

Developing Emotional Regulation Skills in Preschool-Aged Children Through SEL-Based Classroom Activities

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ABSTRACT:

This study examined whether structured, developmentally calibrated Social and Emotional Learning (SEL) activities improve emotional regulation in preschool-aged children (5–6 years), an area comparatively under-examined relative to school-aged populations. Using a quasi-experimental, mixed-methods design, ten preschoolers took part in an eight-week, classroom-embedded SEL curriculum comprising seven activity types (emotion-identification games, deep breathing, mindfulness exercises, emotion-themed storytime, puppet scenarios, collaborative play, and a Calm-Down Corner). Data were drawn from pre- and post-intervention teacher/parent questionnaires (N = 100), the Emotion Regulation Checklist (ERC), teacher-rated behaviour scales, and semi-structured interviews with parents, teachers, and the school principal. Results showed consistent improvement across all measured indicators: children rated able to recognise and label their own emotions rose from 6% to 90%, use of verbal rather than physical expression when upset rose from 7% to 87%, and use of taught calming strategies rose from 7% to 80%. Teacher-rated scales and ERC data corroborated these gains, although 20–40% of children continued to show situation-specific dysregulation. Parent interviews confirmed transfer of regulation skills to the home setting. The findings support embedding structured, play-based SEL practice — particularly activities targeting self-awareness and self-management — within early-childhood curricula to strengthen preschoolers' emotional regulation and classroom climate.

Keywords: emotional regulation, SEL classroom activities, early childhood development, self-management, preschool education

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1. Introduction

Emotional regulation is the capacity to manage internal emotional states and their outward

expression in ways that are adaptive and socially appropriate (Bonaiuto & Vitale, 2024; Kozubal et al., 2023). It involves recognising an emotion, understanding its source, and modulating its

intensity through strategies such as self-soothing or cognitive reframing (McGarvie, 2025). Because emotional competence underlies mental health, peer relationships, and academic engagement (Shengyao et al., 2024), its early acquisition is regarded as a cornerstone of healthy child development, with the preschool years constituting a particularly sensitive period for its development. Social and Emotional Learning (SEL) has emerged as the dominant framework for cultivating these competencies in educational settings. Structured around five interrelated domains — self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020) SEL equips children with a systematic means of identifying emotions and exercising sound judgement (CyberSmarties, 2024; Francis, 2024). Self-awareness and self-management bear the most direct relationship to emotional regulation: the former enables children to label and interpret feelings, while the latter governs impulse control and persistence (Burgess, 2024; Greater Good Science Center, 2025). Early SEL exposure has been linked to improved self-control and interpersonal functioning (MCCA, 2024) and to reduced risk of later mental health difficulties (Grand Rising, 2025), leading professional bodies to recommend embedding SEL within early-childhood curricula (YMCA, 2025). Despite this consensus, the translation of SEL theory into consistent preschool practice remains incomplete. Much of the empirical base concentrates on school-aged populations, leaving implementation at the preschool level comparatively under-examined (Djamnezhad et al., 2021). Many early-childhood settings continue to address social-emotional development informally rather than through structured, evidence-based practice, and educators frequently report insufficient training or resources to deliver SEL systematically (Ferreira et al., 2021, Kasdiah et al., 2024). This gap is compounded by a conceptual mismatch: SEL scholarship has been shaped predominantly by frameworks designed for older children, whose cognitive and social capacities differ substantially from those of three- to six-year-olds. Addressing this problem requires research

