

**4- PEER SOCIAL AWARENESS AND EMOTIONAL REGULATION: EXPLORING
PEER-LED INTERVENTIONS FOR ANGER MANAGEMENT IN EARLY PRIMARY
EDUCATION**

**СОЦИАЛЬНАЯ ОСВЕДОМЛЁННОСТЬ СВЕРСТНИКОВ И ЭМОЦИОНАЛЬНАЯ
РЕГУЛЯЦИЯ: ИССЛЕДОВАНИЕ СВЕРСТНИКОВЫХ ВМЕШАТЕЛЬСТВ ДЛЯ
УПРАВЛЕНИЯ ГНЕВОМ В НАЧАЛЬНОМ ОБРАЗОВАНИИ**

**TENGDOSHLAR BILAN MULOQOTDA IJTIMOIIY XABARDORLIK VA HISSIY
O'ZINI BOSHQARISH: BOSHLANG'ICH TA'LIMNING ILK BOSQICHIDA G'AZABNI
BOSHQARISH BO'YICHA TENGDOSHLAR YETAKCHILIGIDAGI ARALASHUVLARNI
O'RGANISH**

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Abstract

This mixed-methods case study investigated how peer social awareness activities supported anger regulation in a Kyrgyz Grade 2 classroom. Grounded in social learning and sociocultural frameworks, the intervention enhanced empathy, co-regulation, and classroom harmony. Student self-reports showed statistically significant emotional gains, while teachers and parents reported fewer behavioural incidents. Findings suggest that peer-mediated SEL can strengthen emotional regulation where formal programmes are limited.

Keywords: *Social-emotional learning (SEL), Peer social awareness, Emotional regulation, Anger management, Sociocultural classroom dynamics, Primary education (Kyrgyzstan), Peer-led interventions, Empathy development.*

Аннотация

В данном смешанном кейс-исследовании изучалось, как деятельность по развитию социальной осведомлённости сверстников способствует регуляции гнева в классе 2-го года обучения начальной школы в Кыргызстане. Основанное на теориях социального научения и социокультурного развития вмешательство способствовало развитию эмпатии, совместной регуляции и гармонии в классе. Самооценки учащихся показали статистически значимый эмоциональный рост, тогда как учителя и родители отметили снижение числа поведенческих инцидентов. Результаты свидетельствуют о том, что сверстниково-опосредованное социально-эмоциональное обучение может укреплять эмоциональную регуляцию в условиях ограниченного внедрения формальных программ SEL.

Ключевые слова: *социально-эмоциональное обучение (SEL), социальная осведомлённость сверстников, эмоциональная регуляция, управление гневом, социокультурная динамика класса, начальное образование (Киргизстан), сверстниковые вмешательства, Развитие эмпатии.*

Annotatsiya

Ushbu aralash metodli keys-tadqiqot Qirg'izistondagi 2-sinfda tengdoshlarning ijtimoiy xabardorligini rivojlantirishga qaratilgan faoliyatlar g'azabni boshqarishga qanday yordam berishini o'rgandi. Ijtimoiy o'rganish va sotsiokultural yondashuvlarga asoslangan aralashuv empatiya, hamkorlikda o'zini boshqarish hamda sinfdagi ijobiy muhitni mustahkamladi. O'quvchilarning o'zini baholash natijalari hissiy rivojlanishning statistik jihatdan sezilarli darajada oshganini ko'rsatdi, o'qituvchilar va ota-onalar esa xulq-atvor bilan bog'liq hodisalar kamayganini qayd etdilar. Natijalar shuni ko'rsatadiki, tengdoshlar vositasidagi ijtimoiy-emotsional o'qitish rasmiy SEL dasturlari yetarli darajada joriy etilmagan sharoitlarda hissiy o'zini boshqarishni mustahkamlashi mumkin.

Kalit so'zlar: *ijtimoiy-emotsional o'qitish (SEL), tengdoshlarning ijtimoiy ongi, emotsional o'zini boshqarish, g'azabni boshqarish, sotsiokultural sinf dinamikasi, boshlang'ich ta'lim (Qirg'iziston), tengdoshlar yetakchiligidagi intervensiyalar, Empatiyani rivojlantirish.*

I. INTRODUCTION

Social and Emotional Learning (SEL) improves children's behavioural adjustment, emotional competence, and academic functioning (Weissberg et al., 2015; CASEL, 2023). Anger dysregulation is associated with peer conflict, classroom disruption, and reduced learning engagement (Mahoney et al., 2018; Taylor et al., 2017). Although SEL programmes enhance prosocial behaviour, research has focused primarily on teacher-led instruction, leaving peer-mediated regulatory processes underexplored (Schonert-Reichl, 2019; Farmer et al., 2020).

