

Bullying Behavior and Depressive Symptoms Among College Students: The Role of School Climate Perception

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Abstract: OBJECTIVE: To examine the relationship between bullying experience, perception of school climate, and depression. METHODS: The bullying experience questionnaire, the school climate perception questionnaire, and the Streaming Center Depression Scale were used to survey 451 college students. RESULTS: (1) There was a significant negative correlation between bullying experience and school climate perception ($r = -0.204, p < 0.01$), a significant positive correlation between bullying experience and depression ($r = 0.349, p < 0.01$), and a significant negative correlation between school climate perception and depression ($r = -0.431, p < 0.01$); (2) The direct predictive effect on depression ($B=0.305, SE=0.047^{***}$), a significant predictive effect of school climate perception on depression ($B=-0.319, SE=0.035^{***}$), and a significant direct predictive effect of bullying experience on school climate perception ($B=-0.268, SE=0.061^{***}$). The mediating effect value for school climate perception was 0.086, which accounted for 22.05% of the overall effect. CONCLUSION: Bullying experience may be a high-risk predictor of depression, while school climate perception plays a protective role. School climate perception plays a mediating role in the effect of bullying experience on depression, and can be improved to help college students cope with depression and other psychological problems.

Keywords: Bullying experience; Perceived school climate; Depression.

1. Introduction

Background of the study

For most teens, school is the primary place where they learn and live. Adolescents spend nearly half of their waking hours in school. Thus, school is an important ecosystem that influences adolescent development. School factors generally include the objective social context at the school level and the perceived psychosocial context at the individual student level. According to the theory of social ecology, the psychosocial contexts perceived by individuals are more closely related to individual development than the objective social contexts. In this context, researchers have increasingly focused on the role of school climate, an individually perceived psychosocial context, on student development. School climate refers to the relatively persistent and stable environmental characteristics of a school that are experienced by its members and have an impact on their behavior, and is an important protective factor for students' healthy physical and mental development.

The 2019 China Mental Health Survey and Research Report shows that the lifetime prevalence of depressive disorders in China is 6.8%, children and adolescents are vulnerable to mental illness, and major depressive disorder is the main burden of disease among adolescents aged 10-24 years old. Some studies show that 10.8% of depression is caused by school bullying, school bullying is a complex social problem, teenagers are the high incidence of bullying victimization, and in recent years the problem of bullying victimization has been worsening, which indicates to a certain extent that there is a need to improve the preventive intervention of bullying victimization, because teenagers are in the school environment for a long time, and the school climate as a relatively perceptible and easy to change part of the school environment, the school climate is not as good as the school environment, and the school climate is not as good as the school environment. Because adolescents have been in

the school environment for a long time, the school climate as a relatively perceptible and easy to change part of the school environment, when considering how to prevent bullying victimization, the school climate can be an important protective factor, and we can start from the school climate to understand the influence factors of the school climate on the bullying behaviors, which provides a way for educational administrators to intervene in the bullying victimization.

Literature review

The experience of experiencing bullying in school can cause students to continue to suffer from negative emotions years later. Liu et al. (2022) found that exposure to sibling bullying and peer bullying were risk factors for depression and anxiety in adolescents. On the one hand, adolescents who suffered from bullying behaviors had a significantly increased risk of psychological and emotional problems, such as depression and anxiety. Bullying victims may choose to avoid participating in peer-to-peer group activities in order to prevent being beaten and verbally abused by their peers, but this also reduces their chances of positive social interactions, which can easily trigger depression. On the other hand, being bullied also conveys negative self-defeating messages to the victim, who may continuously deny themselves, increasing the risk of depression.