situated within preschool pedagogy, using activities role-play, storytelling, mindfulness, and emotion-themed games that are developmentally calibrated rather than adapted downward from older-child models, and that attend to the role of educators as emotional models and co-regulators (Greenberg, 2023, Janius et al., 2023). This concern is reinforced by evidence that unmet emotional well-being needs persist into secondary school when early, structured support is lacking, underscoring the value of addressing self-regulation proactively during the preschool years (Jailani et al., 2025). The present study addresses this gap by examining the effect of a structured, play-based SEL intervention on the emotional regulation of preschool-aged children, guided by the CASEL five-competency model with particular emphasis on self-awareness and self-management (CASEL, 2024). It further considers the role of teachers in mediating outcomes and the extent to which gains extend to peer relationships and classroom engagement. The study tests the primary hypothesis (H_1) that children who participate in structured SEL activities show significantly greater improvement in emotional regulation than non-participating peers, together with four sub-hypotheses addressing improved emotion recognition (H_{1a}), impulse control (H_{1b}), reduced behavioural outbursts (H_{1c}), and higher prosocial behaviour (H_{1d}).

2. Methodology

Design.

This study employed a quasi-experimental, mixed-methods design combining a pretest–posttest quantitative strand with a concurrent qualitative strand. One group of children participated in an eight-week SEL intervention while continuing the standard preschool curriculum; emotional regulation was measured before and after the intervention. The qualitative strand drew on the Emotion Regulation Checklist (ERC), teacher-rated behaviour scales, and semi-structured interviews to contextualise the quantitative findings within classroom and home realities.

Participants/Sample.

Participants were ten preschool-aged children (5–6 years) enrolled in early-childhood programmes with comparable demographic and instructional profiles. In addition, 100 adults with regular contact with the children — 48 class teachers, 35 parents, and 16 assistant teachers — completed the study questionnaire, and a smaller subset of parents, teachers, and the school principal took part in semi-structured interviews. Written consent was obtained from all participating parents, teachers, and principals prior to data collection.

Instruments.

Emotional regulation was assessed through three complementary instruments: (a) a structured questionnaire completed by teachers and parents at pre- and post-intervention using a 5-point Likert scale (1 = never to 5 = always) covering empathy, emotional recognition, self-control, and conflict resolution, with four open-ended items added post-intervention; (b) the ERC, a standardised instrument administered before and after the intervention; and (c) teacher-rated behaviour scales recording impulse control, emotional responses, and self-regulation over time.

Procedure.

The intervention comprised an eight-week, classroom-embedded curriculum delivered three to five times weekly across seven activity types: an Emotion Identification Game, Deep Breathing exercises, Mindfulness Exercises, Storytime with emotion-themed books, Puppet Scenarios, Collaborative Play, and a permanent Calm-Down Corner. Data collection followed three phases: baseline questionnaires (Week 1), weekly teacher tracking forms and ongoing observation during the intervention (Weeks 2–8), and a post-intervention questionnaire with open-ended items in the final week, followed by semi-structured interviews. The study proceeded under standard institutional research-ethics provisions for minimal-risk, non-clinical research involving consenting adults; all participants received an information sheet, retained the right

to withdraw at any stage, and were protected through pseudonymisation.

Data Analysis.

Questionnaire responses were analysed using descriptive statistics, with pre- and post-intervention results compared to identify patterns of change. Qualitative data from observations, the ERC, teacher-rated scales, and interviews were analysed thematically to identify recurring patterns in children's coping strategies and social behaviour, providing interpretive depth to the quantitative trends.

3. Results

Ten preschool-aged children completed the full eight-week intervention with no withdrawals, contributing data to the teacher-rated scales and ERC at both time points. All 100 adult respondents (48 teachers, 35 parents, 16 assistant teachers) completed both questionnaire administrations. Most children had prior exposure to SEL activities before the study (40% for 4–6 months, 33% for more than six months, 26% for 1–3 months). The eight-week curriculum was delivered consistently across all seven activity types, as verified by weekly teacher tracking forms and direct classroom observation, with no reported disruptions to the schedule.

