



IMPACT OF PARENTAL INVOLVEMENT IN COGNITIVE AND EMOTIONAL DEVELOPMENT OF LEARNERS DURING THE EARLY YEARS

Danica Rose N. Tongol,¹ Melinda F. Marquez, PhD²

¹MAED ECD Student, University of Perpetual Help System DALTA - Las Piñas City

²Associate Professor, University of Perpetual Help System DALTA - Las Piñas City

ABSTRACT

Parental involvement has long been recognized as a critical factor in early childhood development, influencing both cognitive and emotional growth in young learners. This study investigated the impact of parental involvement on the cognitive and emotional development of kindergarten learners at Wonder Park Elementary School in Anchorage, Alaska, a culturally diverse urban setting where localized research on this topic is limited. Guided by Bronfenbrenner's Ecological Systems Theory and Vygotsky's Social Development Theory, the study employed a descriptive quantitative research design using researcher-made questionnaires to gather data from kindergarten teachers and parents during the 2025–2026 school year. The respondents' demographic profiles, levels of parental involvement in home-based learning, school-related activities, emotional support, and encouragement, as well as their perceived effects on learners' attention span, communication, reasoning, basic numeracy, self-regulation, social interaction, motivation, and emotional expression, were analyzed. Results indicated that both teachers and parents are actively engaged in early education, with parents playing a central role in supporting learning, particularly in attention and communication, while emotional and social development require additional support. Differences in perceptions of parental involvement were observed based on teacher and parent demographics. Although parental involvement did not show a significant relationship with cognitive development, it significantly influenced emotional development. The study concludes that while parents are invaluable partners in early education, holistic strategies that address both cognitive and emotional needs, tailored to demographic and contextual factors, are essential for fostering balanced development. Based on the findings, a targeted intervention program was proposed to enhance parental participation through collaboration, awareness, and structured activities, aiming to optimize both academic and socioemotional outcomes for kindergarten learners in Anchorage.

KEYWORDS: Attention Span, Basic Numeracy, Cognitive Development, Emotional Development, Emotional Expression

I. INTRODUCTION

Parental involvement is crucial for children's early development and educational success. International standards emphasize responsive and well-structured parental involvement. However, recent efforts to involve parents have slowed down due to policy and research support shifting focus to school preparation, with fewer resources allocated to family support services. Parents manage five academic responsibilities: arranging learning, enabling learning, monitoring learning, encouraging learning, nurturing learning, and supporting learning. Supporting learning is crucial for effective performance. Parents take over primary teachers, prioritize children's health, socializing, and life skills. Reading, encouraging learning, high hopes, and maintaining communication with children improve their academic success. Parents are crucial in their children's education, but schools need to invest in their empowerment, communicate effectively, and outline expectations. They challenge the negative narrative of rural parents as insufficient, suggesting a re-evaluation of parental involvement and diverse parental roles in collaboration with educators.

The Every Student Succeeds Act (ESSA) emphasizes the importance of parental involvement in children's early education. It promotes collaboration between parents and schools, supporting children's growth and development. Studies show that involved parents improve children's performance,

happiness, and behavior. However, Alaska's unique cultural and geographical context, including its diverse ethnicities, has limited research on parental involvement in early education. Despite initiatives to promote inclusive education, there is a lack of research on how parental participation affects cognitive and emotional growth in young students.

This study seeks to fill that void by assessing the extent of parental participation in the cognitive and emotional dimensions of learners' lives during the early stages in Anchorage. This project aims to provide evidence on the most effective types of engagement, informing local teachers, parents, and authorities who seek to cultivate a positive and inviting atmosphere for children. The project aims to enhance the understanding of the possibilities for promoting early childhood development through parental participation in Anchorage, Alaska, by adopting a focused, localized viewpoint.

This study explores the impact of parental involvement on children's cognitive and emotional development, focusing on kindergarten students. The study is based on Bronfenbrenner's Ecological Systems Theory, which suggests that a child's development occurs in a series of connected systems, with the microsystem being the most important. The mesosystem connects the home environment to other systems, such as school, emphasizing the importance of collaboration between parents and schools. Robinson-Madden (2020) emphasizes the



significance of social and environmental environments in human development. Vygotsky's Social Growth Theory suggests that children acquire knowledge more effectively when a skilled individual, such as a parent, offers appropriate support to foster cognitive and emotional development. Bendanillo (2021) emphasizes the importance of parental involvement in academic development. The study aims to identify the most advantageous forms of interaction for young learners at Wonder Park Elementary School in Anchorage, Alaska, USA.

This study uses the Input-Process-Output (IPO) Model to examine parental involvement in kindergarten education. It examines the impact of parental involvement on students' cognitive and emotional development. The research includes demographics, teacher observations, and questionnaire creation. The process includes questionnaire validation, pilot testing, data collection, and analysis. The output presents a proposed intervention program to strengthen parental involvement in early childhood education.

