# Classroom Climate and Bullying Behavior: A socio-ecological approach

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## Abstract

Classroom climate significantly shapes students' interactions, influencing bullying dynamics and intervention responses. This study investigates the role of classroom climate in reducing self-reported bullying (SBB), promoting constructive bystander responses (BRB), and enhancing proactive teacher interventions (TRB). Using a sample of 510 Chinese primary school students and validated questionnaires, results reveal that positive classroom environments reduce bullying ($\beta = -0.537$, $p < 0.001$), foster bystander support ($\beta = 0.533$, $p < 0.001$), and strengthen teacher interventions ($\beta = 0.538$, $p < 0.001$). These findings underscore the need for supportive educational spaces, offering actionable insights for enhancing students' well-being and school dynamics.

Keywords: Classroom Climate; Bullying Behavior; Bystander Responses; Teacher Responses

## 1.0 Introduction

Classroom climate is a critical factor influencing students' social and emotional development, affecting not only their academic performance but also their behavior and interpersonal relationships within the school context. Environmental psychology, which studies the relationship between individuals and their environment, views the classroom as a vital microenvironment that shapes students' well-being and actions (Tapia-Fonllem et al., 2020; Xiao et al., 2023). A positive classroom climate promotes emotional safety, strengthens relationships, and encourages prosocial behaviors (Thornberg et al., 2018). Conversely, negative classroom environments, characterized by poor teacher-student relations and lack of clear norms, often escalate conflicts and contribute to bullying behaviors (Rocchino & Liang, 2024). A deeper understanding of how classroom environments influence the social dynamics between students and teachers is crucial for addressing bullying.

The second para…Research has shown that a positive classroom climate—characterized by supportive teacher-student interactions, collaborative peer relationships, and clear behavioral norms—plays a vital role in decreasing bullying incidents and fostering positive bystander behaviors (Thornberg et al., 2018; Solberg & Olweus, 2003). Additionally, effective teacher interventions are essential in tackling bullying, with proactive approaches creating safer and more inclusive spaces for students (Campaert et al., 2017). Together, these factors emphasize the importance of a comprehensive approach to combat bullying by focusing on the classroom environment.

This study aims to explore how classroom climate—a multidimensional construct that includes teacher support, peer dynamics, and classroom norms—affects bullying-related outcomes. The objectives of this research are:

To analyze the influence of classroom climate on students' bullying behaviors.

To investigate the role of classroom climate in shaping constructive bystander responses to bullying.

To assess how classroom climate influences proactive teacher interventions in bullying situations.

By achieving these goals, the study seeks to provide a thorough understanding of how classroom climate influences bullying dynamics.

Building on previous research that highlights the importance of classroom climate in shaping student behavior (Thornberg et al., 2018; Solberg & Olweus, 2003), this study delves into the complex relationships between classroom environment, bullying behaviors, bystander actions, and teacher interventions. The significance of classroom climate has been well-documented, with studies indicating that positive teacher-student relationships and peer collaboration reduce bullying incidents (Campaert et al., 2017). Clear classroom norms have been found to foster positive bystander behaviors, encouraging students to intervene constructively in bullying situations (Thornberg et al., 2022). This research integrates these perspectives to examine how these factors interact to influence bullying-related outcomes in primary school environments.

Furthermore, the study highlights the practical implications for educators and school administrators. By fostering a supportive classroom climate, students can become active participants in combating bullying, while teachers gain the necessary tools and strategies for effective responses. The focus on primary schools in China offers a unique perspective, taking into account cultural and social factors that influence bullying and intervention strategies. This research provides practical, context-specific solutions and contributes to the growing body of literature advocating for systemic, evidence-based approaches to reducing bullying in schools.

## 2.0 Literature Review

This section reviews the impact of classroom climate on student behavior, bullying dynamics, and teacher interventions, exploring theoretical perspectives, cross-cultural differences, and research gaps.

*2.1 The Role of Classroom Climate in Student Behaviour*

Classroom climate encompasses the overall social, emotional, and academic environment in a classroom, influenced by teacher-student interactions, peer relationships, and established norms (Qiu, 2022). A positive classroom climate fosters emotional security and encourages prosocial behaviors, while a negative climate can heighten conflicts and disengagement (Luo et al., 2023; Glaesser et al., 2023). Specifically, classrooms that prioritize cooperation and mutual respect can reduce behavioral issues and cultivate an inclusive culture (Garrote et al., 2020).

