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Maladaptive Social Cognitions and Peer Victimization in Elementary-Aged Students

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by

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Abstract

Among elementary-aged students, peer victimization is common and is associated with psychological maladjustment and poor academic achievement. Students with maladaptive social cognitions, like low social competence and low perceived control, are more likely to be victimized, but having a supportive teacher and/or a positive classroom climate might help to mitigate this association. This study aimed to answer the question of whether teacher support and classroom climate protect against peer victimization for students with maladaptive social cognitions. It was hypothesized that teacher support and classroom climate will separately moderate the link between social competence/perceived control and subsequent peer victimization such that children who report high levels of teacher support (or classroom climate) in the fall will have lower levels of peer victimization in the spring of that same school year. Among a sample of 231 3rd through 5th grade students from two Richmond-area elementary schools, those with low social competence in the fall were found to have increased levels of peer victimization in the spring. Furthermore, evidence was obtained for the moderating role of classroom climate such that at high levels of positive classroom climate, the association between social competence and peer victimization was no longer significant. This suggests that a positive classroom climate may act as a protective factor against peer victimization. It is important to determine factors that put children at risk for and that protect children from peer victimization to work towards future interventions aimed at helping students with maladaptive social cognitions.

Maladaptive Social Cognitions and Peer Victimization in Elementary-Aged Students

Peer victimization is a common experience for many school-aged children. Peer victimization refers to any sort of aggressive acts or attacks towards a peer (Salmivalli & Peets, 2009). This aggression may be physical, like hitting, or verbal, such as name calling. It can also

be indirect, or relational, if aggressive behaviors include social exclusion and gossip (Noret et al., 2021). Peer victimization results in many negative consequences for the recipient of aggressive behavior. One especially problematic outcome of peer victimization is psychological maladjustment. For example, research suggests that peer victimization is associated with increases in children's depressive and anxiety symptoms, which has been found to have long lasting negative effects into adulthood (Hamilton et al., 2015; Noret et al., 2021; Saint-Georges & Vaillancourt, 2020). Moreover, academic adjustment is also threatened by experiences of peer victimization. Recipients of peer aggression demonstrate poorer academic competence (Erath et al., 2008), lower levels of school liking, increased perceptions of school being an unsafe place, and increased occurrences of absenteeism (Card & Hodges, 2008). Given these negative consequences, it is important to determine the precursors of peer victimization which have implications for the development of interventions aimed at supporting victims and preventing further victimization.

Maladaptive Social Cognitions Predict Peer Victimization

One possible precursor to peer victimization includes maladaptive social cognitions, like low social competence. Social competence refers to one's effectiveness in social interactions with others (Rose-Krasnor, 1997). Children who display low social competence are less likely to have positive and effective social interactions with others. In fact, having low levels of social competence is common amongst those who are victimized by peers (Hamilton et al., 2015). In a review of prior literature, Hawker and Boulton (2000) found similar trends of low self-reported social competence and experiences of peer victimization. A longitudinal study of lower elementary-aged students showed that deficits in social competence predicted chronically high levels of later peer victimization (Sukhawathanakul & Leadbeater, 2020). Furthermore, teens

who experienced peer victimization were found to have deficits in social competence in both online and offline social interactions (Resnik & Bellmore, 2018). In addition, Steggerda et al. (2022) found that self-rated lunchroom peer acceptance levels in the fall, which may in part reflect negative self-perceptions of social competence, were negatively associated with levels of peer victimization in the spring. Negative appraisals of one's social competence can, therefore, compromise the quality of children's peer interactions. Alternatively, those who have high levels of social competence are better prepared to effectively navigate negative peer interactions and employ effective conflict resolution strategies when needed (Sukhawathanakul & Leadbeater, 2020). Altogether, lacking this social cognition reflects one's confidence and competence in social interactions, which then opens the door for peer victimization.

