Bystander Intervention in Bullying and Sexual Harassment: Role of Personal and Perceived Peer Norms

Amanda B. Nickerson, Margaret E. Manges, Gina M. Bellavia, Jennifer A. Livingston, Lyndsay N. Jenkins, & Thomas H. Feeley

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Abstract

This study investigated the extent to which adolescents' personal normative attitudes (also referred to as personal norms) and perceived peer norms regarding bullying, sexual harassment, and bystander intervention predicted each step of the five-step bystander intervention model (i.e., Notice, Interpret, Accept Responsibility, Know how to Help, Act) for bullying and sexual harassment among two-hundred thirty-three high school students in the Northeastern United States. Interaction effects of gender, personal norms, and perceived peer norms were also assessed. As predicted, perceived peer norms moderated the relations between personal norms and all five bystander intervention steps. However, some effects differed by gender and some differed in direction from predictions. Students who were more anti-bullying/harassment scored higher on some bystander intervention steps when they also perceived their peers to be more anti-bullying and harassment, with some models showing gender differences between male and female students. Personal and perceived peer norms are related to adolescents' engagement in the bystander intervention model, suggesting that both norms should be targets of interventions encouraging youth to intervene in incidents of bullying and sexual harassment.

Keywords: Bullying, sexual harassment, bystander intervention, gender

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Bullying (i.e., unwanted repeated aggressive behaviors which involve an observed or perceived power imbalance; Gladden et al., 2014; Olweus, 1993) and sexual harassment (i.e., unwanted sexual behavior, such as jokes or unwanted touching; American Academy of University Women [AAUW]) are common in secondary school settings and have the potential to cause serious, lasting harm to victims (AAUW, 2001; Gruber & Fineran, 2016). Among high school students, 20% report being a victim of bullying (Wang et al., 2020) and up to 80% report sexual harassment victimization (Yang & Salmivalli, 2013) each year. Being a target of bullying and sexual harassment increases the risk of social, emotional, and academic difficulties (Gruber & Fineran, 2016).

Peer bystanders can play a powerful role in abating or reinforcing victimization (Salmivalli et al., 1996). The Latané and Darley (1968) five-step bystander intervention model is a framework for understanding bystander intervention in bullying and sexual harassment (Jenkins & Nickerson, 2017, 2019; Nickerson et al., 2014). We have an understanding of how individual factors (e.g., empathy [Menolascino & Jenkins, 2018; Pronk et al., 2014] or problem solving skills [Gini, 2008; Pronk et al., 2013]) contribute to the likelihood of bystander intervention (Lambe et al., 2019; Meter & Card, 2015), but there is a lack of research on the role of norms. Specifically, the ways in which personal normative attitudes (i.e., one's own beliefs or behaviors; Sandstrom & Bartini, 2010; referred to as personal norms heretofore) and perceived peer norms (i.e., beliefs about behaviors or attitudes of one's peers; Sandstrom & Bartini, 2010) are related to each step of the bystander intervention model is unknown. However, personal norms and perceived peer norms have been connected to bullying attitudes (Perkins et al., 2011).

This study focused on high school students. Despite bullying and sexual harassment being prevalent at this age, there is a dearth of literature focused on bystander intervention among high school students. Many studies on bystander intervention in bullying focus on elementary and middle school students (e.g., Jenkins & Nickerson, 2017, 2019; Pozzoli & Gini, 2010; Pozzoli et al., 2012) and bystander intervention for sexual violence tends to focus on college-age populations (e.g., Charmaraman et al., 2013; Coker et al., 2015). This research could inform social norms-based interventions, which have been developed and used to address alcohol and drug use (Berkowitz, 2004; Haines et al., 2005). The purpose of this study was to investigate the extent to which adolescents' personal and perceived peer norms regarding bullying, sexual harassment, and bystander intervention predicted each step of the five-step bystander intervention model for bullying and sexual harassment (Latané & Darley, 1970; Nickerson et al., 2014) among high school students.

Situational Model of Bystander Behavior

The current study draws from Latané and Darley's (1970) situational model of bystander behavior. Specifically, this model details five sequential steps of bystander intervention: (a) notice the event, (b) interpret the situation as one that requires help, (c) accept responsibility for intervening, (d) know how to intervene/help, and (e) act (implement intervention; Latané & Darley, 1970). This situational model of bystander behavior has been applied to bullying and harassment conceptually and validated from a measurement perspective (Jenkins et al., 2018; Nickerson et al., 2014). Casey and colleagues (2017) proposed integrating the theory of planned behavior (Ajzen & Fishbein, 1980) with the situational model of bystander behavior in order to include the potentially influential cognitive factors of personal attitudes and perceived social norms. The current study reflects the integration of cognitive and situational models of bystander

intervention by examining personal norms and perceived peer norms in relation to bullying and sexual harassment.

Bystander Roles and Behaviors in Bullying and Sexual Harassment

Bullying and sexual harassment almost always occur in the presence of bystanders who witness these situations (Salmivalli et al., 1996; Timmerman, 2003). Bullying is conceptualized as a group process with participant roles such as bully, victim, assistant (e.g., joins in, encourages bullying), outsider (e.g., ignores bullying), and defender (e.g., supports victims; Salmivalli et al., 1996). Many bystanders are passive or reinforce the perpetrators (Salmivalli & Voeten, 2004), and a smaller subset of defenders try to stop the perpetrator(s), report to an adult, and/or support the victimized individual(s) (Espelage et al., 2012).

Predictors of Bystander Intervention Model in Bullying and Sexual Harassment

There is a positive association between past defending behavior and recent engagement in all five steps of the bystander intervention model (Jenkins & Nickerson, 2017). Victims of bullying seem to be more likely to notice bullying and outsiders less likely than those in other bullying roles to act or intervene (Jenkins & Nickerson, 2017). Aggressive youth are more likely to notice bullying, interpret the situation as an emergency, and know how to intervene compared to non-aggressive students (Jenkins et al., 2020). From a social skills perspective, knowledge of how to intervene has been associated positively with assertiveness and negatively with cooperation in a middle school sample, suggesting that some aspects of bystander intervention may require a willingness to go against a peer norm (Jenkins & Nickerson, 2019). Studies with adolescents have found empathy to be associated with the steps of bystander intervention (Jenkins & Nickerson, 2019; Menolascino & Jenkins, 2018; Nickerson et al., 2014), except in the Jenkins and Nickerson (2019) study where empathy was not associated with noticing bullying.

Gender also plays a moderating role in some steps of bystander intervention. Interestingly, girls who reported experiencing less victimization were more likely to interpret bullying as a situation requiring help; however, for boys, more victimization predicted a greater likelihood of interpreting bullying as a problem needing help (Jenkins & Nickerson, 2017). For boys, increased affective empathy is related to higher levels of interpreting bullying as an emergency and accepting responsibility (Menolascino & Jenkins, 2018). Gender has also been found to moderate the relation between being an outsider and knowledge of how to intervene, with fewer outsider behaviors associated with girls' greater knowledge of how to intervene, but boys' lower knowledge of how to intervene (Jenkins & Nickerson, 2017).

Personal and Perceived Peer Norms in Relation to Bystander Intervention

Students' personal norms are associated with bystander intervention behavior in bullying (Datta et al., 2016; Salmivalli & Voeten, 2004). Adolescents who held more aggressive attitudes were more likely to reinforce and less likely to intervene in bullying (Datta et al., 2016). Other studies, however, have not found this relation (Espelage et al., 2012). In a recent study, affective empathy predicted lower pro-bullying (i.e., more anti-bullying/harassment) attitudes, which then led to a willingness to intervene, suggesting that an emotional response (affective empathy) may neutralize common pro-bullying attitudes that discourage students from intervening (Walters & Espelage, 2021).