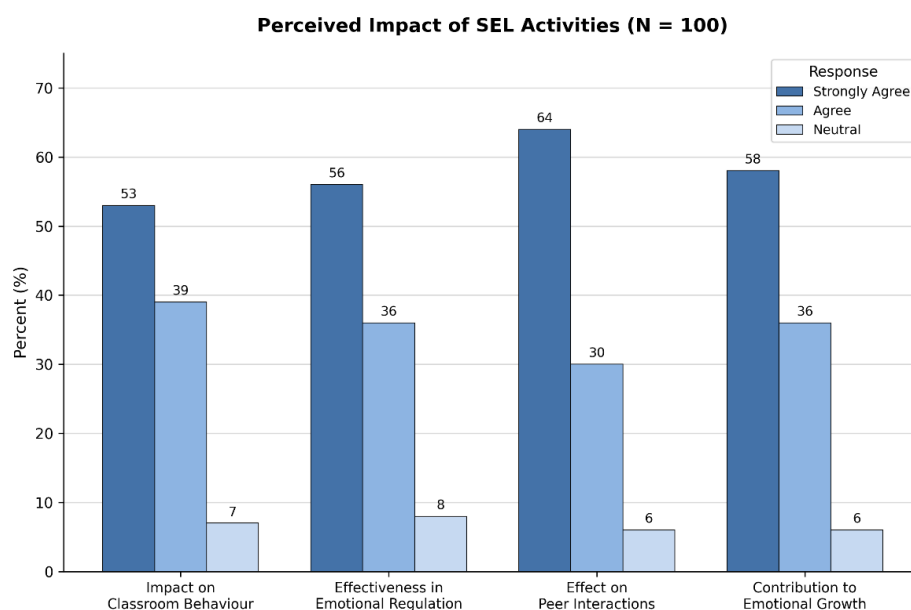
At baseline, only 6% of respondents rated children as “often” able to recognise and label their own emotions, and only 7% rated children as “often” using taught calming strategies. Baseline teacher-rate scales converged with this picture: only 4 of 10 children reliably waited their turn without reminders, and 4 of 10 displayed aggressive behaviour when frustrated.

Comparison of pre- and post-intervention ratings showed consistent, positive change across all seven indicators assessed (Table 1). The largest shifts were in children's use of verbal rather than physical expression when upset (7% to 87%) and use of taught calming strategies (7% to 80%). Respondents' evaluations of the intervention's broader impact were strongly positive: 92% agreed or strongly agreed that SEL activities improved children's ability to manage emotions, and 94% agreed or strongly agreed that SEL positively affected peer interactions

Table 1: Pre- and Post-Intervention Ratings of “Often” or “Always” for Selected Emotional-Regulation Behaviours (Questionnaire, N = 100)

Behavioural Indicator	Pre-Intervention	Post-Intervention
Recognises and labels own emotions	6%	90%
Uses words rather than physical actions when upset	7%	87%
Uses taught strategies to self-calm	7%	80%
Shows impulse control during play/transitions	9%	76%
Seeks adult support when distressed	10%	83%
Shows empathy or concern for peers	9%	92%
Recovers from emotional upsets	8%	87%

Note. Values reflect the combined percentage of respondents selecting “Often” or “Always,” drawn from Section B of the study questionnaire.

**Figure 1. Respondents' Perceived Impact of SEL-Based Classroom Activities Across Four Domains (N = 100)**

Teacher-rated scales, organised around four CASEL-aligned domains, showed a similar pattern: children showing age-appropriate turn-taking rose from 4/10 to 8/10, and those resisting aggressive behaviour when frustrated rose from 4/10 to 8/10. Independent use of

calming strategies rose from 4/10 to 7/10, and empathy for distressed peers rose from roughly half to a clear majority, though 2–3 of 10 children continued to require adult prompting post-intervention.

