Influence of Social Emotional Learning Curriculum on Preschoolers' Mental Health in School-Setting: A Mixed-Methods Study

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Abstract

Research has underscored the significance of social-emotional learning (SEL) on children's academic achievement and cognitive development. Yet, there remains a significant gap concerning the influence of SEL programs on preschool children's mental health and learning motivation. Understanding young children's attitudes and engagement towards SEL programs can help us know how they perceive social relationships and build social and emotional development at a young age. Therefore, this study aims to use a mixed method approach to examine the efficacy of SEL programs in promoting their mental health, and to measure children's feelings and willingness to participate in SEL activities and their attitudes toward SEL-related scenarios. Quantitative findings revealed that preschool children are more likely to participate in SEL activities, while qualitative results found three main themes about their attitudes, indicating a positive reception of SEL, and suggested a lasting improvement in preschooler's mental health and social relationships. Implications are provided as follows.

1. Introduction

In recent years, the realm of youth development and education has acknowledged the critical importance of social-emotional learning (SEL) in shaping the mental health outcomes of children. The academic narratives are shifting from a

purely scholarly and vocational focus to a more holistic "whole child" perspective, aiming to nurture students into well-rounded individuals who lead mentally healthy and meaningful lives alongside their educational and personal growth. This is because the well-being of children is an important part of the curriculum focus since mental health issues increased, including anxiety, ADHD, and behavioral problems (Schulte-Körne, 2016). The emergence of the COVID-19 pandemic further compounded these challenges, with a notable 24% rise in mental health-related emergency visits among children aged 5 to 11 (Leeb et al., 2020). These concerning statistics underscore the imperative to address mental health issues in children and adolescents through educational policies and curricular design.

The adoption of SEL curricula equips educators and practitioners with the tools to support and enhance the social-emotional well-being of students effectively. This supportive framework promotes better outcomes in both academic settings and personal development. SEL activities foster essential life skills in children, such as self-awareness, self-control, and social interaction skills that are fundamental for success in their educational journey and beyond (CASEL, 2013). The significance of SEL is reflected in the increase in students' resilience and ability to contest challenges by using these skills, including managing emotion, problem-solving skills, positive goal-setting, and interpersonal skills. Therefore, the integration of SEL within educational systems is posited as a valuable approach to ameliorating students' academic stress and mental health issues.

Historically, there have been a lot of research studies focusing on cognitive development and its outcomes in early childhood education. However, the recent influence of COVID-19 has spurred a reevaluation of social and emotional learning, in particular concerning children who are aged three and above (Idoiaga et al., 2020). Evidence from various studies has confirmed the substantial significant influence of SEL on both academic success and the well-being of both students and instructors. It also enhances the cognitive, social, and mental well-being of the children. Research has suggested that early childhood is a pivotal phase of acquiring fundamental social and emotional competencies, such as self-regulation, as they develop and experience emotions and cognitions and build a connection to the world (Montroy et al., 2016). As a result, many policymakers are increasingly incorporating SEL in daily educational practice to address the mental health issues faced by children. The expanding implementation of SEL strategies in pre-K education underscores its positive influence and supports social equity via fostering an inclusive, collaborative, and comprehensive approach to child education (Cipriano et al., 2023). Nevertheless, there remains ongoing debate about the strength and efficacy of specific SEL interventions and practices for learners, in particular for young learners between the ages of three to five.

Given the aforementioned gap and the significance of SEL, this paper serves a twofold purpose: 1) to explore the influence of SEL curricula on children's men-

tal health and its implications for educational policy. Specifically, this paper assesses whether SEL implementation in pre-K scenarios leads to beneficial behavioral and attitudinal changes in children's social skills and societal readiness and 2) explores how various SEL implementations and practices, such as elective courses and extracurricular activities, personnel strategies, and SEL-specific classroom practices in early education school settings, contribute to the overall health and well-being of children.

To achieve these objectives, a mixed-method approach was employed. Quantitative data was collected through surveys using Likert scales to gauge attitudes toward SEL activities, and qualitative data was gathered through one-on-one interviews asking open-ended questions in different scenarios to test the effectiveness of SEL learning on their mental health. This paper hopes to shed light on implications for social and emotional development in early childhood education and mental health contexts. It addresses the escalating concern of mental health issues among young children and advocates for the integration of SEL into educational curricula as a preventative strategy. Furthermore, the findings of this paper provide empirical evidence of the positive influence of SEL on children's mental health and social behaviors, emphasizing the potential long-term benefits of SEL programs for their future well-being and for educators.

2. Literature Review

2.1. Mental Health and Normal Mental Health Range

The concept of mental health is multifaceted, encompassing the overall well-being of individuals concerning their emotional, psychological, and social dimensions. Recognized as a fundamental human right, it is integral to personal, community, and socio-economic development (World Health Organization, 2022). Good mental health enables individuals to navigate daily stressors, achieve productivity, fulfill their potential, and contribute positively to their communities. It leads to greater experiences of happiness, love, and joy, benefiting not only the individuals themselves but also those around them (World Health Organization, 2022).

