



Preventing school bullying: Examining the association between classroom management, classroom climate, and relational aggression and victimization

 Shi Yu¹
 Soon Singh Bikar
Singh^{2*}

^{1,2}University Malaysia Sabah, Sabah, Malaysia.

¹Email: shi_yu_dp21@ihv.ums.edu.my

²Email: soonbs@ums.edu.my



(+ Corresponding author)

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ABSTRACT

This research aims to examine the relationship between classroom management, classroom climate, and relational aggression and victimization in high school students. A total of 42 teachers and 2168 students from 5 high schools in Shenzhen, China participated in the study. Teachers completed a classroom management style scale, while students answered a questionnaire based on relational aggression peer-nomination and a relational victimization experience scale. Data was analyzed using correlation and multiple regression analysis. The study found no significant correlation between teachers' management style and levels of relational aggression and victimization. However, there was a positive correlation between teachers' sympathy for the victim of relational aggression and the levels of relational aggression in the classroom. Teachers' attitudes towards relational aggression predicted the level of relational victimization, but not the level of relational aggression. Teachers' handling strategies did not predict the levels of relational aggression and victimization. Support from classmates and solidarity were negatively correlated with relational aggression and victimization. The results suggest that teachers' attitudes towards relational aggression play an important role in predicting levels of relational victimization. Teacher sympathy for the victim of relational aggression may inadvertently reinforce the behavior. The study highlights the importance of creating a supportive classroom climate and promoting solidarity among students to reduce relational aggression and victimization. Teachers can be trained to recognize and address relational aggression, and to create a positive and supportive classroom climate. Strategies promoting peer support and solidarity may help to reduce levels of relational aggression and victimization.

Contribution/Originality: This study contributes in its first-hand investigation of the relationship among classroom management, classroom climate, and relational aggression and victimization, which has received less attention in literature compared to physical aggression. It also emphasizes the role of teacher attitudes and provides practical implications for reducing relational aggression and victimization.

1. INTRODUCTION

Studies have shown that being excluded from peers is one of the most challenging issues for primary school students. Additionally, Cheng (2009) notes that many students experience poor interpersonal relationships in secondary school. Peers play a critical role in the psychological development and growth of high school students.

With peer support and companionship, young people can develop a more positive self-concept, and these interactive experiences can have a profound effect on each other. Thus, exclusion from peers can exert considerable pressure on students. This kind of aggression, which is common among adolescents, typically does not receive sufficient attention as it usually does not cause physical harm. In Chinese high schools, teachers are responsible for establishing a comfortable environment where students feel at ease and have positive attitudes. The management style and attitudes of teachers can influence the overall atmosphere of the class and students' thoughts and attitudes.

This study aims to examine the potential impact of high school teachers' management style on non-physical aggressive behavior among students, such as marginalization, exclusion, and slander. Additionally, the study seeks to identify the characteristics of the classroom climate that may be associated with these aggressive behaviors. The goal of this research is to assist educators in understanding the factors of classroom management and climate that contribute to negative interpersonal interactions in high school classes.

2. LITERATURE REVIEW

2.1. Relational Aggression

Scholars have identified a type of attack that harms others' inner feelings in an imperceptible way, described as relational, social, or indirect aggression. It involves manipulating interpersonal relationships through snubbing, exclusion, and spreading rumors, causing damage to others' self-esteem, friendship, or social status. This aggression can be direct or indirect, such as face-to-face threats or private rumors spread to make classmates exclude the victim (Crick & Grotpeter, 1995; Crick, Ostrov, & Werner, 2006; Galen & Underwood, 1997; Lagerspetz, Björkqvist, & Peltonen, 1988).

Previous studies on relational aggression have typically focused on group or individual analysis. Research on group differences often measures variations in relational aggression based on factors such as gender, social status, or culture. Individual studies emphasize the relationship between social adjustment problems, personality traits, and relational aggression. In mediating variable research, cognitive factors like hostile attribution may play a significant role.

Only a limited number of studies have examined the impact of social contexts, such as the family or school, on relational aggression in children and adolescents. While some research has explored the influence of family factors, fewer empirical studies have investigated the impact of school factors on student relational aggression (Merrell, Buchanan, & Tran, 2006).