From a socio-ecological standpoint, classroom climate is a multifaceted concept that impacts student development at various levels. Bronfenbrenner's ecological model (1979) emphasizes how factors in the microsystem (e.g., teacher-student interactions, peer relationships) interact with the mesosystem (e.g., school policies) and the macrosystem (e.g., cultural norms) to influence students' experiences. In this study, classroom climate is categorized into three dimensions: structural, social, and psychological climates.

Classroom climate influences student behavior differently across cultures due to varying educational norms. In collectivist cultures like China and Japan, teacher authority and discipline shape student behavior, emphasizing group cohesion and structured interventions (Smith et al., 2019). In contrast, individualist cultures such as the U.S. and the U.K. prioritize student autonomy, using peer support and restorative justice to address bullying (Thornberg et al., 2018). Nordic countries favor peer-led interventions, while East Asian schools rely on teacher authority. Hybrid models, like in Singapore, balance structured discipline with student participation, highlighting the need for culturally tailored interventions.

Studies on classroom climate have linked its various dimensions to key student outcomes, such as academic achievement, emotional regulation, and social behaviour (Thornberg et al., 2018). For example, classrooms characterized by strong teacher support provide students with a sense of belonging and trust, which in turn decreases disruptive

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behaviours (Thornberg et al., 2022). Similarly, clear behavioural norms foster consistency and predictability, reducing ambiguity and tension in peer interactions.

These findings underscore the importance of classroom climate as a multidimensional construct that directly influences students' overall school experience. These findings underscore the importance of classroom climate as a multidimensional construct that directly influences students' overall school experience

### 2.2 Bullying in School Contexts

Bullying remains a widespread issue in schools, typically defined as repeated aggressive actions intended to harm or intimidate a target. It manifests in various forms, such as physical, verbal, relational, and cyberbullying, all of which have distinct impacts on the victim's psychological and social well-being (Solberg & Olweus, 2003). Long-term exposure to bullying increases the likelihood of developing anxiety, depression, and social isolation, emphasizing the need for effective interventions.

The impact of classroom climate on reducing bullying behaviors has been widely explored. Supportive classroom environments, characterized by teacher attentiveness and positive peer relationships, tend to reduce bullying dynamics (Thornberg et al., 2018). In contrast, classrooms with unclear behavioral norms and lack of respect create an environment where bullying is more likely to thrive, often due to the absence of intervention and accountability mechanisms (Campaert et al., 2017). Therefore, understanding how classroom climate influences bullying is crucial for developing effective anti-bullying strategies.

### 2.3 Bystander Responses to Bullying

Bystanders play a vital role in either escalating or reducing bullying behaviors. Their actions, ranging from passive observation to active intervention, are influenced by personal, social, and environmental factors (Thornberg et al., 2018). Research categorizes bystander responses as passive (avoiding involvement), defending (supporting the victim), and assisting (aligning with the bully).

Classroom climate has a significant influence on bystander behavior. In environments where empathy and accountability are actively promoted by both teachers and peers, students are more likely to engage in defending behaviors (Thornberg et al., 2018). Conversely, negative climates, where peer indifference and teacher disengagement prevail, often lead to passive or assisting bystander responses. These findings emphasize that fostering a supportive and inclusive classroom climate not only reduces bullying but also empowers bystanders to intervene constructively.

### 2.4 Teacher Interventions in Bullying

Teachers play a key role in mitigating bullying through their interventions, which can disrupt harmful patterns and establish positive behavioral norms. Effective teacher responses include providing support to victims and implementing disciplinary measures to deter future

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incidents (Demol et al., 2020). However, not all interventions are successful; non-intervention or overly harsh strategies can worsen the situation.

The classroom climate directly impacts a teacher's willingness and capacity to intervene. Supportive classroom environments, where teachers feel connected to their students and perceive strong institutional support, encourage proactive responses (Garrote et al., 2020). Furthermore, training programs that emphasize relational strategies, such as mediation and group discussions, have been found to enhance the effectiveness of teacher interventions, fostering a positive ripple effect across the classroom (Campaert et al., 2017). These insights underscore the importance of teacher-focused initiatives that complement efforts to improve classroom climates

## 2.5 Gaps in Existing Research

While significant progress has been made in understanding the influence of classroom climate on bullying-related outcomes, several gaps persist. Few studies have utilized higher-order structural equation models (HOC) to examine the complex relationships among bullying behaviors, bystander responses, and teacher interventions. Such models can provide a more nuanced understanding by integrating multiple dimensions of classroom climate.

