



# The Relationships Between School Climate, Peer Victimization, and Psychosocial Adjustment in China

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## Abstract

This study examined the relationship between peer victimization and adjustment difficulties in middle school aged youth in China. It also investigated whether school climate moderated the relationship between victimization and adjustment. Regression analyses were conducted to determine the impact of different types of peer victimization (physical, verbal, relational, and cyber) as well as different types of school climate (teacher-student relationships, respect for diversity, clarity of expectations) on adjustment difficulties. Moderation analyses were conducted by first mean centering all four types of peer victimization and school climate. Then interaction terms for school climate and all four different types of peer victimization (physical, verbal, relational, and cyber) were created. A significant interaction term indicated that a moderation effect exists.

## Introduction

### What is Victimization?

A negative, intentional behavior, whether physical, verbal, or psychological that is displayed by children toward their peers. The actions are repeated over time and imply an imbalance of power (Olweus, 1991).

### How Victimization Affects Youth

Victimization can lead to negative outcomes for school aged youth.

- Increased internalizing and externalizing symptoms (Kumpulainen & Rasanen, 2000)
- Decreased academic achievement (Glew et al, 2005)
- Increased risk for depression, anxiety, sleep difficulties, and dropping out of school (Centers for Disease Control and Prevention, 2019)

### School Climate

School climate reflects the norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures at a school (National School Climate Council, 2007, para. 3). It also includes the quality of relationships between students and teachers, perceptions of safety, engagement, respect for diversity, and fairness of rules (Bear, Gaskins, Blank, & Chen, 2011; Xie et al., 2016b).

A positive school climate can promote positive youth development.

- Higher academic achievement (Wang et al., 2014; Bear et al., 2018)
- Lower rates of suspension (Bear et al., 2018)
- Better mental health outcomes (Leadbeater et al., 2015)
- Lower rates of bullying victimization (Espelage, Polanin, & Low, 2014)

### Theory

Bronfenbrenner Person Process Context Time (PPCT) Model (Bronfenbrenner & Morris, 2006)

- Theory suggests that person, process, context, and time factors interact and influence each other to predict youth mental health outcomes
- Individual (peer victimization) and contextual factors (school climate) influence each other to predict youth psychosocial adjustment.
- Positive school climate can indicate what the broader environment at school is like. This might include caring teachers, supportive peers, and clear rules, which contribute to better psychosocial adjustment of students.
- It is possible that positive school climate could buffer the negative effects of peer victimization by providing additional support in the school microsystem. Even when students experience victimization if they view their schools as a safe place and feel supported by teachers and peers they are more likely to have better psychosocial adjustment due to these additional supports compared to students who view their schools as less supportive.

## Research Aims

- Do different types of peer victimization predict adjustment difficulties?
- Does school climate predict adjustment difficulties?
- Does positive school climate moderate the relationship between different types of victimization and adjustment difficulties?

## Participants and Measures

### Participants

Survey data were collected from Chinese students in 7<sup>th</sup> to 8<sup>th</sup> grade from two middle schools in Beijing.

### Measures

**Peer Victimization.** *Delaware Bullying Victimization Scale-Student-Chinese version* (DBVS-S; Bear et al., 2016; Xie et al., 2016a; Xie et al., 2018), has high internal consistency ( $\alpha = 0.70$  to  $0.82$ ) and validity (Xie et al., 2016b).

- Physical** - victimization (e.g. "I was deliberately pushed by others"),  $\alpha = .82$
- Verbal**- (e.g. "A classmate said mean things to me"),  $\alpha = .86$
- Relational** - (e.g. "A classmate told others to not be friends with me"),  $\alpha = .57$
- Cyber**- ("e.g. Send me harsh or hurtful messages using email, mobile phone, text messages, WeChat, QQ, or similar electronic means),  $\alpha = .95$

**School Climate.** Three subscales from the *Delaware School Climate Survey-Student-Chinese version* (Bear et al., 2011; Xie et al., 2016b),  $\alpha = .88$

- Teacher-Student Relationships**- (e.g. "I like my teachers," four items),  $\alpha = .84$
- Respect for Diversity** - (e.g., "Students respect others who are different," four items),  $\alpha = .75$
- Clarity of Expectations**- (e.g. "Students know what the rules are," four items),  $\alpha = .82$

**Psychosocial Adjustment.** Six items from the *Swearer Bullying Survey* (Werth et al., 2015)

- Students rated their social and emotional maladjustment (e.g., made me feel bad or sad; made me feel sick; I had difficulty learning; I couldn't make friends) on a 1 (never a problem) to 5 (always a problem) Likert-type scale.

## Results: Research Question 1 and 2

Regression analyses were conducted to determine the impact of different types of peer victimization (all four types- physical, verbal, relational, and cyber) on adjustment difficulties. As Figure 1 shows, results of all regression analyses revealed that peer victimization of all four types significantly predicted adjustment difficulties: physical ( $\beta = .329, t(734) = 4.148, p < .001$ ), verbal ( $\beta = .270, t(734) = 4.435, p < .001$ ), relational ( $\beta = .273, t(734) = 3.550, p < .001$ ), cyber ( $\beta = .219, t(734) = 3.285, p = .001$ ).

