

Which Training Works? Evaluating the Effectiveness of Teacher Training Programs on Classroom Disorder

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ABSTRACT

This study examines the effectiveness of 13 training programs in mitigating classroom disorder and evaluates acceptance of school policy among three distinct student groups. Specifically, it identifies which training programs have a significant impact on reducing or preventing classroom disruptions. Using ordinal logistic regression, the analysis draws on a dataset of 2,762 responses from the 2017–18 School Survey on Crime and Safety (SSOCS), encompassing schools across urban, suburban, town, and rural settings in the United States. Findings indicate that only four training programs—classroom management, security procedures, mental health intervention, and positive behavior intervention—significantly increase the likelihood of reducing classroom disorder. Additionally, among school policies examined, only those promoting cultural diversity, such as cultural awareness clubs, demonstrate a meaningful positive effect on mitigating widespread classroom disruptions. The study identifies four key training-based competencies essential for teachers: classroom management, security procedures, mental health intervention, and positive behavior support. These competencies, developed through targeted training programs, are critical for educational stakeholders and institutions seeking to foster effective classroom management and minimize disorder.

Keywords: Classroom disorder, Classroom management, Cultural diversity policies, Mental health intervention, Ordinal logistic regression, Positive behavior support, and Training programs

INTRODUCTION

In any education system, classroom management is one of the essential pillars that determine the success of the teaching and learning process and students' academic achievement. The literature consistently asserts that teachers should ideally be able to carry out classroom management functions as part of their professionalism. Kaur and Pahuja (2019) Define classroom management as a technique used to create effective learning by minimising distractions during the learning process, a view also reinforced by Nafa (2022), who emphasises that classroom management is a critical factor in learning success. In line with that, Cho et al. (1972) Show that classroom management has a preventive function against disruptive behaviour that can hinder the learning process. Such disruptive behaviour not only affects learning activities but can also impact the school environment, teacher well-being, and students' mental health. (Cho et al., 1972). This understanding is also strengthened by Herman et al.'s (2020) Findings that effective classroom management can increase student concentration, assignment time, engagement in learning, and academic achievement. In addition, other studies have shown that classroom management affects learning motivation (Bist, 2019; Lazarides et al., 2020; Nguyen et al., 2021) and overall student behaviour (Emmer & Stough, 2001). Thus, the literature agrees that classroom management has a broad impact on students' psychological and behavioural aspects.

The increasing number of forms of deviant behaviour in schools, such as bullying and juvenile crime, further emphasises the urgency of classroom management. Data shows that in 2021, about 9.7% of crime cases in the United States involved teenagers, up from 7.5% in the previous year (Statista, 2024). This condition indicates that deviant behaviour can permeate the school environment, affecting the safety and order of the learning process. The United States federal government has even encouraged improvements in student discipline through the education system (Chaney et al., 2003). Therefore, many educational institutions emphasise classroom management to consistently instil values, discipline, and positive behaviour. In this context, classroom management is not only a pedagogical strategy but also a preventive effort against potential disturbances and deviations in student behavior.

Given these challenges, various studies emphasise the need for training for teachers, staff, and school managers to manage the classroom effectively. Training is not limited to classroom management; it also includes other skills that support

the teaching and learning process and prevent deviant behavior. Stough et al. (2015) found that teachers who participated in classroom management training demonstrated greater ability to foster positive student behaviours. The training helps teachers recognise patterns of behaviour that students can exemplify and create a safe, orderly learning environment. Hickey et al. (2017b) added that training can improve teachers' ability to encourage student involvement, prevent conflicts, and strengthen teacher-student relationships. Similar findings were reported by Bouzid et al. (2015), who showed a positive relationship between additional training and improved teacher self-efficacy, and by Hai (2023), who identified a significant influence of pedagogical training on classroom management skills. In addition, El Warfali and Yusoff (2014) emphasised that teachers need various types of training, not only classroom management but also time management, the promotion of positive student behaviour, and the prevention of deviant behaviour. However, these studies have not explicitly examined how variations in training affect the level of "widespread classroom disruption," a gap that is important to note in the development of educational management science.

Based on these gaps, this study sought to examine the influence of 13 types of training on the prevalence of classroom disruption, controlling for three school policy variables that represented school policies towards three different student groups. The approach used is logistic regression to assess the extent to which classroom management training can reduce classroom disruption. Thus, this research not only makes an empirical contribution to the effectiveness of teacher training but also enriches the body of knowledge in education management. This article is organised into several parts: introduction, literature review, methods, results, discussion, and conclusions, including implications, limitations, and recommendations for further research.

LITERATURE REVIEW

The Importance of Classroom Management

Classroom management is considered the foundation for an effective learning process because it provides a safe, orderly, and supportive environment for students. Experts emphasise that classroom management is no longer just a single skill focused on discipline enforcement, but a multidimensional construct encompassing organisational capacity, the quality of teacher-student relationships, and planned instructional design (Afiah, 2018; Hardin, 2008). Recent studies continue to reinforce this multidimensional view. For instance, Pangestika (2025) Highlights that classroom management remains one of the strongest determinants of teaching and learning effectiveness across educational settings in Indonesia. Similarly, Putri et al. (2025) Demonstrate that well-designed classroom management strategies directly improve student learning quality and foster a more conducive classroom atmosphere.