Additionally, most research has focused on Western educational settings, with limited attention given to the cultural and social factors that influence classroom dynamics in non-Western countries, such as China. This gap is critical for understanding how societal norms and teacher-student relationships shape bullying and intervention strategies. Finally, although teacher interventions have been well-explored, less is known about their interaction with bystander behaviors, particularly in diverse classroom climates. Addressing these gaps will contribute to the growing body of literature advocating for evidence-based approaches to enhancing classroom climates and mitigating bullying in schools
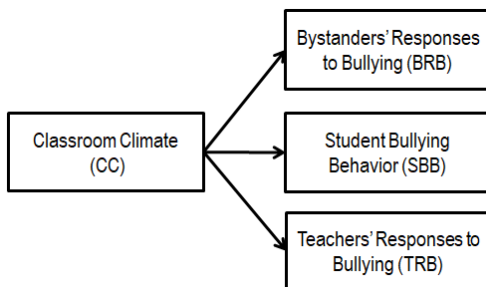
## 2.6 Theoretical and Conceptual Framework



Figure 1. Conceptual Framework of Classroom Climate and Bullying Outcomes

This study adopts a socio-ecological perspective to examine the role of classroom climate (CC) in shaping bullying-related outcomes. As shown in Figure 1, the conceptual framework

illustrates the relationships between classroom climate and three key factors: student bullying behavior (SBB), bystanders' responses to bullying (BRB), and teachers' responses to bullying (TRB). A positive classroom climate, characterized by strong teacher support, clear behavioral norms, and positive peer interactions, is expected to reduce bullying behaviors, promote proactive bystander intervention, and enhance teacher responses to bullying incidents.

Bronfenbrenner's socio-ecological model (1979) provides a useful lens for understanding these dynamics, emphasizing how interactions at different levels—teacher-student relationships (microsystem), school policies (mesosystem), and cultural values (macrosystem)—influence student behavior. In collectivist cultures, teacher authority and group harmony play a critical role in shaping responses to bullying, while individualist cultures emphasize student autonomy and peer-led interventions (Smith et al., 2019; Hong et al., 2021).

By integrating these perspectives, this framework highlights the multi-layered impact of classroom climate on bullying dynamics. It provides a foundation for targeted interventions that address not only individual behavior but also the broader classroom environment, ensuring more effective bullying prevention strategies.
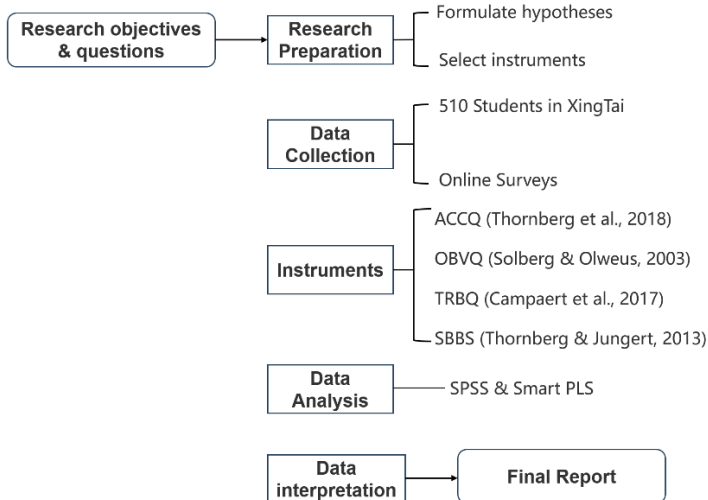
## 3.0 Methodology



Figure 2. Methodological Framework: Research Process and Data Flow

This study employed a cross-sectional design to investigate the influence of classroom climate on bullying behaviours, bystander responses, and teacher interventions. The

methodology includes a detailed description of participants, instruments, data collection procedures, and analytical methods (see Figure 2).

## 3.1 Participants

The study included 510 students, aged 9 to 12, from grades 4 to 6, who were selected from three public primary schools in Xing Tai City, Hebei Province, China. These schools were specifically chosen to ensure similarity in socioeconomic and cultural backgrounds, minimizing external factors that could affect the classroom climate. The sample was almost equally divided by gender, with 52% female and 48% male participants. All participation was voluntary, with parental consent obtained prior to the survey. To guarantee the accuracy of the self-reported data on bullying behaviors and bystander responses, students were briefed on confidentiality measures before completing the questionnaire.

