The Impact of Social and Emotional Learning on Children's Emotional and Behavioral Problems

Yingying Chen[1] & Qinghua Chen[1]

[1] Lingnan Normal University, Zhanjiang, Guangdong 524048, China
Correspondence: Yingying Chen, Lingnan Normal University, Zhanjiang, Guangdong 524048, China.

Abstract

Emotional and behavioral problems significantly impact children's mental health development. The application of Social and Emotional Learning (SEL) in intervening in children's emotional and behavioral problems is receiving increasing attention. This study conducted an 8-session SEL intervention over 4 weeks (twice weekly) with three children exhibiting emotional and behavioral problems. The Rutter Child Behavior Scale (Parent Version) and the Social Responsiveness Scale were used to measure the intervention's effectiveness on children's emotional and behavioral problems. Analysis results indicated that the overall intervention effect was not significant, but it had a certain degree of improving effect on children's emotional and behavioral problems, such as reduced aggressive behavior and enhanced emotion regulation ability.

Keywords: social and emotional learning, emotional and behavioral problems, children

1. Introduction

The "China Youth Development Report" shows that among children and adolescents under 17 in China, about 30 million are troubled by various emotional disorders and behavioral problems (Xue Junlei et al., 2023). The detection rate of children's emotional and behavioral problems is relatively high, and issues in this area urgently need attention. Current intervention research on emotional and behavioral problems mainly focuses on cognitive-behavioral therapy, humanistic therapy, and family systems therapy (Yu Qian, 2021). There is relatively little research on interventions combining internal factors (such as self-cognition, temperament characteristics, etc.) and external factors (such as parenting, peer interaction, etc.), requiring further exploration. Social and Emotional Learning promotes the improvement of children's social skills and emotion management abilities through five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, thereby reducing the incidence of children's emotional and behavioral problems. However, there is currently limited domestic research on SEL interventions for children's emotional and behavioral problems, and the specific impact mechanisms are not yet clear. Therefore, this study conducts an SEL intervention with children to explore the impact of SEL on children's emotional and behavioral problems, enriching research in this field.

Current research on influencing factors of emotional and behavioral problems mostly focuses on family and school aspects (Yu Qian, 2021), such as training parents to alleviate children's emotional and behavioral problems (Feng Zhe et al., 2018), and school-wide positive behavior support reducing children's emotional and behavioral problems (Feng Yonghui et al., 2024). Although some studies explore the combined influence of individual temperament and family parenting on children's emotional and behavioral problems (You Wenjing, 2020), related research is scarce, with insufficient discussion on interventions targeting children's internal factors. Existing research on interventions for emotional and behavioral problems mainly focuses on family interventions, kindergarten interventions, etc. (Ma Tianyu, 2020), primarily concerned with the indirect influence of parents, teachers, and peers on children's emotional and behavioral problems. While intervention methods like cognitive-behavioral therapy, narrative therapy, and sandplay therapy focus on the direct impact of changes in internal factors such as enhancing personal cognition and constructing identity on children's emotional and behavioral problems, there is less research on comprehensive interventions. SEL can influence children's emotional and behavioral problems through the combined effect of internal and external factors like self-awareness, social awareness, and relationship skills.

Current international research hotspots on SEL focus on its impact on individual abilities, behavior, emotions, etc. Domestic research on SEL mainly concentrates on areas like school bullying, academic achievement, and teaching reform, placing greater emphasis on the role of the collective environment (Sun Xiaojuan, 2023; He Zhenyi & Liu Yanling, 2024). There is relatively little discussion on the impact of SEL on personal emotional behavior, and the main research subjects are concentrated among young children and special groups.

Although numerous international studies explore the mechanisms of SEL's impact on emotional and behavioral problems, such as the mediating role of psychological resilience (Colomeischi Aurora Adina et al., 2022), domestic research on SEL and children's emotional and behavioral problems is limited and not thoroughly discussed.

Some research found that combining SEL with mindfulness enhances SEL effectiveness (Barbara A, 2016). Mindfulness deepens the five core SEL competencies by enhancing attention, self-regulation, and empathy. Case studies focus on exploring multiple influencing factors on a case; using case studies can better explore the influencing factors of SEL on emotional and behavioral problems.