In recent years, there has been a worrying increase in the number of young children displaying mental health problems, with estimates suggesting that 10% to 25% of young children may have mild to severe social-emotional disorders (Merikangas et al., 2010). The prevalence is higher among children with disabilities and those at risk, with approximately 10.5% of preschoolers displaying symptoms of emotional disorders, such as anxiety and depression (Egger & Angold, 2006). These mental health concerns are closely linked to a spectrum of adverse outcomes, such as lower educational achievements, substance abuse, violence, and compromised reproductive and sexual health (Patel et al., 2007). SEL programs, designed to enhance emotional regulation and social skills, serve as proactive measures in addressing these challenges and fostering resilience in young learners.

2.2. Social-Emotional Learning Curriculum

Early detection of child mental health problems in schools is critical for implementing strategies for prevention and intervention. The development of an effective measure of mental health and well-being for this context must be both empirically sound and practically feasible (Deighton et al., 2012). To address this challenge, integrating SEL into educational curricula emerges as a potential solution. Developing emotional intelligence, interpersonal abilities, and resilience through SEL might significantly aid in the early detection and assistance of child mental health difficulties in the educational setting (Institute of Medicine and National Research Council, 2015). SEL is a process through which children gain and proficiently utilize the essential knowledge, attitudes, and abilities required to comprehend and regulate their emotions, define and attain constructive objectives, experience and express empathy towards others, create and sustain favorable relationships, and exercise prudent decision-making (CASEL, 2013). One of the most influential meta-analysis papers showed that the breadth of SEL intervention is directly proportional to participant gains, with an 11 percentile point increase in academic performance attributed to SEL participation, suggesting that SEL initiatives may bolster rather than impede academic excellence (Durlak et al., 2011). In addition, children who participate in SEL programs demonstrated much more favorable results as compared to control children in terms of improved SEL competence, attitudes, positive social behavior, and academic achievement, as well as significantly reduced levels of behavioral issues and emotional distress (Durlak et al., 2011). Moreover, further studies corroborate that children with well-honed SEL skills exhibit enhanced mental and physical health, as evidenced by strong social and emotional competencies (Alzahrani et al., 2019). Collectively, these findings endorsed that incorporating SEL programs into the educational system can lead to comprehensive improvements in children's emotional, social, and academic development and their mental health, both long-term and short-term. This robust and consistent body of evidence shows that the SEL program yields tangible benefits for children.

Regarding the structure of SEL, it is grounded in evidence-based interventions, such as Positive Action Life Skills Training, Second Step, Responsive Classroom, and Social and Emotional Training, as examined by previous researchers (Dunn, 2019). The genesis of SEL can be traced back to 1994 when it emerged as a result of discussions on child development and the need to focus on children's school-based development efforts (Durlak et al., 2011; Jones et al., 2015; Dunn, 2019). SEL is a process through which children learn and effectively apply knowledge and skills related to emotional management. It aims to equip children with the ability to achieve positive goals, demonstrate empathy in their relationships, and make rational and responsible decisions (Taylor et al., 2017).

The enhancement of SEL skills is designed to improve attitudes toward oneself and others. Students who have taken the SEL program have shown better academic performance when compared with students who have not. For the pur-

pose of SEL learning, students would be more likely to continue their high school education and make more effort in future college in-depth learning and career management (Jones et al., 2015). Conversely, students who do not perform well in SEL learning, showing their deficits in skills, are more likely to experience mental and emotional problems, and also, they have more possibility of living in public housing and suffering from mental issues (Durlak et al., 2011; Payton et al., 2008).

2.3. Effect of the SEL Curriculum

SEL programs offer empirically supported structures and contents to teach SEL skills, with numerous studies indicating positive impacts on students' social, emotional, behavioral, and academic functioning. The SEL skills that were taught during early childhood, especially within preschool settings, play a pivotal role in building subsequent SEL competencies (Denham et al., 2012). Students demonstrated better interpersonal skills, friendly attitudes toward people, and positive social behaviors (Durlak et al., 2011). Through SEL programs, students can better identify and regulate their emotions, solve problems independently, and establish healthy relationships with others. These developed SEL skills are associated with increased academic success, overall well-being, and the promotion of conscientious community involvement (Zins & Elias, 2007). A recent meta-analysis by Cipriano et al. (2023) validated the positive outcomes associated with SEL interventions in K-12 school settings. This research also redefined SEL to encompass even beyond academic skills, such as attitudes, school climate, and peer relationships (Cipriano et al., 2023). In addition, enrollment in preschool early education programs can also build and strengthen children's social-emotional and cognitive development before kindergarten (Camilli et al., 2010). Specifically, preschool-aged children who engaged in SEL programs exhibited more favorable social conduct, as evidenced by increased levels of social peer cooperation, interaction quality, and social independence, than children who were not enrolled in preschool with socio-emotional training programs (Murano et al., 2020). However, there is a noted dearth of robust research focusing on the influences of SEL intervention on preschoolers from age three to age five.