Perceived peer norms also have been found to predict students' willingness to intervene in bullying and sexual harassment (Kubiszewski et al., 2018; Nickerson & Mele-Taylor, 2014). A perceived peer norm of intervening in bullying has been positively associated with actual bystander intervention and negatively associated with passive bystander behavior for upper elementary and middle school students (Pozzoli & Gini, 2010; Pozzoli et al., 2012). Similarly,

when middle school students perceived peers as accepting bullying, they were more likely to ignore bullying than to intervene to defend victims (Nickerson & Mele-Taylor, 2014).

These studies are relatively consistent in finding that perceptions of peer norms predict attitudes, intentions, and self-reported defending, but they do not assess the relation of perceived peer norms to the more nuanced, theoretically and empirically supported 5-step bystander intervention process for bullying and sexual harassment (Jenkins & Nickerson, 2017, 2019; Nickerson et al., 2014). Findings for personal norms' role in bystander intervention have been mixed, suggesting that other variables may moderate their effect. In fact, Pozzoli and Gini (2010) found that middle school students only acted according to their personal norms when peer pressure to intervene in bullying was low. When peer pressure to intervene was at medium or high levels, middle school students acted more in line with peer norms. Although Pozzoli and Gini's (2010) findings demonstrated a moderating effect of peer norms on personal norms, this interaction has rarely been examined empirically, and no known studies have explored the potential moderating effect of peer norms influencing bystander intervention among high school students. The current study extends previous research by examining the role of personal norms, perceived peer norms, and their interaction in relation to each of the five steps of the bystander intervention model for high school students, and also examines gender as a moderator.

Gender Differences in Bystander Intervention and Norms

Studies have shown that girls are more likely than boys to engage in bystander intervention in bullying (e.g., Gonultas & Mulvey, 2021; Kubiszewski et al., 2018; Lambe et al., 2019; Mulvey et al., 2019). Male middle and high school students also tend to view bullying and aggression as more acceptable and bystander intervention as less acceptable compared to female students (Gonultas & Mulvey, 2021; Mulvey et al., 2019). A few studies with middle school

samples, however, have shown that girls were less likely to be defenders and were more likely to engage in other roles in bullying, such as reinforcers (Datta et al., 2016; Nickerson & Mele-Taylor, 2014). The research on gender differences with regard to the influence of peer norms on bystander intervention is mixed. In one study, anti-bullying norms predicted defending behavior for female, but not male, late elementary school students (Salmivalli & Voeten, 2004). Relevant studies with college students have found men's willingness to intervene in sexual violence is driven by their perception of social norms (Brown & Messman-Moore, 2010; Fabiano et al., 2008). Overall, there seem to be differences between males and females in terms of both frequency of intervention and attitudes towards bullying and sexual harassment. Given these gender differences, the current study explores gender as a moderator (i.e., whether the gender of the student affects associations among personal norms, perceived peer norms, and bystander intervention).

Current Study

Despite the importance of personal norms and perceived peer norms in bystander intervention in bullying and sexual harassment, very few studies examine these relations among high school students. Sexual harassment victimization is prevalent among high school students (AAUW, 2001; Brown et al., 2020), although it is typically not a focus of prevention research. The purpose of the current study was to examine the influence of personal and perceived peer norms about bullying and sexual harassment on the intervention behaviors of high school students. The research questions are: (1) To what extent do personal and perceived peer norms about bullying, sexual harassment, and bystander intervention predict engagement in each of the five steps of the bystander intervention model? (2) Do perceived peer norms moderate the

relation between personal norms and bystander intervention? (3) Are these relations moderated by gender?

We expected that both personal norms and perceived peer norms would predict each step of the bystander intervention model, with more anti-bullying/harassment norms relating to a greater likelihood of engaging in each step. However, we also expected that perceived peer norms would contribute more variance to these behaviors (Pozzoli & Gini, 2010; Pozzoli et al., 2012), particularly for the final step of the bystander intervention model (Brown & Messman-Moore, 2010). In addition, we expected that perceived peer norms would moderate the relation between personal norms and bystander intervention behavior. Specifically, when perceived peer norms are more anti-bullying/harassment, we anticipate that students will act in accordance with those norms, regardless of their personal norms; however, when perceived peer norms are low, students should act more in accordance with their personal norms (i.e., when perceived peer norms are less anti-bullying/harassment, students with more anti-bullying/harassment personal norms should be most likely to take intervention steps [Pozzoli & Gini, 2010]). Given the conflicting findings of past research on the role of gender in bystander intervention, we did not offer a specific hypothesis regarding gender as a moderator.

Method

Participants

The sample included 233 high school students (58.8% female). Participants included 145 students (62.2%) identifying as White, 66 (28.3%) as Asian, 12 (5.2%) as multiracial, five (2.1%) as Black or African American, two (.9%) as American Indian/Alaska Native; three participants (1.3%) did not indicate their race. Ten (4.3%) reported being Hispanic/Latinx. The mean age of participants was 15.52 years (*SD* = 1.18; range 13-18). They were approximately

evenly distributed across grades 9 (*n* = 57, 24.5 %), 10 (*n* = 63, 27.0%), 11 (*n* = 51, 21.9%), and 12 (*n* = 62, 26.6%). The school from which the sample was obtained was in a relatively affluent suburban area of the Northeastern United States. The sample represented approximately 23% of the total student body and reflected the racial/ethnic composition of the school. An a priori power analysis (α = .05, Power = .95, Cohen's f^2 effect size = .15 with 7 predictors for regression) indicated that a sample of 153 was needed. The selection of f^2 is due to its use in a multiple regression model where the independent and dependent variable are continuous (Selya et al., 2012).

Measures

Personal and perceived peer norms toward bullying and sexual harassment. To assess personal norms, this measure included six items from the *Attitudes Toward Bullying and Sexual Harassment* scale (Nickerson et al., 2014, which was adapted from Perkins et al., 2011; α = .87, e.g., "Students who see someone being bullied or harassed should try to stop it."). In response to student feedback from pilot testing, two items were added about bullying and harassment perpetrated specifically through electronic communication (e.g., "Students should NOT insult others on social media"). Response options included a 4-point Likert response scale ranging from *Strongly disagree (0)* to *Strongly agree (3).* To assess perceived peer norms, parallel questions were added for each of the eight items by prefacing each with "The typical student at my school believes" (e.g., "The typical student at my school believes students who see someone being bullied or harassed should try to stop it"). This approach for measuring perceived peer norms is consistent with guidance on social norms methodology (Haines et al., 2005; Perkins et al., 2011). For the current sample, α = .90 for the 8-item personal norms subscale and α =.86 for the 8-item perceived peer norms subscale. Higher scores indicated more anti-bullying/harassment norms.

Bystander intervention in bullying and sexual harassment (Nickerson et al., 2014).

This self-report measure assesses intention to engage in the five steps of the bystander intervention model in bullying and sexual harassment: Notice (3 items, e.g., "I have seen other students being bullied or harassed at my school this year."), Interpret (3 items, e.g., "I think bullying and sexual harassment are hurtful and damaging to others."), Accept Responsibility (3 items, e.g., "I feel personally responsible to intervene and assist in resolving bullying or sexual harassment incidents."), Knowledge (3 items, e.g., "I know what to say to get someone to stop bullying or harassing someone else."), and Intervene (4 items, e.g., "If I saw a student at school that I did not know very well being harassed or bullied at school, I would help him or her out of the situation."). Participants responded on a 4-point Likert scale ranging from *1 (Strongly disagree)* to *4 (Strongly agree)*. The single reverse-coded item ("If someone makes sexually inappropriate comments, the student on the receiving end should realize it is just a joke") had a relatively low factor loading in the Nickerson et al. (2014) study and was revised for the current study ("Sexually inappropriate comments can hurt someone's feelings, even if the person making the comments says they are joking"). The five subscales have been validated through confirmatory factor analysis, convergent validity has been supported (Jenkins & Nickerson, 2017; Nickerson et al., 2014), and measurement invariance across gender has been demonstrated (Jenkins et al., 2019). For the current sample, internal consistencies were: Notice ($\alpha = .76$), Interpret ($\alpha = .60$), Accept Responsibility ($\alpha = .78$), Knowledge ($\alpha = .77$), and Intervene ($\alpha = .71$).

