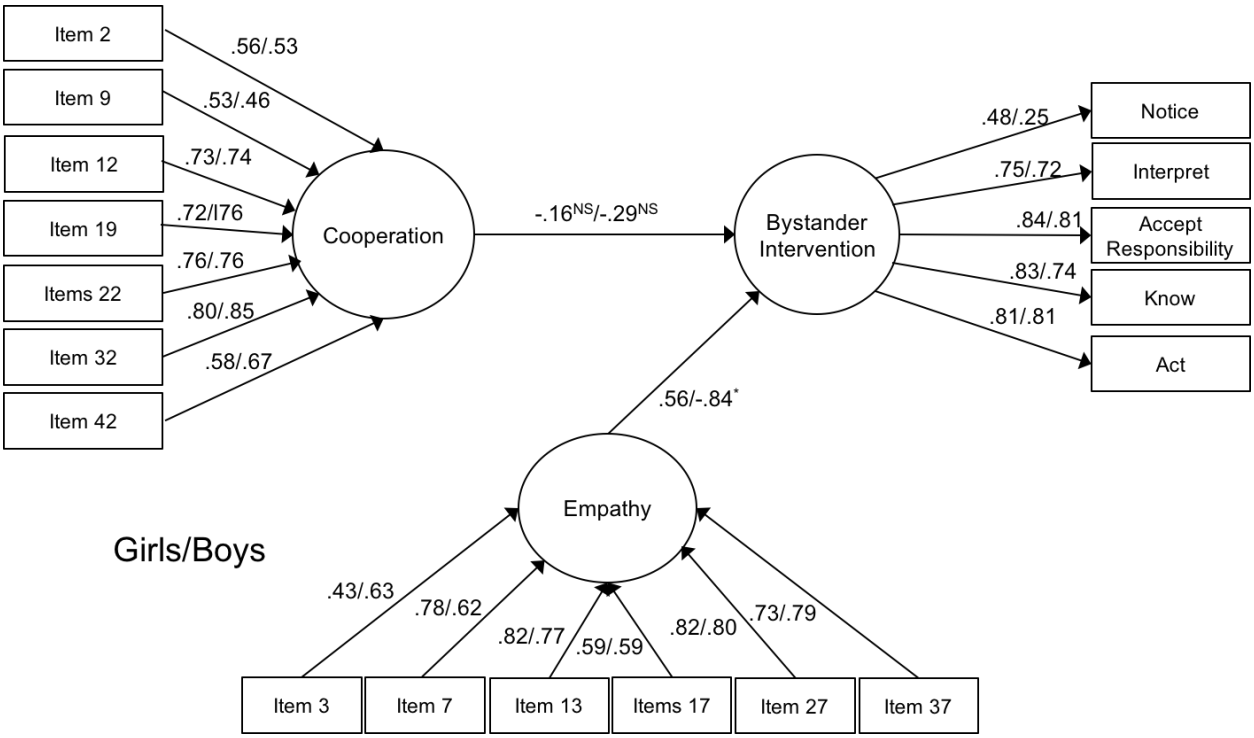

Figure 3. Standardized coefficient for Model 3.

Notes: Paths are significant at p-value < 0.001 unless otherwise noted; * p-value < 0.05.