1

©American Psychological Association, [2018]. This paper is not the copy of record and may not exactly replicate the authoritative document published in the APA journal. Please do not copy or cite without author's permission. The final article is available, upon publication, at: http://psycnet.apa.org/doi/10.1037/dev0000539.

The Moderating Role of Peer Norms in the Associations of Social

Withdrawal and Aggression With Peer Victimization

Fanny-Alexandra Guimond

Mara Brendgen

Stephanie Correia

Lyse Turgeon

Frank Vitaro

Fanny-Alexandra Guimond, Department of Human and Social Development, University of Quebec at Abitibi-Temiscamingue; Mara Brendgen, Department of Psychology, University of Quebec at Montreal, and Ste. Justine Hospital Research Centre, Montreal, Québec, Canada; Stephanie Correia, Department of Psychology, University of Quebec at Montreal; Lyse Turgeon, School of Psycho–education, University of Montreal; Frank Vitaro, Ste. Justine Hospital Research Centre, and School of Psycho–education, University of Montreal.

Funding was provided to Lyse Turgeon and Frank Vitaro authors by the Social Sciences and Humanities Research Council of Canada (Grants 410- 2000-1186 and 410-2001-0552), the Fonds de Recherche du Québec-Société et la Culture (Grant SR-3473), and the Fonds de Recherche du Québec-Santé (Grant 3584). We thank the participating children and their teachers, as well as the research assistants.

Correspondence concerning this article should be addressed to Fanny-Alexandra Guimond who is now at, School of Psychology, Faculty of Social Sciences, University of Ottawa, 136, Jean-Jacques Lussier, Vanier Hall, Ottawa, Ontario, Canada, K1N 6N5. E-mail: fguimond@uottawa.ca

Abstract

This study examined the moderating role of classroom injunctive norms salience regarding social withdrawal and regarding aggression in the longitudinal association between these behaviors and peer victimization. A total of 1769 fourth through sixth graders (895 girls, M = 10.25 years, SD =1.03) from 23 schools (67 classrooms) completed a peer nomination inventory in the fall (T1) and spring (T2) of the same academic year. Participants circled the name of each student who fit the description provided for social withdrawal, aggression and peer victimization at T1 and T2. The salience of injunctive norms was sex-specific and operationalized by the extent to which children displaying the behavior were socially rewarded or sanctioned by their classmates. Generalized estimation equations showed that the association between social withdrawal at T1 and peer victimization at T2 was moderated by injunctive norms. Social withdrawal at T1 was positively associated with peer victimization at T2 in classrooms where injunctive norms for this behavior were salient and unfavorable, as well as in classrooms where injunctive norms for aggression were salient and favorable, albeit for girls only. The association between aggression at T1 and peer victimization at T2 was also moderated by the injunctive norms regarding this behavior. Aggressive children were less likely to be victimized in classrooms where this behavior was rewarded. These results support bullying interventions that target factors related to the larger peer context, including social norms.

Keywords: social withdrawal; peer victimization; aggression; salience of injunctive norms; childhood.

The Moderating Role of Peer Norms in the Associations of Social Withdrawal and Aggression with Peer Victimization

Social withdrawal, a tendency to isolate oneself from familiar and unfamiliar peers are associated with psychosocial problems (Rubin, Coplan & Bowker, 2009). Socially withdrawn children are also at risk of experiencing negative social interactions such as peer victimization (Rubin, Bowker, Rose-Krasnor, Booth-LaForce, & Burgess, 2006). These children seem to be easy targets for bullies because they are less assertive and use avoidance strategies more frequently than others when confronted with difficult peer situations (Guimond et al., 2014; Wichmann, Coplan, & Daniels, 2004). Aggressive children are also at increased risk of peer victimization. Indeed, these children can provoke and get angry easily during social interactions, which may foster aggressive behaviors in peers (Schwartz, 2000). However, internalizing problems such as social withdrawal seem to be an especially important predictor as it continues to be a risk factor of peer victimization across childhood and adolescence, whereas the predictive effect of aggression seems to diminish with age (Brendgen, Girard, Vitaro, Dionne, & Boivin, 2016).

However, not every socially withdrawn child is victimized by peers. Indeed, there are important individual differences in withdrawn children's adjustment. For instance, socially withdrawn boys are more likely to be victimized and excluded than withdrawn girls (Rubin et al., 2006). These interindividual differences may also be partly explained by group-level characteristics (Oh et al., 2008). Specifically, the association between social withdrawal and peer victimization may depend on the extent to which this specific behavior is sanctioned by the peer group and if this behavior occurs in an environment where aggression, a proxy of bullying, is socially rewarded. For example, socially withdrawn boys may suffer greater peer-related

consequences than withdrawn girls because this behavior is perceived by the peer group as less normative for boys and therefore is more likely to be sanctioned by peers, especially if aggressive behaviors are rewarded (Rubin, Coplan, & Bowker, 2009).

Peers provide norms for social behavior (Bukowski, Brendgen, & Vitaro, 2007). Two types of norms have been described that may influence children's behavior. According to Cialdini, Kallgren, and Reno (1991), descriptive norms refer to how most group members behave and are typically operationalized based on the overall prevalence (i.e., the mean level) of a behavior in a given group. In contrast, injunctive norms refer to what group members are expected to do, regardless of the prevalence of the behavior, and are typically operationalized based on the acceptance or rejection of the behavior in a given group. Another important aspect refers to norm salience and represents the degree to which norms are made explicit to the group members through information (for descriptive norms) or through rewards, sanctions or the social standing of the individuals engaging in the behavior (for injunctive norms). The primary difference between descriptive and injunctive norms is that the first type typically does not involve social pressure to conform or social sanctions for noncompliance among group members (Lapinski & Rimal, 2005). Moreover, descriptive norms are not necessarily perceived correctly, nor are they inherently related to any social rewards or sanctions. Thus, injunctive norm salience may be particularly relevant to our understanding of children's behaviors, precisely because it relates to children's desire to be socially rewarded by their peers or to avoid social sanctions (Henry, 2008).