Procedure

Parental consent forms were distributed to 361 students in 16 classes (e.g., physical education, English). A total of 255 parents (71%) consented. Data for 17 students were excluded

because two students did not assent, three students took the wrong survey due to a technical error, and twelve students responded to the validity item "I am telling the truth (I have not intentionally lied) on this survey" by indicating *Disagree* (*n* = 2) or *Strongly disagree* (*n* = 10). Removing students who respond in this way to these validity items improves the quality of adolescent survey data (Cornell et al., 2012). Since gender was included as a variable in analyses, the five respondents who did not identify as male or female were excluded (three did not identify their gender, one identified as transgender female, and one identified as gender non-conforming). Research staff followed standardized instructions to administer surveys electronically via Survey Monkey during students' respective classes in the fall of 2019. All procedures were approved by the university's Institutional Review Board.

Data Analysis

Only .5% of data were missing overall, ranging from 0 to 1.3% on variables of interest. According to Little's MCAR analysis, data were not missing completely at random $\chi^2 = 394.03$, $df = 349$, $p = .048$. To address the missing data, we employed both single and multiple imputation. For single imputation, missing data were addressed with pairwise deletion if participants had two or more data points missing from a scale or subscale; if a participant had only one data point missing from a scale or subscale, the participant's mean for the remaining items was used as a replacement (Dodeen, 2003). Multiple imputation was conducted in SPSS 27.0 using five imputations. The pattern of results was the same for both single and multiple imputation; for parsimony, we report results based on singly imputed data. Results of the analyses using listwise deletion, which yielded the same pattern of findings, are provided in an online supplement

We examined all variables for outliers (i.e., |z-score| > 3.29), the dependent variables for non-normality, and the independent variables for multicollinearity. The number of outliers per variable was: Personal Norms (3), Perceived Peer Norms (1), Bystander Intervention-Interpret (2), and Bystander Intervention-Intervene (1). To reduce the impact of outliers, we changed their values to make them only one unit more extreme than the closest non-outlier except on the Bystander Intervention – Interpret subscale, which also was negatively skewed and thus was reflected and transformed with a logarithm (Tabachnik & Fidell, 1996). Multicollinearity was not found among the independent variables ($r < .50$ and VIF values < 2).

Hierarchical regression analyses were conducted to assess the relation of the predictors to each step of the bystander intervention model. Gender, perceived peer norms, and personal norms were entered in the first block of the analysis; gender by perceived peer norms, gender by personal norms, and personal norms by perceived peer norms interaction terms were added in the second block. Finally, the three-way interaction among gender, perceived peer norms, and personal norms was added in the third block.

Simple slopes tests were conducted to aid interpretation of interactions that were significant at $p < .05$. If the slope of a line differed significantly from zero at $p < .05$, it was interpreted to mean that different levels of the independent variable had different effects on the dependent variable within that group (e.g., males, females, etc.). Lines representing different values of the moderators were plotted and visually examined.

Results

Intercorrelations, means, and standard deviations of the variables are presented in Table 1. For ease of interpretation and comparison, this information is presented using the original, untransformed values for any variables that underwent transformation. The regression results are

presented in Table 2 and discussed further below. Exact *p* values are presented in the table while *p* values less than conventional alpha levels are reported below.

Bystander Intervention

Notice. Model 1 produced $R^2 = .129$, F (3, 228) = 11.26 $p < .001$. Perceived peer norms were a significant predictor in this model; students who perceived their peers to be more anti-bullying/harassment were less likely to notice bullying. Adding the two-way interactions for model 2 explained significantly more variance, $sr^2 = .060$, F (3, 225) = 5.52, $p = .001$, $R^2 = .189$, F (6, 225) = 8.72, $p < .001$. In this model, gender was a significant predictor, with females being more likely to notice bullying. In addition, two interactions were significant: perceived peer norms by gender and perceived peer norms by personal norms (see Figure 1). Simple slopes testing showed that females were more likely to notice bullying and sexual harassment if they viewed their peers as being less anti-bullying/harassment (β = -.318, $p < .001$), but there was no effect of perceived peer norms for males (β = -.043, $p = .497$). In addition, the significant perceived peer norms by personal norms interaction showed that students who were more anti-bullying/harassment noticed greater levels of perpetration when they perceived their peers to be more (versus less) anti-bullying/harassment, although simple slopes tests within levels of perceived peer norms were non-significant (both *p*s > .05). Adding the three-way interaction for model 3 produced $R^2 = .196$, F (7, 224) = 7.82, $p < .001$; the interaction was not significant and neither was the additional amount of variance explained, $sr^2 = .008$, F (1, 224) = 2.12, $p = .147$.

Interpret. Model 1 produced $R^2 = .243$, F (3, 228) = 24.45, $p < .001$. Perceived norms and personal norms were significant. Students who perceived their peers to be more anti-bullying/harassment and students who had less anti-bullying/harassment personal norms scored higher on this subscale. Adding the two-way interactions for model 2 produced a significant

change in amount of variance explained, sr^2 = .056, F (3, 225) = 6.05, p = .001, R^2 = .300, F (6, 225) = 16.06, p < .001, with both the interaction of perceived peer norms and gender and the interaction of personal norms and perceived peer norms being significant. Adding the three-way interaction for model 3 produced a significant increase in variance explained, sr^2 = .023, F (1, 224) = 7.45, p = .007, R^2 = .322, F (7, 224) = 15.23, p < .001. In model 3, gender, personal norms, the interaction between personal and perceived peer norms, and the three-way interaction among personal norms, perceived peer norms, and gender were all significant. As shown in Figure 2, low perceived peer norms had little effect on males' interpretation of perpetration as a problem, regardless of their personal norms. However, more anti-bullying/harassment females with low perceived peer norms reported greater interpretation of perpetration as a problem compared to both less anti-bullying/harassment females (β = .285, p = .008) and more anti-bullying/harassment males (β = .153, p = .032) who had similar perceptions of peer norms. It is important to note that the latter finding is significant at the .05 level rather than the .01 level. In contrast, high perceived peer norms seemed to affect males but not females. When perceived peer norms were more anti-bullying/harassment, males with low personal norms were less likely to interpret perpetration as a problem than females with similar personal norms (β = -.278, p < .001) and males with high personal norms (β = .376, p = .022), which again was significant at the .05 level rather than the .01 level.

Accept Responsibility. Model 1 produced R^2 = .119, F (3, 228) = 10.25, p = .000. Only personal norms significantly predicted accepting responsibility to intervene; students with more anti-bullying/harassment attitudes scored higher on this subscale. Adding the two-way interactions for model 2 produced a significant increase in variance explained, sr^2 = .072, F(3, 225) = 6.68, p < .001, R^2 = .191, F(6, 225) = 8.85, p < .001. In this model, those who perceived

their peers to be more anti-bullying/harassment were more likely to accept the responsibility to intervene. All of the two-way interactions were also significant (see Figure 3.) The gender by personal norms interaction showed that, although more anti-bullying/harassment personal norms led to greater acceptance of responsibility for both males (β = .163, p = .011) and females (β = .372, p < .001), the effect was more pronounced for females. Perceived peer norms had opposite effects for male and females. More anti-bullying/harassment perceived peer norms led to greater acceptance for males (β = .109, p = .016) and less acceptance for females (β = -.105, p = .020). These findings are significant only at the .05 level. Finally, the interaction between personal norms and perceived norms showed opposite effects of personal norms depending on perceived peer norms. Specifically, more anti-bullying/harassment personal norms led to more acceptance of responsibility when perceived peer norms were also anti-bullying/harassment, but to less acceptance when perceived peer norms were less anti-bullying/harassment. Simple slopes tests were non-significant (both ps > .05), indicating no differences within levels of perceived peer norms. Adding the three-way interaction for model 3 produced R^2 = .192, F (7, 224) = 7.62, p < .001; neither the interaction nor the additional variance explained was significant, sr^2 = .001, F (1, 224) = .41, p = .522.