This perspective views classroom management as a proactive, systematic process, rather than merely a response to problematic behavior. Routine planning, physical space planning, and the creation of a safe and inclusive psychological climate are important parts of ensuring the effectiveness of learning. Research shows that clear, accessible, and visibility-supporting spatial planning can minimise distractions and make instructional flows smoother (Shank & Santiago, 2022). In addition, a favourable psychological climate—characterised by a sense of security, acceptance, and togetherness—correlates with increased student motivation and academic engagement (Kaur & Pahuja, 2019). Recent work further underscores this point: Permatasari et al. (2025) find that supportive learning management systems, combined with a favourable school climate, significantly improve student learning outcomes, especially at the elementary school level.

The existence of clear rules and consistent procedures is also a key element in creating productive learning conditions. Rules and routines that are understood together can reduce uncertainty, improve students' self-regulation, and build a stable classroom environment (Marzano & Pickering, 2003). Behaviour management, which includes both proactive and reactive strategies, is necessary to ensure fair and consistent interactions (Kounin, 1979). At the same time, instructional quality also shapes classroom conditions; relevant and engaging learning has been shown to reduce off-task behaviour and increase student participation (Jones & Jones, 2016). These findings align with Everston and Emmer's (2017) Emphasis that classroom management is a collection of interrelated skills, including organisation, time management, relationship building, and behaviour regulation. More recent evidence from early childhood inclusive classrooms shows that strong classroom management—especially in inclusion settings—can significantly improve learning quality for children with additional needs (Syahbari et al., 2025). Thus, consistent implementation of these interrelated skills can create an optimal learning environment.

The Impact of Teacher Training on Student Behaviour

Teacher training is a crucial factor in classroom management and student behaviour. Various studies confirm that professional training—particularly those that focus on proactive strategies, structured routines, and behavioural support—significantly improves teachers' ability to manage the classroom and lowers the rate of disciplinary interruptions or incidents (Emmer & Stough, 2001; Marzano et al., 2003). Similar findings were observed in the implementation of classroom management training in Irish primary schools, which increased teachers' self-confidence and sense of efficacy in implementing positive strategies (Leckey et al., 2016). Recent Indonesian evidence supports this pattern: Putri et al. (2025) Find that classroom management training is positively associated with teachers' readiness to implement structured routines and behaviour-supportive practices, reinforcing its importance for daily teaching.

Longitudinal research also shows that the need for training does not stop at the early stages of the career; experienced teachers still need to update skills to maintain the consistency and effectiveness of classroom management practices (Stough et al., 2015). Beyond the technical aspect, teacher training also has a broader psychological impact. Classroom management competencies acquired through training are often associated with the development of prosocial behaviour, responsibility, and cooperation among students (Sadeghi et al., 2022). Training can also increase teachers' psychological resilience by reducing stress and strengthening confidence in managing challenging student behaviours (Hickey et al., 2017a; Kennedy et al., 2021).

However, not all evidence is consistent. Güner's (2017) study found that the Preventive Classroom Management program did not result in significant changes in teachers' approval or disapproval behavior. This difference appears to be influenced by the measurement focus, which emphasises intrapersonal responses rather than classroom behavioural changes. Newer studies also encourage more nuanced approaches. For example, classroom management interventions in inclusive schools appear to work best when embedded within broader school-wide and climate-supportive frameworks (Syahbari et al., 2025). These findings highlight gaps in the literature—particularly regarding mechanisms, contextual moderators, and the time span required for training to produce real impact. Nonetheless, the research overall supports the idea that teacher training plays an important role in strengthening classroom management and shaping student behavior. However, more research is still needed to understand the conditions that make training truly effective in the long run.

The Role of School Climate and Inclusion

In addition to teacher-centric factors, school climate plays a significant role in shaping classroom interactions and student behaviour. A favourable school climate—characterised by emotional security, acceptance, supportive relationships, and inclusive practices—is the foundation for creating an effective learning process. The psychological dimension in classroom management is closely related to the broader school climate, as an inclusive environment enhances belonging, reduces anxiety, and encourages student academic engagement (Kaur & Pahuja, 2019). Recent studies reaffirm this connection. Rahmadani et al. (2025) Report that inclusive teaching strategies significantly improve students' perceived learning outcomes and emotional engagement, especially in urban primary schools.

When a classroom is built on the principle of inclusion, students are more likely to feel valued and have a place in the learning process, which tends to decrease behavioural disorders. The school climate also affects the effectiveness of classroom management and the outcomes of teacher training. Teachers who work in a supportive environment are better able to consistently implement

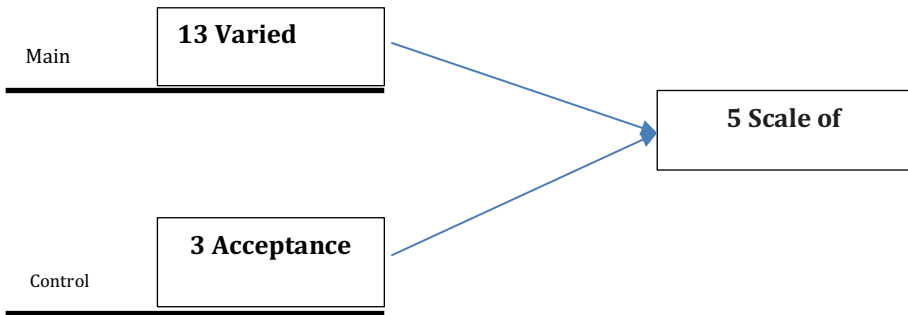
routines, develop positive relationships, and respond to student behaviour constructively. Conversely, a weak or non-inclusive school climate can undermine the effectiveness of effective management strategies by reducing students' social-emotional stability or lowering trust in the teacher–student relationship. Furthermore, studies in Indonesian elementary schools indicate that strong school climate indicators—such as support, safety, and inclusivity—significantly contribute to improved learning outcomes (Permatasari et al., 2025).

