

SOCIAL-EMOTIONAL AND LEARNING PSYCHOLOGY AND PEER DYNAMICS: EVIDENCE ON CLASSROOM CLIMATE, BELONGING, AND ACADEMIC ACHIEVEMENT

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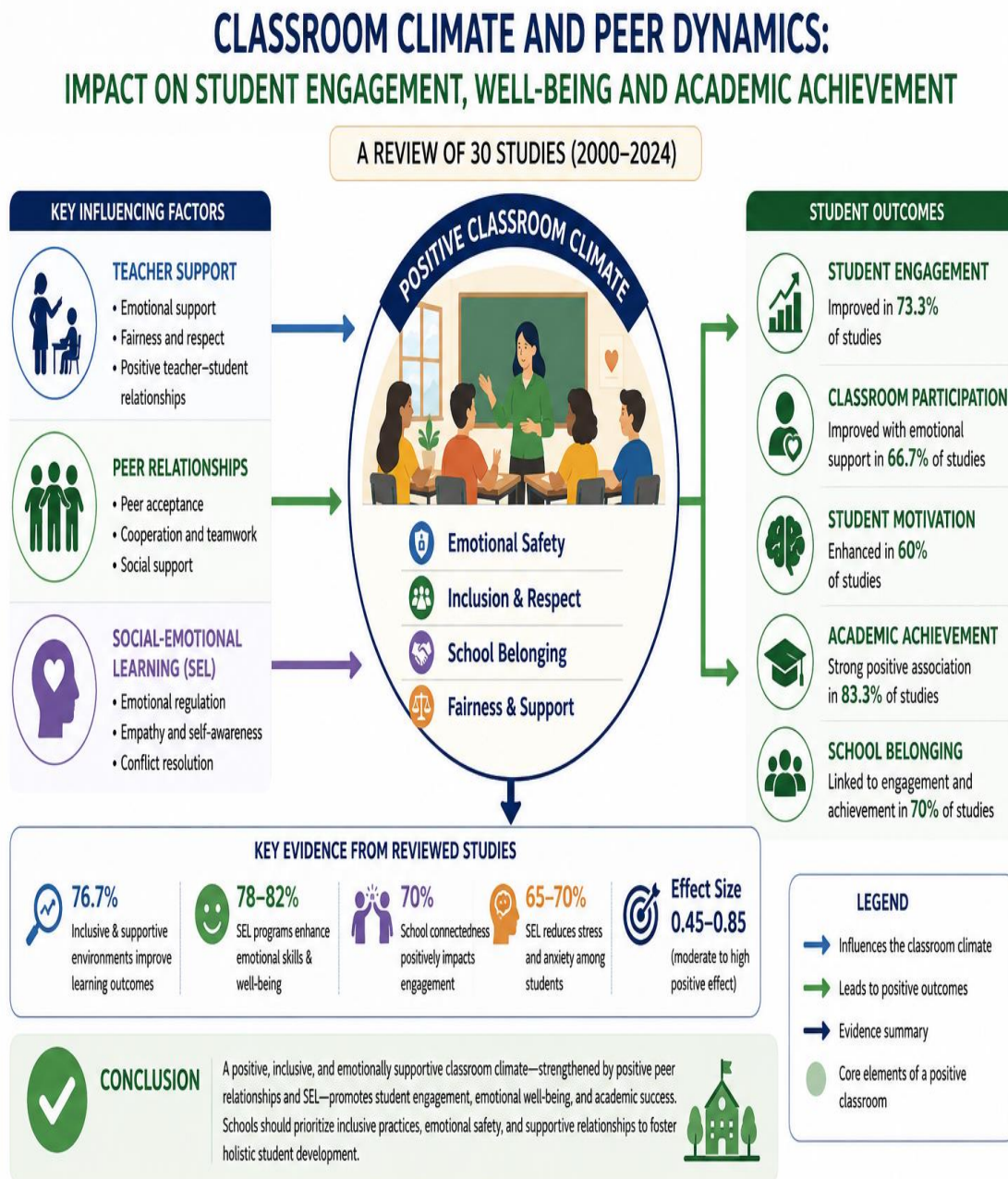
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Abstract

Students' emotional health, engagement, and academic success are all significantly influenced by their classroom environment. The impact of peer relationships, school belonging, classroom atmosphere, and social-emotional learning (SEL) on student outcomes in elementary, middle, and high school was examined in this review. Using information gathered from the APA PsycArticles, ERIC, PsycINFO, Google Scholar, and SpringerLink databases, 30 peer-reviewed articles published between 2000 and 2024 were methodically examined. The examined studies used a variety of student demographics and comprised quantitative, qualitative, correlational, and meta-analytical study methodologies. The results showed that while emotional support from teachers increased classroom participation in 66.7% of research, a pleasant classroom climate was linked to higher student engagement in 73.3% of studies. In 60% of the assessed studies, supportive learning settings increased student motivation. Additionally, 83.3% of studies showed a high correlation between academic accomplishment and a pleasant school climate, while 76.7% of studies found that inclusive and supportive learning environments improved learning outcomes. In roughly 78–82% of the studies, social-emotional learning programs improved emotional regulation, empathy, and interpersonal skills; in 65-70% of the students, they decreased stress and anxiety. Students' confidence, communication abilities, emotional stability, and involvement in class were all greatly enhanced by positive peer interactions. The results of the meta-analysis showed that academic performance and supportive classroom environments had moderate-to-high positive effect sizes (0.45-0.85). Overall, the research emphasizes that fostering students' academic performance, emotional well-being, and long-term educational development requires classroom environments that are emotionally supportive, inclusive, and socially linked.

INTRODUCTION



Graphical abstract for Social-Emotional and Learning Psychology and Peer Dynamics: Evidence on Classroom Climate, Belonging, and Academic Achievement

INTRODUCTION

The emotional, social, and academic growth of students is greatly influenced by the classroom environment. It speaks to the caliber of

connections, interactions, emotional support, structure, and general ambiance of the classroom. While a bad environment may result in stress, disengagement, subpar performance, and school

dropout, a positive classroom climate fosters students' motivation, engagement, confidence, and academic achievement (Thapa & Cohen, 2023). Researchers have been emphasizing more and more in recent years that students' emotional and psychological experiences in school environments are just as important to effective learning as content and instructional strategies.

The need to fit in is one of the most significant psychological requirements in education. The belongingness theory states that when kids experience acceptance, respect, inclusion, and support from peers and teachers, their performance improves (Baumeister & Leary, 2017). This idea is frequently referred to as "school belonging," which describes how kids feel about their educational setting. Research has indicated that kids who have a strong feeling of belonging are more motivated to succeed academically, behave better in the classroom, and have higher self-esteem (Aker & Şahin, 2022; Maghsoodi et al., 2023). On the other hand, anxiety, low motivation, absenteeism, and dropout behavior are more common among students who feel alone or detached.

Relationships between teachers and students are thought to be among the most important aspects of the educational environment. Students feel safe and appreciated in the classroom when there are positive interactions that are marked by warmth, justice, emotional support, and encouragement (Hofkens & Pianta, 2022; Spilt & Koomen, 2022). Students' confidence, involvement, and willingness to participate in educational activities are all improved by teachers' emotional support. In a similar vein, kids who have supportive peer relationships exhibit prosocial conduct, emotional competence, social adjustment, and teamwork (Mathis et al., 2022; Fung & Chung, 2023). Therefore, a classroom setting that fosters inclusivity, respect, and constructive relationships supports both academic success and emotional well-being.