2.2. Classroom Management Style and Relational Aggression

For teachers, classroom management is one of the most enduring and critical issues in education (Korpershoek, Harms, de Boer, van Kuijk, & Doolaard, 2016). Classroom management refers to the behavior of teachers in managing day-to-day teaching activities. These behaviors can reflect teachers' expectations for classroom discipline, communication styles between teachers and students, teaching styles, classroom space management, as well as teachers' preferences and efforts to achieve educational goals (Mansor, Eng, Rasul, Hamzah, & Hamid, 2012; Postholm, 2013).

To clarify, in this research, the teachers' management style was analyzed from two perspectives: instructional management and people management (Martin, Yin, & Mayall, 2008). Instructional management includes tasks such as monitoring, daily routines, arranging class items, and setting class rules. People management, on the other hand, includes aspects such as moral education and teacher behavior to foster teacher-student relationships. Each of these two perspectives has three types of management style: "interventionist," "inter-actionist," and "non-interventionist" (Koutrouba, Markarian, & Sardanou, 2018).

Relational aggression is a form of covert attack that is easily overlooked by teachers. As a result, teachers may sometimes act as 'non-interventionists', even in cases of obvious aggression. Yoon and Kerber (2003) and Rathakrishnan, Bikar, and Yahaya (2022) argue that teachers' failure to address relational aggression may inadvertently signal to students that social exclusion is an acceptable behavior. In contrast, Voulgaridou and Kokkinos (2015) found that when both peers and teachers discouraged aggression, students were less likely to engage in aggressive behaviors over time. Therefore, this research investigates both the general classroom management style of teachers and their specific approaches to identifying, addressing, and preventing relational aggression.

2.3. Classroom Climate and Relational Aggression

In this research, classroom climate is defined as consisting of six aspects: 'solidarity', 'class rules', 'organization', 'group', 'teachers', support' and 'students' support' (Yoneyama & Rigby, 2006).

Previous research has found that students' emotional and behavioral problems tend to increase in a bad classroom climate, which is not conducive to the formation of friendships (Wang et al., 2020). This suggests that students are more likely to be involved in negative peer interactions and relational aggression; however, by improving classroom climate, such peer victimization can be mitigated (Lombas et al., 2019). According to Humphrey (1984), in highly organized classes with strict behavioral norms, cases of relational aggression should be less, which means 'class rules' may be negatively correlated with class relational aggression, while 'organization' may show a positive correlation with class relational aggression. A study by Baker, Grant, and Morlock (2008) found that students who maintained a good and low-conflict relationship with their teachers had more positive learning outcomes (e.g. self-regulation and good academic performance). Conversely, a conflicting teacher-student relationship will adversely affect students' behavioral adaptation. Mikami, Boucher, and Humphreys (2005) found that reducing the presence of small groups in the class can lead to increased mutual support among classmates. Werner and Nixon (2005) found that students' beliefs about relational aggression were related to their own relational aggression behavior - if students thought relational aggression was acceptable, there would be more aggressive behavior (Bikar, Rathakrishnan, Kamaluddin, Nasir, & Nasir, 2021).

Previous research has found that students' emotional and behavioral problems tend to increase in a poor classroom climate, which is not conducive to the formation of friendships (Wang et al., 2020). Students are more likely to be involved in negative peer interactions and relational aggression in such an environment. By improving classroom climate, peer victimization can be mitigated (Lombas et al., 2019). According to Humphrey (1984), in highly organized classes with strict behavioral norms, cases of relational aggression should be less. This means that "class rules" may be negatively correlated with class relational aggression, while "organization" may be positively correlated with class relational aggression.

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The overall research objectives of this study were:

- (1) To investigate differences in class relational aggression among the three types of teachers' class management styles: interventionist, inter-actionist, and non-interventionist.
- (2) To examine the correlation between teachers' thoughts and practices on relational aggression and the incidence of relational aggression in classrooms.

(3) To explore the relationship between students' perceived class climate and class relational aggression.