Knowledge. Model 1 produced R^2 = .030, F (3, 227) = 2.36, p = .073, with no significant predictors. Adding the two-way interactions produced a significant increase in variance explained, sr^2 = .090, F (3, 224) = 7.63, p < .001, model 2 R^2 = .120, F (6, 224) = 5.09, p < .001. Both perceived peer and personal norms were significant predictors of intervention knowledge; students with less anti-bullying/harassment norms and students who perceived their peers to be more anti-bullying/harassment had higher scores on the knowledge subscale. In addition, all three two-way interactions were significant (see Figure 4). The gender by personal norms

interaction showed that females were more likely to report knowing how to intervene if they viewed themselves as more anti-bullying/harassment (β = .260, p = .004), but males were not (β = -.031, p = .662). In contrast, the gender by perceived peer norms interaction showed that males were more likely to report knowing how to intervene if they viewed their peers as more anti-bullying/harassment (β = .183, p < .001), but females were not (β = -.079, p = .079). The personal norms by perceived peer norms interaction showed that when perceived peer norms were more anti-bullying/harassment, students reported greater intervention knowledge, regardless of their personal norms (β = -.209, p = .161); however, when perceived peer norms were less anti-bullying/harassment, personal norms that were less anti-bullying/harassment predicted greater intervention knowledge than personal norms that were more anti-bullying/harassment (β = -.436, p = .003). Adding the three-way interaction for model 3 produced R^2 = .126, F (7, 223) = 4.61, p < .001; neither the interaction nor the additional amount of variance explained was significant, sr^2 = .006, F (1, 223) = 1.62, p = .204.

Intervene. Model 1 produced R^2 = .077, F (3, 227) = 6.28, p < .001. Students were more likely to report intervening in a situation if they had more anti-bullying/harassment personal norms. Adding the two-way interaction for model 2 produced a significant increase in amount of variance explained, sr^2 = .075, F (3, 224) = 6.60, p < .001, R^2 = .152, F (6, 224) = 6.67, p < .001. In this model, perceived peer attitudes and the interaction between perceived attitudes and gender were significant, as was the interaction between personal and peer norms. Adding the three-way interaction produced a significant increase in variance explained, sr^2 = .043, F (1, 223) = 12.01, p = .001, model 3 R^2 = .195, F (7, 223) = 7.71, p < .001. The following were significant: perceived peer attitudes, the interaction between perceived peer norms and gender, the interaction between personal and perceived peer norms, and the three-way interaction among

personal norms, perceived peer norms, and gender. As shown in Figure 5, regardless of personal norms, there was little effect on intervention of more anti-bullying/harassment perceived peer norms for females (β = .026, p = .886) and of less anti-bullying/harassment perceived peer norms for males (β = -.058, p = .416). However, when perceived peer norms were more anti-bullying/harassment, males were more likely to intervene in bullying and sexual harassment if their personal norms were also anti-bullying/harassment (β = .340, $p < .001$); when perceived peer norms were less anti-bullying/harassment, females who were more anti-bullying/harassment reported greater intervention compared to less anti-bullying/harassment females (β = .440, p = .001) and to more anti-bullying/harassment males (β = .497, $p < .001$).

Discussion

This study elucidated the role of personal norms and perceived peer norms in the five-step bystander intervention model, highlighting important gender differences. Overall, anti-bullying/harassment personal norms were most salient for female high school students' bystander intervention, particularly if they perceived peers to hold less anti-bullying/harassment norms. Perceived peer norms were more predictive of male high school students' self-reported intervention in bullying and sexual harassment, especially if their personal norms were more anti-bullying/harassment. Our study extends previous research showing that perceptions of other men's attitudes predicted whether college men would intervene in a sexual assault situation (Brown & Messman-Moore, 2010; Fabiano et al., 2003) to the effect of male high school students' perceived peer norms on intervention in bullying and sexual harassment. In addition, the combination of high personal and high perceived norms predicted three steps of the model (noticing, accepting responsibility, knowledge) regardless of gender, and the other two steps of

the model specifically for male students, suggesting that consistency of personal and peer attitudes and behaviors are important in guiding behavior.

Based on previous literature, we expected that (1) personal and perceived peer norms would predict each step of the bystander intervention model, with more anti-bullying/harassment norms relating to a greater likelihood of each step, (2) that perceived peer norms would contribute to more variance in these behaviors, particularly within the final step of the model, and (3) that perceived peer norms would moderate the relationship between personal norms and bystander intervention behavior; in particular, we expected that when peer norms were more anti-bullying/harassment, students would act in accordance with those norms, but students would act in accordance with their own personal norms when perceived peer norms were low.

Study findings indicate that personal and perceived peer norms did not significantly predict each step of the model, with both significantly impacting only the Interpret subscale in model 1. However, perceived peer norms were indeed significant predictors of Intervene, the final step, in the second and third models run for this analysis. Regarding the expected moderation of perceived peer norms on the relationship between personal norms and bystander intervention behavior, this expectation was met for the majority of analyses, with results indicating differences in this effect based on gender. A comprehensive breakdown of these findings is discussed within the following sections.

Personal and Peer Norms in Relation to Bystander Intervention: Gender as Moderator

Notice

Students who perceived their peers to hold more anti-bullying/harassment attitudes were less likely to notice bullying and sexual harassment. Past research has shown that youth who are victimized (Jenkins & Nickerson, 2017) and those who are aggressive (Jenkins et al., 2020) are

more likely to notice bullying, suggesting that the noticing step may reflect an overall proxy of the prevalence of bullying and sexual harassment in a school environment. Gender moderated the findings; when peer norms were perceived as less anti-bullying/harassment, females, but not males, were more likely to notice bullying and sexual harassment. Past research has shown that male middle and high school students view bullying and aggression as acceptable (Gonulitas & Mulvey, 2021; Mulvey et al., 2019), and sexual harassment of female adolescents is pervasive, largely tolerated and normalized (Brown, 2020). Within these contexts, female students may be more personally attuned to issues of bullying and harassment, particularly if they perceive their peers to accept it. In addition, there was an interaction of personal and peer norms, in which more anti-bullying/harassment peer norms were associated with noticing bullying and sexual harassment, but only for students with anti-bullying/harassment personal norms. It is possible that the convergence of peer and personal norms is important for raising awareness. The personal norms assessed within this paper related to views about bullying, sexual harassment, and intervening as opposed to actually noticing or cognitively accessing information, providing another explanation for the insignificant personal norms findings.

Interpret

Students with more anti-bullying/harassment personal norms were more likely to interpret bullying and sexual harassment as problems requiring help, but those with more anti-bullying/harassment perceived peer norms were less likely to do so. These effects were qualified by a three-way interaction, however. Probing showed that anti-bullying/harassment perceived peer norms were associated with interpreting a situation as an emergency, but this was only true for males with more anti-bullying/harassment personal norms. Male students may need this convergence of personal and peer norms, as they tend to perceive more pressure (from self and

other sources, such as peers) to conform to gender roles regarding bullying and sexual harassment (Nielson et al., 2020). In contrast, and consistent with our hypothesis about the interaction of personal and peer norms, female students were guided by their personal norms if they perceived peers to be less anti-bullying/harassment, which may reflect them viewing bullying and sexual harassment as less acceptable (Gonultas & Mulvey, 2021; Mulvey et al., 2019).