Moreover, SEL programs alleviate some of the pressures educators encounter in driving students toward high academic performance and college and career readiness. Blewitt et al. (2020) suggested that SEL programs may strengthen teaching quality and pedagogy methods, thus developing a nurturing teacher-child connection and effective classroom management in early childhood education. These programs focus on developing five interrelated competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, which are considered foundational to healthy development and executive functioning children's well-being (CASEL, 2013). Self-awareness and self-management and self-awareness, relationship skills, and decision-making, and these competencies are considered foundational to healthy development in

children.

3. Methodology

Given the appropriateness of the research objective, this study was conducted using the mixed-method design (Creswell & Creswell, 2017). The quantitative data for this study were collected using a survey questionnaire administered to the participants. The questionnaire featured items that probed into the participants' attitudes and experiences with SEL, with the responses subsequently undergoing qualitative analysis. Quantitative analysis was executed using SPSS version 27. Descriptive statistics were computed, detailing frequencies, means, and standard deviations for pertinent variables. The qualitative analysis was conducted using NVivo for thematic analysis of the open-ended responses extracted from the questionnaire. The data were coded to discern patterns, themes, and categories related to the participants' attitudes toward SEL. The process involved deductive coding based on predefined categories and inductive coding to capture emergent themes.

3.1. Participants

The participants were selected from a childcare center in Watertown, MA, in the United States, using a convenience sampling method. A total of 14 students (7 males, 7 females) were 4 - 5 years old, with an average age of 4.8. These pre-K students had engaged in SEL activities integrated into their curriculum. A total of 14 students were exposed to an activity associated with self-awareness of emotions, actions, and behaviors, such as mindfulness, progressive muscle relaxation, and role-play. All participants have consented to participate in this study, and this study is aligned with the Declaration of Helsinki.

3.2. Instruments

3.2.1. Survey

For the purpose of the study, the survey-oral interview was used to gather children's responses on the likelihood of SEL activities and gather information to measure their general mental state. As these children are too young to have the ability to write, we have this oral interview instead of a written survey. These children are prompted to rate how they like the SEL activities that they were exposed to and also general feelings on the SEL skills to test their effectiveness.

To support the qualitative results with quantitative data, a trial oral survey was incorporated. The children were given two sets of questionnaires, both entailing roughly 5 - 10 questions that aimed to be responded to with specific emotional ratings. The first set of questions asked about their emotions and the likelihood of SEL skills, such as helping others, being kind, and saying nice words, on a scale of 1 to 10, 1 being intensely disliked and 10 being an utmost endorsement. This measures their inclinations towards these social and emotional skills and how these endorsement potentially influence their mental health.

The second set of surveys implores how they like the SEL activities they had participated in before, such as drawing out emotions and identifying them and storytelling a popup book about emotions, on a scale of 1 to 10. This measures their engagement and satisfaction with activities related to SEL and understands the influence of these activities on their mental health state. For example, receiving a low rating on those activities implies a lack of interest, which may have a neutral or even negative impact on their mental well-being.

3.2.2. Interview

For the purpose of this study, qualitative methods were predominantly employed to gather in-depth insights. Specifically, individual interviews were conducted with the child participants. Given their prior exposure to SEL coursework, the research design included a face-to-face, one-on-one interview format for all child participants involved in the study. The children were prompted to share their pre-kindergarten experiences, touching on their feelings towards classmates and their social connections, including questions about the number of friends they had made.

Moreover, to complement the qualitative data, a quantitative closed-ended protocol was implemented, wherein the children were asked to rate their emotions on a scale from 1 to 10. This scale was utilized across 5 - 10 targeted questions to quantify their emotional states. The gathered data were meticulously recorded and archived for subsequent analysis.

All data procured from the interviews and surveys were systematically recorded and preserved. The availability of this comprehensive dataset will facilitate a thorough analysis of the responses, allowing for the identification of patterns or trends and ultimately contributing to conclusions about the children's mental health and well-being as influenced by their engagement in SEL activities.

In the study conducted using NVivo, a qualitative data analysis software, we explored the attitudes and experiences of children regarding social and emotional learning (SEL). NVivo allowed us to analyze and interpret the data collected from participants, providing valuable insights into their perspectives and behaviors related to SEL. By employing NVivo, we were able to examine the richness and depth of the data, identify recurring themes and patterns, and gain a comprehensive understanding of the participants' attitudes and experiences regarding SEL. The insights gained from the NVivo analysis contribute to our understanding of how children perceive and engage with SEL, providing valuable information for educators, researchers, and practitioners in the field of social and emotional learning.

4. Findings

In addressing the first research question, the quantitative analysis yielded descriptive statistics. The analysis involved calculating the frequencies and means of the participants' ratings for the SEL curriculum components.

The descriptive analysis (see Table 1) and statistical analysis (see Table 2)

provide insights into the participants' responses in various aspects related to social and emotional learning (SEL). As for feelings about helping others, participants rated their feelings towards helping others on a scale of 1 to 10, with a mean rating of 8.21. This suggests that, on average, the participants have positive attitudes toward helping others. Participants rated their feelings towards showing respect to others, with a mean rating of 9.07. This indicates that, on average, the participants are strongly inclined toward showing respect to others. Participants rated their feelings towards saying nice things to others, with a mean rating of 9.36. This suggests that, on average, the participants have positive attitudes towards using kind and positive language.