Among the participants, 256 were male (50.2%) and 254 were female (49.8%). The largest proportion of participants was from the 5th grade (59.8%), followed by 4th grade (22.8%) and 6th grade (17.5%), as shown in Table 1.

Table 1. Demographic Characteristics

| Category | Dimension | Frequency | Percentage (%) | Cumulative Percentage (%) |
|---|---|---|---|---|
| Gender | Male | 256 | 50.2 | 50.2 |
| | Female | 254 | 49.8 | 100.0 |
| Grade | 4th Grade | 116 | 22.8 | 22.8 |
| | 5th Grade | 305 | 59.8 | 82.6 |
| | 6th Grade | 89 | 17.5 | 100.0 |

## 3.2 Instruments

Data for this study were collected using four well-established and validated questionnaires, selected for their relevance to classroom climate, bullying behaviors, teacher interventions, and bystander responses.

The Authoritative Classroom Climate Questionnaire (ACCQ) (Thornberg et al., 2018) assessed students' perceptions of classroom environment, focusing on teacher support, peer support, and classroom norms. Adapted for the Chinese context, the ACCQ emphasized teacher authority and collective responsibility, reflecting cultural nuances such as hierarchical teacher-student relationships. Local experts reviewed the instrument to ensure cultural appropriateness.

The Olweus Bully/Victim Questionnaire (OBVQ) (Solberg & Olweus, 2003) measured self-reported bullying behaviors. Adjustments were made to address cultural definitions of bullying, emphasizing relational behaviors like social exclusion and gossip, which are more prevalent in Chinese classrooms than overt physical aggression.

The Teachers' Responses to Bullying Questionnaire (TRBQ) (Campaert et al., 2017) examined teacher interventions in bullying incidents. Adaptations were made to include questions on indirect strategies, such as fostering group cohesion, reflecting the Chinese emphasis on non-confrontational methods.

The Student Bystander Behavior Scale (SBBS) (Thornberg & Jungert, 2013) assessed bystander responses, including passive, defending, and assisting behaviors. The questionnaire was adapted to explore how peer pressure and teacher influence shaped students' willingness to intervene, in line with collective responsibility in Chinese culture.

A summary of the reliability and validity of these instruments, detailed in Table 2, confirms their psychometric strength, with Cronbach's Alpha and Composite Reliability values exceeding 0.70 and AVE values surpassing 0.50.

Table 2. Reliability and Validity of Constructs

| Construct | Cronbach's Alpha | Composite Reliability (rho_A) | Composite Reliability (rho_C) | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| BRB | 0.855 | 0.855 | 0.912 | 0.775 |
| CC | 0.895 | 0.897 | 0.923 | 0.705 |
| SBB | 0.916 | 0.917 | 0.941 | 0.799 |
| TRB | 0.803 | 0.805 | 0.884 | 0.718 |

*3.3 Data Collection*

Data were collected in a controlled classroom environment using an online questionnaire format to ensure both efficiency and confidentiality. Surveys were administered on school computers, with students taking approximately 20 minutes to complete the survey. The online format minimized response bias and ensured uniformity in data collection. Classroom teachers oversaw the process to maintain order, while researchers were available to provide clarification on any unclear survey items. During the introduction, participants were reminded of the confidentiality of their responses to encourage honest reporting of sensitive topics such as bullying.

*3.4 Data Analysis*

Data analysis was performed using SPSS Version 26 and SmartPLS 4.0. Descriptive statistics summarized demographic information, while Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to explore the relationships among the study variables. PLS-SEM is ideal for complex models and smaller sample sizes, providing reliable measures for theoretical testing. Path coefficients (e.g., CC $\rightarrow$ SBB: $\beta$ = -0.537, $p < 0.001$) assessed direct relationships between classroom climate and bullying outcomes. The $R^2$ and $Q^2$ values were used to determine the explained variance and predictive relevance, respectively, with $R^2$ values above 0.25 considered appropriate for behavioral research, and $Q^2$ values above zero indicating predictive relevance. Discriminant validity was confirmed by HTMT ratios below the 0.85 threshold, and convergent validity was ensured by factor loadings exceeding 0.70 (Lachenbruch & Cohen, 1989).

The analyses showed significant relationships among the constructs, as detailed in Section 4.0 Results, with all paths achieving statistical significance at $p < 0.05$.