A second maladaptive social cognition, perceived social control, refers to one's belief in their own abilities to exert control over their social sphere (Weisz, Southam-Gerow, & Sweeney, 1998). When one feels that they have the ability to take control of a social situation and are able to make changes and adjustments when needed, high levels of perceived control are being displayed. However, children with low levels of perceived control may have difficulty avoiding peer victimization, and ineffective behavioral reactions such as avoidance or isolation are likely to occur when peer victimization is experienced. If one does not perceive that they have the ability to make a difference in their social domain, they will likely not be as willing to make an effort to stand up against the peer victimization that they experience. This is especially problematic because research shows that those who worry, isolate, and/or become passive when faced with peer victimization are more likely to continue to be seen as easy targets and continue to be rejected (Zimmer-Gembeck, 2016). However, positive coping strategies and thus improved emotional well-being are likely when one perceives that they have control over their

environment and life situations (Huang et al., 2022). Although it does not appear that there is research directly examining associations between perceived control and peer victimization, it is reasonable to assume that when deficits of perceived control exist, students are more prone to peer victimization.

Both social competence and perceived control are related as they are social cognitions that contribute to positive and effective peer interactions. However, these two social cognitions differ in that social competence refers to one's actual ability to have effective peer interactions, whereas perceived control refers more-so to one's perception that they are able to change and adjust the course of a possibly negative peer interaction. There is limited existing literature that explores each of these variables separately in relation to peer victimization and practically no literature examines the impact of both variables on peer victimization. There is, however, extensive literature that has established an association between victimization and the partially distinct but related social cognition of self-esteem. Social competence and perceived control directly relate to one's self-esteem because when one feels confident in their social abilities and that they are able to exert effective control in social situations, they are likely to have higher levels of self-esteem. When this confidence and competence is lacking, though, one would likely experience low levels of self-esteem. Self-esteem has been found to be a strong predictor of peer victimization, as those who come across as vulnerable communicate to those around them that they may be unwilling or unable to defend themselves against victimization (van Geel et al., 2018). This introduces the concept of the "low-cost victim", someone who appears to be vulnerable to peer victimization thus making them an easy target who will not fight back because they are lacking the social skills and resources to do so (van Geel et al., 2018). This concept is illustrated through the Self-Perception Driven Model which details an indirect effect of self-

esteem on later peer victimization (Saint-Georges & Vaillancourt, 2020). The Self-Perception Driven Model argues that those who display vulnerability and problematic emotional patterns because they are lacking in self-esteem are more prone to peer victimization (Saint-Georges & Vaillancourt, 2020). Therefore, theory suggests that the maladaptive social cognitions of low social competence and low perceived social control may, like self-esteem, signal vulnerability and thus increase risk for peer victimization. Investigations of social competence and perceived control as predictors of peer victimization have the potential to add noteworthy knowledge to the existing literature and may act as a stepping-stone towards future interventions to help prevent peer victimization for students with maladaptive social cognitions.

Teachers' Role in Reducing Students' Risk for Peer Victimization

Even though there are negative factors that result from low levels of social competence and perceived control in children, poor social relationships are not the only possible outcome because of protective factors, such as social support. For example, by forming positive, trusting teacher-student relationships, the negative effects of maladaptive social cognitions may be lessened through the availability of social support. There are at least three possible explanations for why teacher support may reduce risk for victimization.

First, teachers can serve as a beneficial and trusted coping resource in the form of social support for children with maladaptive social cognitions by providing guidance and advice when needed. Teachers may do this by inviting children to seek out advice or talk through challenges they are encountering (Noret et al., 2021). When one feels that they are not alone because they have other people backing them and supporting them, their experienced peer victimization may not pose as large of a threat to the victim. Furthermore, having available social support has been found to increase levels of perceived control specifically (Huang, 2022). So, when one feels

socially supported, they are also likely to feel that they have more control of the situation, which would then result in less victimization. By having the opportunity to learn effective methods for dealing with problematic social situations with a trusted mentor, like a teacher, or being able to safely talk about how one is feeling with such a mentor, children with maladaptive social cognitions may be less likely to be victimized by their peers. Moreover, teacher support itself was found to be associated with lower levels of peer victimization (Lucas-Molina et al., 2015).

Teachers plays an integral role in their students' development both academically and socially. By forming positive relationships with their students and providing opportunities for the positive development of their classroom climate through its ecology and social dynamics, their students are better supported to thrive socially. In addition, positive teacher-student relationships have the power to lessen the occurrences of peer victimization for students with maladaptive social cognitions.