Regarding being kind, they rated their feelings towards being kind with a mean rating of 9.71. This indicates that, on average, the participants are highly

Table 1. Descriptive analysis.

	N	Min	Max	Mean	SD	Variance
Age	14	4	5	4.79	.426	.181
Feelings to help others	14	5	10	8.21	2.082	4.335
Show respect	14	5	10	9.07	1.492	2.225
Say nice things	14	7	10	9.36	1.082	1.170
Be kind	14	8	10	9.71	.726	.527
No hitting/no spitting activity	14	1	10	7.07	2.586	6.687
Respect/saying nice things/sharing (kindness)	14	4	10	8.57	2.027	4.110
Problem solving	14	5	10	8.14	1.610	2.593
Drawing out emotions and identifies them	14	7	10	9.64	.929	.863
Storytelling a popup book	14	8	10	9.86	.535	.286
Valid N (listwise)	14					

Table 2. Statistical analysis of variables.

		age	Feelings to help others	Show respect	Say nice things	Be kind	No hitting	Respect/ saying nice things	Problem solving	Drawing out	Story-telling
N	Valid	14	14	14	14	14	14	14	14	14	14
	Missing	985	985	985	985	985	985	985	985	985	985
Mean		4.79	8.21	9.07	9.36	9.71	7.07	8.57	8.14	9.64	9.86
Median		5	9	10	10	10	7	10	8	10	10
Mode		5	10	10	10	10	Multiple	10	8	10	10
Min		4	5	5	7	8	1	4	5	7	8

a. Multiple modes exist. The smallest value is shown.

inclined toward kindness in their interactions. Participants rated their engagement in an SEL activity related to avoiding hitting and spitting with a mean rating of 7.07. This suggests that, on average, the participants have moderate engagement in this specific activity. Participants rated their engagement in SEL lessons related to respect, saying nice things, sharing, and taking turns, with a mean rating of 8.57. This indicates that, on average, the participants have moderate engagement in these SEL lessons focused on kindness. Participants rated their engagement in SEL activities related to problem-solving with a mean rating of 8.14. This suggests that, on average, the participants have moderate engagement in activities that promote problem-solving skills. Participants rated their engagement in SEL activities involving drawing out emotions and identifying them with a mean rating of 9.64. This indicates that, on average, the participants have high engagement in activities that help them express and understand their emotions. Participants rated their engagement in an SEL activity involving storytelling using a popup book about emotions with a mean rating of 9.86. This suggests that, on average, the participants have high engagement in this specific activity.

Overall, the quantitative data from descriptive statistics reflected positive attitudes and engagement of the participants towards various aspects of SEL, such as helping others, showing respect, saying nice things, being kind, and engaging in activities that promote emotional expression and problem-solving skills. These findings indicated a favorable disposition towards SEL and suggested that the participants were receptive to learning and applying SEL principles in their daily lives.

To answer our research question 2, the qualitative analysis identified several themes and categories related to children's attitudes toward SEL (see Figure 1). Three main themes, "Understanding and Managing Emotions", "Problem-Solving and Conflict Resolution", and "Empathy and Kindness", emerged from the data. The participants' experiences, perceptions, and suggestions regarding SEL activities were also captured in the qualitative analysis.

Theme 1: Understanding and Managing Emotions

Some participants mentioned strategies related to managing their own emotions. Taking a deep breath, walking away, being more careful, or stopping themselves from engaging in negative behavior were mentioned. This indicates an awareness of the need to regulate emotions and engage in self-control to contribute to positive outcomes.

Participant 1: Maria responded, "used emotions to show my feelings to grown-ups" to the question, "what did you learn from those [SEL] activities and lessons?]."

Participant 2: Allen learned, "I take a deep breath and use my words to tell them [adults] I'm not happy."