The study examined the impact of parental involvement on the cognitive and emotional development of kindergarten students in Anchorage, Alaska, USA. The research involved kindergarten teachers and parents, and used a descriptive quantitative study design. Factors influencing parental involvement included home-based learning, school-related activities, emotional support, and encouragement. The study focused on attention span, communication, reasoning, and fundamental numeracy skills, while examining the influence of parental engagement on emotional development, specifically self-regulation, social interaction, learning motivation, and emotional expressiveness.

The study's findings are beneficial for kindergarten learners, teachers, parents, school heads, and future researchers. They provide support for social and academic development, guide collaboration, encourage parental involvement in school activities, and provide a basis for strengthening parental involvement. The findings contribute to a deeper understanding of parental involvement in kindergarten learners.

1.1 Statement of the Problem

1. What is the profile of the teacher-respondents in terms of:

1.1 Teacher

1.1.1 age;

1.1.2 sex;

1.1.3 years in teaching kindergarten in Anchorage, Alaska; and

1.1.4 Highest educational attainment?

1.2 Parent

1.2.1 Age

1.2.2 Sex

1.2.3 Highest educational attainment?

2. What is the composite mean on the level of parental involvement in kindergarten learners' education as observed by the teachers and parents in terms of home-based learning activities, school-related activities, emotional Support; and encouragement?

3. What is the composite mean on the impact of parental involvement on the cognitive development of kindergarten

learners in terms of attention span, communication, reasoning; and Basic numeracy?

4. What is the composite mean on the impact of parental involvement on the emotional development of kindergarten learners in terms of self-regulation, social interaction, learning motivation and emotional expression?

5. Are there significant differences in the parental involvement level as perceived by the respondents when grouped according to their profile?

6. Are there significant differences between the parental involvement level and its impact on learners' cognitive development as perceived by the respondents?

7. Are there significant differences between the parental involvement level and its impact on learners' emotional development as perceived by the respondents?

8. Are there significant relationships between the impact of parental involvement on kindergarten learners' cognitive and emotional development?

9. Based on the results of the study, what intervention program may be developed?

2. REVIEW OF RELATED LITERATURE

According to Chen et al. (2024), parental participation can impact a child's preparation for school, which then affects their learning outcomes. Although social Support, stress, caregiver psychological distress, and alcohol use may impact parental involvement, it is unclear how these factors affect subsequent child learning outcomes via parental engagement and child school readiness. This research examines those correlations. This study identified statistically significant indirect effects: (1) a pathway connecting caregiver stress to child reading proficiency via caregiver psychological distress, parental involvement, and child school readiness; (2) a pathway linking caregiver stress to child reading proficiency through caregiver alcohol consumption, parental involvement, and child school readiness; and (3) a pathway associating social Support for caregivers with child reading proficiency through caregiver psychological distress, parental involvement, and child school readiness. After the estimation, it was clear that the entire effects of stress and Support together were far bigger than each one alone. The results indicate that alleviating caregiver stress and providing social Support may enhance the well-being of caregivers and improve the educational outcomes of their children. To improve child learning results, it is recommended to concurrently reduce stress and provide social Support for caregivers, rather than addressing only one aspect. These findings are significant for children, especially for those reared by caregivers facing psychological discomfort or alcohol-related problems. Parental engagement has a significant impact on a child's Preparedness for school, which in turn affects their educational outcomes.

Barnett et al. (2020) investigated the correlation between practices employed by early childhood education (ECE) providers to involve parents (e.g., disseminating information about the child), parental participation in ECE centers (e.g., volunteering, attending meetings), and parental engagement in home learning activities (e.g., reading, fostering cognitive development) with children's Preparedness for kindergarten. Path analyses demonstrated that early childhood education (ECE) parental engagement methods were associated with



enhanced parental involvement in both home and school environments. Moreover, ECE parent engagement practices were indirectly linked to kindergarten academic Preparedness via enhancements in the volume of parental involvement in home learning activities. The links between ECE and home engagement were strongest for families with low means. These results suggest that enhancing early childhood education techniques to promote parental involvement and augmenting home learning activities may improve children's readiness for school.

According to the OECD (2024), parental emotional Support, in addition to material and time Support, is a significant factor influencing children's subjective well-being and academic achievement. Not all children, however, receive equal parental Support; significant disparities exist based on families' Socioeconomic position and the child's gender. More emotional Support from parents is linked to higher PISA test results and a greater sense of well-being, with only minor differences based on parental education. Overall, our findings indicate that a substantial improvement in parental Support and associated child outcomes, particularly in nations with lower average levels of parental emotional Support, can be achieved through a multifaceted approach: by tackling financial and material poverty within families, by aiding parents in balancing employment and childcare responsibilities, by encouraging increased parental engagement in their children's educational experiences, and by providing suitable services to assist families with special needs and significant challenges.