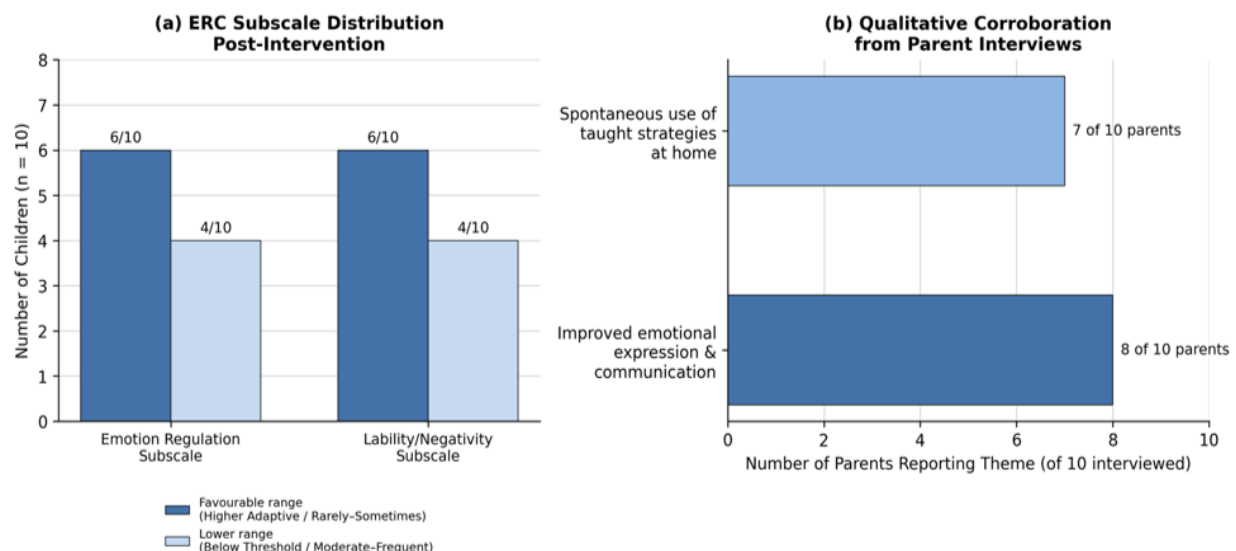


Figure 2. Ancillary Analysis and Qualitative Corroboration of Emotional Regulation Outcomes (N = 10 Children; 10 Parents Interviewed)

Thematic analysis of open-ended responses identified drawing/colouring and praise or positive reinforcement as the most frequently cited effective strategies, alongside recurring challenges such as difficulty sharing at home and strong reactions to peer disagreement. On the ERC, 6 of 10 children scored in the higher adaptive range on the Emotion Regulation subscale post-intervention, while 4 of 10 continued to show moderate-to-frequent dysregulation, most visibly in noisy or unstructured settings (Figure 2).

Semi-structured interviews converged with the quantitative findings: 8 of 10 parents reported improved emotional expression and communication, and 7 of 10 reported spontaneous use of school-taught strategies at home, indicating meaningful transfer of regulation skills beyond the classroom.

4. Discussion

The pattern of results provides consistent support for the primary hypothesis: children who participated in the SEL intervention showed markedly greater emotional-regulation scores post-intervention than at baseline, corroborated across the questionnaire, teacher-rated scales, and ERC. The sub-hypotheses were also broadly supported. H_{1a} (improved emotion recognition) was clearly supported, with recognition rising from roughly half to 8–9 of 10 children on the

teacher-rated scale and from 6% to 90% on the questionnaire. H_{1b} (improved impulse control) was supported through gains in turn-waiting and self-initiated use of calming strategies. H_{1c} (reduced behavioural outbursts) received partial support: aggressive behaviour when frustrated declined substantially, yet ERC liability data showed 4 of 10 children continued to display moderate-to-frequent dysregulation, concentrated in noisy or unstructured settings. H_{1d} (higher prosocial behaviour) was well supported by both empathy-related questionnaire gains (9% to 92%) and parent- and teacher-reported examples of cooperative play.

These findings align with the broader SEL literature identifying structured, activity-based instruction as an effective route to strengthening self-awareness and self-management in young children. Because most existing SEL evidence derives from school-aged samples, the present findings offer more direct support for the applicability of the CASEL competency structure to children as young as five, using activities explicitly designed around preschool learning modes.