Theme 2: Problem-Solving and Conflict Resolution

Many participants mentioned using their words to communicate and resolve conflicts. Strategies such as talking to others, telling them to stop, using nice words,
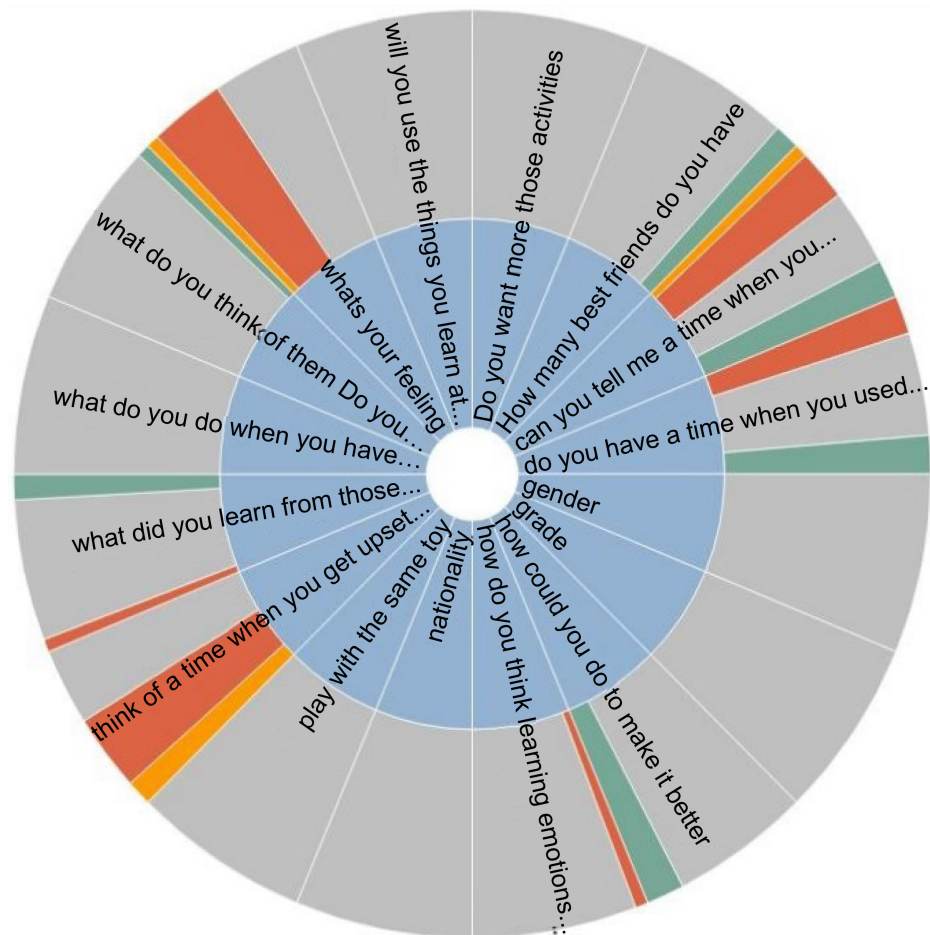
Figure 1. NVivo analysis of variables.

and expressing respect and love were mentioned. This suggests that participants recognize the importance of effective communication and positive interactions in improving situations. In addition, participants were also in the situation of helping a friend who was having trouble with a puzzle and assisting in problem-solving when friends were fighting, reflecting problem-solving skills and a desire to resolve conflicts or challenges in a helpful manner.

Participant 1: Annabell came up with the conflict resolution: "Tell them they are doing it wrong."

Participant 2: Nick said, "Ask a teacher to find another toy to play with" when fighting with the same toy.

Theme 3: *Empathy and Kindness*

Participants showed support and empathy by helping a failed friend to get up, inquiring about a friend's well-being and feelings when they were hurt, and asking about a teacher's feelings when they appeared upset. These actions demonstrate care, concern, and the ability to recognize and respond to others' emotional needs.

Participant 1: Vincent: "Ask about the teacher's feelings when I think they are upset."

Participant 2: Jaker answered, "When a friend got hurt, I asked them if they were okay and asked about their feelings."

Several participants mentioned the importance of showing respect and empathy towards others. This included respecting teachers and friends, listening to others, and showing kindness and appreciation. These responses reflect an understanding of the value of treating others with respect and empathy to improve relationships and create a positive environment.

Participant 1: Kiki used to "tease[ing]" others, but after learning SEL principles, she would "stop laughing and say nice things and listen to others."

Participant 2: Nick: "I respect the teachers and friends and write birthday cards for them."

In the qualitative data, the participants rated their feelings toward helping others (relationship skills in SEL) with a mean rating of 8.21/10. As for feelings towards showing respect to others (social awareness in SEL), participants rated a mena rating 9.07/10, which means they are highly aware of other perspectives with different cultural contexts. Moreover, participants rated their engagement in SEL activities that are related to relationship skills an 8.57/10, whereas they self-rated their participation in SEL lessons that are related to responsible decision-making, such as problem-solving, an 8.14/10.

In the interview results, the qualitative results reveal several aspects of the theme of SEL. Children show the ability to be aware and manage their own emotions. They know how to use words to express their emotions. Theme one, "understanding and managing emotions", corresponds to the self-awareness and self-management of SEL (CASEL, 2013). According to teachers' observations of children's behaviors and their answers to interview questions, children are able to communicate effectively to solve conflicts. They provided resolutions by showing kind language, love, and respect and seeking adult's help to address the challenges between peers. The data showed that SEL activities teach children the ability to have responsible decision-making and relationship skills in the five cores of SEL by identifying solutions for personal and social problems and resolving conflicts constructively (CASEL, 2013). The third theme, "empathy and kindness", is also shown in children's responses and their willingness to engage in kind and caring words and behaviors. They are observer to help friends initiatively, ask about their feelings, and show concern for peers and teachers when recognizing the emotional needs of others. Overall, the qualitative findings indicated three main themes in this study, namely "Understanding and Managing Emotions", "Problem-Solving and Conflict Resolution", and "Empathy and Kindness".