The school environment arguably provides the most immediate and relevant context defining children's behaviors and peer relationships. Studies showed that classroom descriptive norms regarding social withdrawal and aggression vary widely (e.g., Stormshak et al., 1999).

6

The salience of classroom injunctive norms regarding social withdrawal have not been investigated so far, but injunctive norms regarding aggression and antisocial behavior show considerable variability, ranging from very unfavorable to highly favorable (Brendgen, Girard, Vitaro, Dionne, & Boivin, 2013; Henry et al., 2000). Moreover, when classroom injunctive norms are salient and unfavorable regarding aggression, aggressive children are more frequently victimized by their peers. In contrast, when these norms are salient and favorable, aggressive children seem to be even protected from peer victimization (Brendgen, Girard, Vitaro, Dionne, & Boivin, 2015). Although no study has examined whether injunctive norms regarding social withdrawal show a similarly large range as aggression norms, it is likely that social withdrawal norms also vary across classrooms. It is also likely that salient unfavorable norms (i.e., when the behavior is socially sanctioned by peers) may exacerbate the association between social withdrawal and peer victimization. Hence, withdrawn children in classrooms where social withdrawal is sanctioned by the peer group should be more likely to be victimized than withdrawn children in settings where this behavior is not socially sanctioned. Moreover, as aggression norms usually vary widely, in classrooms where aggression (including bullying behavior) is socially rewarded, withdrawn children should be even more likely to be victimized, especially if social withdrawal is not accepted by peers.

The acceptance of a specific behavior such as aggression and social withdrawal by the peer group seems to be greatly influenced by sex role expectations. Indeed, previous studies found important sex differences in peer norms. For instance, Chang (2004) found that social withdrawn behavior was deemed to be more acceptable for girls than for boys, whereas aggression was deemed more acceptable for boys than for girls by peer group. These results

suggest that it may be important to consider potential gender-specific acceptance and rejection of a behavior in a given group.

The Present Study

The main study objective was to examine whether the longitudinal association between social withdrawal and peer victimization varies depending on the sex-specific peer group injunctive norms salience regarding social withdrawal and/or the sex-specific peer group injunctive norms salience regarding aggression, while controlling for previous levels of children's peer victimization. When social withdrawal is sanctioned by the peer group (i.e., when norms are salient and unfavorable), socially withdrawn children should be more frequently victimized by peers than when this behavior is not sanctioned or is rewarded by the peer group (i.e., when norms are neutral or salient and favorable). Moreover, in classrooms where social withdrawal is socially sanctioned, withdrawn children should be even more likely to be victimized by peers when aggression is socially rewarded by peers (i.e., when norms for social withdrawal are salient and unfavorable, whereas norms for aggression are salient and favorable).

A secondary objective of this study was to replicate previous findings (e.g., Brendgen et al., 2015) and to examine the effect of the sex-specific injunctive norms salience regarding aggression in the longitudinal association between this behavior and peer victimization. When aggression is sanctioned by the peer group (i.e., when norms are salient and unfavorable), aggressive children should be more frequently victimized by peers. On the other hand, when aggression is rewarded by the peer group (i.e., when norms are salient and favorable), aggressive children should be less likely to be victimized.

We also examined whether these associations are similar for boys and girls and for different grade levels. Studies have demonstrated that socially withdrawn boys, as well as

aggressive girls, are at greater risk of encountering psychosocial difficulties than socially withdrawn girls, or aggressive boys, because of gender-specific expectations regarding these behaviors (Chang, 2004; Rubin, Coplan, & Bowker, 2009). Withdrawn boys and aggressive girls may therefore experience higher levels of peer victimization, especially when the peer group rejects these behaviors (i.e., when injunctive norms are salient and unfavorable). Moreover, salient unfavorable norms might exacerbate the association between social withdrawal and peer victimization more strongly as children become older and exacerbate the association between aggression and peer victimization more strongly when children are younger. Indeed, younger children tend to describe maladjusted peers as aggressive and usually pay less attention to withdrawn children when compared to older children who notice withdrawn behavior easily and are more likely to describe maladjusted peer as inhibited (Younger & Boyko, 1987). Therefore, older children who display withdrawn behaviors may suffer greater punitive consequences from peers than younger children, who may suffer greater peer-related difficulties when displaying aggressive behaviors when these behaviors are socially sanctioned.

Method

Participants

A total of 1769 fourth through sixth graders (895 girls) from 23 public primary schools (67 classrooms) in low to average SES areas in Montreal, Canada, completed a peer nomination inventory in the fall (T1) and spring (T2) of the same academic year (age range at T1 = 8-13 years, M = 10.25, SD = 1.03). Information about the range of family SES was provided by the School Boards records. School board records also indicated that approximately 54% of the student population from which the study sample was obtained was of Canadian descent (i.e., both parents born in Canada), and 46% of immigrant descent (19% born outside of Canada, 27%

born to one or more parents born outside of Canada). Students of immigrant descent originated primarily from the Caribbean (18.0%), North Africa (4.7%), Central America (4.4%), South America (3.3%), Middle East (2.9%), Southern Europe (2.8%) and Southeast Asia (2.2%). For approximately 33% of students, neither French nor English was their first language and approximately 24% of students spoke neither French nor English at home.