This gap is particularly evident in post-Soviet contexts such as Kyrgyzstan, where SEL is not systematically integrated and children often rely on peer interactions to manage emotionally charged situations. Empirical evidence on peer-supported regulation of intense emotions remains limited, especially outside Western settings (Eisenberg & Spinrad, 2014; Jones et al., 2021).

Peer-mediated regulation can be interpreted through social learning and sociocultural frameworks emphasising modelling and guided interaction (Bandura, 1977; Vygotsky, 1978), as well as emotional intelligence perspectives highlighting empathy and self-control (Goleman, 1995).

This study investigates how organised peer social awareness activities influence anger regulation in a Kyrgyz Grade 2 classroom, treating regulation as embedded within peer-group dynamics. By analysing responses to emotionally charged incidents, the study provides context-specific evidence on peer-mediated SEL and explores peer social awareness as a culturally adaptable approach to emotional development in early primary education.

II. RESEARCH METHODOLOGY

This mixed-methods case study, informed by social-cognitive (Bandura, 1977) and sociocultural (Vygotsky, 1978) frameworks, examined peer-led emotional regulation in a Grade 2 classroom in a Kyrgyz primary school, focusing on one focal student ("Jan," pseudonym) with documented regulation and integration difficulties. The year-long intervention (September 2024–June 2025; 39 weeks) was embedded in routine classroom activities involving 17 students aged 7–8 and their homeroom teacher.

Quantitative data were collected through pre–post questionnaires administered to students (N = 17), parents (N = 17), and teachers working with the class during the academic year or the previous (N = 9) to capture longitudinal perceptions of behavioural change. Student instruments used visual Likert scales (1–4) assessing emotional awareness, anger regulation, communication, and coping, while adult questionnaires used five-point scales (1–5) evaluating emotional control, behavioural incidents, peer

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relations, and perceived improvement. Composite indices of baseline, improvement, and current functioning were computed, with internal consistency assessed using Cronbach's alpha.

Given small samples and ordinal data, non-parametric tests (Wilcoxon signed-rank, Mann-Whitney U, Kruskal-Wallis, Spearman correlations) were used, alongside descriptive statistics and exact p-values. Qualitative data from observations, field notes, and post-incident discussions were analysed thematically across peer empathy, emotional regulation, and collaborative conflict resolution and triangulated with quantitative findings. Ethical approval was obtained from the school administration and parents. Participation was voluntary, informed consent was secured, and anonymity was maintained.

III. Results

The findings indicate convergent evidence of emotional and behavioural improvement across quantitative indicators and qualitative observations. Results are organised around three themes emerging from the data: growth in peer empathy, collaborative emotional regulation, and improved classroom harmony. Descriptive statistics show moderate baseline functioning and clear perceived improvement across respondent groups (Table 1).

Table 1. Descriptive Statistics of Emotional Functioning Indices

Respondent Group	N	Baseline Mean (SD)	Current Mean (SD)	Improvement Mean (SD)
Students	17	2.74 (0.45)	3.29 (0.43)	0.56 (0.58)
Parents	17	3.02 (0.61)	3.68 (0.52)	0.66 (0.49)
Teachers	9	3.14 (0.70)	3.63 (0.41)	4.30 (0.45)*

Note. Student scales were rated 1–4; parent and teacher scales were rated 1–5. Higher scores indicate better emotional functioning; therefore, improvement scores are not directly comparable across groups.

In the open questions, teacher and parent reports indicated reductions in behavioural incidents and enhanced emotional control. For students (N = 17), a Wilcoxon signed-rank test comparing baseline and current emotional regulation indices showed a statistically significant improvement (W = 8.5, p = .003, r = .56) (Table 2). Parent ratings showed strong stability between baseline and current assessments (ρ = .75, p < .01), with no statistically significant association between baseline functioning and perceived improvement (p > .05). Teacher ratings showed consistent positive trends across indices.

Table 2. Non-Parametric Tests of Change and Associations

Group	Comparison	Test	Statistic	P-value	Effect Size	Interpretation
Students	Baseline vs Current	Wilcoxon signed-rank	W = 8.50	.003	r = .56	Significant improvement
Students	Baseline ↔ Improvement	Spearman ρ	-.67	.003	—	Lower baseline ↔ larger gains
Students	Current ↔ Improvement	Spearman ρ	.56	.02	—	Gains linked to better functioning
Parents	Baseline ↔ Current	Spearman ρ	.75	< .01	—	Strong positive relation
Parents	Baseline ↔ Improvement	Spearman ρ	-.23	.37	—	Non-significant
Parents	Improvement ↔ Current	Spearman ρ	.21	.41	—	Non-significant
Teachers	Group comparisons	Kruskal-Wallis / Mann-Whitney	—	> .05	—	No subgroup differences

Note. All tests were non-parametric due to small sample sizes and ordinal data.