One possible explanation for the protective power of teachers is social referencing. When students look up to their teachers as role-models and use them as an observational reference to make judgements about their peers, they are engaging in social referencing. Social Referencing Theory (Hendrickx et al., 2017) suggests that students use their teacher as a social referent for peer liking and disliking. Students develop a perception of how they think their teacher feels about a peer and then base their own opinions about said peer accordingly (Hendrickx et al., 2017). Hendrickx et al. (2017) found that when students believed that their teacher liked (or disliked) a peer, they were more likely to also like (or dislike) said peer. This highlights the important role that teachers play in the perceptions of their own students. Since teachers are the focal point of attention in the classroom, the Social Referencing Theory provides an explanation as to how teachers can play a protective role for students with maladaptive social cognitions.

Students who have positive relationships with their teachers are typically more well-liked by their classmates (Hendrickx et al., 2017). When teachers initiate positive teacher-student relationships, they have the power to promote the acceptance and liking of students who may need it the most.

The second explanation as to how teachers might reduce children's risk for peer victimization has to do with the instrumental role that teachers play in the establishment and maintenance of positive peer relationships in the classroom. This is developed through the creation of a positive classroom climate. Thinking of teachers as an "invisible hand" in the classroom helps to illustrate this point (Farmer et al., 2011). In other words, supportive teachers provide students with ample opportunities and guidance to form positive social relationships with peers. They might achieve this by managing classroom social interaction patterns, organizing social activities, and affirmatively promoting the active participation and engagement of all students (Farmer et al., 2011). By guiding and managing classroom social dynamics, the overall environment of the classroom benefits. Children's classroom experiences are deeply influenced by their overall liking and acceptance by other peers in the class (Farmer et al., 2011). So, a warm, welcoming classroom climate in which everyone is expected to be accepting helps to promote positive social dynamics between students, which then may reduce peer victimization (Lucas-Molina et al., 2015).

Overview of the Present Study

Peer victimization has been found to have an adverse effect on children's adjustment, which is especially true for younger populations, like elementary aged students. Therefore, studies that aim to identify risk factors for peer victimization, particularly among grade schoolers, are important (van Geel et al., 2018). Theory suggests that maladaptive social

cognitions, including social competence and perceived social control, may increase the risk of peer victimization by reducing the likelihood of positive and effective social interactions with others, as well as increasing the likelihood of peer victimization when one appears to be a vulnerable, low-cost target. Teachers might, however, reduce the risk of peer victimization for children with low levels of social competence and perceived control because of the dynamic role that teachers play as a social referent for their students' peer interactions and their ability to positively manage classroom social expectations.

I hypothesized that, among a sample of 3rd through 5th graders, lower levels of social competence and perceived control at T1 will result in higher levels of peer victimization at T2. I further hypothesized that teacher support and classroom climate will separately moderate the link between social competence/perceived control and subsequent peer victimization such that children who report high levels of teacher support (or classroom climate) at T1 will have lower levels of peer victimization at T2.

Method

Participants

The sample of participants ($N = 231$) was made up of 54.1% female ($n = 125$) and 45.5% male ($n = 106$). 36.8% of participants were 3rd graders, 55% 4th graders, and 8.2% 5th graders who were recruited from 15 classrooms within two elementary schools in a metropolitan area of the Southeastern United States. The participant sample was predominantly Caucasian (62.8 %), but participants also came from African American (7.8 %), Asian (7.4 %), Hispanic or Latino (4.8 %), multicultural (15.9 %), and other (1.3 %) backgrounds.

Procedure

The data used in this study was collected as a part of Project YEARS (Youth Emotional Adjustment and Relationships in School). Approval from the University's Institutional Review Board and the school district was obtained. All participants provided assent and gained parental consent to participate. In the fall (T1) and spring (T2) of a school year, students completed a web-based survey which took about 40 minutes to complete with trained research assistants present. Monetary compensation was granted for participating classrooms. Students in each class were given a university pencil plus a snack regardless of their participation status. Teachers received compensation for their participation as well.

Measures

Peer Victimization

Students completed a four-item measure of Peer Victimization (Ladd & Kochenderfer-Ladd, 2002). Students indicated how often in the past two weeks (1 = *never*, 5 = *everyday*) anyone in their class has victimized them. For example, participants responded to an item such as "Hit or kicked you at school." The mean score was calculated by averaging all four items.

Perceived Control

Students completed an eight-item Perceived Control Scale for Children using the Social Subscale (PControl; Weisz, Southam-Gerow, & Sweeny, 1998). Participants were asked to rate on a 4-point Likert scale how they have felt in the past month (0 = *very false*, 3 = *very true*). For example, students responded to an item such as "I cannot get other kids to like me no matter how hard I try [reverse scored]." The sum score was calculated by adding up all eight items accordingly.