Procedure

Active parental consent and children's active verbal assent were obtained for all participants, with a participation rate of at least 75% of the children in each of the participating classrooms (M = 26 children per classroom). The classroom participation rate was well above the minimum required for valid nomination data with limited peer nominations (i.e., 70%; Bukowski, Cillessen, & Velásquez, 2012). All instruments were approved by the Institutional Review Board and the administrators of the Montreal School Board for a larger study on the prevention of anxiety disorders in school-age children. The research assistants read the instructions aloud and made sure that each participant understood them. Throughout the procedure, the children were reminded to keep their responses confidential. Participants completed a peer nomination inventory to assess social withdrawal, aggression and peer victimization at T1 and T2. For each question, participants received a roster with all the names of the students in their classroom and were asked to nominate up to four students of either sex who best fit the description provided. Previous studies using unlimited peer nominations showed that, for aggression, peer victimization and social withdrawal, the mean number of nominations is usually around 2 per classroom (e.g., Erath, Flanagan, & Bierman, 2008; Stormshak et al., 1999). Therefore, nominations were limited to up to four to reduce the workload for participants while at the same time allowing them to name a sufficiently high number of classmates that may fit the

behavior descriptor. Because classmates could nominate children who were absent, there were no missing data points.

Measures

Social withdrawal. Three items adapted from the Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976) were used at T1 and T2 (i.e., "Who are the people in your classroom that.... are shy, ...are not noticed much, ...have very few friends". Items were z-standardized within the classroom to account for variations in classroom size and averaged (Standardized Cronbach's alphas at T1, T2 = .84, .91).

Aggression. Five items adapted from the PEI were used at T1 and T2 (i.e.., "Who are the people in your classroom who.... start a fight over nothing, ...say they can beat everybody up, ...make fun of people, ...say bad things behind others' backs, ...get other children to gang up on a peer"). Items were z-standardized within the classroom to account for variations in classroom size and averaged (Standardized Cronbach's alpha at T1, T2 = .93, .94).

Peer victimization. Two items from the Victimization subscale of the modified Peer Nomination Inventory (Perry, Kusel, & Perry, 1988) were used at T1 and T2 (i.e., "Who are the people in your classroom that...get hit and pushed by others, ...kids make fun of"). Items were z-standardized within the classroom to account for variations in classroom size and averaged (Standardized Cronbach's alphas at T1, T2 = .74, .79).

Injunctive Norm Salience. In line with previous studies (Brendgen et al., 2013, 2015; Henry et al., 2000), classroom injunctive norm salience for social withdrawal operationalized by the extent to which children displaying this behavior were highly accepted or highly rejected using the correlation coefficient between social preference and social withdrawal. To assess social preference, children were asked to nominate up to four classmates of either sex they most

liked to play or do activities with (i.e., positive nominations) and four others they least liked to play with or do activities (i.e., negative nominations). The criteria outlined by Coie, Dodge, and Coppotelli (1982) were used to compute the social preference score for each participant, separately for each time point. Specifically, the total number of received positive nominations was calculated for each participant and *z*-standardized within classroom at T1 and T2 to create a total Liked-Most-score (LM). Similarly, the total number of received negative nominations was calculated for each participant and *z*-standardized within classroom at T1 and T2 to create a total Liked-Least-score (LL). The LL-score was then subtracted from the LM-score to create the social preference score, which was again *z*-standardized within classroom to account for variations classroom size. Like peer-nominated withdrawal and aggression, social preference was *z*-standardized within classrooms.

As discussed earlier, it is essential to examine sex-specific norms, as social withdrawal and aggression are generally perceived differently for boys and girls by the peer group (Chang, 2004; Rubin & Barstead, 2014). Therefore, the correlations between social preference and withdrawal (or aggression, respectively) were calculated separately for boys and girls within each classroom to yield two sex-specific values of injunctive norm salience for each behavior in each classroom. This strategy allowed us to examine the sex-differential acceptability or rejection of a specific behavior by the peer group, i.e., how *all* classmates think girls versus boys should behave. Sex-specific injunctive norm salience values thus indicate the degree to which all students (male and female) feel it is acceptable for a specific sex to engage in a given behavior. The injunctive norm salience values could theoretically range from 0 (*neutral*, or zero salience) to 1 (most salient) and have a positive or negative valence (with a positive correlation indicating a *favourable* salient norm and a negative correlation indicating an *unfavourable* salient norm).

Peer norms are dynamic and can change across the school year, becoming increasingly stable as group members learn which behaviors are accepted and which are not (Laninga-Wijnen, Harakeh, Dijkstra, Veenstra, & Vollebergh, 2016). Scores between T1 and T2 were correlated for injunctive norms salience for social withdrawal (r = .45, p < .001) and for aggression (r = .50, p < .001), and were therefore averaged across time. Resulting norms for social withdrawal varied between -.80 and .01 (M = -.47, SD = .18), indicating that withdrawn behavior ranged from highly rejected (i.e., salient and socially sanctioned) in some classrooms to a behavior that was regarded, at best, as neutral (i.e., not salient) in other classrooms. Since the maximum value for social withdrawal injunctive norms was close to zero (= 0.01), it will therefore be referred as neutral instead of favorable norms. Resulting norms for aggression varied between -.75 and .56 (M = -.24, SD = .29), indicating that aggressive behavior ranged from highly rejected (i.e., salient and unfavorable) in some classrooms to fairly acceptable in other classrooms (i.e., salient and favorable).

Results

Preliminary Analyses

Bivariate correlations between individual-level variables and between classroom-level variables (i.e., norms) and regression coefficients from multilevel simple regressions for associations between classroom-level variables and individual-level variables are presented in Table 1. Boys were more aggressive and frequently victimized by their peers at T1 and T2 than girls. At T1 and T2, higher levels of social withdrawal and aggression were associated with higher levels of peer victimization. Higher levels of social withdrawal were associated with lower levels of aggression at T1 and T2. Levels of peer victimization at T1 and T2 were positively correlated. Injunctive norms salience regarding aggression was negatively associated

with injunctive norms salience regarding social withdrawal. Hence, in classrooms where aggression is socially rewarded, social withdrawal was more likely to be socially sanctioned, and vice-versa. Grade-level was negatively associated with injunctive norms salience regarding social withdrawal and positively associated with injunctive norms salience regarding aggression. In other words, social withdrawal was less accepted among older children, whereas aggression was less accepted among younger children.