Additionally, inclusion principles help ensure that learning is designed in an accessible, culturally responsive manner, which, in turn, reduces off-task behaviour and enhances academic focus. Inclusive classroom management strategies also enhance children's participation, even those with diverse needs, as shown by Syahbari et al. (2025), who document improvements in engagement and learning quality within inclusive early childhood settings. Thus, the literature confirms that school climates and inclusion practices serve as contextual supports that reinforce the benefits of classroom management and teacher training, resulting in a more orderly, equitable, and conducive learning environment.

Research Models and Hypothesis

This study aims to estimate and empirically model the effects of 13 teacher training programs on the incidence of “widespread disorder” in classrooms. The thirteen different training programs are the independent variables, and widespread disorder is the dependent variable. Additionally, this study employs three control variables to test robustness (Figure 1). The thirteen training programs include (Table A2): (T1) *training in classroom management for teachers*; (T2) *training in school-wide discipline policies and practices related violence*; (T3) *training in school-wide discipline policies and practices related to cyberbullying*; (T4) *training in school-wide discipline policies and practices related to bullying other than cyberbullying*; (T5) *training in school-wide discipline policies and practices related to alcohol and/or drug use*; (T6) *training in safety procedures, e.g., how to handle emergencies*; (T7) *training in recognizing early warning signs of students likely to exhibit violent behavior*; (T8) *training in recognizing signs of self-harm or suicidal tendencies*; (T9) *training in intervening and referral strategies for students displaying signs of mental health disorders, e.g., depression, mood disorder, A.D.H.D.*; (T10) *training in recognizing physical, social, and verbal bullying behaviors*; (T11) *training in recognizing signs of students using/abusing alcohol and/or drugs*; (T12) *training in positive behavioral intervention strategies*; (T13) *training in crisis prevention and intervention*.

Figure 1: Research Model



Meanwhile, this study also used three control variables, where schools accept students based on three-dimensional differences in student groups, which include (1) *acceptance of sexual orientation and gender identity of students, e.g., Gay-Straight Alliance*; (2) *acceptance of students with disabilities, e.g., best buddies*; (3) *acceptance of cultural diversity, e.g., cultural awareness club*. As for the dependent variable, “widespread disorders in the classroom” (WDS), with five scales— (1) happens daily; (2) happens at least once a week; (3) happens at least once a month; (4) happens on occasion; and (5) Never happens. With a variable structure comprising independent, control, and dependent variables, this study employs an ordinal logistic regression approach, as detailed in the methodology section. Based on that research model, the hypothesis can be formulated as follows (Table 1):

Table 1: Research Hypothesis

Code	Hypothesis	Variable Category	Proposed Effect
H1	Training in classroom management (T1) significantly reduces widespread classroom disorder (WDS).	Training Program (IV)	Expected to decrease WDS
H2	Training in school-wide discipline policies related to violence (T2) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H3	Training in school-wide discipline policies related to cyberbullying (T3) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H4	Training in school-wide discipline policies related to non-cyberbullying (T4) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS

Code	Hypothesis	Variable Category	Proposed Effect
H5	Training in discipline policies related to alcohol/drug use (T5) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H6	Training in safety and emergency procedures (T6) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H7	Training in identifying early warning signs of violent behaviour (T7) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H8	Training in recognising signs of self-harm or suicide tendencies (T8) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H9	Training in mental-health intervention and referral strategies (T9) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H10	Training in recognising physical, social, and verbal bullying (T10) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H11	Training in recognising alcohol/drug use among students (T11) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H12	Training in positive behavioural intervention strategies (T12) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H13	Training in crisis prevention and intervention (T13) significantly reduces WDS.	Training Program (IV)	Expected to decrease WDS
H14	School acceptance of students' sexual orientation and gender identity significantly reduces WDS.	Control Variable	Expected to decrease WDS
H15	School acceptance of students with disabilities significantly reduces WDS.	Control Variable	Expected to decrease WDS
H16	School acceptance of cultural diversity significantly reduces WDS.	Control Variable	Expected to decrease WDS

Table 1 is a set of hypotheses, surely, based on the underlying theoretical frameworks. In this regard, this research is based on the assumption that

widespread *classroom disorder* results from a complex interaction among teacher competence, student behavioural dynamics, and school climate. The theory of classroom management put forward by Emmer and Stough (2001) emphasises that teachers' ability to set rules, maintain structure, and manage student behaviour is the primary foundation in creating a conducive learning environment. Training focused on classroom management (T1) strengthens these skills, thereby reducing classroom disruption. In addition, the theory of school safety and *situational prevention* (Clarke, 1997; Cornell & Mayer, 2010) explained that teachers who can detect early signs of risk, understand safety procedures, and be prepared for crises (T6, T7, T13) are more effective in preventing the emergence of problematic behaviour that can develop into classroom disruption. Thus, safety-oriented and risk prevention training play a significant role in maintaining classroom order.