Perceived Social Competence

Students completed a seven-item Perceived Competence Scale using the Social Subscale (Harter, 1982). Participants were asked to decide which kind of kid they are from an item such as "Some kids feel/do not feel it is easy to make friends." Furthermore, participants were asked to report whether their chosen statement is *really true* or *sort of true* for them. The mean score was calculated by averaging all seven items.

Classroom Climate

Students completed an 18-item scale, The Psychological Sense of School Membership Scale (PSSM; Goodenow, 1993) to measure classroom climate levels. Students were asked to respond to each item using a 5-point Likert scale (1 = *almost never*, 5 = *almost always*). For example, students responded to items such as "People in this class are friendly to me." The mean score was calculated by averaging all items together.

Teacher Support

Students completed a four-item measure, the Classroom Life Measure – Adapted Teacher Personal Support Subscale (Johnson et al., 1985), to assess each student's perceived teacher support. Participants were asked to rate how often (1 = *almost never*, 5 = *almost always*) their teacher demonstrates each item for them. For example, students responded to an item such as "Helps when you need it." The mean score was calculated by averaging all four items together.

Results

First, descriptive statistics were calculated, including means and standard deviations for all key study variables, and Pearson bivariate correlations were obtained. Next, a series of regression analyses were run to evaluate the proposed hypotheses. Using Aiken and West's

(1991) approach, hierarchical multiple regression with moderation analyses were conducted using SPSS.

Descriptive Statistics

The mean score for T1 Social Competence is 3.111 with a possible range of 1-4 (1 = *not true*, 4 = *very true*). The mean score for T1 Perceived Control is 18.961. Perceived Control is a sum score with a possible range of 0-3 (0 = *very false*, 3 = *very true*).

The mean score for T1 Peer Victimization is 1.431 with a possible range of 1-5 (1 = *never*, 5 = *everyday*) The mean score for T2 Peer Victimization is 1.589.

The mean score for T1 Classroom climate is 3.401 with a possible range of 1-5 (1 = *almost never*, 5 = *almost always*). The mean score for T1 Teacher Support is 4.153 with a possible range of (1 = *almost never*, 5 = *almost always*).

Pearson bivariate correlations were conducted to examine associations among key study variables. Significant positive correlations were found between T1 Social Competence and T1 Perceived Control. In support of my hypotheses, T1 Social Competence was found to be significantly negatively associated with T2 Peer Victimization. T1 Perceived Control was also found to be significantly negatively associated with T2 Peer Victimization.

Hierarchical Regression Analyses

Hypotheses were tested using a hierarchical multiple regression with moderation framework using SPSS. All continuous predictor variables were mean centered. A series of four regressions was run.

T1 Social Competence Predicting T2 Peer Victimization

For the first two regressions, T1 Peer Victimization, T1 Social Competence, and T1 Classroom Climate (or T1 Teacher Support) were entered as main effects in Step 1. To test the

hypothesis that positive Classroom Climate (or Teacher Support) moderates the relationship between Social Competence and outcomes of Peer Victimization, an interaction term was created by computing the product of the centered values of T1 Social Competence and T1 Classroom Climate (or T1 Teacher Support). This two-way interaction term was added at Step 2 (see Table 2).

The regression model including T1 Peer Victimization, T1 Social Competence, and T1 Classroom Climate as predictors explained a significant portion of the variance in T2 Peer Victimization ($R^2 = .364$, $p < .001$). There was a significant main effect of T1 Peer Victimization as a predictor of T2 Peer Victimization ($b = .477$, $SE = .105$, $p < .05$) but there was not a significant main effect of T1 Social Competence. Consistent with my hypothesis, results showed a marginally significant interaction effect of T1 Social Competence x T1 Classroom Climate ($b = .193$, $SE = .112$, $p = .087$).