The research hypotheses were stated as follows:

- (1) *Differences exist in class relational aggression in classes with different management styles. There will be fewer cases of relational aggression in classes with interventionist and inter-actionist teachers in instructional management, as well as inter-actionist teachers in people management.*
- (2) *The teachers' assessment, attitude, and dealing strategies for relational aggression are correlated and predictive of the situation of relational aggression in the class. If the teacher perceives relational aggression as serious and takes active measures to address it, there will be fewer cases of relational aggression.*
- (3) *Classroom climate and class beliefs about relational aggression are correlated and predictive of class relational aggression. Classroom rules, teachers' support, solidarity, and students' support negatively predict class relational aggression, while the factor of "organization" and class beliefs about relational aggression positively predict class relational aggression.*

3. MATERIALS AND METHODS

This research aimed to investigate the relationship between classroom management, classroom climate, and relational aggression and victimization in high school students.

3.1. Participants

In this study, teachers were administered by the Classroom Management Style Scale, while students completed the Classroom Climate Scale, Relational Aggression Peer-nomination Questionnaire, and Relational Victimization Experience Scale. The study involved 42 teachers and 2,168 students from 42 classes in five high schools in Shenzhen, China who formally participated in the research. The data collection process was meticulously planned, aiming for efficiency and organization. To manage and analyze the substantial dataset, several software tools were employed, including Microsoft Excel for data organization, IBM SPSS Statistics for data analysis, and RStudio for advanced statistical modeling. Microsoft Excel facilitated the arrangement and storage of raw data in an organized manner, allowing for easy data cleaning and filtering. With IBM SPSS Statistics, essential correlation and multiple regression analyses were performed, while RStudio provided a versatile platform for creating customized statistical models and visualizations. These software tools collectively ensured the integrity and organization of the data, streamlining the analysis process for the large dataset.

3.2. Scales and Questionnaires

The scales and questionnaires used in this research were pre-tested to assess their reliability and validity. Item analysis was conducted for each scale and questionnaire using extreme group comparison and homogeneity tests. Questions were selected based on the following criteria: if the t-value (Critical value) generated by the mean difference test was less than 3, the question would be deleted if it fell in the highest and lowest 27% of the total scale scores. Secondly, if the correlation between the item and the total score was less than 0.3, it would also be deleted. In addition, for the validity analysis, the KMO (Kaiser–Meyer–Olkin) test and the Bartlett sphericity test were used to assess whether the pre-test results were suitable for factor analysis. The principal component analysis method and the direct oblique rotation axis method were used to analyze the pre-test results. The internal consistency of each scale was tested using Cronbach's alpha coefficient to determine its stability and consistency.

3.2.1. Classroom Management Style Scale

This research examines the classroom management style of Chinese senior secondary school teachers from two perspectives: general classroom management and classroom management for relational aggression.

Firstly, the "Attitudes and Beliefs of Classroom Control Inventory-Revised" developed by [Martin et al. \(2008\)](#), was used to assess teachers' management styles from two dimensions: instructional management and people management. Each dimension comprised ten questions, and scores were categorized into three levels: interventionist, inter-actionist, and non-interventionist, according to [Martin et al. \(2008\)](#) criteria. Secondly, the subscale "Classroom Management for Relational Aggression" contained seven situational questions, based on pre-test results and scales compiled by [Yoon and Kerber \(2003\)](#) to examine the relationship between physical violence, verbal attack, and relational aggression. This subscale aimed to investigate teachers' assessment, attitudes, and dealing strategies regarding relational aggression situations, and was divided into three parts that corresponded to teachers' assessment, attitudes, and dealing strategies.

The first part of the subscale, "Teacher's Assessment of Relational Aggression," aimed to explore teachers' views on the severity of situations and whether intervention was necessary. Two factors can be obtained from the factor analysis results: "Necessity of Involvement" and "Severity of Situations." The second part, "Teachers' Attitudes toward Relational Aggression," aimed to understand teachers' attitudes toward perpetrators and victims. Two factors can be obtained from the factor analysis results: "Sympathy for Victims" and "Anger toward Perpetrators." The third part, "Teacher's Handling Strategies for Relational Aggression," aimed to provide insight into the six handling methods used by teachers. From the results of factor analysis, four factors can be obtained: "Correcting Behaviors and Reporting to Superiors," "Peers Solving and Inadmissibility," "Private Conversation," and "Discussing Rules with the Whole Class."