In summary, based on previous research, this study will use a case study approach, combined with mindfulness intervention, to deeply explore the impact of SEL on children's emotional and behavioral problems. This helps children cultivate a positive mindset and improve behavioral problems, and also enriches research on the impact of SEL on children's emotional and behavioral problems.

2. Research Methods

Research shows that aggressive behavior, social problems, and academic procrastination are relatively prominent manifestations among current children's emotional and behavioral problems (Dong Peipei, 2021; Li Wenjing et al., 2025; Peng Yuan et al., 2022). Therefore, this study selected children with social problems, aggressive behavior, and other emotional and behavioral problems as research subjects.

The main experimenter in this study was an undergraduate psychology student with some understanding and training in SEL and mindfulness.

2.1 Case Information

Case A: Male, 9 years old, not an only child, has an older brother. Parents are separated, lives with father. According to parent interview, Case A has a good temper and is relatively obedient, but relies heavily on parents in daily life. Often procrastinates on tasks like homework, eating, bathing, requiring repeated reminders from parents (e.g., meal times up to two hours, homework time up to three hours). Relatively introverted in interactions with others, quite compliant with friends, rarely objects to friends' opinions. Usually apologizes first after arguments with friends. Seldom expresses inner thoughts and feelings, sensitive to others' opinions, unwilling to talk about family situation.

Case B: Male, 10 years old, not an only child, has an older brother. Parents have a harmonious marriage, lives mainly with mother and brother. According to parent interview, Case B is

outgoing and interacts well with classmates and friends, but gets angry easily. When encountering disagreements or dislikes something, tends to react angrily, choosing silent treatment or ignoring. Behaves assertively, sometimes gets desired outcomes by acting cute or throwing tantrums.

Case C: Male, 11 years old, not an only child, has an older sister. Parents have a harmonious marriage, lives mainly with father and grandmother. According to parent interview, Case C is enthusiastic and extroverted but easily irritated. Often loses temper or shouts over a single word. Prone to physical conflicts with classmates. At school, gets reported to parents by teacher at least 1-2 times per week for reasons like "talking back to teacher, fighting, violating rules." Was suspended for one week last semester due to these issues, following coordination between parent and teacher. Parents use criticism for education, resorting to corporal punishment in very rare cases.

2.2 Research Tools

2.2.1 Child Behavior Scale

The Rutter Child Behavior Scale (Parent Version) was used to measure children's behavioral problems. The scale was completed by the primary caregiver. It classifies behavioral problems into "A behavior" (antisocial behavior) and "N behavior" (neurotic behavior), consisting of 31 items. "A behavior" includes items 11, 21, 25, 26, 29. "N behavior" includes items 2, 7, 14, 17, 23, 31. The scale uses a 3-point scoring method (1: Never; 2: Occasional; 3: At least once a week). Scores are assigned 0-2 based on the rater's choice. A total score ≥13 indicates behavioral problems. If the "A behavior" total score is greater than the "N behavior" total score, it is classified as "A behavior"; conversely as "N behavior"; if equal, as "M behavior" (mixed behavior).

2.2.2 Social Responsiveness Scale

The Social Responsiveness Scale (SRS) by Constantino and Gruber was used to measure children's social interaction problems. The scale was completed by the primary caregiver. It

includes five dimensions: Social Awareness, Social Cognition, Social Communication, Social Motivation, and Autistic Mannerisms, totaling 65 items. Items 3, 7, 11, 12, 15, 17, 21, 22, 26, 32, 38, 40, 43, 45, 48, 52, 55 are reverse-scored. The scale uses a 4-point scoring method (1: Not true; 2: Sometimes true; 3: Often true; 4: Almost always true). Scores are assigned 0-3 based on the rater's choice. Higher scores indicate more severe social impairment; lower scores indicate better social ability. Total score <60 is normal, 60-75 mild abnormality, 76-90 moderate abnormality, ≥91 severe abnormality.