*3.5 Ethical Considerations*

Ethical approval for this study was obtained from the Xing Tai Education Bureau, in line with the principles outlined in the Declaration of Helsinki. Informed written consent was obtained from both students and their parents or legal guardians. The study ensured the confidentiality of all responses, with no personally identifiable information collected, and the data were used strictly for academic purposes. Sensitive survey questions, such as those related to bullying, were framed neutrally to minimize distress for participants.

## 4.0 Results

This section presents findings on the relationships between classroom climate, self-reported bullying behavior, bystander responses, and teacher interventions. Descriptive statistics reveal gender and grade-level variations, while structural analyses confirm the predictive role of classroom climate in bullying-related outcomes. The results underscore the importance of fostering a supportive classroom environment to promote positive student behaviors and effective interventions.

### 4.1 Descriptive Statistics

This section presents descriptive statistics to explore gender and grade-level differences in classroom climate perception, self-reported bullying behavior, teacher intervention, and bystander responses. Examining these variations provides insight into patterns that may inform targeted bullying prevention and intervention strategies.

Table 3. Descriptive Statistics Stratified by Gender

| Gender | | CC | SBB | TRB | BRB |
|---|---|---|---|---|---|
| Male | Valid | 256 | 256 | 256 | 256 |
| | Mean | 3.46 | 1.68 | 3.54 | 3.40 |
| | Std. Deviation | 0.85 | 0.57 | 0.48 | 0.54 |
| Female | Valid | 254 | 254 | 254 | 254 |
| | Mean | 3.35 | 1.75 | 3.47 | 3.41 |
| | Std. Deviation | 0.91 | 0.63 | 0.55 | 0.62 |

These results indicate that male students perceived a slightly more positive classroom climate (M = 3.46, SD = 0.85) compared to female students (M = 3.35, SD = 0.91). In contrast, female students reported higher levels of self-reported bullying behavior (M = 1.75) compared to males (M = 1.68). Teacher responses to bullying (TRB) and bystander responses to bullying (BRB) were relatively similar across genders, suggesting a consistent approach to intervention and peer reactions.

Table 4. Descriptive Statistics Stratified by Grade Level

| Grade | | CC | SBB | TRB | BRB |
|---|---|---|---|---|---|
| 4th Grade | Valid | 116 | 116 | 116 | 116 |
| | Mean | 3.39 | 1.72 | 3.48 | 3.44 |
| | Std. Deviation | 0.92 | 0.69 | 0.62 | 0.64 |
| 5th Grade | Valid | 305 | 305 | 305 | 305 |
| | Mean | 3.38 | 1.72 | 3.51 | 3.39 |

| | | | | | |
|---|---|---|---|---|---|
| | Std. Deviation | 0.89 | 0.59 | 0.49 | 0.57 |
| 6th Grade | Valid | 89 | 89 | 89 | 89 |
| | Mean | 3.49 | 1.70 | 3.51 | 3.41 |
| | Std. Deviation | 0.83 | 0.53 | 0.45 | 0.55 |

Table 4 highlights grade-level variations in key study variables. Sixth graders reported the most positive classroom climate (M = 3.49), suggesting increased stability with age. Bullying behavior was more frequent in 4th and 5th grades (M = 1.72) but slightly declined in 6th grade (M = 1.70), indicating a potential decrease in incidents as students mature. Teacher intervention was perceived as more effective in higher grades (M = 3.51 for 5th and 6th graders), implying greater teacher involvement over time. Bystander responses declined from 4th (M = 3.44) to 5th grade (M = 3.39) before slightly rebounding in 6th grade (M = 3.41), suggesting an initial willingness to intervene that diminishes before stabilizing.

The findings indicate gender and grade-level differences in key study variables. Males reported a more positive classroom climate, while females exhibited higher self-reported bullying. Classroom climate improved with age, bullying declined, and teacher intervention became more effective over time. Bystander responses fluctuated, highlighting the need for targeted, age-specific interventions.

### 4.2 Classroom Climate and Self-Reported Bullying Behaviour (SBB)

Classroom climate (CC) was significantly associated with constructive bystander behaviour (BRB). The path coefficient ($\beta$ = 0.533, $p < 0.001$) indicates that students in positive classroom climates are more likely to engage in constructive bystander actions, such as defending or supporting victims. The model explained $R^2$ = 0.284 of the variance in bystander responses and demonstrated predictive relevance with $Q^2$ = 0.281.