Main Analyses

Multilevel regressions using generalized estimation equations (GEE) to account for the interdependence of data (i.e., children were nested in classrooms) were performed with the Statistical Package for the Social Sciences (SPSS) v.24 software (IBM Corporation, 2016). Goodness of fit was evaluated for each model based on the Quasi-likelihood under independence model criterion (QIC). While this fit index does not allow formal model comparisons, it can be used as a guideline for model selection, with lower values indicating a better overall model fit (Pan, 2001). All variables except child sex and grade were *z*-standardized across the whole sample prior to analyses to facilitate interpretation of effect sizes. Table 2 presents the results from the analyses.

The first model tested was an unconditional model, without including any predictors, which provided preliminary information about model fit (QIC = 1738.39). Inclusion of predictors in the second model resulted in a better model fit compared to the previous model (QIC = 835.38). Specifically, peer victimization and social withdrawal at T1 were positively associated with peer victimization at T2 (b = .58, SE = .03, p < .001, and b = .22, SE = .03, p < .001, respectively), whereas child sex (b = -.02, SE = .04, p = .70), grade (b = .01, SE = .01, p = .45), and T1 aggression (b = -.01, SE = .03, p = .62) were not. Hence, higher levels of peer

victimization and withdrawn behavior at T1 predicted increased peer victimization at T2. The classroom injunctive norms salience for social withdrawal and for aggression were not associated with peer victimization at T2 (b = .00, SE = .00, p = .97; b = -.01, SE = .01, p = .31). All variables from previous steps were entered in subsequent models.

In the third model, three two-way interaction terms were added to test whether a) the association of social withdrawal at T1 with peer victimization at T2 was moderated by injunctive norms salience for social withdrawal or for aggression, and b) the association of aggression at T1 with peer victimization at T2 was moderated by injunctive norms salience regarding this behavior. The model showed better overall model fit compared to the preceding model (OIC = 832.85). The two-way interaction "social withdrawal * withdrawal norms" was significant in predicting victimization at T2 (b = -.06, SE = .03, p = .02). To illustrate this interaction, we examined the association between social withdrawal at T1 and peer victimization at T2 when norms were salient and unfavorable (i.e., at the minimum observed norm value) and when norms were neutral (i.e., at the maximum observed norm value). As shown in Figure 1, the association between social withdrawal and peer victimization was significant when classroom norms for this behavior were salient and unfavorable (b = .28, SE = .04, p < .001). When the classroom norms were neutral and not salient, the association between social withdrawal and peer victimization was not significant (b = -.09, SE = .13, p = .49). Thus, in classroom where social withdrawal was socially sanctioned by peers, withdrawn children were more likely to be victimized. In classrooms where social withdrawal was not socially sanctioned by peers, withdrawn children were less likely to be victimized.

The association between social withdrawal at T1 and peer victimization at T2 was not moderated by aggression norms (b = -.01, SE = .02, p = .80). However, the two-way interaction

"aggression * aggression norms" was significant in predicting peer victimization at T2 (b = -.05, SE = .02, p = .03). To illustrate this interaction, we examined the association between aggression at T1 and peer victimization at T2 when norms were salient and unfavorable (i.e., at the minimum observed norm value) and when norms were salient and favorable (i.e., at the maximum observed norm value). As shown in Figure 2, the association between aggression and peer victimization was significant when classroom norms for this behavior were salient and favorable (b = -.14, SE = .07, p < .001). When the classroom norms were salient and unfavorable, the association between aggression and peer victimization was not significant (b = .05, SE = .05, p = .27). Thus, in classrooms where aggression was socially rewarded by peers, aggressive children were less likely to be victimized. In classrooms where aggression was socially sanctioned by peers, aggressive children were neither more nor less likely to be victimized than other children.

In the fourth model, two three-way interaction terms, as well as two-way interaction terms that were part of the three-way interactions and that were not in the previous models, were included, but tested in separate submodels a and b. In model 4a, the three-way interaction term "social withdrawal T1 * sex * aggression norms" was significant (b = -.09, SE = .05, p = .05). The model including this three-way interaction showed a slightly better overall model fit compared to the preceding model (QIC = 832.77). To illustrate this interaction effect, we examined the association between social withdrawal at T1 and peer victimization at T2 separately for boys and girls and at distinct levels of injunctive norms salience regarding aggression, i.e., when norms were salient and unfavorable (i.e., at the minimum observed norm value) and when norms were salient and favorable (i.e., at the maximum observed norm value). The results showed that, when norms were salient and unfavorable regarding aggression (i.e., aggression was socially

sanctioned), withdrawal was associated with more victimization in boys (b = .27, SE = .07, p < .001) but not in girls (b = .14, SE = .08, p = .08). When norms were salient and favorable regarding aggression (i.e., aggression was socially rewarded), withdrawal was associated with more victimization in girls (b = .40, SE = .09, p < .001) but not in boys (b = .13, SE = .09, p = .14). In model 4b, the three-way interaction "social withdrawal T1 * sex * withdrawal norms" was not significant in predicting peer victimization at T2 (b = .05, SE = .04, p = .25).

All remaining two- and three-way interaction terms between child sex (or grade-level), social withdrawal, aggression, and classroom injunctive norms salience regarding social withdrawal and aggression were also tested but were found to be non-significant (not shown in Table 2 for parsimony).

Discussion

The main objective of the present study was to examine the moderating role of sexspecific classroom-level injunctive norm salience regarding social withdrawal and aggression in
the longitudinal association between social withdrawal and peer victimization. A secondary
objective was to replicate past study findings and examine the moderating role of sex-specific
classroom-level injunctive norm salience regarding aggression in the longitudinal association
between this behavior and peer victimization. Potential child sex and grade-level differences in
this context were also examined.