3.2.2. Classroom Climate Scale

This scale measured the classroom climate as perceived by students. Students assessed both the overall climate of their class and the specific climate of relational aggression. Since this research was class-based, the average score of each class was calculated after obtaining each student's evaluation score of their own classroom climate. The subscale measuring the overall climate of the class was compiled based on four subscales (solidarity, class regulation, group, and organizational chaos) of [Fraser \(1982\)](#) Learning Environment Inventory and two subscales (teachers' support and students' support) of Classroom Life Inventory proposed by [Johnson, Johnson, and Anderson \(1983\)](#). From the factor analysis results, five factors were obtained: 'students' support', 'class rules', 'teachers' support', 'organization', and 'solidarity'. The official version consisted of a total of 22 questions.

In addition to assessing the general classroom climate in each class, the study also examined students' receptiveness to relational aggression in the class. According to [Crick \(1995\)](#), definition of relational aggression, seven questions (representing different types of aggression) were used to measure the class beliefs of relational aggression.

Furthermore, this research also measured the levels of relational aggression that occurred in a class as a whole. This was defined as the ratio of the number of students who committed acts of relational aggression in the class to the total number of students in the class. Therefore, it was necessary to identify every student who tended to commit acts of relational aggression. The relational aggression peer nomination questionnaire compiled by [Mehari, Waasdorp, and Leff \(2019\)](#) was adapted to assess students' tendency toward relational aggression.

3.2.3. Relational Victimization Experience Scale

Relational victimization in a class was measured in this study as a percentage of the number of victims of relational aggression in a class to the total number of students in the class. To assess relational victimization, this study adopted the Relational Victimization Experience Scale for middle school students, developed by [Martin and Huebner \(2007\)](#). Providing additional information about the scale would improve readers' understanding of its use and development.

4. RESULTS AND DISCUSSION

In Table 1, the mean and standard deviation of each variable in this study are presented. The results of each analysis are described respectively.

Table 1. The mean and standard deviation of the variables of classroom management and classroom climate (N=42).

Variables	Mean	Standard deviation
Management style		
Instructional management	32.40	2.86
People management	19.76	3.13
Teachers' assessment		
Severity of situations	23.34	3.88
Necessity of intervention	25.62	4.28
Teachers' attitude		
Angry with perpetrators	24.70	3.43
Sympathetic to victims	21.84	4.37
Teachers' dealing strategies		
Private conversation	22.94	6.17
Discussing rules with the whole class	20.30	5.10
Peers solving/Inadmissibility	32.80	10.43
Correcting behaviors/Reporting to superiors	49.12	9.68
Classroom climate		
Students' support	14.29	0.80
Class rules	14.93	1.34
Teachers' support	11.57	1.27
Organization	9.96	1.38
Solidarity	12.65	0.78
Beliefs of relational aggression	15.22	1.85

4.1. The Relationship between Teachers' Classroom Management Style and Relational Aggression in Classes

This study examined high school teachers' classroom management styles from two dimensions, "instructional management" and "people management," and measured the degree of teachers' intervention in these dimensions according to Martin et al. (2008) classification. The results showed that 30 teachers (approximately 71% of the total number of participants) were categorized as "interventionists" in instructional management, while 12 teachers (29%) were "inter-actionists," and none were "non-interventionists." In terms of people management, four teachers were interventionists, 33 teachers were inter-actionists, and five teachers were non-interventionists. The majority of high school teachers adopted an "intervention" style when dealing with teaching-related affairs, whereas they preferred students' active participation and establishing teacher-student relationships in an "interactive" way when it came to managing students. Therefore, exploring teachers' classroom management style from different perspectives was necessarily based on this result.

To investigate whether there are differences in relational aggression and victimization among classes with different management styles, this study conducted a comparison of classes in terms of relational aggression and victimization. The results of the one-way ANOVA (Analysis of Variance) test, as shown in Table 2, indicate that classes led by teachers with different 'instructional management' styles did not show significant differences in 'class relational aggression' ($F(1, 48) = 0.87, p = 0.36$) and 'class relationship victimization' ($F(1, 48) = 0.10, p = 0.75$). Similarly, classes led by teachers with different 'people management' styles did not differ significantly in 'class relational aggression' ($F(2, 47) = 0.35, p = 0.71$) and 'class relationship victimization' ($F(2, 47) = 2.24, p = 0.12$).