Parent involvement has been repeatedly associated with good child outcomes in terms of cognitive, language, and socioemotional development. Jeong, McCoy, Yousafzai, Salhi, and Fink (2021) in a worldwide systematic review and meta-analysis of 102 randomized controlled trials of parenting interventions from birth to age three. Their results showed large gains in children's cognitive (Hedges' $g = 0.36$), language ($g = 0.28$), and socioemotional development ($g = 0.20$) when interventions were those that combined parenting education with parent-child interaction opportunities. These findings indicate that organized parental involvement interventions have the potential to improve early developmental outcomes considerably, especially in low- and middle-income countries. Adding to these short-term consequences, Varshney, Temple, and Reynolds (2022) presented age-37 follow-up results of the Child-Parent Center (CPC) preschool intervention, which incorporates parental engagement as a central element. Their research indicated long-term gains, such as greater educational attainment, improved health outcomes, and lower participation in the criminal justice system, resulting in a net economic gain of more than \$12,000 per participant. Collectively, these studies emphasize that parental involvement is not merely important to early school readiness but also generates long-term social and economic dividends, making the case for policy investment in family-centered early education approaches.

Williams et al. (2020) conducted a randomized controlled experiment examining the impact of parental involvement in a supported playgroup on parenting stress and toddlers' social-communicative behavior. The results indicated that parents in the parent-involved group saw a decrease in parental stress after the program, in contrast to those in the parent-uninvolved

group, who did not. Both groups of toddlers demonstrated more communicative behavior following the training, but the rise in the parent-involved group was much bigger than the increase in the parent-uninvolved group. During the program, toddlers from the parent-involved group also showed bigger changes in how much they played with other kids and adults. The results indicate that parental involvement is crucial for maximizing the benefits of supported playgroups.

Ghazali et al. (2023) aim to evaluate Malaysian parental involvement in the numeracy education of young children. The current poll indicates that parents possess a high level of Awareness, understanding, and attitude toward preschoolers' numeracy. Even though the results are good, the parents' attitudes and familiarity with math are only average. The investigation revealed that parents require a pertinent guide to facilitate their children's home learning through efficient instructional practices. The data from this study provided preliminary insights to facilitate a complete follow-up investigation into parental involvement in early children's numeracy learning. Based on these outcomes, it is important to look at the reasons and limitations that led to them. The research will be advantageous for scholars, guardians, youth, educational institutions, and the broader community. We talk more about the conclusion and what we should do in the future.

Lanjekar et al. (2022) assert that several studies have been conducted on topics including parenting, parent-child relationships, parenting styles, effortful parenting, the notion of parenting, children's cognitive development, and parental cognition. This study primarily focuses on parenting practices, child development, and maturation. The cognitive development of children commences in the initial year of life and then advances incrementally. In complex and traumatic situations, kids need good parenting. Being a parent offers a child the confidence to deal with significant, complex challenges. To help children grow and learn, parents and caregivers need to be sensitive. It has been noted that the media has a crucial role in enhancing parenting practices. Children display internalizing and externalizing symptoms due to harsh, abusive, and invasive parenting. The research indicates that the risk of depression escalates during adolescence. The primary factor contributing to the increase in childhood depression is the lack of cooperation and Support from parents. Children whose mothers and fathers work together and Support one another are less likely to become depressed. Family and social stress might make kids more likely to get depressed, but a bad parenting style can make kids anxious about family and social situations. Because their parents are quite antagonistic and not very positive, they have stress, peer pressure, and problems with their social and familial relationships. Another great word for "effortful control parenting" is "necessary for children's cognitive development." Parenting is crucial for managing emotions and behavior effectively. Many difficulties happen in infancy, early childhood, and later life. There are four sorts of parenting styles: authoritative, authoritarian or controlling, permissive or indulgent, and uninvolved or neglectful. To be a good parent, you need to know what good parenting is, what parenting is, how important it is, what your kids need, what parenting is made up of, and what happens when you parent.



According to the research conducted by Ringoot et al. (2022), the quality of young children's peer relationships is crucial for their development. It is posited that parenting and self-regulation abilities influence children's behavior in peer interactions. In this multi-informant, multi-method study, we investigated the direct and mediated relationships among preschool parenting, children's behavioral self-regulation, and peer aggression and relationship issues in elementary school-aged children, while also building upon prior research by analyzing both positive and negative parenting styles of mothers and fathers. A structural equation model indicated that mother sensitivity was positively correlated with children's behavioral self-regulation. In contrast, diminished behavioral self-regulation was linked to increased peer hostility and relationship difficulties among children. Nonetheless, children's behavioral self-regulation did not serve as a mediator in the interaction between mother sensitivity and peer relationship issues.