The interaction was probed following procedures outlined by Aiken and West (1991). Simple slopes were conducted for the regression of T2 Peer Victimization on T1 Social Competence at the mean of T1 Classroom Climate and at one standard deviation above the mean and below the mean. Regressions were conducted both with and without baseline (T1) peer victimization. When controlling for T1 Peer Victimization, at one standard deviation above the mean of T1 Classroom Climate, T1 Social Competence was not found to be a significant predictor of T2 Peer Victimization ($b = .050$, $SE = .135$, $t = .371$, $p = .711$). At one standard deviation below the mean of T1 Classroom Climate, the association between T1 Social Competence and T2 Peer Victimization approached but did not reach significance ($b = -.164$, $SE = .104$, $t = -1.581$, $p = .116$). In view of this finding, regressions were re-run without controlling for T1 Peer Victimization.

At one standard deviation above the mean of T1 Classroom Climate, T1 Social Competence was not found to be a significant predictor of T2 Peer Victimization ($b = .013$, $SE = .141$, $t = .089$, $p = .929$). At one standard deviation below the mean of T1 Classroom Climate, the association between T1 Social Competence and T2 Peer Victimization was significant ($b = -.214$, $SE = .109$, $t = -1.966$, $p = .051$). See Figure 1. So, students with low levels of social competence in classrooms with poor classroom climate may be more prone to peer victimization than students with low levels of social competence but with positive classroom climates. These results indicate that for students with low levels of social competence, positive classroom climate may act as a protective factor against outcomes of peer victimization.

The regression model including T1 Peer Victimization, T1 Social Competence, and T1 Teacher Support as predictors explained a significant portion of the variance in T2 Peer Victimization ($R^2 = .364$, $p < .001$). There was a significant main effect of T1 Peer Victimization as a predictor of T2 Peer Victimization ($b = .378$, $SE = .095$, $p < .05$) and there was a marginally significant main effect of T1 Social Competence ($b = -.141$, $SE = .079$, $p < .09$). There was not significant interaction effect of T1 Social Competence x T1 Teacher Support.

T1 Perceived Control Predicting T2 Peer Victimization

For the second two regressions, T1 Peer Victimization, T1 Perceived Control, and T1 Classroom Climate (or T1 Teacher Support) were entered as main effects in Step 1. To test the hypothesis that positive Classroom Climate (or Teacher Support) moderates the relationship between Perceived Control and outcomes of Peer Victimization, an interaction term was created by computing the product of the centered values of T1 Perceived Control and T1 Classroom Climate (or T1 Teacher Support). This two-way interaction term was added at Step 2 (see Table 3).

The regression model including T1 Peer Victimization, T1 Perceived Control, and T1 Classroom Climate as predictors explained a significant portion of the variance in T2 Peer Victimization (R^2 = .353, p < .001). There was a significant main effect of T1 Peer Victimization as a predictor of T2 Peer Victimization (b = .484, SE = .105, p < .05) but there was not a significant main effect of T1 Perceived Control. There was not a significant interaction effect of T1 Perceived Control x T1 Classroom Climate.

The regression model including T1 Peer Victimization, T1 Perceived Control, and T1 Teacher Support as predictors explained a significant portion of the variance in T2 Peer Victimization (R^2 = .280, p < .001). There was a significant main effect of T1 Peer Victimization as a predictor of T2 Peer Victimization (b = .398, SE = .094, p < .05) but there was not a significant main effect of T1 Perceived Control. There was not a significant interaction effect of T1 Perceived Control x T1 Teacher Support.

Figure 1

Simple Slopes for T1 Social Competence Predicting T2 Peer Victimization at Differing Levels of T1 Classroom Climate
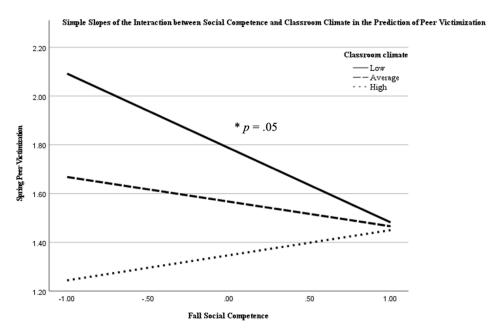
Table 1

Descriptives and Bivariate Correlations of Key Study Variables

	1	2	3	4	5	6	Mean	SD
1. T1 Social Competence	-						3.111	.7598
2. T1 Perceived Control	.700**	-					18.961	3.598
3. T1 Teacher Support	.334**	.331**	-				4.153	.7793
4. T1 Classroom Climate	.663**	.627**	.574**	-			3.401	.5549
5. T1 Peer Victimization	-.336**	-.295**	-.210**	-.254**	-		1.431	.6379
6. T2 Peer Victimization	-.263**	-.225**	-.158*	-.262**	.359**	-	1.589	.7626