5. Discussion

The results of this study examined the attitudes of preschoolers towards SEL programs and activities, underscoring a reciprocal benefit where engagement in SEL garners not only positive feedback but also provides valuable emotional support and knowledge. This implies that integrating SEL activities fosters a

more holistic learning experience, enhancing the emotional well-being of the children. In addition, this paper casts light on the influence of SEL on children's mental health among 4 - 5 year-old. It highlights that preschoolers are able to and willing to help others, respect others, use kind language, and engage in activities related to emotional regulation and problem-solving, which are taught in the SEL curriculums.

Several implications can be drawn from the study as follows. First, the positive attitudes of preschoolers towards SEL activities emphasized the feasibility of integrating SEL into the curriculum at an early age. By including SEL in the school curriculum and childcare center policy and beliefs, policymakers can foster the early development of SEL skills, such as emotional regulation, problem-solving, and self-awareness. These skills, as demonstrated in the study, are not only positively received by preschoolers but also help them to enhance their mental health, social behaviors, and academic outcomes. By promoting SEL in the early years and not just K-12 education, policymakers can create a nurturing and inclusive learning environment for preschoolers to maintain emotional well-being in the later stages of education.

Secondly, this paper explores the implications of SEL curriculums on instructors' direct teaching. This study's results of positive attitudes of preschoolers towards SEL activities indicate that students are not only receptive but deeply engaged and learn necessary social skills in these pedagogies to support their social and emotional development. Likewise, teachers may also feel more productive at their jobs, have lower levels of teaching-related stress, and improve their well-being (Greenberg, 2015). Moreover, Jennings and Greenberg (2009) and current research results suggest that instructors who use SEL practices in their teaching can foster stronger teacher-student relationships and improved student engagement as students favor these activities.

Finally, this study contributes and provides suggestions for the instructional design of SEL curriculums in how the designers and developers can better tailor and develop age-appropriate SEL programs for preschoolers. By developing SEL-related materials that align with five core competencies (CASEL, 2013), instructional designers and developers can better collaborate with educators to facilitate the social and emotional development of these skills for 4 to 5-year-old children. This study contributes and extends further in the field of early childhood education and social-emotional learning curricula. The results of the paper contribute significantly to SEL curricula implications for educational policies and instructional design to enhance the positive influence on children's mental health in order to foster positive attitudes.

These findings align with previous research that SEL curriculums have positively impacted children's academic success and social and emotional development. Previous research results and meta-analyses in Panayiotou et al. (2019) and Durlak et al. (2011) all illustrated the direct effect of social-emotional competence on the academic attainment of children and the indirect effects of school

connectedness and mental health difficulties. In addition, many research papers and literature reviews illustrate that teaching SEL curriculum and social-emotional competence may improve their levels of social-emotional well-being and social behaviors as well as their academic outcomes (e.g., Ashdown & Bernard, 2012; Alzahrani et al., 2019; Nelson et al., 2003; Payton et al., 2000).

Similar to the current study, young children who were exposed to SEL programs were more likely to show positive social competencies, build kind social relationships with peers and others, and reduce mental health issues. These similarities reaffirm the consistency in past findings across different cultural backgrounds to support the thesis that SEL is beneficial to children in various ways: 1) academic outcomes, 2) healthy behaviors, 3) peer relationships in school, 4) SEL competencies, 5) emotional distress (CASEL, 2022). However, the study focuses on the attitudes of preschoolers, especially 4 - 5-year-old children, which is a relatively less explored age area in SEL research. Most existing studies have concentrated on older students from K-12 or broader age groups (e.g., Ashdown & Bernard, 2012; Dunn, 2019; Panayiotou et al., 2019). Thus, this paper expands the scope of SEL research to include preschool-aged children, which adds a valuable perspective to the SEL field.

This research incorporates Erikson's psychosocial developmental theory. Preschoolers are the third stage of Erikson's eight stages of development. Preschoolers at 3 - 5 years old focus on doing things more independently. Erikson (1950) also suggests that social interaction and experience played pivotal roles in their development to assert their power and take the initiative as well as feeling regret and guilt for actions. Development is considered a response to reinforcement and rewards. That being said, SEL is extremely beneficial and important to preschoolers to encourage them to understand different feelings and to be able to expect future challenges and opportunities for growth with the skills of problem-solving. The results of the successful resolution of each crisis are set to be the foundations and prior experiences for future challenges (Erikson, 1950). This theory can be reflected in the theme of "empathy and kindness", where children learn to take initiative and develop empathy and caring behaviors for others. In our data, all children indicate that they are willing to apply the SEL knowledge at home and in their lives, which sets a foundation for useful experiences in the future.

Furthermore, Lev Vygotsky's sociocultural theory presents that social interactions contribute to a child's cognitive development and learning capability and emphasizes the importance of healthy social interactions within different cultural contexts to learning. The results from the themes "problem-solving and conflict resolution" and "empathy and kindness" demonstrate how children interact socially with both peers and teachers under SEL curriculums. In addition, Vygotsky mentions the Zone of Proximal Development (ZPD) as "the distance between the actual development level (of the learner) as determined by independent problem solving and the level of potential development as determined through

problem-solving under adult guidance, or in collaboration with more capable peers" (Billings & Walqui, 2017). Through SEL activities with teachers' guidance, students can learn and improve better when interacting with peers and teachers with support to solve a problem. For example, when teachers show preschoolers how to manage feelings or solve a problem or conflict, the children are more likely to learn the ability to understand social relationships and problem-solving skills when they have social-emotional guidance throughout the activities. Vygotsky indicates that people do not learn by themselves but with other's support and by observations. By learning SEL curriculums and related skills, children can reach their full potential in building strong social networks, solving conflicts, and being kind to each other.