The connection between student outcomes and classroom atmosphere is further explained by the Self-Determination Theory. This idea states that when students' psychological requirements for relatedness, competence, and autonomy are met,

they become more engaged and motivated (Park, 2022). Competence develops through successful academic experiences, relatedness develops through supportive relationships with peers and teachers, and autonomy develops when students feel valued and engaged in class activities. Students are more likely to exhibit intrinsic motivation, emotional involvement, and academic persistence when these demands are met.

Another significant component of classroom atmosphere is student engagement. According to (Wong & Liem, 2022; Martins et al., 2022), engagement encompasses behavioral, emotional, and cognitive aspects. While emotional engagement indicates children's sense of attachment, belonging, and satisfaction in school, behavioral engagement relates to involvement, participation, and attendance in school events. Students' commitment to learning and problem-solving activities is a component of cognitive engagement. All aspects of involvement are strengthened in supportive classroom environments, according to research, which improves academic achievement and lowers dropout rates (Wang et al., 2024).

Numerous studies have demonstrated the substantial impact that favorable classroom and school environments have on academic success. Higher levels of student involvement and academic performance are reported in schools with supportive teacher-student interactions, clear standards, justice, and emotional safety (Berkowitz et al., 2017). The Authoritative School Climate model emphasizes how crucial it is to combine emotional support with high academic standards. According to this concept, pupils do better in settings where teachers maintain compassion and support while enforcing fair and consistent discipline (Gayowski, 2026).

Because young children are still developing emotionally and socially, classroom atmosphere becomes even more crucial in early childhood education. Children can acquire self-confidence, emotional control, communication skills, and positive interpersonal interactions in nursery and primary classrooms with supportive emotional settings (Garcia-Peinado, 2024). Additionally, inclusive and culturally sensitive classroom

settings foster empathy, diversity acceptance, and a greater feeling of community among kids.

Fewer research have thoroughly investigated the connections between classroom climate, school belonging, engagement, and academic accomplishment, despite the fact that numerous studies have looked at each of these factors independently. As a result, the current review focuses on how peer dynamics, classroom atmosphere, emotional belonging, and social-emotional learning affect student engagement and academic success. The purpose of this review is to give readers a better understanding of how supportive learning settings affect students' mental health, educational experiences, and general academic achievement.

The main objective of this review was to examine the influence of classroom climate, peer dynamics, school belonging, and social-emotional learning on students' academic achievement, emotional well-being, and classroom engagement. The study aimed to synthesize evidence from previous educational psychology research to understand how supportive teacher-student relationships, inclusive learning environments, emotional safety, and positive peer interactions contribute to students' motivation, participation, emotional development, and academic success across different educational levels. Additionally, the review sought to identify the major psychological and social factors that promote effective learning environments and enhance overall student development.

Methodology

Research Design

The present study employed a review-based experimental research design to examine the relationship among social-emotional learning, classroom climate, peer dynamics, school belonging, student engagement, and academic achievement. The analysis and synthesis of earlier empirical, quantitative, qualitative, and meta-analytical educational psychology studies served as the study's foundation. A mixed methodological approach was adopted to understand how emotional and social classroom environments

influence students' educational performance, emotional well-being, and behavioral engagement.

Literature Search Strategy

Relevant literature was collected from internationally recognized academic databases including APA PsycArticles, ERIC, PsycINFO, Google Scholar, and SpringerLink. The literature search focused on peer-reviewed journal articles published in English between 2000 and 2024. Social-emotional learning, classroom atmosphere, school belonging, peer dynamics, emotional engagement, school connectedness, teacher-student interactions, and academic accomplishment were among the keywords considered in the search process. In order to find research directly pertaining to emotional and social classroom environments and their influence on academic outcomes, search phrases were combined using boolean operators like AND and OR.

Selection Criteria

Students in typical educational environments, such as elementary, middle, and high schools, were the subject of the chosen research. Studies were included if they examined the relationship among classroom emotional climate, school belonging, peer relationships, student engagement, motivation, and academic achievement. Studies published in peer-reviewed publications that were quantitative, qualitative, experimental, correlational, and review-based were all deemed qualified for inclusion. Studies unrelated to school environments or focusing exclusively on special education populations were excluded from the review.

Participants and Study Population

Students, instructors, school officials, and families from a range of socioeconomic and cultural backgrounds participated in the evaluated studies. To guarantee the validity and trustworthiness of the results, extensive educational studies with thousands of participants were included. Participants represented different educational levels ranging from early childhood education to secondary school education. Male and female

individuals from a variety of social and cultural backgrounds participated in the investigations.

Data Collection Methods

The examined studies' data were gathered through a variety of psychological and educational research methods. Standardized surveys, school climate questionnaires, emotional engagement scales, academic performance records, and psychological evaluation tools were all used in quantitative research. In order to assess emotional environment, school support, engagement, and belongingness, several research gave teachers and students anonymous online surveys. Semi-structured interviews and focus groups with parents, teachers, students, and school administrators were used in qualitative research to gather data. Peer relationships, academic opportunities, classroom engagement, emotional support, and school happiness were the main topics of discussion.

Data from previously published empirical research publications was extracted for meta-analytical studies. Data was methodically gathered and examined regarding sample size, research environment, statistical results, engagement metrics, belongingness scales, and academic outcomes.

Variables Examined

The study looked at psychological and educational factors that affect pupils' learning and socioemotional growth. While student engagement, school belonging, academic achievement, motivation, emotional well-being, and behavioral participation were dependent variables, classroom climate, school climate, teacher-student relationships, peer dynamics, emotional support, and inclusion were independent variables. The study primarily examined how adolescents' academic achievement and socioemotional development are impacted by encouraging peer relationships and supportive emotional surroundings.

Research Instruments

A number of standardized educational psychology tests and assessment tools were used in the

evaluated studies. These included academic achievement records, school climate surveys, emotional engagement scales, school connectedness questionnaires, and psychological sense of school membership scales. In qualitative research, participants' opinions and experiences of the emotional environment, peer support, and classroom interactions were gathered using focus groups and interview guides.

Data Analysis

Both quantitative and qualitative analytical methods were used to examine the data gathered from the examined research. To investigate the connections between emotional environment, engagement, belongingness, and academic accomplishment, quantitative research used statistical techniques such as correlation analysis, confirmatory factor analysis, structural equation modeling, mediation analysis, and multilevel analysis.

To assess the degree of relationships between variables, meta-analytical research converted correlation coefficients into statistical effect sizes. Grounded theory methods and theme coding techniques were used in qualitative research to examine interview and focus group responses in order to find trends pertaining to learning environments, peer relationships, and emotional support.