"The results indicate that there was no significant difference in relational aggression among classes led by teachers with different management styles. The researcher suggests two possible explanations for this outcome. First, it may be due to the fact that the data was not collected from the same group. Previous studies that have shown a significant correlation between teacher-related factors and student-related factors have used questionnaires answered by the same group, either students or teachers. In contrast, the study conducted by Roland and Galloway

(2002) required both teachers and students to fill in questionnaires and found a very low correlation between their responses. Therefore, the use of different sources of data may be one reason why there is no significant correlation in this study. Another explanation is that there may be no significant correlation between teacher-related factors and student-related factors in reality. Bru, Stephens, and Torsheim (2002) found that teachers' classroom management style may cause individual differences but has limited influence on the class as a whole. Teachers' general classroom management behavior may not influence students' interpersonal interactions.

Table 2. The mean, standard deviation and test results of relational aggression of classes led by teachers with different classroom management styles (N=42).

Classroom management style	Number of teachers	Class relational aggression			Class relational victimization		
		Mean	Standard deviation	F value	Mean	Standard deviation	F value
Instructional management							
Inter-actionist	11	0.10	0.05	0.87	0.13	0.10	0.10
Interventionist	31	0.12	0.06		0.14	0.07	
People management							
Non-interventionist	5	0.11	0.07	0.35	0.09	0.07	2.24
Inter-actionist	36	0.12	0.06		0.15	0.08	
Interventionist	2	0.10	0.01		0.10	0.04	

4.2. Teachers' Classroom Management for Relational Aggression

4.2.1. The Correlation of Class Relational Aggression with Teachers' Assessment, Attitude and Dealing Strategies

The results presented in Table 3 demonstrate that there is a positive correlation ($r = 0.30$; $p < 0.05$) between the scores of 'sympathetic to victims' and 'class relational aggression', and a positive correlation ($r = 0.32$; $p < 0.05$) between the scores of 'sympathetic to victims' and 'class relational victimization'. However, no significant correlations were found between teachers' scores on 'severity of situations' and 'necessity of intervention' (parts of teachers' assessment of relational aggression), 'angry with perpetrators' (part of teachers' attitude towards relational aggression), and the scores of the four dealing strategies for relational aggression with 'class relational aggression' and 'class relational victimization'.

Table 3. The correlation of class relational aggression with teachers' assessment, attitude and dealing strategies.

Variables	1	2	3	4	5	6	7	8
Class relational aggression	0.18	-0.06	0.22	0.30*	0.15	0.15	0.17	0.09
Class relational victimization	0.21	-0.09	0.21	0.32*	0.04	-0.03	-0.05	0.10
Teachers' assessment								
1. Severity of situations	-							
2. Necessity of intervention	0.42**							
Teachers' attitude								
3. Angry with perpetrators	0.69***	0.28						
4. Sympathetic to victims	0.40**	0.12	0.58***					
Teachers' dealing strategies								
5. Private conversation	0.10	0.15	0.26	0.36*				
6. Discussing rules with the whole class	0.34*	0.35*	0.17	0.06	0.16			
7. Peers solving/Inadmissibility	0.49***	0.36**	0.37**	0.24	0.25	0.29*		
8. Correcting behaviors/Reporting to superiors	0.41**	0.16	0.31*	0.16	0.06	0.37**	0.20	-

Note: * $p < 0.05$, ** $p < 0.1$, *** $p < 0.001$.

4.2.2. Regression Analysis of Teachers' Assessment, Attitude and Coping Strategies on Class Relational Aggression

During the research, teachers were asked to first familiarize themselves with the contexts in which relational aggression occurred and then complete the questionnaire. The teachers' responses were based on the hypothetical scenarios presented in the questionnaires rather than the realities of their own classrooms. As a result, this study

employed teachers' assessments, attitudes, and strategies for dealing with relational aggression as independent variables, and class relational aggression and relational victimization as dependent variables, for regression analysis.