Table 5. Path Coefficients and Predictive Relevance

| Relationship | Path Coefficient ($\beta$) | p-value | $R^2$ | $Q^2$ |
|---|---|---|---|---|
| CC → SBB | -0.537 | <0.001 | 0.289 | 0.284 |
| CC → BRB | 0.533 | <0.001 | 0.284 | 0.281 |
| CC → TRB | 0.538 | <0.001 | 0.289 | 0.286 |

### 4.3 Classroom Climate and Bystander Responses (BRB)

Classroom climate (CC) was significantly associated with constructive bystander behaviour (BRB). The path coefficient ($\beta$ = 0.533, $p < 0.001$) shows that students in classrooms with positive climates were more likely to engage in constructive bystander actions, such as defending or supporting victims. The predictive relevance for BRB was $Q^2$ = 0.281, and the model explained $R^2$ = 0.284 of the variance in bystander responses.

### 4.4 Classroom Climate and Teacher Interventions (TRB)

A positive classroom climate significantly influenced teacher interventions (TRB), with a path coefficient of $\beta$ = 0.538, $p < 0.001$. The TRB construct showed strong explanatory

power ($R^2$ = 0.289) and predictive relevance ($Q^2$ = 0.286), indicating that teachers in supportive environments are more likely to proactively intervene to address bullying incidents.

### 4.5 Summary of Key Findings

This study underscores the importance of a positive classroom climate in mitigating bullying-related outcomes. A supportive classroom climate significantly reduces self-reported bullying behaviours, promotes constructive bystander actions, and enhances teacher interventions. Students in classrooms with positive climates, characterized by teacher encouragement, clear norms, and supportive peer interactions, report fewer bullying incidents. Furthermore, the classroom environment encourages students to actively intervene in bullying situations and supports teachers in taking proactive measures. These findings highlight the critical role of classroom climate in fostering a safer and more inclusive school environment.

## 5.0 Discussion

This section discusses the role of classroom climate in shaping bullying behaviors, bystander responses, and teacher interventions. It emphasizes the need for tailored, culturally sensitive interventions and provides valuable insights for improving classroom dynamics and developing bullying prevention strategies.

### 5.1 Gender and Grade-Level Differences

The results of this study demonstrate significant variations in classroom climate perceptions, bullying behaviors, and responses across gender and grade levels. Male students reported a slightly more positive classroom climate compared to their female counterparts, while females indicated higher levels of self-reported bullying behavior, which could reflect differences in aggression types (e.g., relational versus physical bullying) (Solberg & Olweus, 2003).

Grade-level differences revealed that older students reported a more stable classroom climate, likely due to enhanced social adaptation as they mature. Bullying behaviors were most prevalent in 4th and 5th grades, decreasing in 6th grade, suggesting that peer conflicts tend to subside with age (Smith et al., 2019). Teacher interventions were perceived as more effective in higher grades, which could be attributed to the increased involvement of educators over time. Bystander responses decreased from 4th to 5th grade before stabilizing, indicating that younger students are initially more inclined to intervene but may become hesitant due to peer influence or fear of retaliation (Thornberg et al., 2018).

These findings highlight the need for age-appropriate anti-bullying interventions. Social-emotional learning and peer mediation may be more beneficial for younger students to address early signs of aggression, while later interventions should focus on enhancing teacher-led strategies and empowering bystanders. Strengthening classroom climate across all grades is essential for maintaining a supportive and inclusive school environment.

## 5.2 Classroom Climate and Student Behaviour

This study reinforces the crucial influence of classroom climate on student behaviour, in line with findings from Luo et al. (2023), who highlighted its role in promoting emotional safety and prosocial actions. Our results, however, reveal important cultural distinctions, particularly in Chinese classrooms, where teacher-student relationships often emphasize collective harmony and authority. This cultural focus appears to enhance the positive impact of supportive classroom climates in reducing disruptive behaviours, a contrast to findings from Glaesser et al. (2023), which showed limited effects on student disengagement. These differences point to the need for further investigation into how cultural contexts shape classroom dynamics.

These findings offer practical implications for classroom management and policy. Schools should aim to create inclusive environments that strike a balance between academic demands and emotional support. Teacher training programs can be designed to incorporate strategies for relationship-building that resonate with local cultural values, fostering classroom climates that reduce disruptive behaviours and enhance student participation. Future research should explore how different authority structures across cultures influence the effectiveness of classroom climate interventions, ensuring that strategies are tailored to specific cultural contexts.