Classroom disruption is also often related to students' social-emotional needs and psychological conditions, so student mental health theory and whole-child education perspectives provide a solid basis for introductory mental health training and interventions (T8, T9, T11). Suldo et al. (2014) show that mental symptoms such as anxiety, depression, or ADHD can appear in the form of disruptive behaviours if they are not identified and handled appropriately. Teacher training in recognising signs of substance abuse or other risky behaviours also supports efforts to prevent early classroom disruptions. On the other hand, the *Positive Behavioural Interventions and Supports (PBIS) approach* (Sugai & Horner, 2006) confirms that behavioural interventions that focus on positive reinforcement, exemplary, and clear expectations (T12) are more effective in encouraging students' prosocial behaviour. Thus, mental health and positive behaviour-based training directly contribute to a teacher's ability to proactively manage student behaviour.

Beyond teacher training, the control variables in this study are grounded in *school climate* and *multicultural education* theories that emphasise the importance of an inclusive, safe, and diverse school environment. Cohen et al. (2009) Affirm that a favourable school climate reduces the tendency toward aggressive behaviour and increases students' attachment to the school community. Policies that accept cultural diversity, sexual orientation, gender identity, and disability help build a sense of security and social acceptance, which, in turn, suppresses conflict and disruptive behaviour (Banks, 2013; Jagers et al., 2019). Schools that have initiatives such as *cultural awareness clubs* have been shown to strengthen social cohesion and reduce class disruptions stemming from tensions between individuals. Thus, these theories collectively support the hypothesis that, in addition to teacher competence, an inclusive school environment is an essential factor in reducing *widespread disorders* and increasing learning effectiveness.

RESEARCH METHOD

This study uses ordinal logistic regression. This choice is based on the characteristics of ordinal logistic regression, which emphasises the dependent variable as ordinal rather than binary, such as Likert Scales or other ordinal scales (O'Connell, 2006). Theoretically, this study uses ordinal logistic regression as an analysis model because it is intended to estimate the key factors affecting WDS. This is because the dependent variable (WDS) is ordinal, with Likert-type responses ranging from 1 to 5 (Gow et al., 2022). This type of dependent variable data characterises the fundamental rationale for choosing an ordinal logistic regression-based analysis.

Data and Measurement

The study utilised data collected by the National Centre for Education Statistics (N.C.E.S.) related to the School Survey on Crime and Safety (S.S.O.C.S.) wave 2017-18, later published by the Institute of Education Sciences, Washington, DC. This data relates to education in the United States and other countries. S.S.O.C.S.: 2018, in its collection, is designed as “a mailed paper questionnaire” and “an online questionnaire,” which are then followed up by telephone (NCES, 2020). In this regard, the sample consisted of 2,762 schools spanning various levels (primary through combined), enrollment sizes, locales, racial compositions, and geographic regions, providing a diverse representation of the U.S. education system. Overall, after the survey was conducted, 2,762 samples were collected and analysed in this study using ordinal logistic regression. S.S.O.C.S. instruments involve complex items; therefore, they require recoding to be relevant to the analytical approach used. At this stage, the independent variables—13 types of teacher training (C0266-C0277)—are recorded, with the sample receiving training coded as “1” and those not receiving training coded as “0.” For dependent variables (WDS), no changes are made (unrecoded) because the data are already on a 1-5 scale, which meets the ordinal logistic regression criteria. The same is true of control variables, where re-encoding assigns a value of “0” to answers that do not accept the existence of group differences based on cultural diversity, disabilities, or *sexual orientation*. In addition, multicollinearity was assessed using the Variance Inflation Factor (VIF) to ensure that there was no high correlation among independent variables that could compromise the stability of the model estimates. As a result, the test results show a VIF value below 5, indicating no multicollinearity among the variables.

Ordinal logistic regression model

An ordinal logistic regression model is applied after performing a chi-squared test. This aligns with the research model by Gow et al. (2021), in which the dependent variable, WDS, has a non-zero value on a 1-5 scale; therefore, the approach used

is ordinal logistic regression. (H. Gow et al., 2009). The value of the dependent variable is a category that is in *sequential order* and more relevant, analysed using ordinal logistic regression methods, with models built on latent regression methods notated as follows:

$$y^* = x^* \beta + \epsilon \dots \dots \dots (1)$$

Where Y (ordered dependent variable) has five possible answers (scale 1-5), and respondents can then choose one of the scale value options based on what best represents their experience. The x represents various factors that determine the respondent’s choice, and ϵ represents *the unobserved factors*.

Statistical Analysis

The 2017-18 S.S.O.C.S. wave data were analysed using regular statistical tests. Descriptive analysis using results already reported by N.C.E.S., and Pearson’s chi-squared test and ordinal logistic regression with marginal effects were used to test whether variations in WDS (widespread disorder in the classroom) events were influenced by variations in training that teachers had received in schools in the United States. So is the possible influence of other factors, such as acceptance of cultural diversity, acceptability of groups of people with disabilities, and acceptability of differences in sexual orientation and gender. Additionally, S.S.O.C.S. data were analysed using STATA (version 17.0). The difference between this research and similar studies lies precisely in the analytical techniques employed. Stough et al. (2015) used an experiment-based survey approach, but did not use ordinal logistic regression (Stough et al., 2015). In this regard, Aydin et al. (2020) used a quasi-experimental design with a pre-test intervention—posttest design. (Aydin & Karabay, 2020). Instead, the study used an ordinal logistic regression because the dependent variable is non-zero.