School bullying may arise from social structural causes such as the disruption of social structure in a risky society, individuals' non-compliance with tension relief, and the rejection of lower-class groups by the dominant culture, and is deeply influenced by social interaction process causes such as individuals' acquisition of bullying behaviors of others, and individuals' low social control and self-control, as well as social reaction causes such as individuals' encounter with labeling and stigmatization, and the conflict of scarce resources among different individuals or groups in the schoolyard. It is also related to social reaction factors such as labeling and stigmatization, and conflict between different

individuals or groups in school. He et al. (2022) conducted a longitudinal cross-lagged analysis of 1,687 adolescents and showed a bidirectional association between being bullied by peers and depressive symptoms. First, peer bullying had a positive predictive effect on depressive symptoms, and related studies have also shown that adolescents being bullied by their peers can trigger a series of internalized psychological problems, while adolescents suffering from depressive symptoms may be more susceptible to peer bullying. Wen et al. (2022) conducted a survey study on 1094 adolescents and found that adolescent bullying in schools significantly predicted adolescent depression, and the higher the level of bullying, the higher the level of depression. Li et al. (2022) conducted a research study on 2,152 college students and found that the frequency of school bullying was higher in elementary school and middle and high school, and the frequency of school bullying was lowest in college. However, the experience of being bullied during elementary school, junior high school and high school, and college had a significant positive predictive effect with depression status.

Some studies have shown that the perception of a favorable school climate can buffer the adverse effects of being subjected to bullying experiences. He (2022) conducted a research study on 6176 adolescents to examine the influencing factors and mechanisms of school bullying and found that a positive school climate could reduce the school bullying situation of left-behind children. Shi (2021) found that school climate perception was significantly negatively correlated with bullying behavior, school climate perception could negatively and significantly predict traditional bullying and cyberbullying, and positive school climate perception was a protective factor for individuals and could significantly reduce their undesirable behaviors. This may be due to the fact that when adolescents perceive a higher quality school climate in school, they also get good interpersonal relationships, support and respect from classmates and teachers accordingly, and all their basic psychological needs are satisfied, so they do not adopt other undesirable defense mechanisms to cope with the trivialities in their lives, which also reduces the emergence of undesirable behaviors. Li (2021) found that school climate has a significant negative effect on bullying victimization, and the better the perceived school climate, the less bullying victimization. These studies suggest that school climate reduces individuals' delinquent behaviors and protects victims of school bullying. Liu et al. (2020) found that school climate has a delayed predictive effect on negative emotions, i.e., adolescents with better current school climate have lower levels of negative emotions six months later, and this predictive effect is increasing. In other words, a poor school climate leads to an increase in negative affect, while a good school climate reduces adolescents' negative affect, and this effect occurs with a lag. That is, the autonomy opportunities from classmates, teachers, and the adolescents themselves cannot be met, and the effects may be reflected in the adolescents' negative emotions such as distress, despair, and pessimism after six months. And the level of adolescents' dependence in the school is increasing with the passage of time, and the influence of school climate on negative emotions is also increasing. Therefore, the establishment of a good school climate is long-lasting and beneficial to the mental health of adolescents, whether at present or later.

To summarize, a good or bad school climate is directly related to the healthy development of adolescents. School

administrators and educators must pay attention to the role that school climate plays in the production of adolescents' problematic behaviors, and promote adolescents' social adjustment through the creation of a good school psychosocial environment, so it is important to examine how the experience of being subjected to school bullying is related to college students' depressive symptoms and whether these associations are buffered or exacerbated by how adolescents perceive the school climate. This research can help us understand how school climate works and can be useful in safeguarding the well-being of adolescents who have been bullied.

Research Objectives:

This study examined the relationship between bullying experiences, perceived school climate, and depression. Specifically, this seeks answers to the following questions:

1. To analyze the means and correlations of the three variables of bullying experience, school climate perception, and depression in their current state.
2. To analyze the mediating effect of school climate perception in the effect of bullying experience on depression.