## 5.3 Bystander Responses

The connection between classroom climate and bystander behaviours supports Thornberg's (2022) findings, showing that positive classroom environments encourage defending behaviours. This study builds on previous research by emphasizing the importance of clear classroom norms in empowering students to take constructive actions during bullying incidents. While Qiu (2022) examined these mechanisms in online settings, our results suggest that similar dynamics exist in traditional classrooms. Additionally, the cultural context of this study highlights that teacher authority and peer accountability are critical in fostering defending behaviours, offering new insights into how classroom climate can prevent passive or complacent responses.

A significant cultural takeaway is that in structured classroom environments, students may feel a stronger moral obligation to defend victims, given the emphasis on collective responsibility. Schools can leverage this by incorporating bystander intervention training into the curriculum, encouraging students to engage proactively and constructively in bullying situations. Future studies should explore how different levels of classroom hierarchy and peer influence shape bystander behaviours across diverse educational settings.

## 5.4 Teacher Interventions

Teacher interventions are significantly shaped by the classroom climate, consistent with findings by Rocchino & Liang (2024) and Demol et al. (2020). Our results show that supportive classroom environments not only foster proactive teacher interventions but also

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reduce reliance on punitive measures. This study highlights how relational harmony in Chinese classrooms promotes mediation and supportive responses from teachers, rather than strict disciplinary actions. This adds a cultural dimension to the literature and underscores the importance of integrating relational strategies into teacher training programs aimed at improving classroom climate.

These findings carry important implications for educational practices and policies. Schools should invest in professional development programs that equip teachers with culturally sensitive intervention strategies, balancing authority with emotional support. Teacher training should prioritize restorative justice methods, encouraging teachers to adopt mediation techniques that align with students' expectations for relational dynamics. Future research could explore the long-term effects of teacher interventions, investigating how these strategies contribute to sustained classroom harmony and student behaviour regulation.

## 6.0 Conclusion

This research emphasizes the essential role that classroom climate plays in influencing bullying-related outcomes. By incorporating teacher support, peer dynamics, and classroom norms into a higher-order structural equation model, it illustrates how these factors together help reduce bullying, promote positive bystander behavior, and encourage proactive teacher interventions. The results significantly contribute to educational psychology, particularly by highlighting the importance of nurturing supportive classroom environments in cultural contexts like China, where relational harmony is a key aspect.

However, the study has some limitations, such as its cross-sectional design, regional focus, reliance on self-reported data, and the exclusion of psychological traits. These limitations suggest potential areas for improvement in future research.

Future studies should adopt longitudinal designs to establish causal relationships, explore diverse cultural settings for comparative insights, and investigate psychological factors like emotional regulation and resilience. Furthermore, expanding the scope to include broader outcomes such as academic performance and peer relationships would provide a more holistic understanding.

In conclusion, this research underscores the significance of supportive classroom climates in fostering students' well-being and shaping their behaviors. By considering cultural differences and integrating educational practices, it offers valuable insights into strategies for addressing bullying globally.

## Article Contribution to Related Field of Study

This study contributes to the field of educational psychology by incorporating multiple dimensions of classroom climate into a higher-order structural equation model, thus providing a thorough perspective on its effects on bullying-related outcomes. Grounded in environmental psychology, the study views the classroom as a critical microenvironment

where teacher support, peer interactions, and classroom norms collectively shape both student and teacher behaviors. The findings offer empirical evidence supporting the idea that positive educational environments promote psychological well-being and help reduce bullying. Additionally, the research provides practical recommendations for educators and policymakers to foster inclusive, supportive classroom climates.

For educators, the study suggests incorporating training on creating supportive climates, setting clear behavioral norms, and promoting peer collaboration to foster positive student interactions. Additionally, tailored interventions are recommended for different age groups, with younger students benefiting from social-emotional learning programs and older students from empowering bystanders.

For policymakers, the study advocates for integrating classroom climate into national education policies and supporting initiatives that promote positive school cultures. Providing incentives for schools to implement anti-bullying programs and ensuring cultural sensitivity in policy design are also key recommendations.

Overall, by focusing on primary schools in China, this study broadens the cross-cultural relevance of classroom climate research, shedding light on how cultural values and environmental factors interact to shape educational practices.

## Acknowledgement

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