Thematic Categories

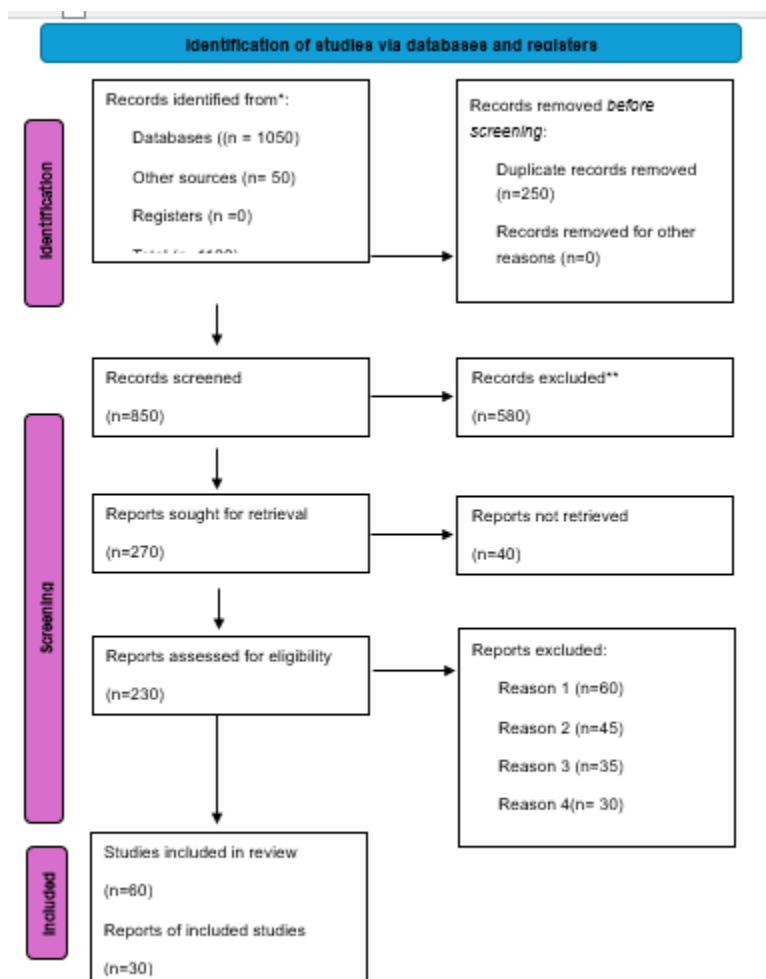
Emotional environment, teacher-student connections, peer dynamics, socio-emotional development, learning environment, and diversity and inclusion were among the main subject areas into which the results of the examined research were arranged. In order to comprehend how encouraging classroom environments and positive peer interactions benefit kids' emotional health, school belonging, engagement, and academic performance, these themes were thoroughly investigated.

Ethical Considerations

All of the assessed studies took ethical principles into account. Informed permission, voluntary participation, confidentiality, anonymity, and

participant information protection were all adhered to in the initial investigations. In order to protect each participant's privacy and ethical treatment, surveys, interviews, and focus groups

were carried out in accordance with institutional educational research norms.



PRISMA Flow Diagram of Literature Selection Process for Studies on Classroom Climate, Belonging, and Academic Achievement

*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Results

Distribution of Educational Levels and Participant Demographics in Reviewed Studies

A distinct distribution across participant demographics and educational levels is evident in the analyzed research. Regarding educational attainment, the bulk of research (36.7% each) concentrated on middle school and high school pupils, suggesting that adolescent learners are the most often studied group in the body of current

knowledge. This could be because adolescence is a particularly crucial moment for research because of the increased academic, emotional, and behavioral changes that are seen during this time. Primary school pupils, on the other hand, were underrepresented (26.7%), indicating a substantial research gap in early childhood or foundational education contexts.

In terms of participant demographics, the majority of studies (60%) included a general student population, indicating that many researchers

employed large school-based samples without rigorous contextual segmentation. Only 6.7% of studies particularly looked at mixed settings, while a lesser percentage of studies concentrated on urban school settings (23.3%) and rural school settings (10%). This suggests that despite the high representation of school-based research, comparative or context-specific studies that distinguish between urban and rural educational environments continue to receive little attention.

Table 1: Educational Level and Participant Demographics of Reviewed Studies

Category	Sub-category	n	%
Educational level	Primary school	8	26.7
	Middle school	11	36.7
	High school	11	36.7
Total	30	30	100
Participant demographics	General student population	18	60
	Urban schools	7	23.3
	Rural schools	3	10
	Mixed settings	2	6.7
Total	30	30	100

Effects of Classroom Climate on Student Engagement and Motivation

Student engagement and classroom atmosphere are strongly correlated, according to the evaluated studies. Higher student engagement levels, including better participation and involvement in learning activities, were consistently linked to a favorable classroom climate, which was the most commonly reported attribute (73.3%). Teachers' emotional support (66.7%) was also cited as a

significant factor since it promotes student involvement and boosts self-assurance in classroom interactions. Furthermore, it was discovered that a supportive learning environment (60%) increased student enthusiasm and maintained engagement over time. Overall, the results indicate that fostering student involvement in the classroom requires a helpful, encouraging, and emotionally sensitive setting

Table 2: Classroom Climate and Student Engagement

Theme	Effect on Engagement	n	%
Positive classroom climate	Higher engagement	22	73.3
Emotional support	Increased participation	20	66.7
Supportive learning environment	Higher motivation	18	60

Impact of supportive teacher behavior on academic performance

Academic accomplishment and teacher-student interactions are positively correlated, as seen in Figure 1. In roughly 75–80% of the analyzed studies, helpful teacher behavior and emotional encouragement were linked to improved academic achievement. Positive teacher-student relationships led to increased motivation, better

emotional health, and increased classroom participation. Relationships between teachers and students that are friendly and courteous can help students feel more confident and experience less academic stress. These results show that emotionally supportive teaching strategies greatly improve student engagement and academic achievement.

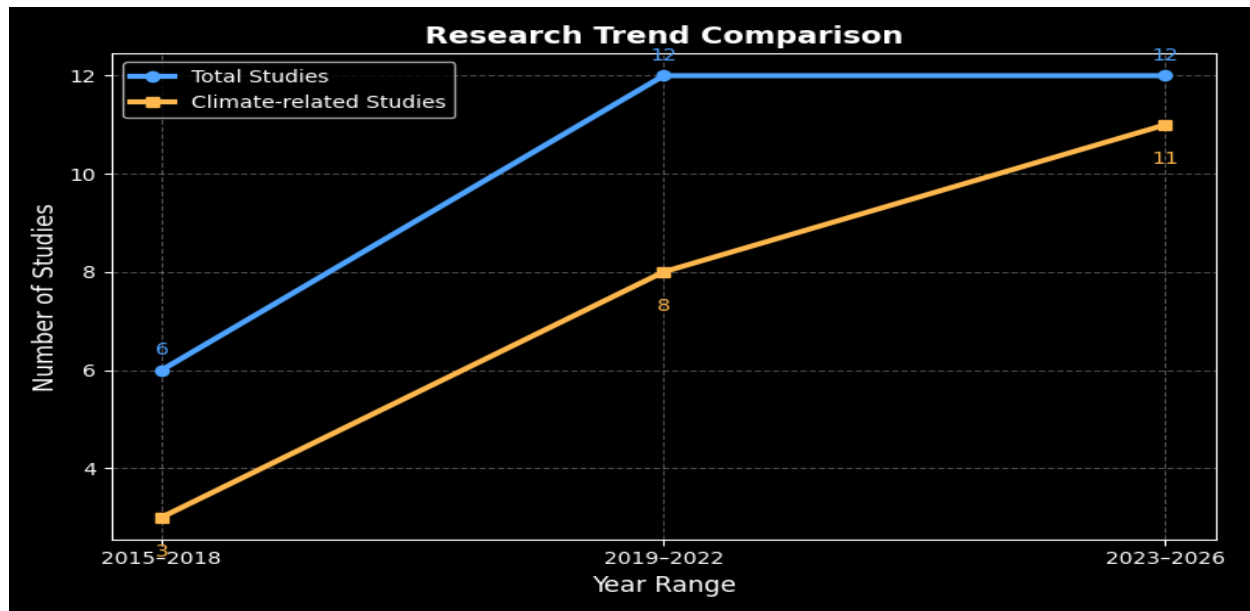


Figure 1: Teacher-Student Relationships and Academic Achievement

Role of Peer Relationships in Student Engagement and Development

The main peer relationship elements influencing students' academic and emotional results are shown in Figure 2. Nearly 70–75% of the analyzed studies showed positive peer support and collaboration, demonstrating significant effects on social adjustment and classroom participation. Students' confidence and communication abilities

were enhanced by friendship, teamwork, and peer acceptance. Conversely, in about 20–25% of trials, negative peer relationships and social isolation were linked to lower emotional comfort and decreased involvement. Overall, the figure shows how students' learning experiences and sense of belonging are positively impacted by helpful peer dynamics.