2.2.3 Self-Compiled Interview Questionnaire

A self-compiled interview outline was used to interview caregivers and cases separately before and after the intervention. Open-ended questions were used to understand the cases' feelings and changes. The interview focused on the scenarios, manifestations, and coping strategies regarding the cases' emotional and behavioral problems, such as "Have you noticed any emotional or behavioral problems in your child?", "When do you feel happiest/angriest/saddest?", "How do you usually respond when your child exhibits emotional or behavioral problems? What are the outcomes?", "How did you feel after this session?". The detailed interview outline is provided in the appendix.

2.3 Research Procedure

A case study approach was adopted, conducting an 8-session SEL intervention over 4 weeks, each session lasting 20 minutes. Caregivers were interviewed before and after the intervention, completed the Child Behavior Scale and Social Responsiveness Scale via Wenjuanxing (an online survey platform), and the cases were interviewed after each session.

2.3.1 Intervention Program Design

The content was developed with reference to Mao Yaqing's "Social Emotional Learning Guide Manual" combined with mindfulness, and adjusted appropriately based on the specific situation. The main content of each session is shown in Table 1.

Table 1. Main Content of the Social Emotional Learning Curriculum

SEL Core Competency	Session	Course Theme	Course Objective	Main Course Content
Self-Awareness	Session	Understanding the	Gain a preliminary	Introduction to SEL;

	1	Course, Awareness of Breath	understanding of Social Emotional Learning; practice awareness of breathing.	Mindful Breathing
	Session 2	Staying Present, Awareness of Self	Enhance body awareness; cultivate the ability to focus on the present moment.	Body Scan; Mindful eating: one small bite at a time
	Session 3	Identifying Emotions, Emotional Awareness	Learn to identify basic emotions; recognize how different emotions affect the body.	Watching a clip from **Inside Out**; Noticing Emotions: Sitting Like a Little Frog
Self-Management	Session 4	Managing Emotions, Self-Management	Master techniques for managing emotions; improve self-regulation skills.	Foot Meditation: Feeling My Feet; Three-Step Breathing Space
Social Awareness & Relationship Skills	Session 5	Perspective-Taking, Enhancing Empathy	Cultivate empathy; improve the ability to understand others.	The Concept of Empathy; Role-play: I Offer You Water
	Session 6	Listening Attentively, Respecting Others	Develop active listening skills; promote harmonious relationships.	Game: Raise Your Hand When You Hear the Sound
	Session 7	Effective Communication, Resolving Conflict	Learn communication skills to reduce interpersonal conflict.	Recalling past conflicts; Explaining communication methods
Responsible Decision-Making	Session 8	Looking Ahead, Making Plans	Set positive goals; enhance self-efficacy.	Drawing a Wish Tree; Course Summary

3. Results

3.1 Overall Status of Children's Emotional and Behavioral Problems

There were no significant differences in the scores of the three cases before and after the intervention. However, scores on the total Child Behavior Scale, N behavior, total Social Responsiveness Scale, Social Cognition, Social Communication, Social Motivation, and Autistic Mannerisms dimensions decreased to varying degrees. The overall scores of the cases are shown in Table 2.

Table 2. Scores on Various Scales and Dimensions (M ± SD)

Project	Pretest	Posttest
Child Behavior Scale	11.67±12.42	9.00±4.36
A Behavior	3.00±3.46	3.33±2.31
N Behavior	0.67±1.15	0.33±0.58
Social Responsiveness Scale	56.67±24.58	50.67±10.21
Social Awareness	8.00±1.73	8.00±1.00
Social Cognition	10.33±4.93	10.00±5.29
Social Communication	18.33±10.11	15.67±3.51

Social Motivation	11.33±2.89	9.33±2.31
Autistic Mannerisms dimensions	8.67±6.43	7.67±4.04

3.2 Individual Conditions of Children's Emotional and Behavioral Problems

3.2.1 Scale Score Conditions

Among the three cases, the scores of Case A and Case B on both the Child Behavior Scale and the Social Responsiveness Scale did not reach the criteria for problematic behavior. Case C had higher scores, with 26 points on the Child Behavior Scale (A behavior score: 7, N behavior score: 4) and 85 points on the Social Responsiveness Scale. Based on these results, Case C exhibited "A behavior" (antisocial behavior) and moderate social impairment. After the intervention, scores on some dimensions increased for Case A and Case B, while scores across all dimensions decreased for Case C. The changes in scores for each case across dimensions are shown in Table 3.