Socially withdrawn children were more likely to be victimized by their peers than their counterparts. This result supports earlier findings that social withdrawal is associated with later peer-related difficulties and that withdrawn children may be easy targets for school bullies (e.g., Boivin, Hymel, & Bukowski, 1995). Withdrawn children have difficulty standing up for themselves when confronted with aggressive peers and usually prefer to retreat instead of using

assertive strategies or asking for help from an adult (Wichmann, Coplan, & Daniels, 2004). However, the predictive association between social withdrawal and peer victimization depended on the sex-specific classroom injunctive norms regarding withdrawal and regarding aggression.

The salience and valence of sex-specific injunctive norms regarding aggression and social withdrawal showed considerable variation. In line with previous studies, injunctive norms regarding aggression varied from highly salient and favorable to highly salient and unfavorable (Brendgen et al., 2013, Henry et al., 2000). In contrast, although injunctive norms regarding social withdrawal were often salient and unfavorable, they were rarely particularly favorable. This latter result may be due to societal and cultural expectations specific to Western societies (Stormshak et al., 1999). Indeed, withdrawn children may have difficulties developing valued characteristics such as self-confidence, social assertiveness, and initiative that are required for successful adaptation in individualistic and competitive societies such as those in Western countries (Chen, Cen, Li, & He, 2005). Social withdrawal might therefore rarely be highly accepted and rewarded by peers in Western societies. However, the variations between classrooms regarding peer injunctive norms salience could be explained by teachers' influences. For instance, in classrooms where teachers clearly disapprove and sanction aggression, peer norms toward this behavior might be less favorable (Farmer, Lines, & Hamm, 2011). Moreover, in classrooms where teachers establish an inclusive climate, i.e., where similarities between peers are highlighted instead of differences, norms regarding social withdrawal and aggression might be less salient. Peers might be less likely to sanction specific behaviors in these environments. The teachers' role should be further investigated in future studies on peer norms.

Results regarding the moderating role of aggression norms salience partially replicated previous findings. In line with previous findings, aggressive children were at *lower* risk of being

victimized in classrooms where aggression was rewarded by the peer group (Brendgen et al., 2015). However, contrary to expectations, aggressive children were neither more nor less likely to be victimized than others in classrooms where aggression was sanctioned by peers. Together, these findings may indicate that aggressive children may instill fear in others, who may be careful not to provoke them, even if aggressive behavior is disapproved of. When aggression is approved, aggressive children may have a rather large social network that provides additional protection against peer victimization (Huitsing & Veenstra, 2012).

In contrast to aggression, social withdrawal did not convey a lower risk of victimization in any context. Specifically, as expected, withdrawn children were at higher risk of being victimized in classrooms where withdrawal was sanctioned by the peer group. In classrooms where this behavior was not sanctioned by peers (i.e., neutral norms), socially withdrawn children were neither more nor less to be victimized than others. These findings are in line with a Person-context fit model, whereby children's outcomes depend on the interaction (or the fit) between the individual's characteristics and the social context (Thomas & Chess, 1977). According to this model, child maladjustment is not necessarily a product of a "bad" behavior and a negative environment but rather a mismatch between the child and the context (Magnusson & Stattin, 1998). For instance, Leadbeater and colleagues (2003) found that children with emotional difficulties were more likely to be victimized in classrooms where their classmates were more socially competent than children in other classrooms. Thus, a specific behavior such as social withdrawal seems to be an important risk factor for victimization by peers in social settings where this behavior does not fit with what is expected (Bellmore, Witkow, Graham, & Juvonen, 2004).

19

The link between social withdrawal and peer victimization was also moderated by aggression norms salience, albeit differently for girls and boys. Indeed, socially withdrawn girls were more likely to be victimized by peers in classrooms where girls' aggressive behavior was socially rewarded. Although our measure of aggression did not distinguish between different forms of aggression, these findings may be driven by classrooms that value specifically relational aggression in girls. When girls' aggression is acceptable, socially withdrawn girls may be easy targets for relational forms of victimization, such as social exclusion or rumour spreading, which also tend to be more prevalent forms of aggressive behavior amongst girls rather than amongst boys (Crick & Grotpeter, 1995). In contrast, socially withdrawn boys were more frequently victimized in classrooms where boys' aggressive behavior was socially sanctioned. Socially withdrawn boys may lack certain social abilities required for successful social interactions with peers. Compared to socially withdrawn girls, socially withdrawn boys may have a greater tendency to react aggressively when teased and harassed. However, reactive aggression is seldom an effective strategy of defense, but often leads to further victimization, which may then even be perceived as justified by peers (Troop-Gordon & Ladd, 2015). Indeed, studies show that withdrawal is positively correlated with reactive aggression and withdrawn-aggressive children are at highest risk of becoming the target of peer abuse (Ladd & Burgess, 1999). This outcome may be especially likely in contexts where boys' aggression is rejected. Despite our large sample, we lacked statistical power to test for such a potential quadruple interaction between sex, withdrawal, aggression, and aggressive norm salience. Further studies with even larger samples are required to replicate and elucidate this issue.

Multilevel simple regressions revealed that social withdrawal was less accepted (i.e., norms were salient and unfavorable) in older children than in younger children, whereas

aggression was less accepted in younger children than in older children. Previous studies have also found that younger children are more likely to deem aggression inacceptable and are less sensitive to social withdrawal. In contrast, older children seem to be less tolerant towards withdrawn behavior and inhibition than towards aggression than younger children (Younger & Boyko, 1987). However, the longitudinal associations between social withdrawal, aggression and injunctive norms salience at T1 and peer victimization at T2 were not moderated by child grade. Norm violations may be problematic and increase the risk of peer victimization in social settings where norms are unfavorable toward a specific behavior, independently of child age or grade. However, the age range of our sample limits the generalizability of our results beyond 4th to 6th graders. Samples covering a wider age range are thus needed to examine a potential moderating effect of grade-level in these associations before any firm conclusion is drawn.