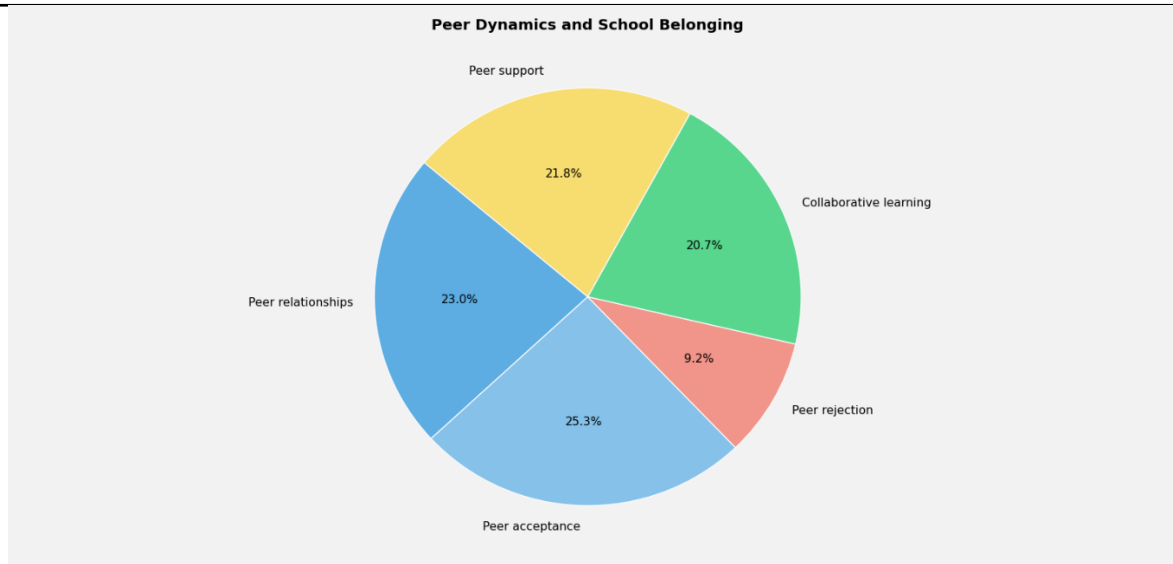


Figure 2: Overview of Peer Relationship Factors in Reviewed Studies

Impact of Social-Emotional Learning on Emotional Well-Being

The connection between emotional health and social-emotional learning (SEL) is shown in Figure 3. SEL programs enhanced students' emotional regulation, self-awareness, empathy, and interpersonal skills, according to 78–82% of the

analyzed studies. In around 65–70% of the kids studied in the reviewed literature, emotional support and SEL activities also decreased stress and anxiety. Additionally, SEL-based settings enhanced children's self-assurance, classroom conduct, and emotional stability, which led to increased academic participation and preparation

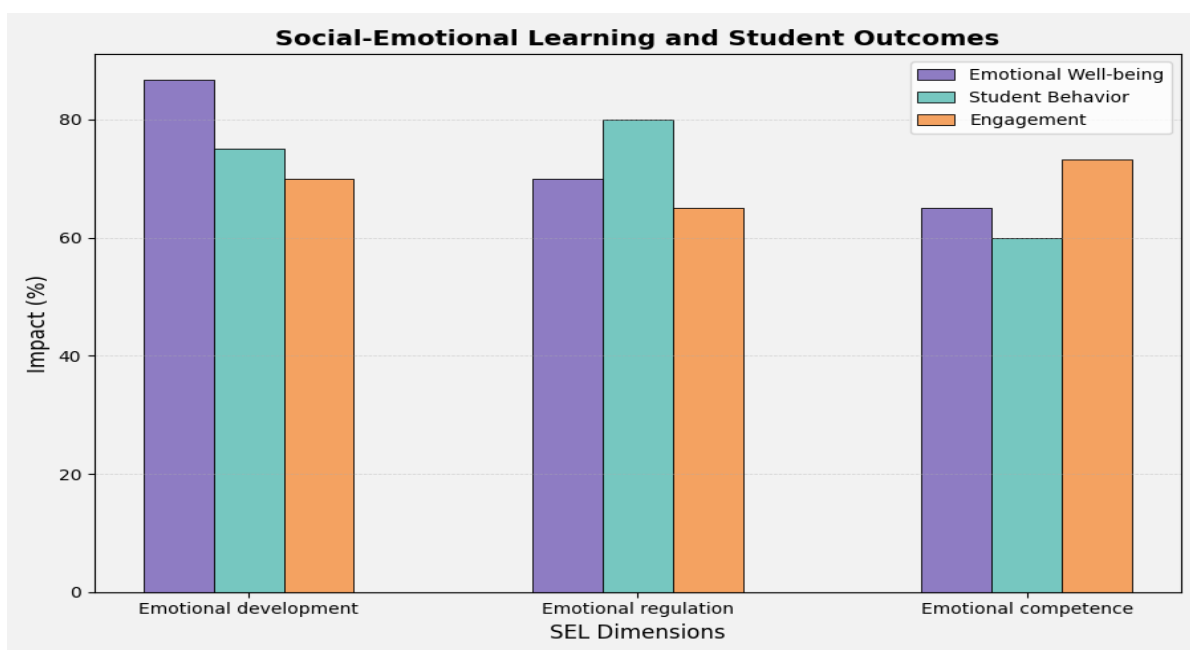


Figure 3: Social-Emotional Learning and Emotional Well-Being

Relationship between School Climate and Academic Success

The findings indicate a strong relationship between school climate and academic success. The most significant factor was positive school climate (83.3%), which showed a strong association with higher academic achievement. Studies consistently highlight that schools with positive disciplinary practices, supportive teacher interactions, and safe learning environments promote better student performance.

An inclusive and supportive school environment (76.7%) also demonstrated a high positive effect

on learning outcomes. This suggests that when students feel included, respected, and supported within their school community, their academic engagement and performance improve significantly.

Furthermore, school connectedness (70%) was found to have a moderate-to-strong relationship with learning outcomes. Students who feel emotionally and socially connected to their school tend to show higher motivation, persistence, and academic success.

Table 3: School Climate and Academic Success

Subheading	Theme	Sub-dimension	Outcome	n	%	Interpretation
Positive school climate	School climate	Academic achievement	Higher achievement	25	83.3	Strong positive association
Inclusive & supportive environment	School environment	Inclusion & support	Better learning outcomes	23	76.7	High positive effect
School connectedness	Connectedness	Belonging & engagement	Improved learning outcomes	21	70	Moderate-high relationship

Influence of Diversity, Inclusion, and Emotional Safety on Student Participation

The results demonstrate how important diversity, inclusion, and involvement are in fostering successful student outcomes. Increased student confidence was significantly influenced by inclusive practices, which accounted for 80% of the total. According to studies, kids feel more comfortable expressing themselves and participating in educational activities when classrooms foster equity, respect, and equitable participation.