**. Correlation is significant at the 0.01 level
*. Correlation is significant at the 0.05 level

Table 2

Prediction of T2 Peer Victimization by T1 Social Competence and T1 Moderator

Moderator:	**T1 Classroom Climate**			**T1 Teacher Support**		
			Step Statistics			
Predictors	ΔR^2	b (*SE* b)	b*	ΔR^2	b (se b)	β
Step 1, Main Effects	.175			.147		
T1 Peer Victimization		.477 (.105)	.323***		.378 (.095)	.296***
T1 Social Competence		-.108 (.099)	-.099		-.141 (.079)	-.137†
T1 Moderator		-.152 (.129)	-.108		-.037 (.073)	-.037
Step 2, Two-Way Interaction	.189			.155		
T1 Social Competence x T1 Moderator		.193 (.112)	.132†		.100 (.075)	.097
Total R²	.364			.302		

*** $p < .001$
† $p < .09$

Table 3

Prediction of T2 Peer Victimization by T1 Perceived Control and T1 Moderator

Moderator:	**T1 Classroom Climate**			**T1 Teacher Support**		
			Step Statistics			
Predictors	ΔR^2	b (*SE* b)	b*	ΔR^2	b (se b)	β
Step 1, Main Effects	.174			.140		
T1 Peer Victimization		.484 (.105)	.327***		.398 (.094)	.311***
T1 Perceived Control		-.019 (.021)	-.080		-.023 (.018)	-.102
T1 Moderator		-.173 (.128)	-.121		-.043 (.074)	-.043
Step 2, Two-Way Interaction	.179			.140		
T1 Perceived Control x T1 Moderator		.028 (.027)	.076		.003 (.019)	.012
Total R²	.353			.280		

*** $p < .001$
† $p < .09$

Discussion

The purpose of this study was to investigate whether teacher support (or classroom climate) moderated the relationship between social competence (or perceived control) and peer victimization amongst a sample of 3rd-5th grade students. In support of my first hypothesis, lower levels of fall social competence and fall perceived control were found to be associated with higher levels of spring peer victimization. Furthermore, my second hypothesis was partially supported by the study's findings. Teacher support was not found to be a moderator of social competence or perceived control on outcomes of subsequent peer victimization. However, a marginally significant interaction between social competence and classroom climate in the fall provide some support for moderation. More specifically, low levels of social competence in the fall predicted high levels of peer victimization in the spring only when students did not perceive

their classroom climate to be positive, as those who perceived a positive classroom climate were less likely to be victimized. This marginally significant moderation effect was present only when baseline levels of peer victimization were not controlled for, suggesting that fall peer victimization explains a significant portion of the variance in spring peer victimization. This suggests that a positive classroom climate may act as a protective factor against outcomes of peer victimization for students with low levels of social competence.

Social Competence, Perceived Control, and Peer Victimization

Aligning with my first hypothesis, fall social competence and fall perceived control were negatively correlated with spring peer victimization. This finding supports previous research as low levels of social competence have been found to be associated with higher levels of experienced peer victimization (Hamilton et al., 2015; Hawker and Boulton, 2000; Sukhawathanakul & Leadbeater, 2020). Limited previous research has examined the association between perceived control and peer victimization. However, it is possible that when one feels that they have a limited ability to make a difference in a negative social situation, like the ability to stop peers from being mean to them for example, this is associated with isolating oneself and demonstrating passive behaviors which are known risk factors for peer victimization (Zimmer-Gembeck, 2016). Furthermore, fall peer victimization was found to significantly predict spring peer victimization. This is not surprising considering the vulnerable position that victimized students are put in, especially when they are victimized at the beginning of the school year. As van Geel et al. (2018) discussed, the "low-cost victim" is someone who does not have the social resources to fight back against being victimized. Peers are very perceptive and pick up on this lack of social skills and resources, so someone who is victimized early in the year may continue to be victimized later in the year due to their position as a "low-cost victim" in the class.

Classroom Climate as a Moderator

Partially supporting my second hypothesis, fall classroom climate was found to be a marginally significant moderator in the relationship between fall social competence and spring peer victimization. I did not obtain evidence for the moderating role of fall teacher support. Although this does not support my original prediction, the significant moderation of fall classroom climate but not fall teacher support may be accounted for by the nature of peer victimization and the extent to which classroom climate encompasses peer relations.