Regression analyses were conducted to determine the impact of school climate (all three types- teacher student relationships, respect for diversity, and clarity of expectations) on adjustment difficulties. Results of all regression analyses revealed that school climate of all three types did not significantly predict adjustment difficulties: teacher-student relationships ( $\beta = -.032, t(734) = -.754, p = .451$ ), respect for diversity ( $\beta = .002, t(734) = .041, p = .967$ ), and clarity of expectations ( $\beta = .010, t(734) = .227, p = .820$ ).

	Unstandardized $\beta$	Standard Error	t	p
Constant	1.241	.097	12.738	<.001
Physical	.329	.079	4.148	<.001
Constant	1.274	.085	14.960	<.001
Verbal	.270	.061	4.435	<.001
Constant	1.307	.095	13.814	<.001
Relational	.273	.077	3.550	<.001
Constant	1.363	.082	16.526	<.001
Cyber	.219	.067	3.285	.001

Figure 1. Standardized regression coefficients for the relationship between different types of victimization and adjustment difficulties.

	Unstandardized $\beta$	Standard Error	t	p
Constant	1.751	.181	9.683	<.001
Teacher-Student Relationships	-.032	.043	-.754	.451
Constant	1.609	.187	8.613	<.001
Respect for Diversity	.002	.043	.041	.967
Constant	1.572	.199	7.912	<.001
Clarity of Expectations	.010	.046	.227	.820

Figure 2. Standardized regression coefficients for the relationship between different types of school climate and adjustment difficulties

## Results: Research Question 3

	Unstandardized $\beta$	Standard Error	t	p
Constant	1.615	.036	45.368	<.001
School Climate	.020	.049	-.397	.691
Physical Victimization	-.341	.083	4.104	<.001
School Climate*Physical Victimization	-.041	.096	-.426	.670
Constant	1.615	.036	45.081	<.001
School Climate	.034	.050	.679	.498
Verbal Victimization	-.289	.064	4.500	<.001
School Climate*Verbal Victimization	-.038	.079	-.485	.628
Constant	1.619	.036	45.414	<.001
School Climate	.012	.049	.234	.815
Relational Victimization	-.321	.083	3.860	<.001
School Climate*Relational Victimization	-.144	.101	1.426	.154
Constant	1.608	.035	45.575	<.001
School Climate	-.005	.048	-.098	.922
Cyber Victimization	-.234	.089	2.621	.009
School Climate*Cyber Victimization	.052	.099	.528	.598

- For school climate and physical victimization, there was a main effect for physical victimization ( $\beta = .341, t(734) = 4.104, p < .001$ ), but no main effect for school climate ( $\beta = .020, t(800) = .397, p = .691$ ), and the interaction effect was not significant ( $\beta = .014, t(734) = .426, p = .670$ ).
- For school climate and verbal victimization, there was a main effect for verbal victimization ( $\beta = .289, t(734) = 4.500, p < .001$ ), but no main effect for school climate ( $\beta = .034, t(734) = .679, p = .498$ ), and the interaction effect was not significant ( $\beta = .038, t(734) = .485, p = .628$ ).
- For school climate and relational victimization, there was a main effect for relational victimization ( $\beta = .321, t(734) = 3.860, p < .001$ ), but no main effect for school climate ( $\beta = .012, t(734) = .234, p = .815$ ), and the interaction effect was not significant ( $\beta = .144, t(734) = 1.426, p = .154$ ).
- For school climate and cyber victimization, there was a main effect for cyber victimization ( $\beta = .234, t(734) = 2.621, p = .009$ ), but no main effect for school climate ( $\beta = -.005, t(734) = -.098, p = .922$ ), and the interaction effect was not significant ( $\beta = .052, t(734) = .528, p = .598$ ).
- Based on these results, school climate does not seem to buffer the effect of peer victimization (all four types) on adjustment difficulties.

Figure 3. Standardized regression coefficients for the relationship between victimization and adjustment difficulties as moderated by school climate.