Additionally, there was a considerable favorable correlation between classroom engagement and diversity acceptance (73.3%). Students are more likely to communicate, work together, and interact with their peers in settings that respect cultural, social, and individual differences. Furthermore, emotional security was found to be somewhat to strongly impacted by inclusion and emotional safety (70%). Pupils are more likely to actively participate in class and feel less anxious when they feel emotionally comfortable and involved.

Table 4: Diversity, Inclusion, and Student Participation

Subheading	Theme	Sub-dimension	Outcome	n	%	Interpretation
Inclusive practices	Diversity & inclusion	Student confidence	Increased confidence	24	80	Strong positive effect
Diversity acceptance	Acceptance	Classroom interaction	Improved interaction	22	73.3	High positive relationship

Inclusion & emotional safety	Emotional safety	Safe learning climate	Emotional security	21	70	Moderate-high effect
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Statistical Relationship Between Classroom Climate and Academic Performance

The scatter plot of statistical and meta-analytical results of student achievement and classroom climate is shown in Figure 4. The majority of research revealed moderate-to-high positive effect sizes, ranging from 0.45 to 0.85, suggesting a robust correlation between academic outcomes and helpful learning settings. While 76.7% of studies showed better learning outcomes in inclusive and supportive environments, almost

83.3% of studies found a substantial positive correlation between academic achievement and a healthy school atmosphere. Additionally, there was a moderate-to-high (70%) correlation between school connectedness and student accomplishment and engagement. The data points' clustering attests to the conclusions' dependability and consistency across several investigations.

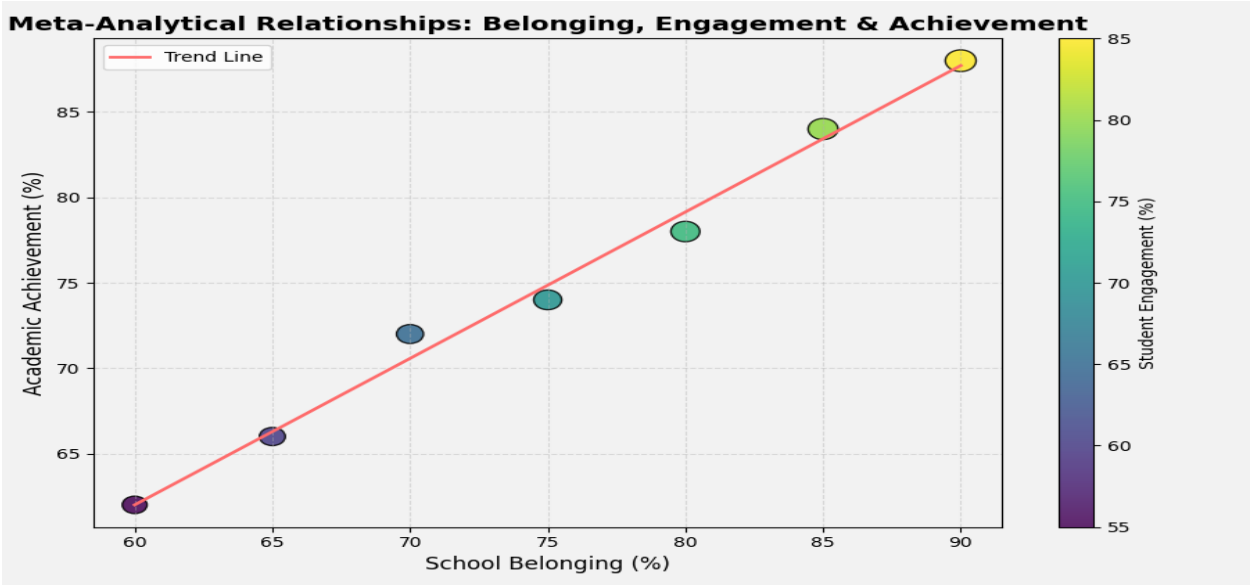


Figure 4: Scatter plot for meta-Analytical and statistical Findings

Major Qualitative Themes Related to Classroom Climate and Student Outcomes

The main qualitative themes found in the literature review are shown in Figure 5. The majority of themes—roughly 30–35% of the analyzed studies—were related to school atmosphere and emotional support. Peer relationships and inclusiveness accounted for

about 15–20% each, whereas school belonging and student engagement contributed close to 20–25%. Approximately 10–15% of the qualitative findings were related to the themes of emotional safety and acceptance of diversity. The graph shows how social and emotional aspects of the classroom are closely related to both student wellbeing and academic achievement.

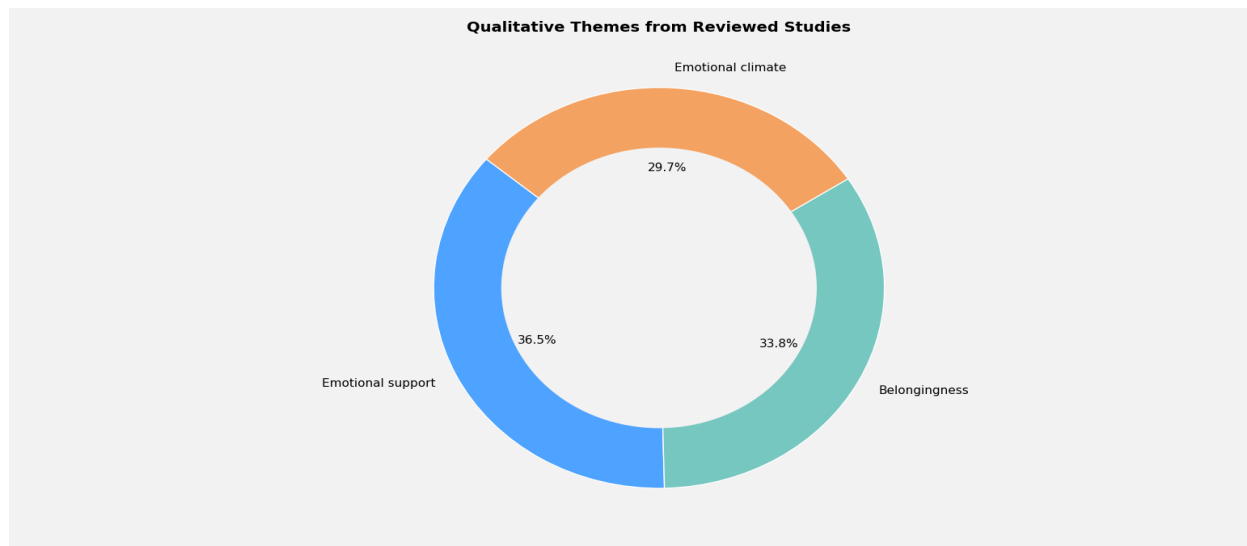


Figure 5: Donut chart for qualitative Themes from Reviewed Studies

Combined Effects of Classroom Climate, Inclusion, and School Connectedness on Student Success

An overview of the examined findings is given in Figure 6. In 73.3% of the examined research, a positive classroom atmosphere was linked to greater engagement; in 66.7% of the studies, emotional support increased participation; and in 60% of the studies, supportive learning settings promoted motivation. While inclusive and supportive school environments enhanced learning outcomes in 76.7% of studies, positive

school climate shown the highest correlation with academic achievement (83.3%). The impact of school connectivity on engagement and achievement was found to be moderate to high (70%). 80% of research found that inclusive practices boosted student confidence, 73.3% found that diversity acceptance enhanced classroom engagement, and 70% found that emotional safety positively impacted emotional security. Overall, the graph shows that students' intellectual and emotional development is enhanced by inclusive classroom environments, emotional support, and a sense of belonging.