2. Design and Methodology

Research Design

This study conducted a questionnaire survey (questionnaire survey method) through the bullying experience questionnaire, school climate perception questionnaire, and depression questionnaire to explore the correlation among the three variables of bullying experience, school climate perception, and depression, as well as the mediating effect of school climate perception in the influence of bullying experience on depression, and to provide the theoretical basis for the development of more effective education policies to protect the health and well-being of college students.

Population and Locale of the Study

Adopting the method of convenience sampling, the samples came from college students in three colleges and universities in Sichuan Province, and a total of 557 questionnaires were distributed through the form of network questionnaire, excluding invalid questionnaires (answering too fast, regular answers, and more default values), and 451 valid questionnaires, with a validity rate of 80.97%. The survey respondents were all university students, aged between 16-23 years old, with an average age of 19.2 ± 0.932 years old. Students participating in the questionnaire were required to live in the school dormitory during the school year, and students who took long vacations or withdrew from school were not included.

Data Gathering Tool

Delaware Bullying Victimization Scale

Measures the experience of being bullied in school during primary and secondary school. There were 12 entries, including three dimensions: verbal bullying (question 1, 4, 7, 9), relational/social bullying (question 2, 5, 8, 11), and physical bullying (question 3, 6, 9, 12) on 3 subscales, using 1 (never) to 6 (every day) 6-point scale, all positively scored questions, never, occasionally, once or twice a month, once a week, multiple times a week, and 6 options per day, with scores of 0, 1, 2, 3, 4, and 5. Since this study explored the relationship between past bullying experiences, perceived school climate, and depression among college students. Therefore, the questionnaire instructions asked subjects to recall whether they had experienced school bullying in elementary/secondary school and to add "ever" to the stem,

such as the statement for entry 1, "I was once taunted by other people who said some very hurtful things." Higher scores indicate a higher level of ever having been bullied at school in elementary and middle school. In this study, the Cronbach's alpha coefficient of the questionnaire was 0.928, respectively, showing a high level of reliability.

Youth Perception of School Climate Scale

The Perceived School Climate Scale (PSCS) developed by Jia et al. (2009) was used to examine the level of perceived school climate among adolescents. The scale consists of 25 items divided into three dimensions: teacher support (question 1, 4, 8, 11, 15, 17, and 24), student support (question 2, 3, 6, 7, 10, 12, 13, 14, 18, 20, 21, 23, and 25), and opportunities for autonomy (question 5, 9, 16, 19, and 22). Of these, question 2, 3, 10, 13, 18, 20, and 23 were reverse scoring questions. Forward scoring question options, never, sometimes, often, and always, were scored 0, 1, 2, and 3 points, respectively. The reverse scoring options, never, sometimes, often, and always, were scored 3, 2, 1, and 0, respectively. Higher scores represent better school climate. In this study, the Cronbach's alpha coefficients of the questionnaire were 0.908, respectively, showing a high level of reliability.

The Center for Epidemiological Studies Depression Scale

The Center for Epidemiological Studies Depression Scale (CES-D), compiled by Lenore Raloff of the National Institute of Mental Health in 1977, and revised in Chinese by Zhang et al. The scale is suitable for the general population's depressive tendency. The scale is applicable to the assessment of depressive tendency in the general population. The Flow Center Depression Scale is used to assess the subject's depressive state in the last two weeks and consists of 20 self-assessment entries, of which questions 4, 8, 12, and 16 are reverse scoring questions. Forward scoring questions with the option of almost none (less than 1 day), some of the time (1-2 days), often (3-4 days), and most of the time (5-7 days) are scored as 0, 1, 2, and 3, respectively. The reverse scoring question options, hardly ever (less than 1 day), some of the time (1 to 2 days), often (3 to 4 days), and most of the time (5 to 7 days), were scored 3, 2, 1, and 0, respectively. The higher the score, the higher the score indicates more severe depressive symptoms. In this study, the Cronbach's alpha coefficients of the questionnaire were 0.897, respectively, showing a high level of reliability.