Accept Responsibility

The next step of the bystander intervention model goes beyond recognition and concern for bullying and harassment to taking personal responsibility for action, which was predicted by personal norms. This finding was consistent with studies showing students' personal norms to associate with bystander intervention behavior in bullying (Datta et al., 2016; Salmivalli & Voeten, 2004). Personal norms were stronger predictors of accepting responsibility for female students. Male students were more likely, and female students were less likely, to accept personal responsibility for intervening when peer norms were more anti-bullying/harassment. Furthermore, moderating effects indicated that students with anti-bullying/harassment personal norms and anti-bullying/harassment perceived peer norms were more likely to accept the responsibility to intervene. This is aligned with aspects of the situational-cognitive model of bystander behavior and theory of reasoned action in that assuming responsibility to intervene arises from both perceived social norms and personal norms toward intervening (Casey et al., 2017).

Know How to Help

Although there were no main effects of personal or perceived norms in the first model for knowing what to do to intervene in bullying and sexual harassment, the models with interaction

effects revealed main effects for both norms, as well as moderated effects. Anti-bullying/harassment personal norms predicted greater knowledge for female students, and anti-bullying/harassment perceived peer norms predicted greater knowledge for male students, consistent with findings from other steps. As predicted, when perceived peer norms were more anti-bullying/harassment, students had greater intervention knowledge regardless of their personal norms. When perceived peer norms were less anti-bullying/harassment, however, students with less (rather than more) anti-bullying/harassment personal norms had greater intervention knowledge. Jenkins and colleagues (2020) had a similar finding that aggressive youth were more likely to report knowing how to intervene. It is possible that knowledge of what to do reflected the school climate and expectations of treating others with dignity and respect, but that this was not aligned with the adolescents' self and perceived peer norms.

Intervene

The final step of the bystander intervention model, self-reported intervention behavior, showed a three-way interaction. Male students were more likely to intervene in bullying and sexual harassment if their personal norms and perceived peer norms were both anti-bullying/harassment, whereas female students with more anti-bullying/harassment personal norms and less anti-bullying/harassment peer norms reported greater intervention. Similar to findings for other steps, male students were particularly impacted by a convergence of their own norms and their peer norms, likely because of pressure from self and others (Nielson et al., 2020), and the salience of peers for how to behave in sexual aggression (Brown et al., 2020; Brown & Messman-Moore, 2010; Fabiano et al., 2003). In contrast, female high school students who perceived peers to be less anti-bullying/harassment seemed to compensate for this by relying on their own personal norms to guide their intervention behavior, consistent with past

findings (Pozzoli & Gini, 2010) and our hypothesis. A recent study on gender conformity found that early adolescents perceived the most pressure from themselves, followed by peers, and then parents, highlighting the importance of one's own internalized ideals (Nielson et al., 2020). Female adolescents may have internalized values of engaging in efforts to prevent these forms of violence (Fairbairn, 2020).

Implications for Practice

This study suggests that both personal norms and perceived peer norms are important to target when shifting bystander intervention behavior. Social norms campaigns, which use data from the specific population to present correct information about peer group norms in order to reduce perceived peer pressure and improve healthy attitudes and behaviors, have led to positive changes in bullying (Perkins et al., 2011) and harassment (Paluck & Shepherd, 2012). Our results indicate that male high school students may be particularly impacted by their perceptions of peers, so including representation from males in the data and in the campaign would be important. In the broader sexual assault prevention field, men have been the focus of social norms campaigns to engage in bystander intervention (Mennicke et al., 2021). Because female students in the study were guided strongly by their personal norms, particularly when they perceived low anti-bullying/harassment norms of peers, they may be further empowered to lead efforts to raise awareness of the importance of bystander intervention.

These findings provide important implications for practice. Practically speaking, social norms interventions that target bystander intervention would benefit from integrating these gender differences. For example, interventions should work to target the importance of perceived peer norms for male students, particularly in areas related to sexual harassment. These same interventions might also want to identify and reinforce strong prosocial personal norms that

guide female students. These findings may indicate that although social norms broadly emphasize perceived peer norms among all students (Perkins et al., 2005), interventions could be differently applied to male and female students in school. Even beyond targeted interventions, school teachers and staff may provide further support among their students, by working to address misperceived peer norms for male students, and reinforcing prosocial personal norms among female students in order to promote active bystander behavior.

Limitations and Future Research Directions

This cross-sectional study was based on self-reports from a relatively small sample of predominantly White students attending a school in an affluent community. Therefore, there may be bias or a social desirability effect and limited generalizability. Future research should include larger, more diverse samples and consider methodology such as peer nominations. Longitudinal studies would also allow us to examine whether the norms influence the subsequent bystander intervention process. Most of the personal norms and peer norms assessed were attitudinal, which did not allow us to fully examine or compare different types of norms, such as descriptive norms (e.g., perceptions of actual behavior of peers). In addition, the norms included in this study were largely prescriptive, or beliefs about what one should or ought to do, reflective of injunctive norms (Cialdini et al., 1990). Future research should expand on this work to examine the different types of norms, and to assess the beliefs one closely adheres to. Future research might also benefit from examining bystander intervention in bullying and sexual harassment separately, as one might be more or less willing to intervene in these different scenarios.

Conclusion

This study adds to our understanding of the interplay between personal norms and perceived peer norms as they relate to the bystander intervention process in bullying and sexual

harassment for male and female high school students. Although both personal and peer norms predicted bystander intervention, the effects varied in relation to noticing the issues, identifying them as problems requiring help, accepting responsibility for intervening, knowing what to do, and acting to intervene. Female high school students were largely guided by their personal norms, particularly when they perceived their peers to have less anti-bullying/harassment norms, whereas male high school students' bystander intervention was more impacted by perceiving peers' norms as more anti-bullying/harassment. The convergence of anti-bullying/harassment personal and peer norms was particularly salient for male high school students. Overall, results suggest that it is important to target both personal norms and perceived peer norms to encourage youth to intervene in incidents of bullying and sexual harassment.

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Table 1

Means, Standard Deviations, and Bivariate Correlations for Male and Female Students

	Total Sample *M* (*SD*)	Males *M (SD)*	Females *M (SD)*	1	2	3	4	5	6	7
1. Personal Norms	21.06 (3.53)	19.34 (4.34)	22.26 (2.13)		**.494**	-.002	**-.392**	**.331**	.069	**.281**
2. Peer Norms	15.15 (4.22)	15.13 (4.71)	15.17 (3.87)	**.175**		-.144	-.081	**.288**	**.306**	**.327**
3. Notice	6.88 (2.21)	6.44 (2.09)	7.20 (2.25)	.024	**-.416**		**-.360**	**.341**	**.316**	**.260**
4. Interpret	10.56 (1.47)	10.08 (1.48)	10.90 (1.37)	**-.397**	.112	**-.249**		**-.375**	**-.265**	**-.393**
5. Accept	8.74 (1.89)	8.49 (1.77)	8.91 (1.96)	**.353**	-.024	.090	**.270**		**.552**	**.680**
6. Knowledge	8.38 (1.81)	8.39 (1.81)	8.38 (1.82)	**.261**	-.019	-.001	**-.198**	**.470**		**.538**
7. Intervene	12.06 (2.08)	11.86 (2.08)	12.19 (2.08)	**.267**	-.089	**.234**	**-.407**	**.534**	**.356**	

Note. Means and standard deviations are presented using untransformed values; correlations used the transformed data. The range of values is 0 – 24 for Personal Norms and Peer Norms, 3 – 12 for the Notice, Interpret, Accept, and Knowledge subscales, and 4 – 16 for the Intervene subscale. Correlations appear above the diagonal for male students and below the diagonal for female students. Bold correlations are significant at $p < .05$.