Strengths, Limitations and Conclusions

This study has a number of positive features. First, the use of a longitudinal perspective helped establish the directionality of the link between social withdrawal and peer victimization. Second, this study is the first to examine the moderating role of injunctive norms salience regarding social withdrawal and aggression in the predictive link between social withdrawal and peer victimization. Injunctive norms salience was based on the actual acceptance or rejection of a given behavior, operationalized using its correlation with social preference within a given classroom setting and separately for boys and girls, rather than participants' perceptions of their peer norms.

Our study also has several limitations. First, the external validity is limited given the ethnic composition of the sample. Although recent studies have shown that social withdrawal is associated with peer-related difficulties in both Western (e.g., Rubin et al., 2006) and Eastern

samples (e.g., Wei & Chen, 2008), this association is typically weaker in the latter, especially in rural communities (e.g., Chen, Wang, & Cao, 2011). Future studies should investigate the role of the cultural context in the interactive link between behavioral norms and social withdrawal in predicting peer victimization. Second, social withdrawal was assessed as a general construct (i.e., peer nominated children that are shy, not noticed much and have very few friends). This measurement lacks the ability to differentiate the subtypes of social withdrawal such as preference for solitude, shyness and social reticence (Rubin, Bowker, & Kennedy, 2009), which may yield different results. Third, all study variables were peer-reported. Some behaviors, such as peer victimization, may therefore be underestimated because the peer group might not necessarily be aware of all children's peer-related difficulties, especially those of less noticeable students such as withdrawn children.

Finally, in limiting the peer nominations to four nominations per item, it was not possible to calculate prevalence rates or descriptive norms regarding withdrawn and aggressive behavior in the study sample, which is typically achieved by allowing respondents to nominate an unlimited number of classmates for each item. While we have utilized peer nominations to compute injunctive norms salience, this type of norm may also be measured by asking group members to rate the degree to which a behavior is acceptable or not within the group, in this case, the classroom. They are other drawbacks to limited peer nominations. Traditional peer nominations (e.g., Coie, Dodge, Coppotelli, 1982) solicited three nominations and this practice was followed in many studies but may cause an issue to the ecological validity (Terry, 2000). Although students may have trouble coming up with four names for questions about constructs with low prevalence (e.g., aggression, peer victimization and social withdrawal), in some cases students may have wanted to indicate more peers than four (Bukowski, Cillessen & Vélasquez,

2012). The present study findings therefore need to be replicated with unlimited peer nominations and a more direct assessment of peer norms.

Despite these limitations, the present study offers new insights into the role of sexspecific classroom injunctive norms salience regarding social withdrawal and aggression in the
association between these behaviors and peer victimization. Context-specific behavioral norms
seem to play a crucial role in determining whether social behaviors that are often deemed
problematic lead to actual social difficulties with peers. These results support the ongoing
research and clinical initiatives (e.g., KiVa antibullying program; Yang & Salmivalli, 2015) that
focus on the larger peer context, including social norms in the peer group, in bullying
interventions.

References

- Bellmore, A. D., Witkow, M. R., Graham, S. & Juvonen, J. (2004). Beyond the individual: The impact of ethnic context and classroom behavioral norms on victims' adjustment.
 Developmental Psychology, 40, 1159-1172. doi: 10.1037/0012-1649.40.6.1159
- Boivin, M., Hymel, S., & Bukowski, W. M. (1995). The roles of social withdrawal, peer rejection, and victimization by peers in predicting loneliness and depressed mood in childhood. *Development and Psychopathology*, 7, 765-785. doi: 10.1017/S095457
- Brendgen, M., Girard, A., Vitaro, F., Dionne, G. & Boivin, M. (2013). Do peer group norms moderate the expression of genetic risk for aggression? *Journal of Criminal Justice*, 41, 324–330. doi: 10.1016/j.jcrimjus.2013.06.004
- Brendgen, M., Girard, A., Vitaro, F., Dionne, G., & Boivin, M. (2015). Gene-environment correlation linking aggression and peer victimization: Do classroom behavioral norms matter? *Journal of Abnormal Child Psychology*, 43, 19–31. doi: 10.1007/s10802-013-9807-z
- Brendgen, M., Girard, A., Vitaro, F., Dionne, G., & Boivin, M. (2016). Trajectories of peer victimization from primary to secondary school: Risk and protective factors.

 *Developmental Psychology, 52, 1103-1114. doi: 10.1037/dev0000107.
- Bukowski, W. M., Brendgen, M. & Vitaro, F. (2007). *Peers and socialization: Effects on externalizing and internalizing problems*. In J. E. Grusec & P. D. Hastings (Eds.), Handbook of socialization: Theory and research (pp. 355–381). New York: Guilford Press.
- Bukowski, W. M., Cillessen, A.H.N., & Velasquez, A. M. (2012). *Peer ratings*. In B. Laursen, T. Little, & N. Card (Eds.), Developmental Methods (pp. 211-228). New York: Guilford.
- Chang, L. (2004). The role of classroom norms in contextualizing the relations of children's

- social behaviors to peer acceptance. *Developmental Psychology*, 40, 691-702. doi: 10.1037/0012-1649.40.5.691
- Chen, X., Cen, G., Li, D. & He, Y. (2005). Social functioning and adjustment in Chinese children: The imprint of historical time. *Child Development*, 76, 182–195. doi: 10.1111/j.1467-8624.2005.00838.
- Chen, X., Wang, L., & Cao, R. (2011). Shyness-sensitivity and unsociability in rural Chinese children: Relations with social, school, and psychological adjustment. *Child Development*, 82, 1531-1543. doi: 10.1111/j.1467-8624.2011.01616.x
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in Experimental Social Psychology*, 24, 201-234. doi: 10.1016/S0065-2601(08)60330-5
- Coie, J. D., Dodge, K. A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. *Developmental Psychology*, *18*, 557-570. doi:10.1037/0012-1649.18.4.557
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, 66, 710-722. doi: 10.1111/j.1467-8624.1995.tb00900.x
- Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2008). Early adolescent school adjustment:

 Associations with friendship and peer victimization. *Social Development*, *17*, 853-870.

 doi: 10.1111/j.1467-9507.2008.00458.x
- Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology*, 32, 247-256. doi: 10.1016/j.appdev.2011.04.006

- Guimond, F. A., Brendgen, M., Vitaro, F., Forget-Dubois, N., Dionne, G., Tremblay, R. E., & Boivin, M. (2014). Gene–environment interplay in the link of friends' and nonfriends' behaviors with children's social reticence in a competitive situation. *Developmental Psychology*, 50, 956-967. doi: 10.1037/a0034354
- Henry, D. (2008). Changing classroom settings through attention to norms. In M. Shinn & H. Yohikawa (Eds.), *Toward positive youth development: Transforming schools and community programs* (pp. 40-57). New York: Oxford University Press.
- Henry, D., Guerra, N., Huesmann, R., Tolan, P., Van Acker, R., & Eron, L. (2000). Normative influences on aggression in urban elementary school classrooms. *American Journal of Community Psychology*, 28, 59-81. doi: 10.1023/A:1005142429725.
- Huitsing, G., & Veenstra, R. (2012). Bullying in classrooms: Participant roles from a social network perspective. *Aggressive Behavior*, *38*, 494-509. doi: 10.1002/ab.21438
- IBM Corporation (2016). IBM SPSS Statistics for Windows (24.0 ed.). Armonk, NY: IBM Corp.
- Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70, 910-929. doi: 10.1111/1467-8624.00066
- Laninga-Wijnen, L., Harakeh, Z., Dijkstra, J. K., Veenstra, R., & Vollebergh, W. (2016).

 Aggressive and prosocial peer norms change, stability, and associations with adolescent aggressive and prosocial behavior development. *The Journal of Early Adolescence*. doi: 10.1177/0272431616665211
- Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15, 127-147. doi: 10.1111/j.1468-2885.2005.tb00329.x

- Leadbeater, B., Hoglund, W., & Woods, T. (2003). Changing contexts? The effects of a primary prevention program on classroom levels of peer relational and physical victimization. *Journal of Community Psychology*, *31*, 397-418. doi: 10.1002/jcop.10057
- Magnusson, D. & Stattin, H. (1998). *Person-context interaction theories*. In W. Damon & R. M., Lerner (Eds.), Handbook of child psychology: Theoretical models of human development (pp. 685-759). Hoboken, NJ: John Wiley & Sons Inc.
- Oh, W., Rubin, K. H., Bowker, J. C., Booth-LaForce, C., Rose-Krasnor, L., & Laursen, B. (2008). Trajectories of Social Withdrawal from Middle Childhood to Early Adolescence.

 *Journal of Abnormal Child Psychology, 36, 553-566.
- Pan, W. (2001). Akaike's information criterion in generalized estimating equations. *Biometrics*, *57*, 120-125. doi: 10.1111/j.0006-341X.2001.00120.x
- Pekarik, E. G., Prinz, R. J., Liebert, D. E., Weintraub, S., & Neale, J. M. (1976). The pupil evaluation inventory. *Journal of Abnormal Child Psychology*, 4, 83-97. doi: 10.1007/BF00917607
- Perry, D. G., Kusel, S. J., & Perry, L. C. (1988). Victims of peer aggression. *Developmental Psychology*, 24, 807-814. doi: 10.1037/0012-1649.24.6.807
- Rubin, K. H., & Barstead, M. G. (2014). Gender differences in child and adolescent social withdrawal: A commentary. *Sex Roles*, 70, 274-284. doi: 10.1007/s11199-014-0357-9.
- Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual review of psychology*, 60, 141-171. doi: 10.1146/annurev.psych.60.110707.163642
- Rubin, K. H., Wojslawowicz, J. C., Rose-Krasnor, L., Booth-LaForce, C., & Burgess, K. B.

- (2006). The best friendships of shy/withdrawn children: Prevalence, stability, and relationship quality. *Journal of Abnormal Child Psychology*, *34*, 139-153. doi: 10.1007/s10802-005-9017-4
- Schwartz, D. J (2000). Subtypes of victims and aggressors in children's peer groups. *Journal of Abnormal Child Psychology*, 28, 181-192. doi:10.1023/A:100517483156
- Stormshak, E. A., Bierman, K. L., Bruschi, C., Dodge, K. A., Coie, J. D. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70, 169-182. doi: 10.1111/1467-8624.00013.
- Terry, R. (2000). Recent advances in measurement theory and the use of sociometric techniques. In A. H. N. Cillessen & W. M. Bukowski (Eds.), Recent advances in the measurement of acceptance and rejection in the peer system. New Directions for Child Development, No. 88 (pp. 27-53). San Francisco: Jossey-Bass.
- Thomas, A., & Chess, S. (1977). *Temperament and Development*. Oxford: Brunner/Mazel.
- Troop-Gordon, W., & Ladd, G. W. (2015). Teachers' victimization-related beliefs and strategies:

 Associations with students' aggressive behavior and peer victimization. *Journal of Abnormal Child Psychology*, 43, 45-60. doi: 10.1007/s10802-013-9840-y
- Wei, H. S., & Chen, J. K. (2008). Social withdrawal, peer rejection, and peer victimization in Taiwanese middle school students. *Journal of School Violence*, 8, 18-28. doi: 10.1080/15388220802067755
- Wichmann, C., Coplan, R. J., & Daniels, T. (2004). The social cognitions of socially withdrawn children. *Social Development*, *13*, 377-392. doi: 10.1111/j.1467-9507.2004.00273.x
- Yang, A., & Salmivalli, C. (2015). Effectiveness of the KiVa antibullying programme on bully-

victims, bullies and victims. *Educational Research*, *57*, 80-90. doi: 10.1080/00131881.2014.983724

Younger, A. J., & Boyko, K. A. (1987). Aggression and withdrawal as social schemas underlying children's peer perceptions. *Child Development*, *58*, 1094-1100.