Treatment of Data

Data were entered, processed and analyzed using SPSS 25.0, and mediation effect tests were performed using the Process program.

Ethical considerations

To ensure that participants are willing to participate in the study, consent forms will be signed uniformly in a fixed classroom and data will be collected using only a numbered form, no personal information will be collected from the subjects. The school and class of the respondents will not be mentioned, all data obtained will be used for scientific research only and will be anonymized in all settings to maintain privacy and confidentiality. Prior to completing the questionnaire, the researcher will communicate with the participants to build support and help them understand the study by providing an overview of the study and its purpose.

Considering that the study may cause harm to the participants, by analyzing the possible causes, the harm will be mitigated through the following methods.

Sensitive topics: The questionnaire may cover sensitive or

personal issues, such as questions about a student's personal experiences, feelings or behaviors. These questions may make students feel uneasy or uncomfortable. Solution: Before distributing the questionnaire, the researcher will give a detailed explanation, making it clear that students' participation is voluntary, that they have the right to terminate their participation at any time, and that their answers will be kept strictly confidential.

Recalling painful experiences: The questionnaire may involve questions that make students recall painful experiences. This may trigger negative emotions such as sadness, fear or anger. Solution: Try not to allow students to recall specific events in the questionnaire, and only allow them to describe their feelings about the campus climate and peer relationships, which have been taken into account in the questionnaire of this study.

Social pressure: When answering the questionnaire, students may feel pressure from their peers, such as being questioned or ridiculed by others. This may make them reluctant to participate or feel uncomfortable when answering questions. Solution: Before implementing the study, participants were made aware that the purpose of this study was to improve the campus climate and peer relationships and that their responses were anonymous and would not have any impact on their reputation.

Possible negative impact of the findings of the study: The findings of the study may reveal problems or weaknesses of some students. This may make some students feel uncomfortable or anxious. Solution: After the results of the study are released, a symposium or consultation can be organized to let students know their feedback and suggestions, and to provide the necessary support and resources to reduce their anxiety and stress. It is also possible to release the results of the study by emphasizing that the purpose of this study is to improve the school climate and peer relationships, not to criticize or blame anyone.

In addition, we will provide psychological support services to students participating in the study through the school's Mental Health Education Center, and counseling services to students with severe negative emotions.

3. Results

Common methodology deviation test

Since the study used self-assessment questionnaires to collect data, there is a possibility of common method bias. The common method bias test was conducted using the HARMAN one-factor modeling method. The results showed that there were 11 factors with eigenvalues greater than 1. The explained variance of the first factor was 21.624%, which was less than the critical value of 40%. It indicates that there is no serious common method bias in the data of this study.

Results of correlation analysis

A status quo analysis of the means and correlations of the three variables of bullying experience, perception of school climate, and depression yielded the following results:

Bullying experience mean and standard deviation (6.52 ± 8.137), school climate perception mean and standard deviation (45.75 ± 10.683), and depression mean and standard deviation (15.76 ± 9.10).

Table 1 shows a significant correlation between bullying experience, school climate perception, and depression. There was a significant negative correlation between bullying experience and school climate perception ($r = -0.204$, $p < 0.01$), a significant positive correlation between bullying

experience and depression ($r = 0.349, p < 0.01$), and a significant negative correlation between school climate

perception and depression ($r = -0.431, p < 0.01$).

Table 1. Correlation analysis of the relationship between bullying experience, perceived school climate and depression

	M±SD	bullying experience	perceived school climate	depression
bullying experience	6.52±8.137	—		
perceived school climate	45.75±10.683	-0.204**	—	
depression	15.76±9.100	0.349**	-0.431**	—

Note: **P<0.01

Tests of the Mediating Effect of School Climate Perceptions

PROCESS 4.0 was used to analyze the mediating effect of school climate perception in the effect of bullying experience on depression (Table 2 and Figure 1), using the bias-corrected percentile Bootstrap method with 5,000 repetitively drawn test results and 95% confidence intervals, controlling for demographic factors such as gender, grade, and age. The results showed that the direct predictive effect of bullying

experience on depression was significant ($B=0.305, SE=0.047^{***}$), the predictive effect of school climate perception on depression was significant ($B=-0.319, SE=0.035^{***}$), and the direct predictive effect of bullying experience on school climate perception was significant ($B=-0.268, SE=0.061^{***}$). The mediating effect value for perceived school climate was 0.086, accounting for 22.05% of the overall effect.