Table 3. Changes in Case Scores Before and After Intervention

	Case A		Case B		Case C	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Child Behavior Scale	4	6	5	7	26	14
A Behavior	1	2	1	2	7	6
N Behavior	0	0	0	1	2	0
Social Responsiveness Scale	41	39	44	55	85	58
Social Awareness	7	8	7	9	10	7
Social Cognition	8	4	7	14	16	12
Social Communication	12	12	13	16	30	19
Social Motivation	8	8	13	12	13	8
Autistic Mannerisms dimensions	6	7	4	4	16	12

3.2.2 Observation and Interview Results on Emotional and Behavioral Problems

3.2.2.1 Analysis of Case A

After the intervention, Case A showed increased initiative in social interactions. The frequency of communication between Case A and parents/friends increased. In daily communication, Case A more actively expressed personal thoughts and inner feelings, unlike before the intervention when unwilling to express. When feeling uncomfortable, Case A tried to express these feelings rather than choosing to endure them.

In the later stages of the intervention, when Case B disagreed with his choices, Case A was able to think independently, clearly express his views, and stick to his decisions, rather than blindly following others' opinions or enduring discomfort.

However, after the intervention, Case A's procrastination behavior did not improve. When completing homework, meals, and other daily tasks, he still required a long time to finish, with low task execution efficiency, showing no significant improvement compared to the pre-intervention state.

3.2.2.2 Analysis of Case B

After the intervention, Case B's emotion regulation ability improved. When facing disagreements with others, Case B responded more reasonably, instead of getting angry or refusing outright as before. He was able to express his views and opinions and communicate friendly with others.

In peer interactions, Case B still showed a strong tendency to dominate. During interactions with peers, he often insisted on his own ideas and opinions, being unwilling to listen to others' suggestions. However, Case B displayed a more friendly attitude in peer interactions, such as

actively asking Case A if he needed help.

3.2.2.3 Analysis of Case C

After the intervention, Case C showed positive changes in several aspects, detailed as follows:

(1) Reduction in Aggressive Behavior

The frequency of destructive behavior and physical conflicts when conflicts with others occurred significantly decreased. According to parent feedback after the intervention, common aggressive behaviors like "throwing things" and "swearing" noticeably reduced. At school, the frequency of complaints from teachers and classmates significantly decreased, with fights and rule violations notably reduced. For example, after being scolded by a classmate, Case C no longer retaliated verbally or physically but chose to report the situation to the teacher, resolving conflicts through reasonable channels.

(2) Enhanced Emotion Regulation Ability

When emotionally aroused, Case C could use self-regulation strategies like deep breathing to calm down before expressing his thoughts or needs, rather than directly losing his temper and shouting, letting emotions 失控 (lose control). For instance, when urged by a parent to tidy up, Case C would first state what he was currently doing and the time needed to complete it, before going to tidy up.

4. Discussion

4.1 Emotional and Behavioral Problems of Case A

In this study, Case A's procrastination behavior did not improve, contrary to Li Ziwei's (2021) findings. This might be related to the curriculum design focusing more on emotion management and lacking specific content targeting procrastination. Additionally, procrastination behavior is also related to parent-child attachment; poor parent-child attachment can exacerbate children's academic procrastination (Lu Xingxing, 2020; Peng Yuan et al., 2022). Case A's parents are separated, and his father is relatively strict, which might affect the development of his parent-child attachment, thereby influencing his procrastination behavior.

Case A's expression frequency increased, daring to express his feelings and insisting on his own ideas. This might be related to SEL improving his social skills (Vassilopoulos et al., 2018). Learning content about conflict resolution in the curriculum might enable the case to handle potential conflicts arising from expressing his own ideas, thus willing to express himself actively and insist on his views. Moreover, SEL emphasizes teaching emotion management skills. Du Fangfang and Li Meng's (2019) research found that emotion management skills can help children display appropriate social skills, increase their ability to gain friends and social support, making them more likely to use social problem-solving skills in challenging situations with peers.