Where the results diverge from a straightforward “SEL works uniformly” narrative is in the consistent minority (roughly 20–40%) of children who continued to require adult prompting or showed situation-specific dysregulation —

consistent with prior findings that SEL benefits are real but graded, depending on practice frequency and the emotional demands of specific contexts.

Several features of the design temper interpretation. Most outcome data were collected via teacher and parent report rather than independently coded observation, so socially desirable responding and expectancy effects cannot be ruled out. The Likert-scale questionnaire relies on adults' subjective judgements of frequency categories, which may not be applied consistently across raters, and because the questionnaire, ERC, and teacher-rated scales cover closely related constructs, the measures are not fully independent. The study reports descriptive pre-post change rather than inferential statistics, so regression to the mean, maturation, or rater drift cannot be excluded as alternative explanations, and with only ten children in the observed cohort, subgroup patterns should be treated as descriptive rather than statistically reliable. Delivery fidelity was monitored through tracking forms and observation but not independently verified against a structured fidelity checklist, and because the intervention combined seven activity types delivered concurrently, the design cannot isolate which specific components were most responsible for the observed gains.

The observed cohort was small and drawn from preschools with similar demographic and instructional profiles, limiting generalisability to settings with less established SEL infrastructure, larger class sizes, or fewer trained staff. The eight-week window is also short relative to the developmental timescale over which regulation skills consolidate, so the durability of gains beyond the immediate post-assessment cannot be established from this design.

Notwithstanding these limitations, the findings offer meaningful evidence that structured, developmentally calibrated SEL activities can support the early consolidation of emotional-

regulation skills during a developmental window in which such competencies are first organised. The results lend support to the CASEL framework's proposed sequencing, in which self-awareness functions as a foundation for self-management, which in turn supports relationship skills and social awareness, a sequence that held reasonably well even within a preschool sample rarely used to test it directly. Practically, the study offers early-childhood educators a concrete, low-cost set of classroom-ready activities, together with descriptive evidence of which components showed the clearest gains, and which required more sustained reinforcement. This pattern echoes findings that self-regulated strategies are closely tied to motivational components such as self-efficacy, suggesting that the self-management gains observed here may also support children's confidence and persistence as learners (Rifin et al., 2025).

5. Conclusion

This study provides evidence that structured, play-based SEL activities implemented through emotion-identification games, deep breathing, mindfulness, storytelling, puppet scenarios, collaborative play, and a Calm-Down Corner can meaningfully improve emotional regulation in preschool-aged children. Gains were most consistent for emotion recognition and self-management, corroborated by teacher-rated scales, the ERC, and parent and teacher interviews, though a substantial minority of children continued to require adult support in high-stimulation contexts. These findings support embedding structured, developmentally calibrated SEL practice prioritising self-awareness and self-management within early-childhood curricula. Future research should employ larger, more diverse samples, independent behavioural observation, and longitudinal follow-up to establish the durability and generalisability of these gains, and dismantling studies to identify which specific components of multicomponent SEL programmes drive regulatory change.