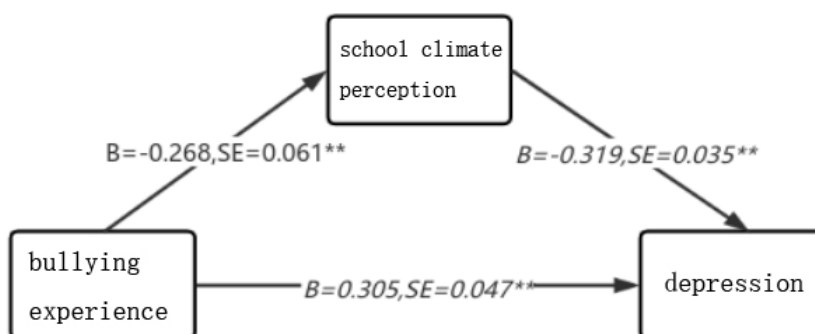


Figure 1. Mediating role of perceived school climate

Table 2. Mediating role test for college nursing students' perception of school climate

intermediary variable	effect	efficiency value	efficiency ratio	Boot standard error	95.0% confidence interval	
					lower limit	limit
perceived school climate	aggregate effect	0.390		0.049	0.293	0.488
	direct effect	0.305		0.047	0.213	0.396
	indirect effect	0.086	22.05%	0.028	0.036	0.145

Note: **P<0.01

4. Discussions and Conclusion

The results of this study demonstrate how bullying experiences and perceptions of school climate can play a role

in depression, suggest that depression among college students can be improved by intervening in individual perceptions of school climate, and provide a preliminary exploration of the mechanisms by which perceptions of school climate play a

role.

Relationship between bullying experience, school climate perception and depression among college students

This study examined the effects of college students' experiences of school bullying and depression in elementary and middle school. The study showed that there was a significant positive correlation between college students' experiences of school bullying and depression in elementary and junior high school, a significant negative correlation between bullying experiences and perceived school climate, and a significant negative correlation between perceived school climate and depressed mood. This supports some previous studies (Guo, 2022; Rui, 2022). This implies that those college students who are frequently subjected to school bullying are more likely to experience depressive symptoms, a finding that supports the idea that school bullying may have a longer-term negative impact on adolescent mental health. Bullying not only leads to physical, psychological, and behavioral disorders in victims, but also increases the risk of depression, anxiety, suicide, sleep difficulties, decreased academic performance, and dropping out of school. There is a bidirectional association between being bullied by peers and depressive symptoms, with either type of peer bullying having a positive predictive effect on depressive symptoms, and studies have also shown that adolescents who are bullied by their peers can trigger a range of internalized psychological problems, and that adolescents who suffer from depressive symptoms may be more susceptible to being bullied by their peers as well (He, 2022). School climate, on the other hand, can buffer the negative effects of the experience of being subjected to school bullying, which validates some previous hypotheses (Yang, 2013; Li, 2015), and a positive school climate is a mutually supportive, encouraging, warm, and accepting environment, where teachers and students can build teacher-student and peer-student relationships of mutual trust, respect, and care, and which enables students to develop a positive emotional connection, which can have a positive impact on many problematic behaviors such as internalization and externalization, and is one of the important protective factors for adolescent problematic behaviors.