RESULTS

Descriptive statistics

Table 2 provides the total sample and the characteristics of each sample taken. There are five sample criteria in this study: First, the level of education, with 671 samples at the primary level, 975 at the middle level, 997 at the high school level, and a combined total of 119. *Second* is enrollment capacity, where schools with fewer than 300 students have 135 samples, those with between 300 and 499 students have 334 samples, those with 500-990 students have 806 samples, and those with 1000 or more students have 700 samples.

Table 2: Sample and its characteristics

School characteristic	Completed survey
Total	2762
Level	
Primary	671
Middle	975
High school	997
Combined	119
Enrollment size	
Less than 300	135
300-499	334
500-999	806
1000 or more	700
Locale	
City	769
Suburb	793
Town	168
Rural	245
Per cent white, non-Hispanic enrollment	
More than 95%	128
More than 80-95%	675
More than 50-80%	848
50% or less	1111
Region	
Northeast	459
Midwest	639
South	1042
West	625

Source: N.C.E.S., 2020

Third, based on school location, there are 769 samples from big cities, 793 from suburbs, 168 from cities, and 245 from regions. *Fourth*, white, non-Hispanic registrants were represented in the following proportions: more than 95% of up to 128 samples, more than 80% to 95% of up to 675 samples, more than 50% to 80% of up to 848 samples, and less than 50% of up to 1111 samples. *Fifth*, based on region, samples were collected from the Northeast (459), the Midwest (639), the South (1042), and the West (625).

Chi-Squared Test Results

The Chi-Squared test presented in Table A1 provides a preliminary picture of the relationship between teacher participation in 13 types of training and the level of classroom disruption. Of the entire tests, only two trainings showed a significant association with WDS frequency levels, namely: *First*, Classroom management training. Where the regression Equation is $\chi^2 = 11.5781$; $p = 0.021$. This similarity confirms that schools whose teachers receive classroom management training tend to have significantly different patterns of WDS distribution than schools that do not. Substantively, this indicates that improvements in teachers' ability to regulate student procedures, routines, and behaviours are indeed associated with reduced classroom disturbances. *Second*, training in *safety procedures*. With the regression model, $\chi^2 = 14.4877$; $p = 0.006$, from this Equation, while confirming this finding, shows that teachers' ability to handle emergencies is also related to the stability of classroom conditions. A possible explanation is that teachers who are prepared for extreme conditions tend to be more confident and better able to maintain classroom control in everyday situations. Other training showed no significant association at this stage. However, the Chi-Squared test provides only a preliminary indication, so ordinal regression analysis is necessary to determine the effect of each training after controlling for all variables.

Ordinal Logistic Regression Results

The core analysis of this study uses ordinal logistic regression, as shown in Table A3. This model estimates the probability that a class is in a lower interference category (category five is better than 1). The results showed that only four of the 13 training sessions had a significant effect on reducing the likelihood of classroom disruption. *First*, Classroom Management Training (OR = 1.18; $p < 0.001$). Teachers who attended classroom management training were 18% more likely to report that classroom disruptions *were rare or never occurred*. These findings are consistent with classroom management theory, which states that structure, clear rules, and active supervision can prevent deviant behaviour. Meaning: "Teachers who received classroom management training were 1.18 times more likely to report no classroom disruption." *Second*, Safety Procedures training (OR = 1.21; $p = 0.025$). This training significantly increased the likelihood of a more orderly class by 21%. Emergency preparedness seems to make teachers more effective in

implementing overall classroom controls. *Third*, Mental Health Intervention Training (OR = 1.17; $p = 0.020$). Teachers who took this training had a 17% greater chance of preventing classroom disruption. This suggests that teachers' ability to recognise symptoms of depression, mood disorders, or ADHD has a direct impact on the decline of disruptive behaviours stemming from students' social-emotional needs. *Fourth*, positive behaviour intervention training (OR = 1.19; $p < 0.001$). Training in positive behaviour intervention strategies increased the chances of a stable class by 19%. This approach uses positive reinforcement, rewards, and clear behavioural expectations. These four trainings collectively represent the most effective classroom management core competencies: pedagogical competence, safety competence, social-emotional competence, and behavioural intervention competence.

Control Variables

The control variable, only admission of students with disabilities, was significant (OR = 1.18; $p < 0.001$). Schools with disability inclusion programs are more likely to report fewer classroom disruptions. These findings suggest that an inclusive school culture can strengthen students' social relationships, foster a favourable emotional climate, and, overall, reduce classroom conflict. Acceptance of cultural diversity and sexual/gender orientation did not show significant effects, indicating that the impact may be indirect or require a stronger social context to be effective. When comparing "Table A1" and "Table A3", it becomes clear that ordinal regression strengthens and clarifies the results of the initial test by showing that only 4 of the teacher training sessions were actually practical. These findings are important from a policy perspective because they direct teacher professional development toward training with a real impact on classroom order. In essence, these four trainings not only reduce distractions but also build teachers' competence in managing behaviour, responding to students' emotional needs, maintaining safety, and enforcing positive expectations.