Table 1.

Bivariate Correlations and Multilevel Regression Coefficients [95% confidence intervals] Between Individual-Level and Classroom-Level Variables

Variables	1	2	3	4	5	6	7	8
1. Sex		.00	37**	.05	08**	05*	04	11
		[05, .05]	[41,34]	[.00, .09]	[12,03]	[10, .00]	[11, .03]	[41, .18]
2. Grade		_	.01	.01	.00	.00	28**	.42**
			[05, .04]	[04, .06]	[05, .05]	[05, .05]	[54,02]	[.18, .66]
3. Aggression T1			_	10**	.27**	13**	.00	04
				[13,04]	[.23, .32]	[.09, .18]	[08, .08]	[10, .02]
4. Social Withdrawal T1					58**	.56**	01	.01
					[.53, .63]	[.51, .60]	[03, .00]	[03, .04]
5. Peer Victimization T1						.71**	01	03
						[.66, .74]	[01, .00]	[06, .00]
6. Peer Victimization T2						_	.00	03
							[01, .01]	[06, .00]
7. Social Withdrawal Norms								23**
								[43,03]
8. Aggression Norms								_

Note. N = 1769 for individual-level variables. N = 67 for classroom-level variables (norms). Sex was coded 0 = boys, 1 = girls. *p < .05, **p < .01.

Table 2
Multilevel Regression Analyses Assessing the Moderating Role of Peer Norms in the Longitudinal
Association Between Social Withdrawal and Aggression at T1 and Peer Victimization at T2

Model 1 (Unconditional Model) 1738.4 Model 2 835.4 Peer Victimization T1 .58 [.52, .64] Sex 02 [11, .06] .00 Grade .00 Aggression T1 01 [06, .04] .22 [.16, .28]	.03 .04 .01 .03	.00 .70 .45
Peer Victimization T1 .58 [.52, .64] Sex 02 [11, .06] Grade .00 [.02, .05] Aggression T1 01 [06, .04] Withdrawal T1 .22	.04 .01 .03	.70 .45 .62
Sex[.52, .64]Grade[11, .06]Grade.00Aggression T101Withdrawal T1.22	.04 .01 .03	.70 .45 .62
Sex 02 [11, .06] [11, .06] Grade .00 Aggression T1 01 Withdrawal T1 .22	.01	.45 .62
Grade .00 Lo2, .05] 01 Lo5, .04] 06, .04] Withdrawal T1 .22	.03	.62
Aggression T101 [06, .04] Withdrawal T1 .22		
Withdrawal T1 .22	.03	00
[.10, .28]		.00
Withdrawal Norms .00	.01	.97
[01, .01] Aggression Norms01 [04, .01]	.00	.31
Model 3 832.9		
Withdrawal T1 * Withdrawal Norms06	.03	.02
Withdrawal T1 * Aggression Norms [11,01]01	.02	.80
Aggression T1 * Aggression Norms [05, .04]05	.02	.03
[09,01] Model 4a 832.8		
Withdrawal T1 * Sex07 [16, .03]	.05	.18
Aggression Norms * Sex08	.04	.04
[16,01] Withdrawal T1 * Sex * Aggression Norms09 [18, .00]	.05	.05
Model 4b 840.55		
Withdrawal T1 * Sex02 [13, .08]	.05	.64
Withdrawal Norms * Sex .00	.04	.92
[08, .09] Withdrawal T1 * Sex * Withdrawal Norms .05 [03, .13]	.04	.25

Note. N = 1769. *QIC* = Quasi Likelihood under Independence Model Criterion. 95% confidence intervals are shown in brackets.

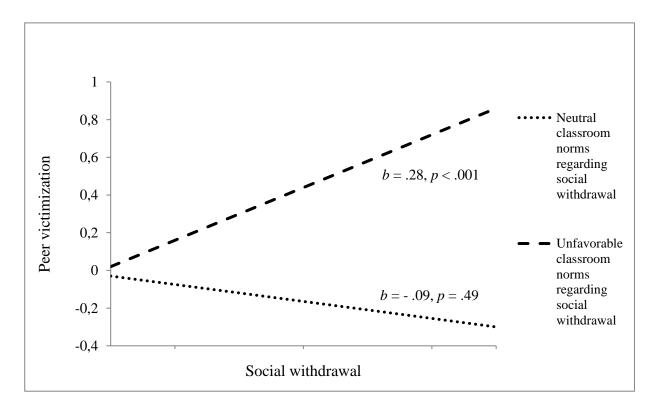


Figure 1. Interaction between social withdrawal and salience of injunctive classroom norms regarding social withdrawal at T1 predicting peer victimization at T2.

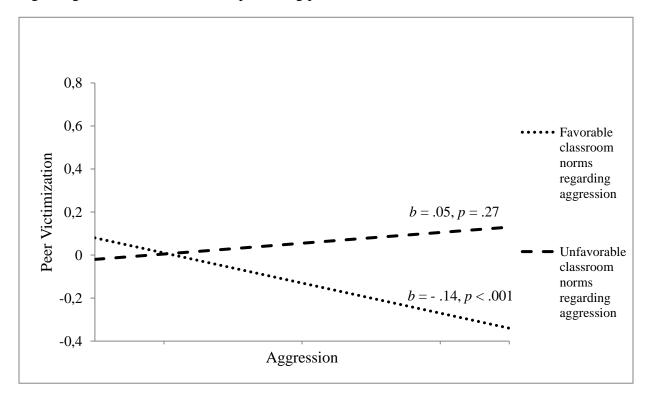


Figure 2. Interaction between aggression and salience of injunctive classroom norms regarding aggression at T1 predicting peer victimization at T2.