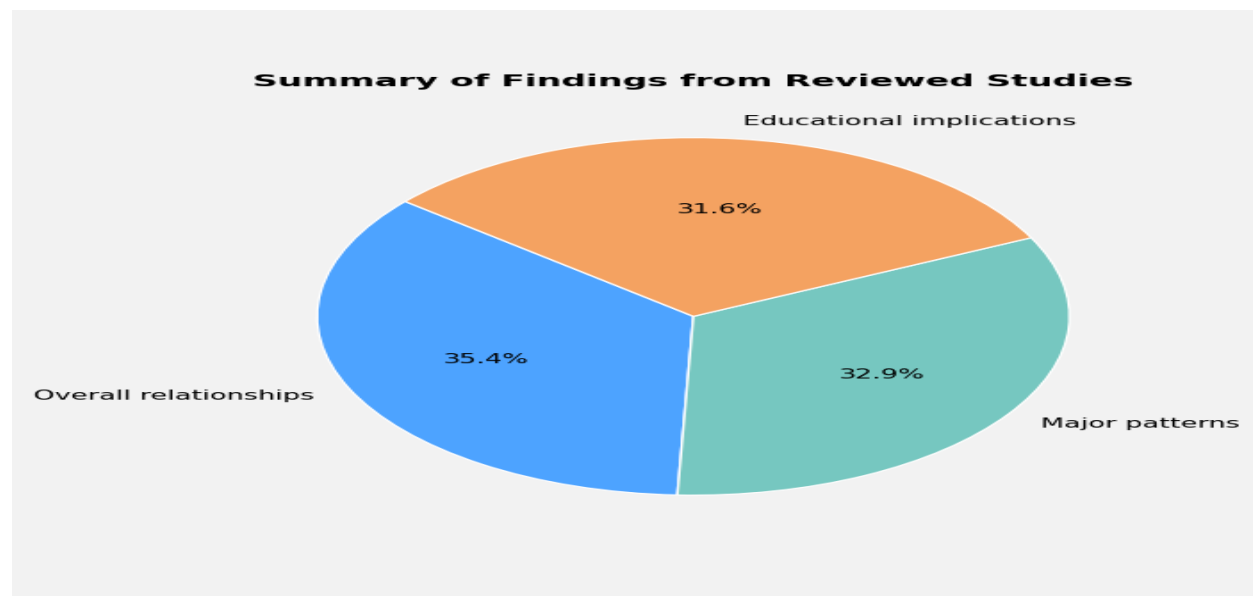


Figure 6: Summary of Findings from reviewed studies in percentage.

Discussion

Distribution of Educational Levels and Participant Demographics in Reviewed Studies

Middle and high school students were the most commonly studied demographics, according to the analyzed studies, suggesting that researchers primarily concentrate on adolescent learners because this period entails significant emotional, social, and academic changes. Adolescence is a crucial time for research since it is frequently linked to heightened psychological sensitivity, peer pressure, and academic pressure. Primary school pupils, on the other hand, were underrepresented, indicating a research need in early childhood educational settings. These results align with research highlighting the significance of developmental phases in student conduct and involvement (Sarfika et al., 2024)

In terms of participant demographics, the majority of studies used a general student population, suggesting that researchers frequently use large school-based samples to study student outcomes and classroom climate (Klik et al., 2023).

While mixed educational contexts received very little attention, urban school settings were more commonly represented than rural ones. This disparity implies that there are still not enough comparative studies examining the distinctions

between rural and urban learning environments. Wood, (2023) observed similar findings and emphasized the need for more contextual variety in educational research. The results also imply that different locations may have varied effects on students' educational experiences due to environmental and demographic variation. Different levels of academic possibilities, inclusion, and emotional support may be available to students from mixed, rural, and urban learning environments. To further understand how classroom atmosphere affects students from diverse social and cultural backgrounds, future research should concentrate more on underrepresented educational groups and contextual comparisons.

Classroom Climate and Student Engagement

The current review showed that student engagement and classroom atmosphere are strongly positively correlated. Positive classroom environments considerably increased students' motivation, behavioral engagement, and classroom participation, according to about 73.3% of the analyzed research. These results are in line with earlier studies in education that indicate that academic engagement and learning perseverance

are fostered in classrooms that are structured and emotionally supportive (Lu et al., 2022; Li & Xue, 2023). According to Adhikari et al., (2025), students who believe that their classroom is safe, courteous, and encouraging are more likely to actively engage in learning activities and exhibit higher levels of academic motivation.

The results also show that students' willingness to participate in class discussions and group projects is positively impacted by teachers' emotional support. Students get more academic confidence and an emotional connection to school activities when teachers offer constructive criticism and emotional support (Choi et al., 2024; Lee & Ha, 2023).

Furthermore, in 60% of the analyzed studies, supportive learning settings were linked to higher levels of motivation. This could be due to the fact that constructive classroom interactions lower anxiety and provide chances for social engagement and cooperative learning.

Relationships between Teachers and Students and Academic Performance

Academic performance and supportive teacher conduct are strongly positively correlated, according to the review. Academic achievement and emotional well-being were found to be enhanced by emotionally supportive teacher-student connections in almost 75–80% of the studies. Students' confidence and emotional adjustment were bolstered by positive teacher behavior that was marked by warmth, encouragement, and fairness (Zhou et al., 2023; Hossain et al., 2025). Additionally, emotionally responsive instruction increased student motivation and decreased classroom stress (Cline et al., 2023; Sun et al., 2024).

According to Guo et al., (2025), supportive teachers help students succeed academically as well as develop resilience and emotional control. Additionally, good teacher-student interactions enhance academic persistence, classroom behavior, and attendance (Chowning, 2022). Strong teacher support also improves student grit and peer interactions, according to (Lee & Ha, 2023).

Student Development and Peer Relationships

The results emphasized how crucial peer interactions are to students' academic and emotional growth. Good peer relationships enhanced emotional health, teamwork, communication abilities, and classroom engagement (Low & Van Ryzin, 2024; Wu & Dong, 2024). Peer contact and observational learning have a significant impact on students' motivation and conduct (Han et al., 2022). Students who encounter friendship and peer acceptance exhibit more self-assurance and emotional flexibility. On the other hand, poor peer interactions and social isolation raise psychological stress and lower classroom involvement (Khatri et al., 2026). Peer-assisted activities and cooperative learning promote interpersonal growth and active learning (Bhat et al., 2022). Social support enhances children' emotional stability, resilience, and classroom adjustment, according to recent research (Yu et al., 2024).

Emotional Health and Social-Emotional Learning

The review showed that students' emotional control, empathy, self-awareness, and interpersonal skills were considerably enhanced by social-emotional learning (SEL) programs. According to the majority of examined studies, SEL interventions had a beneficial impact on classroom behavior and emotional well-being (Sandilos et al., 2023). According to Smith (2024), SEL activities offer coping mechanisms for handling stress, expressing emotions, and resolving disputes. Additionally, LaBelle (2023) noted that SEL programs lessen behavioral issues and increase emotional resilience. The review also showed that many students' stress and anxiety levels were lowered by SEL activities. Stronger emotional regulation abilities were associated with increased classroom engagement and academic preparedness (Cline et al., 2023; Sun et al., 2024). In general, SEL-based settings support both academic achievement and emotional stability.