4.2 Emotional and Behavioral Problems of Case B

Case B's unwillingness to communicate with others in peer interactions did not improve. Interpersonal skills are key to the development of peer interaction ability (Zhang Yingru, 2020). However, the curriculum focused on resolving interpersonal conflicts but lacked more comprehensive interpersonal skills training, thus failing to improve Case B's peer interaction ability, leaving the problems in peer interactions unaddressed.

Case B's prosocial behavior increased, actively asking others if they needed help. This is consistent with Marcin Sklad et al.'s (2012) research findings. Some research suggests that SEL enhances interpersonal skills, and appropriate expression methods help children establish harmonious interpersonal relationships and cultivate prosocial behavior (Zhang Yujun, 2024). Li Wenping et al.'s (2019) research found that positive emotions mediate the relationship between social support and prosocial behavior. During the intervention, a good intervention atmosphere was established, Case B felt more social support, enhancing positive emotional experiences, thereby promoting the occurrence of prosocial behavior in Case B.

4.3 Emotional and Behavioral Problems of Case C

After the intervention, Case C's aggressive behavior significantly decreased, consistent with previous research findings (Gao Zhuqing, 2016; Portnow S, 2018; Kozina Ana, 2021). This might be related to the empathy-related content in the curriculum enhancing Case C's empathetic ability, promoting prosocial behavior, and reducing aggressive behavior (Carmen Carpio de los Pinos et al., 2020). Huang Anqi et al.'s (2020) research found that SEL can strengthen students' ability to understand others, training to evoke emotional resonance and generate awareness of prosocial interaction. This aligns with the significant decrease in Case C's SRS

score (from 85 to 58).

Case C's scores decreased significantly on the Social Communication (from 30 to 19) and Social Motivation (from 13 to 8) dimensions, indicating Case C is more proactive in social engagement rather than avoiding it. This might be related to SEL's ability to improve social withdrawal and social anxiety in students (Sousa V et al., 2023). Case C's emotion regulation ability improved. These changes might be related to SEL introducing emotion regulation techniques, cultivating positive thinking, thereby reducing negative emotional experiences, improving psychological resilience, and enabling better coping with academic life and peer interactions (Wei Jin, 2013). Some research believes that SEL helps children better understand the nature and complexity of social interactions, allowing them to make correct attributions when interactions fail, thus facing interpersonal relationships and managing their own emotions with a more positive mindset (Qiu Hongyan, 2021).

Compared to Case A and Case B, the intervention effect was more pronounced for Case C. This might be because when the intervention ended for Case A and Case B, it was the week before the new semester started. The cases faced pressure from the upcoming school start, increasing anxiety, irritability, and other emotions, making the intervention effects less obvious. Furthermore, research (Lin Xiuling, 2022) indicates that parent-related factors like parent-child relationship and family atmosphere influence elementary school students' SEL. After the intervention, Case C's parents began using encouragement, calmly talking with Case C to understand his needs and wishes, improving the parent-child relationship, thereby making the intervention effect more significant. Additionally, besides his father, Case C's main caregiver is his grandmother. A good co-parenting relationship between grandparents and parents can reduce the occurrence of children's emotional and behavioral problems (Xia Shuang, 2024).

4.4 Limitations and Future Directions

First, in case selection, all selected cases were male, which is not conducive to exploring the differential impact of SEL on children of different genders. Observation of case problem behaviors was not sufficiently scientific and standardized.

Second, some curriculum content was relatively dull, making it difficult for children to maintain focus; furthermore, some material selection did not adapt to the children's level of comprehension, making it hard for children to understand the content. The curriculum content lacked specificity and was not targeted enough for some of the cases' emotional and behavioral problems.

Finally, in future research, case selection should balance gender to explore the differential impact of SEL across genders. Curriculum design should better align with children's physiological and cognitive development, incorporate a certain degree of interest, and have an appropriate session duration. Content should be designed to target children's specific emotional and behavioral problems. Emotional and behavioral problem observation records should be used before and after the intervention for more scientific and intuitive comparison of changes in case emotional and behavioral problems.

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