Table 2

Standardized and Unstandardized Regression Coefficients with p-values and Confidence Intervals

Bystander Intervention		B	SE	β	*p*	95% CI for B Lower CI	95% CI for B Upper CI
Notice							
Model 1	Gender	.481	.311	.107	.124	-.132	1.094
	Perceived Norms	**-.184**	**.036**	**-.338**	**.000**	**-.255**	**-.113**
	Personal Norms	.105	.054	.144	.051	-.001	.211
Model 2	Gender	**.678**	**.306**	**.151**	**.028**	**.075**	**1.281**
	Perceived Norms	.232	.126	.426	.067	-.017	.480
	Personal Norms	.040	.164	.055	.806	-.282	.362
	Perceived x Gender	**-.275**	**.078**	**-.805**	**.001**	**-.429**	**-.121**
	Personal x Gender	.051	.109	.099	.642	-.163	.265
	Personal x Peer	**.036**	**.011**	**.233**	**.001**	**.014**	**.057**
Model 3	Gender	**.811**	**.319**	**.181**	**.012**	**.183**	**1.439**
	Perceived Norms	.182	.130	.334	.165	-.075	.439
	Personal Norms	.090	.167	.123	.589	-.238	.419
	Perceived x Gender	**-.217**	**.088**	**-.635**	**.014**	**-.390**	**-.044**
	Personal x Gender	.007	.112	.013	.952	-.215	.228
	Personal x Peer	**.087**	**.037**	**.568**	**.019**	**.014**	**.160**
	Personal x Peer x Gender	-.045	.031	-.377	.147	-.106	.016
Interpret							
Model 1	Gender	-.039	.034	-.076	.243	-.106	.027
	Perceived Norms	**.011**	**.004**	**.174**	**.005**	**.003**	**.019**
	Personal Norms	**-.041**	**.006**	**-.478**	**.000**	**-.052**	**-.029**
Model 2	Gender	-.056	.033	-.108	.090	-.122	.009
	Perceived Norms	-.015	.014	-.242	.263	-.042	.012
	Personal Norms	-.026	.018	-.309	.137	-.061	.008
	Perceived x Gender	**.018**	**.008**	**.447**	**.036**	**.001**	**.034**
	Personal x Gender	-.013	.012	-.226	.253	-.037	.010
	Personal x Peer	**-.005**	**.001**	**-.270**	**.000**	**-.007**	**-.003**
Model 3	Gender	**-.083**	**.034**	**-.159**	**.015**	**-.150**	**-.016**
	Perceived Norms	-.005	.014	-.083	.706	-.033	.022
	Personal Norms	**-.036**	**.018**	**-.426**	**.042**	**-.071**	**-.001**
	Perceived x Gender	.006	.009	.154	.515	-.012	.025
	Personal x Gender	-.005	.012	-.079	.697	-.028	.019
	Personal x Peer	**-.015**	**.004**	**-.847**	**.000**	**-.023**	**-.007**
	Personal x Peer x Gender	**.009**	**.003**	**.649**	**.007**	**.003**	**.016**
Accept							
Model 1	Gender	-.181	.267	-.047	.499	-.708	.346

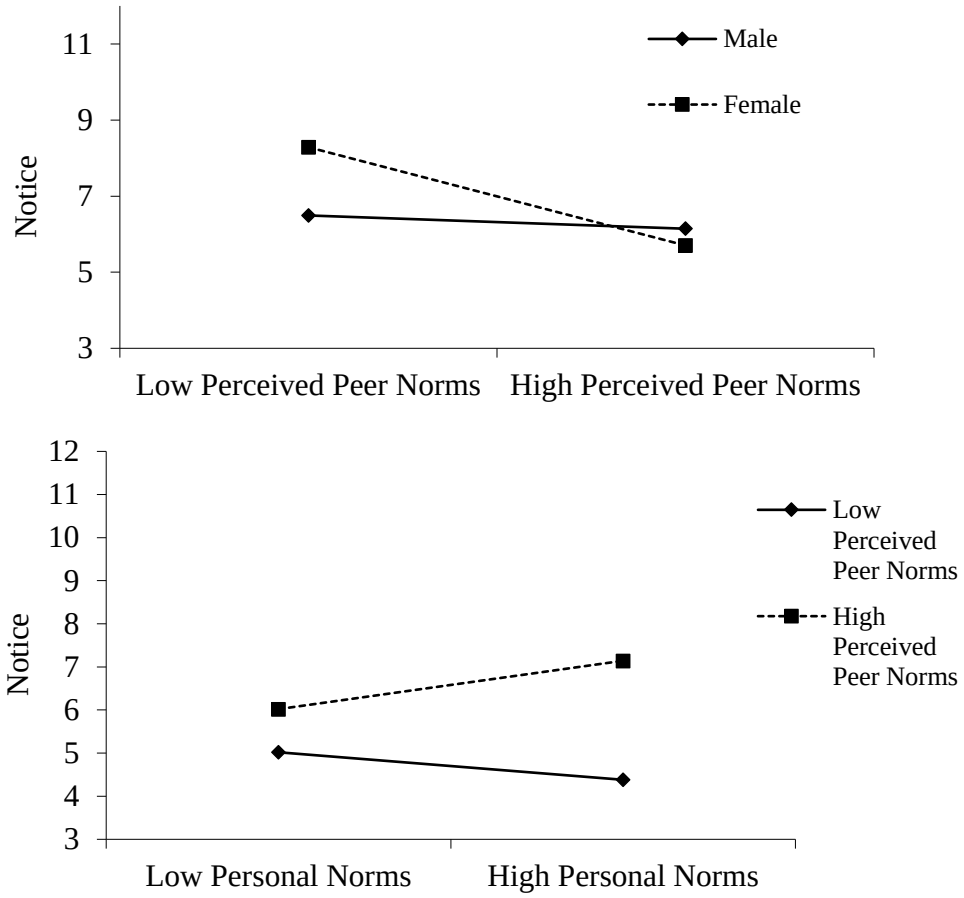
	Perceived Norms	-.004	.031	-.009	.888	-.065	.057
	Personal Norms	**.229**	**.046**	**.366**	**.000**	**.138**	**.321**
Model 2	Gender	-.028	.261	-.007	.915	-.543	.487
	Perceived Norms	**.324**	**.108**	**.695**	**.003**	**.112**	**.536**
	Personal Norms	-.046	.140	-.073	.742	-.321	.229
	Perceived x Gender	**-.214**	**.067**	**-.734**	**.002**	**-.346**	**-.083**
	Personal x Gender	**.209**	**.093**	**.478**	**.025**	**.026**	**.392**
	Personal x Peer	**.034**	**.009**	**.261**	**.000**	**.016**	**.053**
Model 3	Gender	.022	.273	.006	.935	-.516	.561
	Perceived Norms	**.305**	**.112**	**.655**	**.007**	**.085**	**.525**
	Personal Norms	-.027	.143	-.043	.849	-.308	.254
	Perceived x Gender	**-.192**	**.075**	**-.658**	**.011**	**-.340**	**-.044**
	Personal x Gender	**.192**	**.096**	**.440**	**.047**	**.003**	**.382**
	Personal x Peer	.054	.032	.409	.092	-.009	.116
	Personal x Peer x Gender	-.017	.027	-.167	.522	-.069	.035
Knowledge							
Model 1	Gender	-.225	.269	-.061	.404	-.756	.306
	Perceived Norms	.037	.031	.083	.233	-.024	.099
	Personal Norms	.084	.047	.139	.073	-.008	.176
Model 2	Gender	-.067	.262	-.018	.797	-.583	.448
	Perceived Norms	**.445**	**.108**	**.996**	**.000**	**.233**	**.657**
	Personal Norms	**-.322**	**.140**	**-.535**	**.022**	**-.597**	**-.047**
	Perceived x Gender	**-.262**	**.067**	**-.932**	**.000**	**-.394**	**-.130**
	Personal x Gender	**.291**	**.093**	**.692**	**.002**	**.108**	**.473**
	Personal x Peer	**.028**	**.009**	**.221**	**.003**	**.010**	**.046**
Model 3	Gender	.032	.273	.009	.907	-.505	.569
	Perceived Norms	**.408**	**.111**	**.912**	**.000**	**.188**	**.627**
	Personal Norms	**-.284**	**.143**	**-.472**	**.047**	**-.565**	**-.003**
	Perceived x Gender	**-.219**	**.075**	**-.777**	**.004**	**-.366**	**-.071**
	Personal x Gender	**.257**	**.096**	**.613**	**.008**	**.068**	**.447**
	Personal x Peer	**.067**	**.032**	**.528**	**.037**	**.004**	**.129**
	Personal x Peer x Gender	-.034	.027	-.344	.204	-.086	.019
Intervene							
Model 1	Gender	-.207	.299	-.050	.489	-.797	.382
	Perceived Norms	.002	.035	.004	.948	-.066	.070
	Personal Norms	**.201**	**.052**	**.293**	**.000**	**.099**	**.303**
Model 2	Gender	-.015	.292	-.004	.959	-.591	.561
	Perceived Norms	**.453**	**.120**	**.890**	**.000**	**.216**	**.690**
	Personal Norms	-.060	.156	-.088	.699	-.368	.247
	Perceived x Gender	**-.294**	**.075**	**-.918**	**.000**	**-.441**	**-.147**
	Personal x Gender	.189	.104	.395	.070	-.016	.393
	Personal x Peer	**.034**	**.010**	**.240**	**.001**	**.014**	**.055**
Model 3	Gender	.280	.298	.067	.349	-.307	.866