6. Limitations and Future Directions

These findings regarding the influence of the SEL curriculum in preschool childcare centers are qualified by various study limitations. First, the sample size is relatively small (n = 14), which may limit the generalizability of the findings and the diversity of the population. In addition, due to budget and resource constraints, all participants are selected from the same childcare center, considered convenience sampling, which may result in a relatively homogenous sample in terms of demographic and contextual factors. Third, as the participants are all chosen from the same childcare center, the SEL experiences and attitudes of preschoolers in this specific school may be influenced by certain teaching methods, cultures, and curriculums. Thus, it might not be representative in other educational settings and will make it harder to apply the results more broadly.

Since this study is not an experimental design in nature, future studies could center on empirical data, which could draw more robust cause-and-effect relational conclusions. Future directions could involve a more diverse and larger sample size and employ a rigorous randomized sampling method to reduce the risk of convenience sampling to increase the validity of these results regarding the influence of the SEL curriculum in early childhood education. Building on that, it is important to diversity the locations and educational settings of participants, such as childcare centers, preschool programs, and community events. Further studies could replicate the research by adding wider selections of participants to reduce the bias.

7. Conclusion

Mental health in young children has been a huge and urgent issue during the COVID-19 pandemic. This study indicates that young children from four to five years old tend to embrace and actively engage in SEL activities. This means they are open to learning SEL skills, including helping others, being kind, showing respect, and using nice language to promote emotional expression and social skills. This suggests that incorporating SEL teaching in early formative years has the potential to address children's mental health issues. Our study uses a mixed

method to examine the efficacy of SEL in promoting the mental well-being of pre-schoolers and the potential positive changes in children's attitudes and behaviors. This research hopes to be valuable for policymakers, educators, and those involved in course design planning and development. In order to prioritize the promotion of mental health in schools using the SEL curriculum, the active involvement of educators and policymakers is needed to support the training of teachers in applying SEL in curriculum activities.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Alzahrani, M., Alharbi, M., & Alodwani, A. (2019). The Effect of Social-Emotional Competence on Children Academic Achievement and Behavioral Development. *International Education Studies, 12,* 141-149. https://doi.org/10.5539/ies.v12n12p141

Ashdown, D. M., & Bernard, M. E. (2012). Can Explicit Instruction in Social and Emotional Learning Skills Benefit the Social-Emotional Development, Well-Being, and Academic Achievement of Young Children? *Early Childhood Education Journal, 39,* 397-405. https://doi.org/10.1007/s10643-011-0481-x

Billings, E., & Walqui, A. (2017). *The Zone of Proximal Development: An Affirmative Perspective in Teaching ELLs/MLLs.* https://www.wested.org/resources/zone-of-proximal-development/

Blewitt, C., O'Connor, A., Morris, H., Mousa, A., Bergmeier, H., Nolan, A., Jackson, K., Barrett, H., & Skouteris, H. (2020). Do Curriculum-Based Social and Emotional Learning Programs in Early Childhood Education and Care Strengthen Teacher Outcomes? A Systematic Literature Review. *International Journal of Environmental Research and Public Health, 17,* Article 1049. https://doi.org/10.3390/ijerph17031049

Camilli, G., Vargas, S., Ryan, S., & Barnett, W. S. (2010). Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development. *Teachers College Record, 112,* 579-620. https://doi.org/10.1177/016146811011200303

CASEL: Collaborative for Academic, Social, and Emotional Learning (2013). *CASEL Guide: Effective Social and Emotional Learning Programs—Preschool and Elementary School Edition.* Collaborative for Academic, Social, and Emotional Learning.

CASEL: Collaborative for Academic, Social, and Emotional Learning (2022). *What Does the Research Say?* https://casel.org/fundamentals-of-sel/what-does-the-research-say/

Cipriano, C., Strambler, M. J., Naples, L. H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A. K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J. C., & Durlak, J. (2023). The State of Evidence for Social and Emotional Learning: A Contemporary Meta-Analysis of Universal School-Based SEL Interventions. *Child Development, 94,* 1181-1204. https://doi.org/10.1111/cdev.13968

Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Sage Publications.