DISCUSSION AND CONCLUSIONS

Widespread disorder in the classroom and its new explanations

Widespread classroom disruption is characterised by disorderly behaviour across different parts of the classroom that lasts long enough to inhibit the learning process. This condition is not just a problem of spontaneous discipline but a symptom of structural problems in classroom management, the quality of social relationships, and the emotional capacities that underpin learning practices. Classical literature provides an initial overview of the problem's origins. Kounin (1979) Emphasised that *withitness*, the teacher's overall awareness of classroom dynamics, is the foundation of distraction prevention. When disruption occurs on a massive scale, this dimension of vigilance is likely underdeveloped or

inconsistently applied. Class chaos also often arises from rules that are not clearly formulated or inconsistently applied. Marzano and Pickering (2003) Emphasised that explicit, mutually understood rules and procedures are prerequisites for orderly classroom behaviour. Uncertainty about rules often leads to ambiguous expectations, which in turn trigger undisciplined behaviour. In addition, the quality of the teacher-student relationship is fundamental. Pianta (1999) Shows that relationships that are not warm, supportive, or responsive can trigger noncompliance and interfere with learning interactions. In this perspective, positive relationships are not an add-on but the foundation for a well-managed class.

Another factor receiving increasing attention in contemporary research is students' social-emotional states. Jennings and Greenberg (2009) argue that teachers need social-emotional competence to respond adaptively to students' social-emotional vulnerabilities. This lack of competence can make students more vulnerable to stress, anxiety, and even difficulties in social interaction, which directly increases the likelihood of classroom disruption. Thus, widespread classroom disruption should be understood as a multidimensional phenomenon that requires a systemic response, primarily through teacher competency development. The research findings in this study show that not all training has a significant impact on reducing classroom distractions. Of the thirteen types of training analysed, only four were shown to be effective: classroom management training, safety procedures training, intervention and referral training for students with indications of mental disorders, and positive behavioural intervention strategies training. These findings align with theoretical developments on classroom management as the foundation of effective learning. Afiah (2018) and Hardin (2008) emphasised that classroom management is a multidimensional construct that extends beyond discipline enforcement, encompassing organisational capacity, instructional design, and the quality of teacher-student relationships.

The latest evidence from the Indonesian context also strengthens this view. Pangestika (2025) Found that classroom management remains the strongest determinant of learning effectiveness, while Putri et al (2025) Found that well-designed classroom management strategies directly contribute to the quality of learning and the creation of a conducive atmosphere. The classroom management training in this study had a significant impact because it equipped teachers with a set of skills that create structure, predictability, and a safe atmosphere—three elements that serve to suppress potential disruptions. Training in safety procedures also showed substantial effects. Physical and psychological safety are prerequisites for effective learning; teachers who fully understand safety procedures can respond appropriately to risks, thereby reducing student anxiety and creating more focused learning conditions. This effect reinforces the literature, which emphasises that a safe psychological climate correlates with increased academic motivation and

engagement (Kaur & Pahuja, 2019; Shank & Santiago, 2022). Under safe conditions, distractions are reduced, and learning participation increases.

The third type of training—intervention and referral for students with indications of mental disorders such as depression, *mood disorders*, or ADHD—is of high relevance in the context of contemporary educational challenges. This training strengthens teachers' social-emotional competence, enabling them to detect early signs of disorders and provide appropriate interventions. These findings are highly consistent with the concept of social-emotional competence proposed by Jennings and Greenberg (2009), which posits that teachers' emotional competence is a determinant of students' behavioural stability. Given the increasing cases of mental health issues in children and adolescents, this type of training is increasingly urgent. The fourth training, a positive behaviour intervention strategy, is based on the principle of positive reinforcement that has long been recognised as more effective than physical punishment. Kounin (1979) showed that maintaining students' active involvement through positive reinforcement directly reduced the frequency of disturbances. In the context of modern classroom management, positive reinforcement not only serves as a disciplinary technique but also helps build a supportive, collaborative, and motivating classroom climate.

The analysis of this study's findings is strengthened when it is critically linked to school climate theory and inclusion. The effectiveness of teacher training depends heavily on the school environment. Schools with a supportive and inclusive climate tend to optimise training outcomes. Rahmadani et al. (2025) Noted that inclusive learning strategies improve students' perception of learning outcomes and emotional engagement. Meanwhile, Permatasari et al. (2025) show that a favourable school climate—especially indicators of support, safety, and inclusivity—significantly improves learning outcomes. The findings of this study are also strengthened by evidence from the inclusion classroom. Syahbari et al. (2025) Show that effective classroom management in an inclusive context can improve engagement and learning quality, especially for students with additional needs. This indicates that teacher training should not only emphasise the technical aspects of classroom management but also incorporate an inclusive perspective, enabling teachers to effectively manage the diversity of student needs.

Theoretically, this study reaffirms that classroom management is a complex process influenced by pedagogical and social-emotional skills, as well as the quality of the school climate. These findings expand on the existing literature by showing that the synergy between teacher competence and the school context strongly influences training effectiveness. In practical terms, the implications are clear: teacher professional development needs to prioritise training proven to directly reduce classroom disruptions, i.e., classroom management, safety, social-emotional interventions, and positive behaviour strategies. This training can help

build a safe, orderly, inclusive, and ultimately more productive learning environment for all students.