References

- Bonaiuto, M., & Vitale, V. (2024). The role of nature in emotion regulation processes: An evidence-based rapid review. *Journal of Environmental Psychology*, 96, 102325. <https://doi.org/10.1016/j.jenvp.2024.102325>
- Burgess, K. (2024). Self-management (Social Emotional Learning). Landmark Outreach. <https://www.landmarkoutreach.org/strategies/self-management-sel/>
- CASEL. (2020). What is the CASEL framework? <https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/>
- CASEL. (2024). Fundamentals of SEL. <https://casel.org/fundamentals-of-sel/>
- CyberSmarties. (2024). Fundamentals of SEL: Building emotional intelligence. <https://cybersmarties.com/fundamentals-of-sel/>
- Djamnezhad, D., Koltcheva, N., Dizdarevic, A., Mujezinovic, A., Peixoto, C., Coelho, V., Achten, M., Kolumbán, E., Machado, F., & Hofvander, B. (2021). Social and emotional learning in preschool settings: A systematic map of systematic reviews. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.691670>
- Ferreira, M., Reis-Jorge, J., & Batalha, S. (2021). Social and emotional learning in preschool education — A qualitative study with preschool teachers. *Center for Research and Innovation in Education*, 13(1), 51–66.
- Francis, T. (2024). Social emotional learning (SEL): What is it and how to learn more? Routledge. <https://blog.routledge.com/education-and-training/social-emotional-learning-sel-what-is-it-and-how-to-learn-more/>
- Grand Rising. (2025). The role of empathy in strengthening relationships. <https://www.grandrisingbehavioralhealth.com/blog/the-role-of-empathy-in-strengthening-relationships>
- Greater Good Science Center. (2025). SEL for adults: Self-awareness and self-management. Greater Good in Education. <https://ggie.berkeley.edu/my-well-being/sel-for-adults-self-awareness-and-self-management/>
- Greenberg, M. (2023). Evidence for social and emotional learning in schools [Brief]. Learning Policy Institute. <https://learningpolicyinstitute.org/product/evidence-social-emotional-learning-schools-brief>
- Hosokawa, R., Matsumoto, Y., & Nishida, C. (2024). Enhancing social-emotional skills in early childhood: An intervention study on the effectiveness of social and emotional learning. *BMC Psychology*, 12, 761. <https://doi.org/10.1186/s41709-1716-02280-w>
- Jailani, M. A., Yusooif, F., Wong, H. S., & Wan Abas, W. M. U. (2025). A comparative analysis of counselling needs among urban and rural secondary school students in the post-COVID-19 period (July 2022–June 2024): Implications for school counselling services. *Asian Journal of Social Science Research*, 7(1), 40–53. <https://doi.org/10.5281/zenodo.15803339>
- Kasdiah, M. A. H. B., Saidin, M. S. B., Amdan, M. A. B., & Janius, N. (2024). Challenges of preschool teachers in the implementation of early children's curriculum. *International Journal of Science and Research Archive*, 13(2), 437–446. <https://doi.org/10.30574/ijrsra.2024.13.2.2152>
- Kozubal, M., Szuster, A., & Wielgopolan, A. (2023). Emotional regulation strategies in daily life: The intensity of emotions and regulation choice. *Frontiers in Psychology*, 14, 1218694. <https://doi.org/10.3389/fpsyg.2023.1218694>
- MCCA. (2024). Social-emotional learning in preschool. <https://mccaedu.org/blog/inside-out-exploring-social-emotional-learning-for-children/>
- McGarvie, S. (2025). Emotional regulation: 5 evidence-based regulation techniques. *Positive Psychology*. <https://positivepsychology.com/emotion-regulation/>
- MOHAMAD, A. H. B. K., MOHD, S. B. S., MOHAMMAD, A. B. A., & NALDO, J. (2024). Challenges of preschool teachers in the implementation of early children's curriculum. *INTERNATIONAL JOURNAL*, 13(2), 1709–1716.
- Rifin, R., Sidik, N. B., Abdul Rahman, N. H., Mohd Hussain, M., & Mokhtar, S. M. A. (2025). The influence of self-regulated strategies on components in motivational beliefs. *Asian Journal of Social Science Research*, 7(1), 146–160. <https://doi.org/10.5281/zenodo.15804446>

Shengyao, Y., Xuefen, L., & Jenatabadi, H. S. (2024). Emotional intelligence impact on academic achievement and psychological well-being among university students: The mediating role of positive psychological characteristics. *BMC Psychology*, 12, 389. <https://doi.org/10.1186/s41709-1716-01709-1716>

YMCA. (2025). The importance of social emotional learning for children's development. YWCA Greater Los Angeles. <https://www.ywcagla.org/blog-1/the-importance-of-social-emotional-learning-for-childrens-development>

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Author Declaration

The authors confirm that this work is original and has not been submitted elsewhere for publication. The authors declare no conflicts of interest.