## Discussion

- Peer victimization of all 4 types (physical, verbal, relational, cyber) predicted adjustment difficulties such that a higher rate of victimization led to more adjustment difficulties. Therefore, results suggests that that Chinese middle school students who are victimized by their peers may become maladjusted, both emotionally and socially.
- Given that victimization predicts adjustment difficulties, it is important for schools to find ways to decrease victimization so that students will not have as many adjustment difficulties. Such ways could include educating students about what bullying is and how to report it if they see it occurring. Furthermore, to aid students with adjustment difficulties schools could teach methods of coping and resources to access if they do experience victimization.
- School climate did not significantly predict adjustment difficulties.
- This could be due to the fact that school climate is only one of many variables that could affect adjustment difficulties in Chinese middle school students. According to Bronfenbrenner's PPCT theory, context is a component that can influence an individuals' development. This may include settings such as the child's home, peer group, school, or daycare and the interpersonal relations and activities within those environments. School climate is one such context, however, this study only looked at the relationships between teachers and students, the clarity of rules, and respect for diversity. It is possible that these three types didn't capture everything. For example, relationships between peers may be another factor, or perceptions of school safety may also impact adjustment difficulties.
- School climate was also not a significant moderator for the relationship between peer victimization and adjustment difficulties.
- This could be due to several factors. First, it is possible that the negative effects of peer victimization might overpower the protective effects of a positive school climate (Wang et al., 2014). In other words, a student who is victimized may still feel bad or sad, have difficulty learning, and have problems making friends despite a school environment where there are good relationships among teachers and students, clear rules, and respect for diversity. Second, school climate in this study was measured by having individual students respond to questions. Although the perception of individuals are important, the results may have been different if school climate were measured at a school level, as school climate represents the overall quality in a school (Cohen et al., 2009).
- Third, although the types of school climate investigated in this study (teacher-student relationships, clarity of rules, respect for diversity) didn't function as a moderator, it is possible that other elements of school climate, such as student-student relationships, student engagement, school safety, and school belonging, may buffer the relationship between victimization and adjustment difficulties. Future research should investigate other elements of school climate as potential moderators. Furthermore, other individual level factors, such as temperament, social support, family level factors, or coping strategies may serve as buffers to victimization other than school climate. Future research should examine these potential moderators as well.

## Selected References

Bear, G., Gaskins, C., Blank, J., & Chen, F. (2011). Delaware school climate survey—student: Its factor structure, concurrent validity, and reliability. *Journal of School Psychology, 49*(2), 157–174. doi:10.1016/j.jsp.2011.01.001

Bear, G. G., Yang, C., Harris, A., Mantz, L., Hearn, S., & Boyer, D. (2016). Technical manual for 2016 Delaware School Survey: Scales of school climate; bullying victimization; student engagement; positive, punitive, and social emotional learning techniques; and the Delaware social and emotional competencies scale. *Newark, DE: Center for Disabilities Studies.*

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In Lerner RM, editor; & Damon W., editor.(Eds.), *Handbook of child psychology: Theoretical models of human development* (Vol. 1, pp. 793–828). Hoboken.

Centers for Disease Control and Prevention. (2019). *Preventing Bullying*. Retrieved from <https://www.cdc.gov/violenceprevention/youthviolence/bullyingresearch/fastfact.html>

Espelage, D. L., Polanin, J. R., & Low, S. K. (2014). Teacher and staff perceptions of school environment as predictors of student aggression, victimization, and willingness to intervene in bullying situations. *School Psychology Quarterly, 29*(3), 287.

Glew, G.M., Fan, M.Y., Katon, W., Rivera, F.P., & Kernic, M.A. (2005). Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine, 159*, 1026-1031.

Kumpulainen, K., & Räsänen, E. (2000). Children involved in bullying at elementary school age: their psychiatric symptoms and deviance in adolescence: an epidemiological sample. *Child abuse & neglect, 24*(12), 1567-1577.

Leadbeater, B. J., Sukhathathanakul, P., Thompson, K., & Holfeld, B. (2015). Parent, child, and teacher reports of school climate as predictors of peer victimization, internalizing and externalizing in elementary school. *School Mental Health, 7*(4), 261–272. doi:10.1007/s12310-015-9154-z

National School Climate Council. (2007). The school climate challenge: Narrowing the gap between school climate research and school climate policy, practice guidelines and teacher education policy. Retrieved from <https://www.schoolclimate.org/school-climate>

Olweus, D. (1991). Bully/victim problems schoolchildren: Basic facts and effects of a school based intervention program. *The development and treatment of childhood aggression* (pp. 411–448). Hillsdale, NJ: Erlbaum.

Wang, W., Vaillancourt, T., Brittain, H. L., McDougall, P., Krygsman, A., Smith, D., . . . Hymel, S. (2014). School climate, peer victimization, and academic achievement: Results from a multi-informant study. *School Psychology Quarterly, 29*(3), 360377. doi:10.1037/spq0000084

Wang, C., Swearer, S. M., Lembeck, P., Collins, A., & Berry, B. (2015). Teachers matter: An examination of student-teacher relationships, attitudes toward bullying, and bullying behavior. *Journal of Applied School Psychology, 31*(3), 219-238.

Werth, J. M., Nickerson, A. B., Aloe, A. M., & Swearer, S. M. (2015). Bullying victimization and the social and emotional maladjustment of bystanders: A propensity score analysis. *Journal of school psychology, 53*(4), 295-308.

Xie, J., & Xie, L. (2016a). A comparative study of bullying victimization in Chinese and American adolescents. *Chinese Journal Of Clinical Psychology, 24*(4), 706-709.

Xie, J., Lv, Y., Bear, G., Yang, C., Marshall, S., & Gong, R. (2016b). Reliability and validity of the Chinese version of Delaware Bullying Victimization Scale-Student. *Chinese Journal of Clinical Psychology, 23*, 594–596.