Conclusion

The main findings of this study show an important contribution to the development of educational science, especially in understanding the factors that are truly effective in preventing widespread classroom disruption. Of the thirteen types of training received by teachers in the United States, only four have proven relevant and significant: *classroom management training*, *safety procedures training*, *mental health intervention training*, and *positive behaviour intervention*. These four forms of training are not only technical but also reflect the core competencies teachers need to create a classroom climate that is safe, responsive, and supportive of the learning process. In addition, the findings on the control variables showed that only acceptance of cultural diversity—e.g., through cultural awareness clubs—had a positive and significant effect on the likelihood of avoiding widespread class disturbances. This confirms that schools with an inclusive culture tend to be more socially stable and better able to reduce potential classroom conflicts. At the developmental level, these findings confirm that efforts to prevent classroom disruption cannot rely solely on disciplinary rules or ad hoc responses to problematic behaviours. In fact, investing in the correct type of teacher training and strengthening an inclusive school culture has a tangible impact on the quality of the learning environment. The practical implication is that educational institutions and policymakers should prioritise these four types of training in teacher professional development programs. Schools also need to formulate policies that consistently foster acceptance and appreciation for cultural diversity. By implementing these measures, schools not only improve teacher competence but also build a safer, mentally healthy, and more conducive educational ecosystem for all students.

IMPLICATIONS

The theoretical implication of this study is the “need for holistic competence” that teachers must possess to anticipate and manage the widespread classroom chaos. These competencies are considered holistic and practical for anticipating and addressing widespread classroom disorder. They have four basic competencies, which are acquired through at least four training variations: First, classroom management competencies, which include abilities that teachers can master through training to create, maintain, and manage an orderly and conducive classroom environment for learning. Key elements of this competency include: “classroom setting”—structuring the physical environment to support learning,

“developing rules and procedures”—creating and implementing clear and consistent rules, and “behaviour management”—using techniques such as positive reinforcement, logical consequences, and proactive approaches to prevent and deal with disruption.

Second, competence in security procedures can be developed through training, enabling teachers to master the skills needed to understand and implement procedures that ensure a safe and supportive learning environment for students. This includes the competence that teachers can possess to formulate policies that prevent violence, handle emergencies, and ensure students’ physical and psychological safety. In this case, the main elements that underpin this competence are “security policy,” emergency management, and a safe environment. *Third*, mental health intervention competencies, where competencies are acquired by teachers through training, making them helpful in recognizing signs of mental disorders in students, depression, mood disorders, and ADHD. Once any of these signs are present, teachers can intervene early or refer students to the appropriate professionals. Last is the competence in positive behavior intervention. Through this competency training, teachers are equipped to use positive behaviour intervention strategies to encourage and reinforce desired behaviours. Skills needed and acquired include technical skills such as positive reinforcement, rewards, and approaches that can support and strengthen positive relationships between teachers and students.

Holistic competencies are formulated and needed to minimise the occurrence of “widespread disorder in the classroom”, while placing this study as an argument for formulating a practical policy for teachers based on four holistic competencies, which have been modelled by ordinal logistic regression. In this regard, there are at least four practical implications that teachers can apply: (1) practical implications of classroom management competence, where teachers can start class with an opening routine such as Reading today’s rules and expectations and use non-verbal signals to remind students of expected behavior without disrupting the learning process; (2) practical implications of competency of security procedures, whereby teachers can establish classroom rules prohibiting any form of violence or intimidation and implement a ‘zero-tolerance’ policy towards violations; (3) the practical implications of mental health intervention competence, could be creating a safe space in the classroom where students can talk about their problems privately with teachers; and (4) the practical implications of positive behavior intervention competencies, which could be the creation of reward boards in the classroom where students can earn stars or stickers for good behavior, which can then be exchanged for rewards or privileges.

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Appendix

Table A1: Chi-Squared Test Results

No.	Variables	Scale	How often is widespread disorder in classrooms					Chi-square (X^2)	P-Value
			1	2	3	4	5		
Independent Variable-Dependent Variable									
1	<i>training in classroom management for teachers;</i>	0	2	6	12	86	254	11.5781	0.021
		1	28	65	94	737	1478		
2	<i>training in school-wide discipline policies and practices related to violence;</i>	0	9	19	24	204	400	1.9741	0.741
		1	21	52	82	619	1332		
3	<i>training in school-wide discipline policies and practices related to cyberbullying;</i>	0	11	17	28	234	440	4.4772	0.345
		1	19	54	78	589	1292		
4	<i>training in school-wide discipline policies and practices related to bullying other than cyberbullying;</i>	0	7	12	21	141	289	1.5766	0.813
		1	23	59	85	682	1443		
5	<i>training in school-wide discipline policies and practices related to alcohol and/or drug use;</i>	0	16	33	45	377	775	1.4299	0.839
		1	14	38	61	446	957		
6	<i>training in safety procedures, e.g., how to handle emergencies;</i>	0	5	2	7	37	65	14.487	0.006
		1	25	69	99	786	1667		
7	<i>training in recognizing early warning signs of students likely to exhibit violent behavior;</i>	0	15	35	50	399	791	2.1203	0.714
		1	15	36	56	424	941		
8	<i>training in recognizing signs of self-harm or suicidal tendencies</i>	0	13	16	30	237	468	5.5222	0.238
		1	17	55	76	586	1264		
9		0	14	37	40	316	637	8.0829	0.089