The Role of College Students' Perceptions of School Climate in Bullying Experiences and Depression

This study found two ways in which the experience of being bullied plays a role in depression among college students: through a direct effect, or through a partially mediated effect of school climate perceptions. Bullying is a repeated, prolonged victimization of an individual that is characterized by unpredictability and inescapability. Based on the broken assumption perspective, a victim experiencing such bullying may be on constant high alert for unpredictable bullying-related cues, and may also develop negative cognitions and emotions as a result of the inescapable nature of bullying (Janoff, 1992). Attachment theory also states that parent-child attachment provides an important foundation for psychological development during childhood, that both traumatic childhood experiences and school bullying experiences may negatively affect the development of secure attachment, and that early negative life events may be associated with adult attachment and, in turn, with life satisfaction and social anxiety in college students (Hu, 2020). The present study also verifies the above theory that subjective perception of school climate is also affected by past experiences, i.e., bullying experiences can lead to depression

by affecting an individual's perception of school climate. At the same time, this is also consistent with the basic assumption of cognitive behavioral therapy, that is, individuals have formed some maladaptive cognitive styles, which will be interpreted negatively in the face of normal social situations, leading to depression, which also provides a direction for future psychological interventions for disadvantaged college students. Based on the results of the study, targeted psychoeducational and intervention measures can be carried out to help individuals with bullying experiences to better cope with depression and other psychological problems.

Conclusion

This study analyzed the effects of bullying experience and school climate perception on depression among college students in elementary and junior high school, and found that there was a significant negative correlation between bullying experience and school climate perception, a significant positive correlation between bullying experience and depressed mood, and a significant negative correlation between school climate perception and depressed mood, i.e., bullying experience may be a high-risk predictor of depression, whereas school climate perception The study also found that the perception of school climate had a significant negative correlation with depressive mood. It was also found that perceptions of school climate mediated the effects of bullying on depression. This finding provides a basis for further exploration of the role of perceptions of school climate, as well as new ideas and methods for the prevention and treatment of depression in college students.

Research Limitations

The results of this study have implications for understanding the long-term effects of the experience of being bullied in school on individuals; however, this study utilized a cross-sectional study, which makes it difficult to validate a causal relationship between the experience of being bullied and depression. In addition, the way this study used the Bullying Experience Questionnaire to retrospectively assess previous traumatic experiences, individuals' recollections of earlier times may have been influenced by social desirability effects or current emotional states. Therefore, future research could use long-term follow-up studies to explore the effects of different types of bullying experiences on adulthood, with a focus on exploring the mediating as well as moderating roles of protective and harmful factors. Meanwhile, due to the limitations of the research methodology, the present study failed to fully consider other factors that may influence college students' depressed mood, such as family environment, personal traits, and social support. Therefore, future research can further explore the effects of these factors on college students' depressed mood and gain insight into the mechanisms and influencing factors of bullying in schools.

References

- [1] Guo, J. , Li, M. , Wang, X. , Ma, S. , & Ma, J. (2019). Being bullied and depressive symptoms in chinese high school students: the role of social support. *Psychiatry Research*, 284(2), 112676.
- [2] Wong, M. D., Dosanjh, K. K., & Jackson, N. J., et al. The longitudinal relationship of school climate with adolescent social and emotional health. *BMC Public Health* 21, 207 (2021). <https://doi.org/10.1186/s12889-021-10245-6>
- [3] Midgett, A., & Dumas, D. M. (2019). Witnessing bullying at school: The association between being a bystander and anxiety