The variance inflation factor (VIF) output by SPSS was used to examine if there is multivariate collinearity among the independent variables. Myers and Myers (1990) suggested that a VIF value of 10 or above may result in biased regression model due to multicollinearity. In the current analysis, the VIF values range from 1.08 to 2.49, suggesting no multicollinearity among the predictor variables. Regression analysis using the forced entry method was conducted, and the results showed that the joint prediction of 'class relational aggression' by teachers' assessment and attitude towards relational aggression did not reach statistical significance, with $R^2 = 0.12$, $F(4, 45) = 1.46$, and $p = 0.23$. Additionally, the handling strategy for relational aggression by teachers also did not significantly predict 'class relational aggression', with $R^2 = 0.05$, $F(4, 45) = 0.59$, and $p = 0.67$.

However, the results of the regression analysis using the forced entry method, as shown in Table 4, indicate that the joint prediction of 'class relational victimization' by teacher-related factors, including 'severity of situations', 'necessity of intervention', 'angry with perpetrators', and 'sympathetic to victims', reached a significant level, with an R^2 of 0.22, $F(4, 45) = 3.06$, $p < 0.05$. The correlation between the predicted 'class relational victimization' and the actual class relationship damage calculated by the research is 0.47, as indicated by the R value. The variance explained by the four predictor variables in predicting the class relational victimization is 22%. Only the regression coefficient of the 'sympathetic to victims' subscale, which is part of teachers' attitude towards relational aggression, reached a significant level, $t = 2.23$, $p < 0.05$. However, the regression coefficients of the 'severity of situations' and 'necessity of intervention' (both of which are part of teachers' assessment) and 'angry with perpetrators' (part of teachers' attitude towards relational aggression) did not reach a significant level. Additionally, the joint prediction of 'class relational victimization' by the teachers' dealing strategy for relational aggression, including 'private conversation', 'discussing rules with the whole class', 'peers solving/inadmissibility', and 'correcting behaviors/reporting to superiors', is not significant, with an R^2 of 0.02, $F(4, 45) = 0.23$, $p = 0.92$.

Table 4. Regression analysis results of teachers' assessment, attitude, and dealing strategies on class relational victimization.

Predictor variable	Class relational aggression			
	Regression coefficient	Standard error	Standardized regression coefficient	T-value
Teachers' assessment and attitude				
Severity of situations	0.006	0.004	0.340	1.74
Necessity of intervention	-0.004	0.003	-0.253	-1.72
Angry with perpetrators	-0.003	0.004	-0.153	-0.73
Sympathetic to victims	0.006	0.003	0.366	2.23*
Teachers' dealing strategies				
Private conversation	0.001	0.002	0.086	0.56
Discussing rules with the whole class	0.000	0.002	-0.037	-0.022
Peers solving/Inadmissibility	0.000	0.001	-0.081	-0.50
Correcting behaviors/Reporting to superiors	0.001	0.001	0.117	0.72

Note: * $p < 0.05$.

This study found that teachers' assessments and attitudes towards relational aggression could predict class relational victimization, with teachers' sympathy for relational victims being the main explanatory factor. The more sympathetic a teacher is towards the victim, the more severe the relational victimization is in the class. This phenomenon can be explained in two ways. Firstly, teachers' sympathy for victims may make others feel biased and unfair, which may lead to more severe relational victimization within the class (Bru et al., 2002). Secondly, teachers' sympathy may deepen the victim's self-pity and affirm the fact that they have been attacked, increasing students' awareness of being attacked. Consequently, the scores tended to be higher when measuring relational victimization experiences and the situation of class relational victimization was more serious.

4.3. Overall and Specific Class Climate and Class Relational Aggression

4.3.1. Correlation between Class Climate Factors and Class Relational Aggression

The results indicate that the factor of 'students' support' was significantly and negatively correlated with "class relational aggression" ($r = -0.43, p < 0.01$) and "class relational victimization" ($r = -0.31, p < 0.05$). The factor 'solidarity' was also significantly and negatively correlated with 'class relational aggression' and "class relational victimization" ($r = -0.37, -0.35; p < 0.05$). The factor 'organization' was only significantly and negatively correlated with "class relational aggression" ($r = -0.30, p < 0.05$). 'Class beliefs of relational aggression' was only significantly and positively correlated with 'class relational victimization' ($r = 0.46, p < 0.01$). However, 'class rules', 'teachers' support', 'class beliefs of relational aggression', and 'class relational aggression' were not significantly correlated. 'Class rules', 'teachers' support', 'organization', and 'class relational victimization' were also not significantly related.