	<i>training in intervening and referral strategies for students displaying signs of mental health disorders</i>	1	16	34	66	507	1095		
10	<i>training in recognizing physical, social, and verbal bullying behaviors;</i>	0	10	15	16	191	397	5.6756	0.225
		1	20	56	90	632	1335		
11	<i>training in recognizing signs of students using/abusing alcohol and/or drugs;</i>	0	19	43	46	464	962	8.0286	0.091
		1	11	28	60	359	770		
12	<i>training in positive behavioral intervention strategies;</i>	0	8	10	12	140	329	7.1471	0.128
		1	22	61	94	683	1403		
13	<i>training in crisis prevention and intervention</i>	0	12	21	28	220	435	4.4712	0.346
		1	18	50	78	603	1297		
Control variable- Dependent Variable									
1	<i>acceptance of the sexual orientation and gender identity of students,</i>	0	22	45	70	534	1131	1.0532	0.902
		1	8	26	36	289	601		
2	<i>acceptance of students with disabilities, e.g., best buddies;</i>	0	21	36	67	473	956	6.5572	0.161
		1	9	35	39	350	776		
3	<i>acceptance of cultural diversity, e.g., cultural awareness club.</i>	0	24	45	66	501	1079	4.6880	0.321
		1	6	26	40	322	635		

Source: Author's

Table A2 Descriptive Statistics

Variables	Descriptive Statistics				
	count	mean	sd	min	max
Dependent Variable:					
<i>Widespread disorder in classrooms</i>	2762	4.505	0.782	1.000	5.000
Independent Variables:					
<i>training in classroom management for teachers;</i>	2762	0.870	0.337	0.000	1.000
<i>training in school-wide discipline policies and practices related to violence;</i>	2762	0.762	0.426	0.000	1.000
<i>training in school-wide discipline policies and practices related to cyberbullying;</i>	2762	0.736	0.441	0.000	1.000
<i>training in school-wide discipline policies and practices related to bullying other than cyberbullying;</i>	2762	0.830	0.376	0.000	1.000
<i>training in school-wide discipline policies and practices related to alcohol and/or drug use;</i>	2762	0.549	0.498	0.000	1.000
<i>training in safety procedures, e.g., how to handle emergencies;</i>	2762	0.958	0.201	0.000	1.000
<i>training in recognizing early warning signs of students likely to exhibit violent behavior;</i>	2762	0.533	0.499	0.000	1.000
<i>training in recognizing signs of self-harm or suicidal tendencies</i>	2762	0.723	0.447	0.000	1.000
<i>training in intervening and referral strategies for students displaying signs of mental health disorders</i>	2762	0.622	0.485	0.000	1.000
<i>training in recognizing physical, social, and verbal bullying behaviors;</i>	2762	0.772	0.419	0.000	1.000
<i>training in recognizing signs of students using/abusing alcohol and/or drugs;</i>	2762	0.445	0.497	0.000	1.000
<i>training in positive behavioral intervention strategies;</i>	2762	0.819	0.385	0.000	1.000
<i>training in crisis prevention and intervention</i>	2762	0.741	0.438	0.000	1.000
Control Variables:					
<i>acceptance of the sexual orientation and gender identity of students,</i>	2762	0.348	0.476	0.000	1.000
<i>acceptance of students with disabilities, e.g., best buddies;</i>	2762	0.438	0.496	0.000	1.000
<i>Acceptance of cultural diversity, e.g., a cultural awareness club.</i>	2762	0.379	0.485	0.000	1.000

Source: Author's

Table A3: Ordinal Logistic Regression on Likelihood of Lower Classroom Disorder (Higher Category)

VARIABLES	Odds Ratio (OR)	Std. Error	z-value	p-value	95% CI
Training in classroom management for teachers	1.18*	(0.04)	4.98	<0.001	[1.09 – 1.28]
Training in school-wide discipline policies related to violence	1.03	(0.05)	0.61	0.541	[0.94 – 1.13]
Training in the cyberbullying discipline	1.04	(0.06)	0.74	0.459	[0.94 – 1.17]
Training in bullying (non-cyber)	1.03	(0.05)	0.66	0.509	[0.93 – 1.14]
Training in alcohol/drug discipline	1.01	(0.05)	0.29	0.771	[0.92 – 1.11]
Training in safety procedures	<i>*1.21</i>	(0.09)	2.24	0.025	[1.02 – 1.43]
Training in recognizing violent behavior, early signs	1.04	(0.05)	0.83	0.405	[0.95 – 1.15]
Training in signs of self-harm/suicide	1.01	(0.05)	0.22	0.826	[0.92 – 1.12]
Training in mental health intervention strategies	<i>*1.17</i>	(0.08)	2.32	0.020	[1.03 – 1.34]
Training in recognizing bullying behaviors	1.06	(0.06)	1.10	0.270	[0.96 – 1.19]
Training in alcohol/drug abuse recognition	1.05	(0.05)	1.14	0.254	[0.96 – 1.16]
Training in positive behavioral interventions	1.19*	(0.06)	3.87	<0.001	[1.08 – 1.31]
Training in crisis prevention/intervention	1.07	(0.06)	1.17	0.239	[0.96 – 1.19]
Acceptance of sexual orientation & gender identity	1.02	(0.05)	0.40	0.689	[0.92 – 1.13]
Acceptance of students with disabilities	1.18*	(0.06)	3.79	<0.001	[1.08 – 1.30]
Acceptance of cultural diversity	1.05	(0.05)	0.94	0.345	[0.95 – 1.16]

Source: Data analysis