- and depressive symptoms. *School mental health*, 11(3), 454-463.
- [4] Nie, Q., Yang, C., Stomski, M., Zhao, Z., Teng, Z., & Guo, C. (2022). Longitudinal link between bullying victimization and bullying perpetration: A multilevel moderation analysis of perceived school climate. *Journal of interpersonal violence*, 37(13-14), NP12238-NP12259.
- [5] Liu, Y., Yang, Y., Wang, C. X., Yang, Y. N., Jia, X. J., Bai, X. J., & Lin, L. (2020). The effects of school climate and negative emotions on adolescents' suicidal ideation: a cross-lagged study. *Psychological and Behavioral Research* (06),784-790.
- [6] Su, J., Zhu, L. H., Li, S., Yang, C. Y., George, G. B., & Xie, J. S. (2021). Chinese version of the Delaware School Climate Scale (Student Volume) revisited. *Chinese Journal of Clinical Psychology* (03),544-548+553. doi:10.16128/j.cnki.1005-3611.2021.03.020.
- [7] Li, D. P., He, D., Chen, W., Bao, Z. Y., Wang, Y. H., & Zhao, L. Y. (2015). The relationship between school climate and adolescent problem behavior: the mediating role of peer aggression. *Psychological Science* (04),896-904. doi:10.16719/j.cnki.1671-6981.2015.04.018.
- [8] Liu, X. Q.,Liu, Q. W., & Wu, F., et al. (2022). Co-occurrence of sibling bullying and peer bullying among middle school students and its association with depression and anxiety[J]. *Chinese Journal of Clinical Psychology*, 2022, 30(2):6.
- [9] He, Y., Chen, S. S., Yuan, M. Y., Li, Y. H., Chang, J. J., Zhang, T. T., & Su, P. Y. (2022). Longitudinal cross-lag analysis of the relationship between adolescents' exposure to peer bullying and depressive symptoms. *Chinese School Health* (10),1472-1475+1479. doi:10.16835/j.cnki.1000-9817.2022.10.007.
- [10] Wen, B. S., Liu, X. B., Zhan, L., & Hu, Y. Q. (2022). Effects of school bullying on adolescent depression: the moderating role of cognitive flexibility. *Journal of Hunan Institute of Industrial Vocational Technology* (02), 20-25. doi:10.13787/j.cnki.43-1374/z.2022.02.006.
- [11] Li, H. J., Qian, H., Yu, Y., Qian, X.Y., Wan, S.Y., Liang, H., & Yang, X. L. (2022). Effects of school bullying experience on the depression status of 2152 medical students[J]. *China School Medicine*,2022,36(07):488-491.
- [12] He, E. L., Ye, X. M., & Mao, Y. Q. (2022). Research on the influence mechanism of school climate on school bullying among left-behind children[J]. *Journal of Education*, 2022, 18(03): 144-158.DOI:10.14082/j.cnki.1673-1298.2022.03.013.
- [13] Shi, D. (2021). The relationship between perceived school climate and adolescent bullying (Master's thesis, Central China Normal University).
- [14] Li, J. (2021). The effect of school climate on junior high school students' bullying victimization (Master's thesis, Southwest University of Finance and Economics).
- [15] Liu, Y.,Yang, Y., & Wang, C. X., et al. (2020). The effects of school climate and negative emotions on adolescents' suicidal ideation: a cross-lagged study[J]. *Psychological and Behavioral Research*,2020,18(06):784-790.
- [16] Yang, X., Wang, Y. H., Li, D. P., Zhao, L. Y., Bao, Z. Y., & Zhou, Z. K. (2013). School climate and adolescents' suicidal ideation/attempts: the mediating role of self-esteem. *Psychological Development and Education*, 29(5), 11.
- [17] Guo, X. M., & Huang, J. W. (2022). Relationships of college students' experiences of childhood trauma and school bullying with social anxiety and life satisfaction. *Chinese Journal of Mental Health* (009), 036.
- [18] Janoff- Bulman R. Shattered assumptions. towards a new psychology of trauma. new York The Free Press, 1992
- [19] Hu, Y., Zhang, Y. T., & Chen, Y. W. (2020). The relationship between childhood trauma and adult attachment in patients with anxiety disorders[J]. *Chinese Journal of Mental Health*, 2020, 34(9) : 729 - 735.