Warm and supportive teacher-student relationships are beneficial for students. Existing research has found that such positive relationships are associated with higher levels of academic performance and school liking as well as lowered depressive symptoms (Jerome et al., 2009; Rucinski et al., 2018). However, a positive classroom climate may play a more influential role on outcomes of peer victimization than teacher support because classroom climate includes children's perceptions of the broader ecology of the classroom regarding peer relationships, feelings of belonging, and the role that the teacher plays in the classroom organization. It is possible that the role teachers play as an invisible hand in the creation of a positive classroom climate as discussed by Farmer et al. (2011) may be more influential than teacher support alone in reducing outcomes of peer victimization for students with maladaptive social cognitions.

Too much teacher support may even have an adverse effect on students' risk for peer victimization. When students are overly dependent on their teacher, they are less likely to explore peer relationships, which in turn increases feelings of loneliness and may result in increased risk for peer victimization due to self-isolation (Birch & Ladd, 1997). Decreasing the likelihood of peer victimization for students with maladaptive social cognitions, such as those with low social competence who feel that they are not well liked or popular, may require more

than just teacher support. These results suggest that classroom environments that are inclusive and supportive of students with maladaptive social cognitions may reduce the risk of negative peer relations, such as peer victimization.

Limitations and Future Directions

These results help to further existing knowledge of the potentially harmful effects of maladaptive social cognitions on children's classroom peer relations by separately exploring the associations between social competence or perceived control on outcomes of peer victimization. However, there are some limitations worth mentioning. First, this study relied on self-report measures which may have led to an inflation of results because the inclusion of teacher reports and/or parent reports would help to improve the validity of the findings by providing multiple perspectives of the students' experiences. In addition, questions about sensitive topics, such as maladaptive social cognitions and peer victimization, may be prone to social desirability bias. It might be that students with maladaptive social cognitions do not feel comfortable reporting so honestly and may answer survey questions with socially desirable answers. For example, students may have reported that they are well-liked and popular amongst their peers, even if they are not.

A strength of this study is the longitudinal design. By collecting data at two separate timepoints, the study controls for baseline levels of the outcome, peer victimization, and allows for inferences about temporal precedence. A limitation of this design is the one-year timespan of the data. The study only covered the course of one school year, so the relationships that each student had with their teacher and classmates during the year of the study may have been especially positive or especially negative. Some teachers are better able to develop high-quality relationships with their students than others are, and some students become naturally closer to

certain teachers than others (Jerome et al., 2009). Future studies should work to track students across multiple school years to explore how the existence of maladaptive social cognitions affects peer victimization with different teachers and in different classroom contexts.

The sample of this study consisted of 3rd-5th graders, which may not be generalizable to other grade levels or age groups. The needs of children in early elementary grades compared to later elementary grades differ as these children are in separate stages of development. These results are also not generalizable to secondary school grade levels, so future studies should explore other grade levels. In addition, the experiences that students have had with previous classes and teachers are not accounted for in this study. The experiences that students have in early elementary grades set the foundation for school liking and peer relationships in later grades. Jerome et al. (2009) found that early child experiences with teacher interactions in K-2nd grade have lasting impacts on students' experiences into preadolescence, which is a potential confounding factor that future studies should account for. Another possible confounding factor that was not explored is gender. Prior studies have consistently found that girls tend to have higher quality relationships with teachers (Birch & Ladd, 1997; Jerome et al., 2009; Rucinski et al., 2018), so similar results would be expected if further explored in this study and future studies.

Conclusion

To summarize, students with low social competence in the fall were found to have increased levels of peer victimization in the spring above and beyond their baseline levels of peer victimization in the fall. Furthermore, this association between low social competence and peer victimization was no longer significant at high levels of classroom climate, suggesting that a positive classroom climate may act as protective factor against peer victimization for students

with maladaptive social cognitions. It is important for future research to further explore the precursors to peer victimization and any preventive factors that exist to help create a learning environment that is supportive of all children, especially those with maladaptive social cognitions. Future interventions aimed at preventing peer victimization may find it effective to focus on providing teachers with strategies to create a positive classroom climate that is warm, welcoming, and accepting of all students.

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