Deighton, J., Tymms, P., Vostanis, P., Belsky, J., Fonagy, P., Brown, A., Martin, A., Patalay, P., & Wolpert, M. (2012). The Development of a School-Based Measure of Child Mental Health. *Journal of Psychoeducational Assessment, 31,* 247-257. https://doi.org/10.1177/0734282912465570

Denham, S. A., Bassett, H., Mincic, M., Kalb, S., Way, E., Wyatt, T., & Segal, Y. (2012). Social-Emotional Learning Profiles of Preschoolers' Early School Success: A Person-Centered Approach. *Learning and Individual Differences, 22,* 178-189. https://doi.org/10.1016/j.lindif.2011.05.001

Dunn, M. (2019). *The Impact of a Social Emotional Learning Curriculum on the Social-Emotional Competence of Elementary-Age Students.* https://tigerprints.clemson.edu/all_dissertations/2457?utm_source=tigerprints.clemson.edu%2Fall_dissertations%2F2457&utm_medium=PDF&utm_campaign=PDFCoverPages

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development, 82,* 405-432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Egger, H. L., & Angold, A. (2006). Common Emotional and Behavioral Disorders in Preschool Children: Presentation, Nosology, and Epidemiology. *Journal of Child Psychology and Psychiatry, 47,* 313-337. https://doi.org/10.1111/j.1469-7610.2006.01618.x

Erikson, E. H. (1950). *Childhood and Society.* Vintage Digital.

Greenberg, M. T. (2015). *Teacher Stress and Health Effects on Teachers, Students, and Schools.* https://www.academia.edu/28690597/Teacher_Stress_and_Health_Effects_on_Teachers_Students_and_Schools

Idoiaga, N., Berasategi, N., Eiguren, A., & Picaza, M. (2020). Exploring Children's Social and Emotional Representations of the COVID-19 Pandemic. *Frontiers in Psychology, 11,* Article 553612. https://doi.org/10.3389/fpsyg.2020.01952

Institute of Medicine and National Research Council (2015). *Transforming the Workforce for Children Birth through Age 8.* National Academies Press.

Jennings, P. A., & Greenberg, M. T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Review of Educational Research, 79,* 491-525. https://doi.org/10.3102/0034654308325693

Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early Social-Emotional Functioning and Public Health: The Relationship between Kindergarten Social Competence and Future Wellness. *American Journal of Public Health, 105,* 2283-2290. https://doi.org/10.2105/AJPH.2015.302630

Leeb, R. T., Bitsko, R. H., Radhakrishnan, L., Martinez, P., Njai, R., & Holland, K. M. (2020). Mental Health-Related Emergency Department Visits among Children Aged < 18 Years during the COVID-19 Pandemic—United States, January 1-October 17, 2020. *Morbidity and Mortality Weekly Report, 69,* 1675-1680. https://doi.org/10.15585/mmwr.mm6945a3

Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime Prevalence of Mental Disorders in U.S. Adolescents: Results from the National Comorbidity Survey Replication—Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry, 49,* 980-989. https://doi.org/10.1016/j.jaac.2010.05.017

Montroy, J. J., Bowles, R. P., Skibbe, L. E., McClelland, M. M., & Morrison, F. J. (2016). The Development of Self-Regulation across Early Childhood. *Developmental Psychology, 52,* 1744-1762. https://doi.org/10.1037/dev0000159

Murano, D., Sawyer, J. E., & Lipnevich, A. A. (2020). A Meta-Analytic Review of Preschool Social and Emotional Learning Interventions. *Review of Educational Research, 90,* 227-263. https://doi.org/10.3102/0034654320914743

Nelson, G., Westhues, A., & MacLeod, J. (2003). A Meta-Analysis of Longitudinal Research on Preschool Prevention Programs for Children. *Prevention & Treatment, 6,* Article 31. https://doi.org/10.1037/1522-3736.6.1.631a

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An Empirical Basis for Linking Social and Emotional Learning to Academic Performance. *Contemporary Educational Psychology, 56,* 193-204. https://doi.org/10.1016/j.cedpsych.2019.01.009

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental Health of Young People: A Global Public-Health Challenge. *The Lancet, 369,* 1302-1313. https://doi.org/10.1016/S0140-6736(07)60368-7

Payton, J. W., Wardlaw, D. M., Graczyk, P. A., Bloodworth, M. R., Tompsett, C. J., & Weissberg, R. P. (2000). Social and Emotional Learning: A Framework for Promoting Mental Health and Reducing Risk Behavior in Children and Youth. *Journal of School Health, 70,* 179-185. https://doi.org/10.1111/j.1746-1561.2000.tb06468.x

Payton, J., Resnik, H., Weissberg, R., Durlak, J., Dymnicki, A., Taylor, R., Schellinger, K., & Pachan, M. (2008). *The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth Grade Students: Findings from Three Scientific Reviews.* https://files.eric.ed.gov/fulltext/ED505370.pdf

Schulte-Körne, G. (2016). Mental Health Problems in a School Setting in Children and Adolescents. *Deutsches Aerzteblatt Online, 113,* 183-190. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4850518/ https://doi.org/10.3238/arztebl.2016.0183

Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting Positive Youth Development through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development, 88,* 1156-1171. https://doi.org/10.1111/cdev.12864

World Health Organization (2022). *Human Rights and Health.* https://www.who.int/news-room/fact-sheets/detail/human-rights-and-health

Zins, J. E., & Elias, M. J. (2007). Social and Emotional Learning: Promoting the Development of All Students. *Journal of Educational and Psychological Consultation, 17,* 233-255. https://doi.org/10.1080/10474410701413152