Associations between baseline functioning and perceived improvement were examined using Spearman rank correlations. For students, lower baseline regulation was significantly associated with

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greater improvement ($\rho = -.67, p = .003$), suggesting that students with initially greater difficulties showed the largest gains. Comparable patterns were observed in teacher and parent reports, although correlations did not reach statistical significance.

Triangulation across sources confirmed alignment between quantitative trends and classroom observations (Table 3).

Table 3. Triangulation Matrix based on thematic analysis of observational data
: *Quantitative + Qualitative Alignment*

Theme	Teachers	Parents	Students	Interpretation
Empathy	Note improved emotional expression; report better peer protection	Parents note more emotional communication at home	Students report recognising others' feelings	Strong convergence
Emotional regulation	Fewer outbursts; calmer responses	All parents report better anger management	Students use strategies and report improvement	Clear triangulation
Peer bonding	Teachers observe full integration	Parents observe improved friendships	Students report feeling supported and included	Full alignment

Growth in peer empathy, collaborative emotional regulation, and classroom harmony was consistently reported across respondent groups. Teachers and parents noted improved recognition of others' emotions and fewer escalation incidents, while student self-reports indicated greater emotional awareness and regulation, particularly among those with initially lower functioning. Observations supported these patterns: peer intervention during distress became increasingly frequent, classmates prompted the use of calming strategies, and conflicts were more often resolved through dialogue than confrontation.

The intervention was also associated with strengthened group cohesion. Early patterns of exclusion and conflict shifted toward cooperation, social integration, and mutual assistance during collaborative tasks. Teachers observed greater acceptance of the focal student, and parents reported more positive peer interactions outside school, indicating generalisation beyond the classroom.

Overall, convergent quantitative and qualitative evidence suggests that peer social awareness activities contributed to improvements in empathy, emotional regulation, and classroom climate within the studied context.

IV. DISCUSSION

This study examined how structured peer social awareness activities influenced anger regulation in a Kyrgyz primary classroom, indicating that emotional regulation in early childhood appears to operate as a socially mediated process rather than solely an individual skill. Improvements in empathy, co-regulation, and classroom harmony suggest that peers can act as agents of emotional development, particularly where formal SEL programmes are limited.

Growth in peer empathy and supportive intervention aligns with research showing that prosocial competencies emerge through social interaction and can generalise across contexts (Eisenberg & Spinrad, 2014; Jones et al., 2021). Collaborative emotional regulation further illustrates peer-mediated mechanisms, as classmates prompted the use of calming strategies during escalation, consistent with modelling and guided interaction processes described in social learning and sociocultural frameworks (Bandura, 1977; Vygotsky, 1978). The reduced need for teacher intervention suggests that regulation strategies became internalised as shared classroom practices.

The intervention also strengthened classroom cohesion, shifting patterns of conflict and exclusion toward cooperation and social integration. Such changes are consistent with evidence that emotionally supportive climates enhance prosocial behaviour and peer relations (Durlak et al., 2010; Schonert-Reichl, 2019). Overall, the findings suggest that peer social awareness activities can create a distributed regulatory system in which students support one another's emotional functioning, offering a contextually adaptable approach in settings where formal SEL infrastructure is limited.

LIMITATIONS

The researcher's dual role as teacher and investigator may introduce observer bias despite triangulation across data sources. The small sample size and single-class design limit statistical power and generalisability beyond similar classroom contexts. Reliance on self-report questionnaires, particularly with young children, may affect measurement accuracy despite the use of visual scales adapted for developmental level. The findings are also context-specific to a Kyrgyz primary school where formal SEL provision is limited, and may not fully transfer to systems with established SEL curricula. Finally, the study does not assess the long-term sustainability of observed improvements.

V. CONCLUSION

This study shows that structured peer social awareness activities can enhance anger regulation by reshaping classroom emotional dynamics. By fostering collective empathy and shared regulatory practices, such activities enable vulnerable students to improve emotional control and offer a feasible, culturally adaptable approach in contexts where formal SEL programmes are limited.

For Kyrgyz primary education, integrating social awareness practices into routine classroom activities may strengthen emotional development and stability without specialised SEL curricula. Future research should examine the durability of these effects across classrooms and developmental stages, particularly through longitudinal studies of peer-supported emotional resilience.

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