Perceived Norms	**.342**	**.122**	**.672**	**.005**	**.102**	**.582**
Personal Norms	.052	.156	.076	.739	-.255	.359
Perceived x Gender	**-.165**	**.082**	**-.515**	**.046**	**-.326**	**-.003**
Personal x Gender	.090	.105	.188	.393	-.117	.297
Personal x Peer	**.149**	**.035**	**1.041**	**.000**	**.081**	**.218**
Personal x Peer x Gender	**-.100**	**.029**	**-.899**	**.001**	**-.158**	**-.043**

Note. Bold *p*-values are significant at $p < .05$.

Figure 1

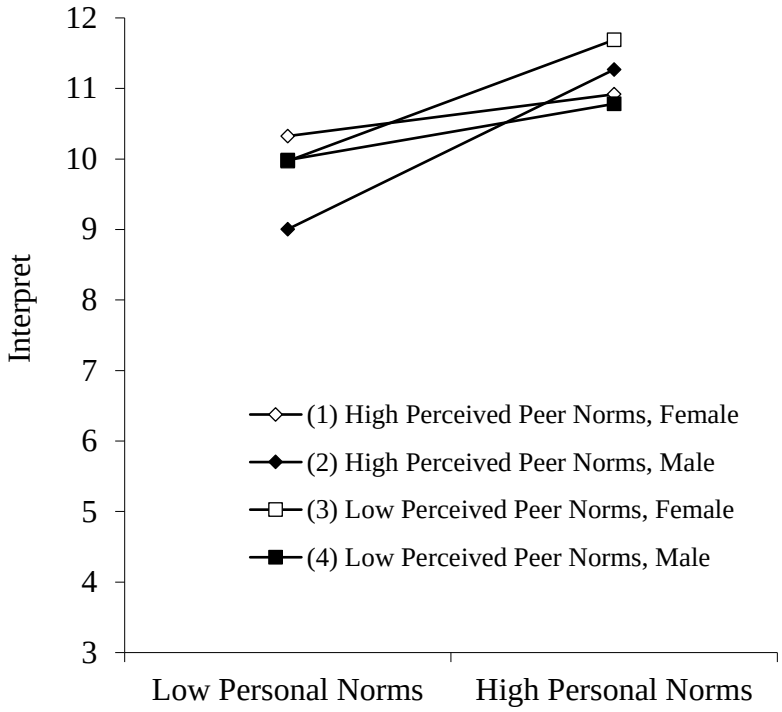
Students' Noticing Bullying/Sexual Harassment as a Function of Gender and Perceived Peer Anti-Bullying/Harassment Norms (top) and Personal and Perceived Peer Anti-Bullying/ Harassment Norms (bottom)



Note. Higher scores indicate higher levels of a variable. Low Personal and Perceived Peer Norms values are one standard deviation below their respective means; high Personal and Perceived Peer Norms values are one standard deviation above their respective means.

Figure 2

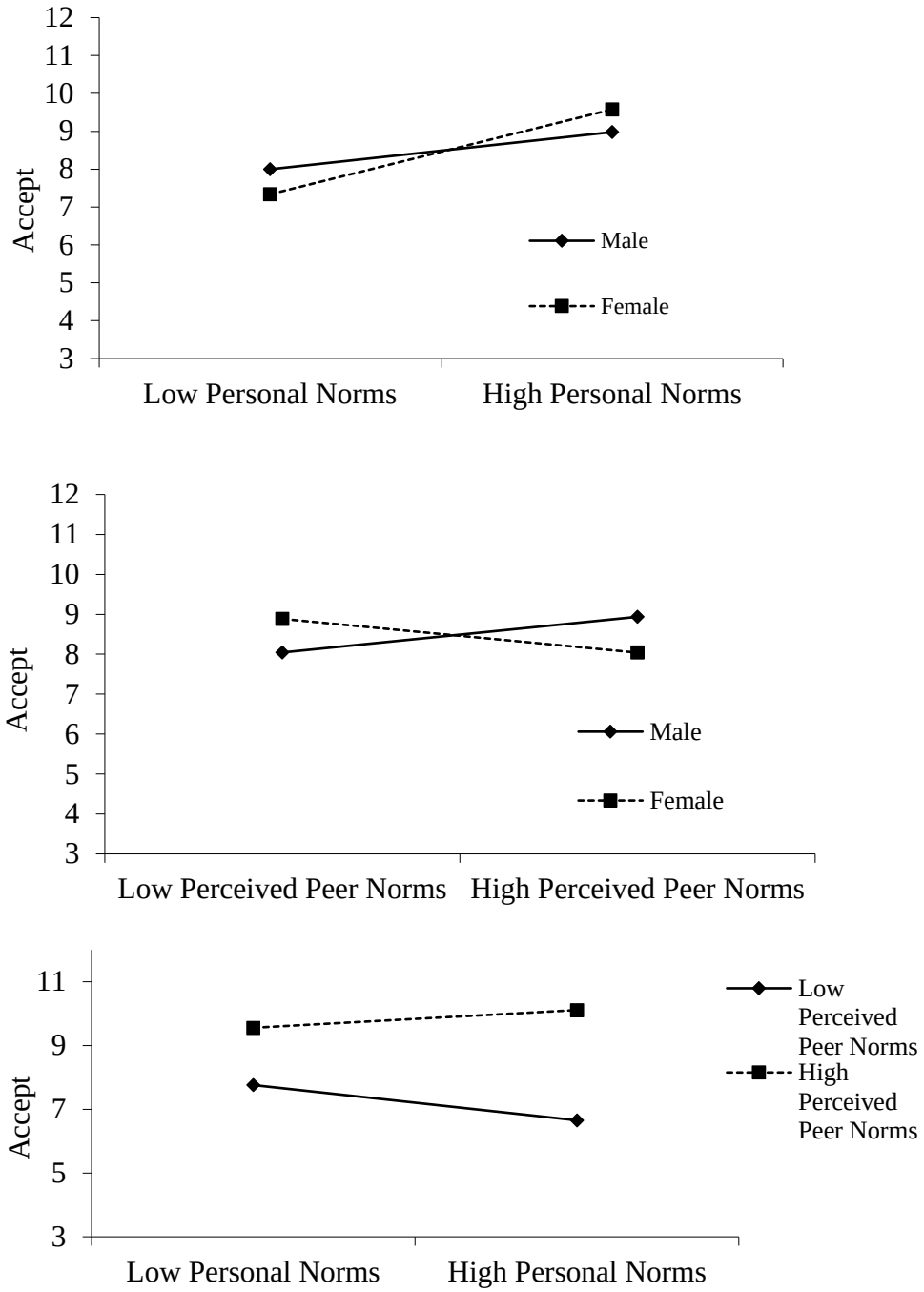
Students' Interpreting Bullying/Sexual Harassment to be a Problem as a Function of Gender, Personal Anti-Bullying/Harassment Norms, and Perceived Peer Anti-Bullying/Harassment Norms



Note. Interpret was back-transformed so that higher scores indicate higher levels of all variables. Low Personal and Perceived Peer Norms values are one standard deviation below their respective means; high Personal and Perceived Peer Norms values are one standard deviation above their respective means.