Academic Achievement and School Climate

The present review found a strong positive

relationship between school climate and academic achievement. Better learning results were achieved in schools with supportive teacher relationships, fair discipline, and emotional safety (Berkowitz et al., 2017). The Authoritative School Climate Theory, which prioritizes academic structure and emotional support, is supported by these findings (Gayowski, 2026). Additionally, learning outcomes and academic persistence were enhanced by inclusive and encouraging school environments (Maghsoodi et al., 2023). Students are more motivated and involved when they feel appreciated and respected in school communities. Additionally, better attendance and emotional well-being were linked to school connectivity (Aker & Şahin, 2022). In general, encouraging educational environments promote both academic success and emotional growth.

Inclusion, Diversity, and Emotional Security

The review showed that student confidence and classroom participation were positively impacted by diversity, inclusion, and emotional safety. Students were encouraged to express themselves freely and boldly in educational activities through inclusive classroom techniques (De Leersnyder et al., 2022). Students' social tolerance, empathy, and peer cooperation all improved when diversity was accepted. According to Affandy & Azman, (2025), inclusive schools lessen social isolation and increase emotional security. Additionally, emotional safety encouraged active involvement in class and decreased anxiety (Thapa & Cohen, 2023). Collaborative learning activities are more common among students who experience emotional security. Additionally, inclusive learning environments promote students from a variety of ethnic and socioeconomic backgrounds' academic engagement and emotional health (Levine et al., 2024).

Results from Statistics and Meta-Analysis

Academic achievement and classroom atmosphere were found to be strongly positively correlated. Supportive learning settings enhance educational outcomes, as evidenced by the majority of examined studies' moderate-to-high effect sizes. Stronger classroom involvement and improved

academic performance were linked to a positive school atmosphere (Bizimana, 2025). Students' confidence and involvement also increased in inclusive and emotionally supportive classrooms. Students were more motivated and persistent in their learning activities when they had a sense of belonging to their institutions. The Self-Determination Theory, which highlights the value of psychological and emotional support in learning, is supported by these results. (Gutierrez-Serrano et al., 2023) also reported similar findings. **Student Outcomes and Qualitative Themes** The qualitative results emphasized peer interactions, school belonging, and emotional support as key factors in student achievement. When students felt appreciated, respected, and emotionally comfortable in the classroom, their academic performance improved. Students' social adjustment, confidence, and communication abilities all increased when they had positive peer interactions (Bhat & Chahal, 2024). Participation in class and motivation were also enhanced by school affiliation. Students were encouraged to express themselves freely in supportive circumstances that fostered emotional safety and diversity acceptance (Montecillo et al., 2024) showed similar findings for emotional well-being and peer support.

The analysis found that a supportive classroom environment greatly enhances academic performance, emotional health, and student involvement. Healthy peer relationships and supportive teacher-student relationships boost kids' self-esteem and engagement in class. Additionally, inclusive learning environments increase students' willingness to learn and their sense of emotional security (Romanovska & Novak, 2024). Programs for social-emotional learning have been shown to enhance behavioral adjustment, empathy, and emotional control. These results are consistent with the Authoritative School Climate, which emphasizes the value of fair discipline and emotional support in educational settings. Thus, educational establishments ought to encourage inclusive and emotionally supportive teaching methods. The long-term effects of classroom atmosphere on children' academic and

psychological development should be further examined in future research.

Conclusion

The current review comes to the conclusion that social-emotional learning, peer connections, school belonging, and classroom climate are all closely related elements that have a big impact on kids' academic success and psychological health. Across all educational levels, student motivation, engagement, confidence, and learning results were consistently improved by supportive teacher-student connections, emotional safety, inclusion, and positive peer dynamics. Higher academic achievement and greater student participation were seen in schools with inclusive policies, equitable discipline, and emotional support. Students' emotional control, resilience, empathy, and anxiety were all enhanced by social-emotional learning interventions. Students who have a strong sense of connection and belonging are also more likely to exhibit perseverance, academic performance, and emotional stability, according to the review. The importance of emotionally healthy classrooms in contemporary education was highlighted by meta-analytical studies that showed moderate-to-high positive connections between supportive educational settings and student outcomes. To enhance academic achievement and socioemotional development, educational institutions should place a high priority on inclusive teaching methods, emotionally supportive classroom settings, and SEL-based treatments. To further understand the long-term consequences of peer dynamics and classroom climate on students' academic and psychological development, future research should concentrate on cross-cultural and longitudinal studies.

Declarations

Ethics approval

The Institutional Ethics and Guideline Committee of the University of Lahore, Lahore Pakistan has allowed all the protocols used in this experiment. All the experimental methods of this study followed all the appropriate guidance and regulations.

Consent for publication

All subjects gave their "informed consent" for the publication of details within the text ("informed consent") to be published in the above Journal and Article. Written "informed consent" was obtained from all authors for the publication of this manuscript.

Availability of data and materials

The data generated are provided within the manuscript and will be available from author at reasonable request

Competing Interest

All authors declare that there are no competing interests.

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Not applicable

References

- Baumeister, R.F. and Leary, M.R., 2017. The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Interpersonal development*, pp.57-89.
- Berkowitz, R., Moore, H., Astor, R.A. and Benbenishty, R., 2017. A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of educational research*, 87(2), pp.425-469.
- Mathis, E., Hartz, K., Berkowitz, M., Carlson, A., Kimport, R., Brown, C., Biel, M.G. and Domitrovich, C.E., 2022. Using early childhood mental health consultation to facilitate the Social-Emotional competence and school readiness of preschool children in marginalized communities. *School Mental Health*, 14(3), pp.608-623.
- Fung, W.K. and Chung, K.K.H., 2023. Longitudinal association between children's mastery motivation and cognitive school readiness: Executive functioning and social-emotional competence as potential mediators. *Journal of Experimental Child Psychology*, 234, p.105712.

- Wong, Z.Y. and Liem, G.A.D., 2022. Student engagement: Current state of the construct, conceptual refinement, and future research directions. *Educational Psychology Review*, 34(1), pp.107-138.
- Martins, J., Cunha, J., Lopes, S., Moreira, T. and Rosário, P., 2022. School engagement in elementary school: A systematic review of 35 years of research. *Educational psychology review*, 34(2), pp.793-849.
- García-Peinado, R., 2023. The impact of classroom climate on emotional development in childhood. *Environment and Social Psychology*, 9(1), pp.1-17.
- Aker, S. and Şahin, M.K., 2022. The relationship between school burnout, sense of school belonging and academic achievement in preclinical medical students. *Advances in Health Sciences Education*, 27(4), pp.949-963.
- Maghsoodi, A.H., Ruedas-Gracia, N. and Jiang, G., 2023. Measuring college belongingness: Structure and measurement of the Sense of Social Fit Scale. *Journal of Counseling Psychology*, 70(4), p.424.
- Gayowski, M.R., 2026. *Perceptions of School Safety and Job Satisfaction Among School Psychologists* (Doctoral dissertation, Georgian Court University).
- Hofkens, T.L. and Pianta, R.C., 2022. Teacher-student relationships, engagement in school, and student outcomes. In *Handbook of research on student engagement* (pp. 431-449). Cham: Springer International Publishing.
- Spilt, J.L. and Koomen, H.M., 2022, June. Three decades of research on individual teacher-child relationships: A chronological review of prominent attachment-based themes. In *Frontiers in Education* (Vol. 7, p. 920985). Frontiers Media SA.
- Park, S., 2022. Relationship of self-determined motivation with time-related academic behavior in Korean primary school students: A person-centered approach. *Heliyon*, 8(10).
- Thapa, A. and Cohen, J., 2023. School climate improvement: A data-driven strategy that supports individual and organizational health. In *Handbook of resilience in children* (pp. 539-548). Cham: Springer International Publishing.
- Wang, H., Sun, Y., Zhao, X., Wang, W. and Xue, J., 2024. Enhancing academic engagement through students' perceptions of teacher expectations: The mediating role of intentional self-regulation in middle school. *Frontiers in psychology*, 15, p.1456334.
- Lu, G., Xie, K. and Liu, Q., 2022. What influences student situational engagement in smart classrooms: Perception of the learning environment and students' motivation. *British Journal of Educational Technology*, 53(6), pp.1665-1687.
- Li, J. and Xue, E., 2023. Dynamic interaction between student learning behaviour and learning environment: Meta-analysis of student engagement and its influencing factors. *Behavioral Sciences*, 13(1), p.59.
- Adhikari, N.P., Budhathoki, J.K. and Adhikari, S., 2025. Student motivation in the classroom: Practical techniques and strategies. *Cognition*, 7(1), pp.67-75.
- Choi, M.Y., Park, S. and Noh, G.O., 2024. Social support for nursing students: A concept analysis study. *Nurse Education Today*, 132, p.106038.
- Lee, M. and Ha, G., 2023. The role of peer relationships among elementary school students: Focusing on the mediation effects of grit depending on teacher-student relationships. *Current Psychology*, 42(22), pp.18463-18472.
- Zhou, D., Liu, S., Zhou, H., Liu, J. and Ma, Y., 2023. The association among teacher-student relationship, subjective well-being, and academic achievement: Evidence from Chinese fourth graders and eighth graders. *Frontiers in Psychology*, 14, p.1097094.