4.3.2. Regression Analysis of Class Climate Factors and Class Relational Aggression

The results of predicting 'class relational aggression' and 'class relational victimization' based on overall and specific class climate factors found that the joint prediction of 'classmate support', 'class rules', 'teachers' support', 'organization', 'solidarity', and 'class beliefs of relational aggression' on 'class relational aggression' did not reach a significant level, with $R^2 = 0.23, F(6, 43) = 2.16, p = 0.066$. The VIF value obtained before regression analysis by the forced entry method was between 1.35 and 3.90, indicating that there was no multi-collinearity problem among the predictor variables.

The results of the regression analysis using the forced entry method in Table 5 revealed that the joint prediction of 'students' support', 'class rules', 'teachers' support', 'organization', 'solidarity', and 'class beliefs of relational aggression' on 'class relational victimization' was significant, with $R^2 = 0.25, F(6, 43) = 2.43, p < 0.05$. The R value indicated that the correlation between the predicted 'class relationship victimization' by the six predictors and the 'class relational victimization' calculated by the actual research was 0.50. Similarly, the R^2 value suggested that the six predictors could explain 25% of the variance in predicting class victimization, and only the regression coefficient of 'class beliefs of relational aggression' reached a significant level, with $t = 2.69, p < 0.05$.

Table 5. Regression analysis results of class atmosphere factors on class relationship victimization.

Predictor variables	Class relational aggression			
	Regression coefficient	Standard error	Standardized regression coefficients	T value
Students' support	0.002	0.027	0.021	0.08
Class rules	0.006	0.009	0.090	0.59
Teachers' support	0.010	0.012	0.147	0.83
Organization	0.000	0.013	0.001	0.00
Solidarity	-0.025	0.026	-0.239	-0.99
Class beliefs of relational aggression	0.020	0.008	0.455	2.69*

Note: * $p < 0.05$.

The preceding analysis indicates that 'classmate support' and 'solidarity' in a class have the potential to mitigate the occurrence of relational aggression. When students exhibit greater willingness to support one another and are more cohesive, relational aggression tends to be less severe. Mikami et al. (2005) also found that higher levels of cohesion and support among students are associated with more positive peer relationships. Additionally, the factor 'organization' in the class climate was negatively correlated with class relational aggression, possibly because a well-organized classroom environment promotes greater self-control and reduces the likelihood of immediate aggressive or retaliatory behavior in response to interpersonal provocation or disappointment (Elias & Schwab, 2013; Humphrey, 1984; Rathakrishnan, Singh, Yahaya, Kamaluddin, & Aziz, 2022).

5. CONCLUSION

The aim of this study was to investigate the relationship between classroom management, classroom climate, and relational aggression and victimization in high school students. Results indicated that there was no difference in class relational aggression among different types of teacher management styles. However, a significant positive correlation was found between the attitude of being sympathetic to victims and class relational aggression. There was no significant correlation between teachers' strategies for dealing with relational aggression and class relational aggression, and it was found to be impossible to predict class relational aggression based on teachers' dealing strategies. Moreover, 'classmate support', 'solidarity', and 'organization' were negatively correlated with class relational aggression, and 'classmate support' and 'solidarity' were negatively correlated with class relational victimization. In contrast, 'class beliefs of relational aggression' was positively correlated with class relational victimization. Class climate and class beliefs of relational aggression did not predict class relational aggression. However, class beliefs of relational aggression could predict class relational victimization.

Therefore, the findings suggest that a teacher's sympathetic attitude towards relational victims may not necessarily reduce relational aggression in the classroom. Instead, fostering mutual support and solidarity among students may be more effective in reducing class relational aggression. Furthermore, the results indicate that publicly expressing sympathy for victims may actually lead to increased relational aggression in the class. Thus, it is recommended that high school teachers prioritize promoting class cohesiveness, tolerance, and cooperation to prevent relational aggression in their classrooms.

Additionally, this study found a positive correlation between teachers' sympathetic attitudes towards victims and class relational victimization, suggesting that such attitudes may contribute to the severity of relational aggression in the class. However, since the direction of causality cannot be inferred from these correlational findings, further research is needed to explore the relationship between these two factors. It is possible that teachers who have higher sympathy scores for relational victimization are teaching in classes where relational victimization is more prevalent.

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