Figure 3

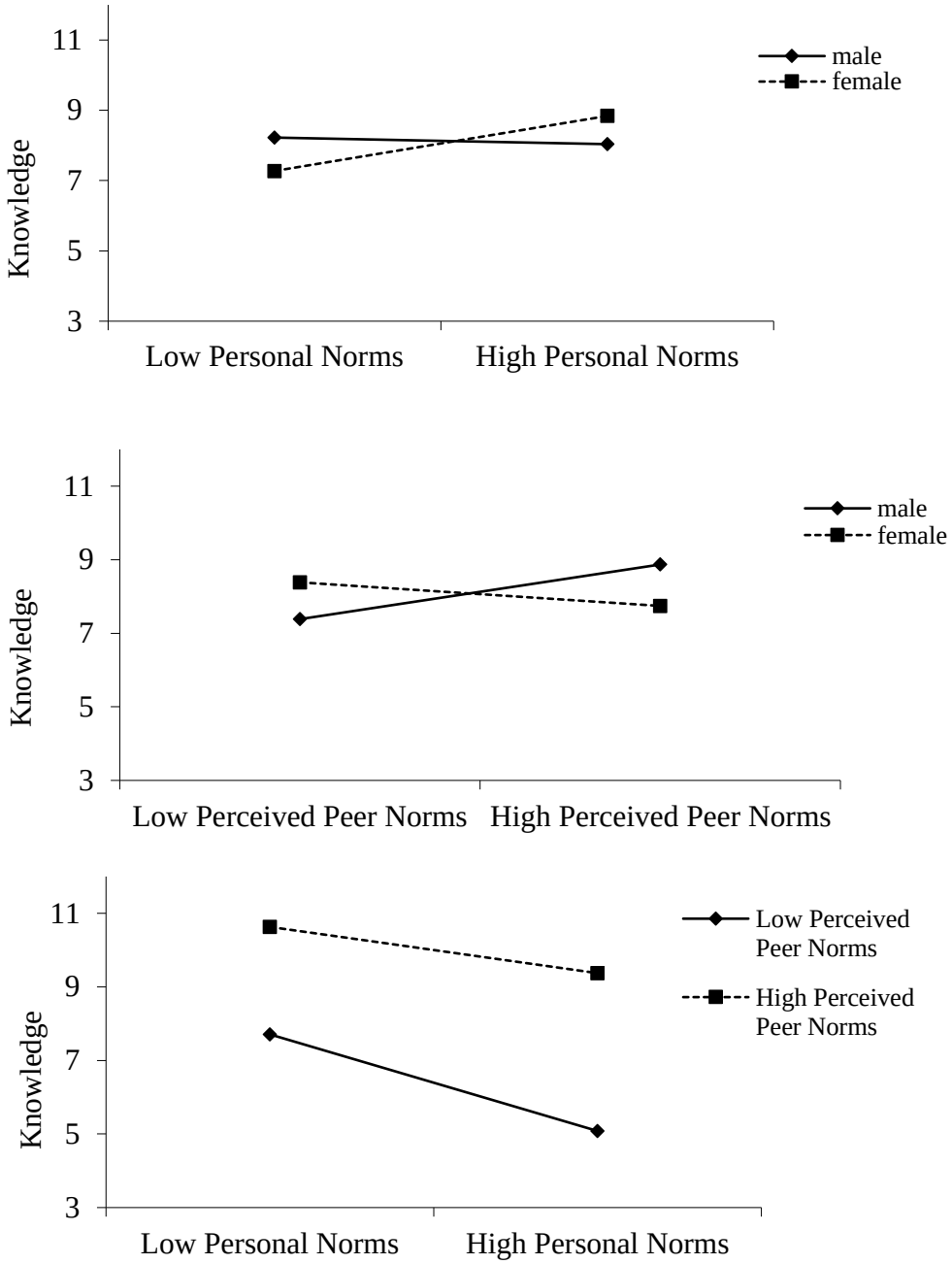
Students' Acceptance of Responsibility to Intervene in Bullying/Sexual Harassment as a Function of Gender and Personal Anti-Bullying Norms (top), Gender and Perceived Peer Anti-Bullying/Harassment Norms (middle), and Personal and Perceived Peer Anti-Bullying/Harassment Norms (bottom)



Note. Higher scores indicate higher levels of a variable. Low Personal and Perceived Peer Norms values are one standard deviation below their respective means; high Personal and Perceived Peer Norms values are one standard deviation above their respective means.

Figure 4

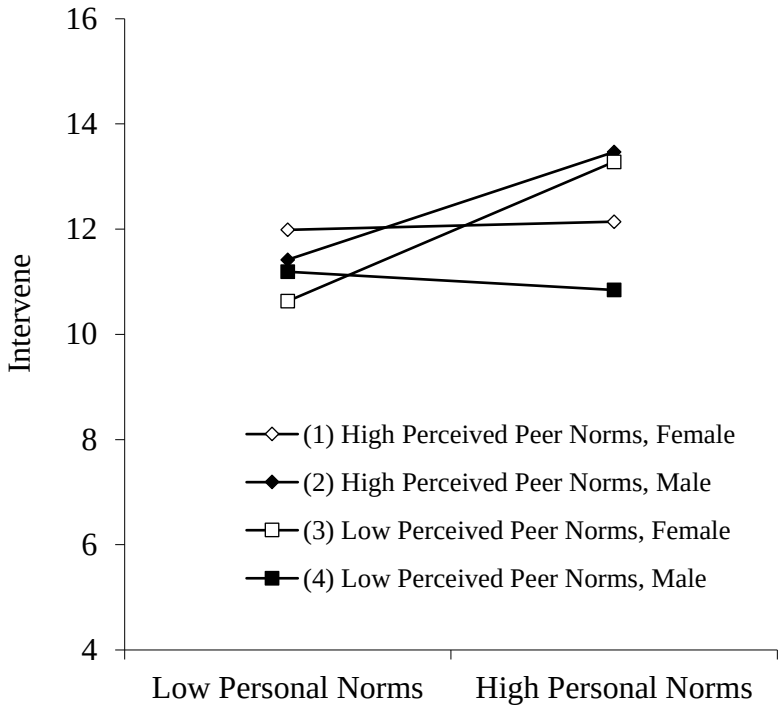
Students' Knowledge of How to Respond to Bullying/Sexual Harassment as a Function of Gender and Personal Anti-Bullying Norms (top), Gender and Perceived Peer Anti-Bullying/ Harassment Norms (middle), and Personal and Perceived Peer Anti-Bullying/Harassment Norms (bottom)



Note. Higher scores indicate higher levels of a variable. Low Personal and Perceived Peer Norms values are one standard deviation below their respective means; high Personal and Perceived Peer Norms values are one standard deviation above their respective means.

Figure 5

Students' Intervention in Bullying/Sexual Harassment as a Function of Gender, Personal Anti-Bullying/Harassment Norms, and Perceived Peer Anti-Bullying/Harassment Norms



Note. Higher scores indicate higher levels of a variable. Low Personal and Perceived Peer Norms values are one standard deviation below their respective means; high Personal and Perceived Peer Norms values are one standard deviation above their respective means.