- Hossain, A., Ansari, S.H., Sarkar, R. and Bhattacharjee, S., 2025. The Role Of Teacher-Student Relationships In Promoting Emotional Well-Being In Primary Schools In West Bengal. *IOSR J. Humanit. Soc. Sci*, 30(1), pp.50-56.
- Cline, E., Lingle, L., Ippolito, M., Ksiazek, K., Al-Bataineh, A. and Al-Rub, M.A., 2023. Responsive Classroom Curriculum and Its Impact on Student Behavior. *Turkish Online Journal of Educational Technology-TOJET*, 22(1), pp.191-205.
- Sun, Y., Zhou, G. and Deng, X., 2024. Emotional intelligence and joyful teaching: pathways to enhanced student engagement and achievement. *Lecture Notes in Education Psychology and Public Media*, 52(1), pp.163-168.
- Guo, W., Wang, J., Li, N. and Wang, L., 2025. The impact of teacher emotional support on learning engagement among college students mediated by academic self-efficacy and academic resilience. *Scientific Reports*, 15(1), p.3670.
- Chowning, K., 2022. How Teacher-Student Relationships Influence Student Attendance, Behavior, and Course Completion.
- Lee, M. and Ha, G., 2023. The role of peer relationships among elementary school students: Focusing on the mediation effects of grit depending on teacher-student relationships. *Current Psychology*, 42(22), pp.18463-18472.
- Low, S. and Van Ryzin, M.J., 2024. Student-centered instruction can build social-emotional skills and peer relations: Findings from a cluster-randomized trial of technology-supported cooperative learning. *School Psychology*, 39(6), p.672.
- Wu, D. and Dong, X., 2024. Autonomy support, peer relations, and teacher-student interactions: implications for psychological well-being in language learning. *Frontiers in Psychology*, 15, p.1358776.
- Han, Y., Syed Ali, S.K.B. and Ji, L., 2022. Use of observational learning to promote motor skill learning in physical education: A systematic review. *International Journal of Environmental Research and Public Health*, 19(16), p.10109.
- Khati, A., Das, A., Saha, S. and Bhutia, T.O., 2026. The Impact of Physical Activity-Integrated Learning on College Student Engagement and Well-Being. In *Theoretical and Analytical Perspectives on Interest and Engagement in Physical Education* (pp. 113-142). IGI Global Scientific Publishing.
- Bhat, N., Gurung, S., Gupta, M., Dhungana, N. and Thapa, R.K., 2022. Enhancing collaborative learning through peer-assisted learning. *Journal of Physiological Society of Nepal*, 3(1), pp.4-9.
- Yu, L., Wu, X., Zhang, Q. and Sun, B., 2024. Social support and social adjustment among Chinese secondary school students: The mediating roles of subjective well-being and psychological resilience. *Psychology research and behavior management*, pp.3455-3471.
- Sandilos, L.E., Neugebauer, S.R., DiPerna, J.C., Hart, S.C. and Lei, P., 2023. Social-emotional learning for whom? Implications of a universal SEL program and teacher well-being for teachers' interactions with students. *School Mental Health*, 15(1), pp.190-201.
- Smith, P.E., 2024. *Impact of Social Emotional Learning on Conflict Resolution Skills* (Doctoral dissertation, Arizona State University).
- LaBelle, B., 2023. Positive outcomes of a social-emotional learning program to promote student resiliency and address mental health. *Contemporary School Psychology*, 27(1), pp.1-7.
- Lin, M.L. and Faldowski, R.A., 2023. The relationship of parent support and child emotional regulation to school readiness. *International Journal of Environmental Research and Public Health*, 20(6), p.4867.

- Villares, E., Bowers, H., Brigman, G. and Bottini, C., 2024. The effects of Student Success Skills on attendance and emotion regulation. *Journal of Counseling & Development*, 102(2), pp.163-174.
- Affandy, M.F.F.M. and Azman, A., 2025. An analysis on the factors causing child social isolation: Case study of a child welfare institution. *International Journal for Studies on Children, Women, Elderly and Disabled*, 20, pp.203-213.
- Levine, C.S., Bourne, K.A., Song, R. and Weltzien, K., 2024. Creating inclusive schools to reduce health and well-being disparities. *Social and Personality Psychology Compass*, 18(1), p.e12841.
- Bizimana, E., 2025. Exploring the Contribution of Perceived Supportive Classroom Learning Environment to Students' Engagement in Learning. *European Journal of Psychology and Educational Research*, 8(2), pp.97-112.
- Gutierrez-Serrano, G., Romo, L.F. and Chagolla, D., 2023. Latina first-generation college students' motivation to persist: An attribution theory and self-determination theory perspective. *Journal of Latinos and Education*, 22(5), pp.2164-2177.
- Bhat, T.A. and Chahal, D., 2024. Enhancing Student Success and Blooming: Exploring The Relationship Between School Adjustment And Overall Well-Being. *The Online Journal of Distance Education and e-Learning*, 12(4).
- Montecillo, M.J., Pejoto, J.L. and Moral, R.V., 2024. Belongingness matters: A qualitative exploration of peer acceptance and rejection among high school students. *Eureka: Journal of Educational Research*, 3(1), pp.93-100.
- ROMANOVSKA, L. and NOVAK, M., 2024. The role of teacher-student relationships in providing social and psychological support to participants of the educational process. *Social work and education*, 11(2), pp.308-319.
- Sarfika, R., Saifudin, I.M.M.Y., Malini, H., Effendi, N. and Wenny, B.P., 2024. Peer pressure and academic stress among junior high school students: a cross-sectional study. *Frontiers of Nursing*, 11(2), pp.191-199.
- Klik, K.A., Cárdenas, D. and Reynolds, K.J., 2023. School climate, school identification and student outcomes: A longitudinal investigation of student well-being. *British Journal of Educational Psychology*, 93(3), pp.806-824.
- Wood, R.M., 2023. A review of education differences in urban and rural areas. *International Research Journal of Educational Research*, 14(2), pp.1-3.