Obradović et al. (2021) assert that responsive parenting and parental scaffolding enhance executive functions (EFs) and self-regulation skills in early children; nevertheless, excessive parental directed engagement may prove detrimental. The duration of parents' active guidance of children's conduct was assessed in relation to following the child's lead, resulting in a metric for parental over-engagement that quantifies the Extent of active parental involvement through positive control and scaffolding behaviors. The hypothesis posited that excessive parental involvement would adversely affect children's self-regulation and executive function skills, as it diminishes opportunities for children to exercise self-regulation by leading to dyadic interactions with their parents. We employed a novel State-Space Grid methodology to record second-to-second variations in parental and child behaviors during a series of organized tasks. We investigated the conceptual relationship between parental over-engagement and global assessments of parenting, demonstrating that parental over-engagement was adversely connected with worldwide ratings of parental scaffolding and showed no correlation with global ratings of parental sensitivity. We then demonstrated that parental over-engagement forecasted diminished levels of child hot executive functions and observed self-regulation, while controlling for age, parental education, family income, and overall parenting assessments. The predictive validity of over-engagement was exclusive to instances of active child involvement and was nonexistent during passive engagement. This study contributes to the conversation on how parents can help their children develop self-control as they transition from preschool to elementary school.

Thümmler et al. (2022) examine emotional development and the cultivation of emotion Management abilities in children during early childhood education, emphasizing the significance of the early childhood educator. Emotion Management is crucial for achieving success and maintaining well-being in subsequent life stages. It is cultivated through interactions with parents, who serve as attachment figures. Teachers can also play a significant role in a child's life when it comes to forming a bond. This raises the question of how early childhood educators might assist youngsters in mastering emotional regulation. We conduct a content study of four programs

currently employed in Germany to enhance social and emotional abilities. The primary inquiry is whether the programs have components that enhance instructors' competencies in supporting children's emotional regulation. The classifications for analyzing the programs are based on theories of teacher-child interaction. We will discuss how to shape interaction as an essential component of encouraging emotional regulation, in addition to programs that Support emotional and social development. The conclusion outlines several significant implications for educational practice and emphasizes the importance of cultivating professional conduct to foster high-quality teacher-child interactions.

II. RESEARCH METHODOLOGY

Research Design

This research used a descriptive quantitative design to analyze characteristics, behaviors, and trends in kindergarten students. Descriptive research involved surveys and fact-finding investigations, while quantitative research used numerical data to validate hypotheses and prediction models. The study aimed to examine the influence of parental involvement on the cognitive and emotional development of kindergarten students, using data from early childhood development. The research design allowed for the generalization of results from a larger sample population.

Population and Sampling

The study involved 50 kindergarten teachers and 50 kindergarten parents from Wonder Park Elementary School in Anchorage, Alaska, using a simple random sampling technique.

Respondents of the Study

The study involved 50 kindergarten teachers and 50 parents, assessing the impact of parental involvement on the cognitive and emotional development of kindergarten learners.

Research Instrument

The study used a researcher-developed questionnaire to collect data on the impact of parental involvement on kindergarten learners' cognitive and emotional development. The questionnaire consisted of four sections: demographics, parental involvement in home-based learning, cognitive development, and emotional development. The Likert scale was used to rate each indicator and analyze the results. The questionnaire aimed to provide insights into the impact of parental involvement on kindergarten learners.

Validity and Reliability of the Instrument

Instrument validation ensures accurate measurement of constructs, producing credible and reliable data. A researcher-developed questionnaire underwent content validation by a panel of experts, re-evaluation, and pilot testing. The results assessed reliability via Cronbach's alpha coefficient, confirming the questionnaire's validity and reliability. Without validation, study conclusions and recommendations could be erroneous or misinterpreted.

Data Gathering Procedure

The researcher conducted a study using a validated questionnaire, obtaining approvals from administrative entities and obtaining informed consent. The questionnaires were



developed and validated, and respondents were given ample time to provide truthful responses. Data was stored securely for statistical analysis, ensuring anonymity, privacy, and non-bias. The findings informed the development of an intervention program to enhance parental involvement among kindergarten students. The manuscript was revised and submitted after the final oral defense.

Statistical Treatment

The study used frequency and percentage distributions to identify teacher-respondent demographics in Anchorage, Alaska, USA. It also used weighted mean to determine parental involvement in kindergarten learners' education, its impact on cognitive and emotional development, and the significance of differences in parental involvement levels based on teachers' profiles. Pearson's r was used to determine relationships between parental involvement and learners' cognitive and emotional development.

Ethical Consideration

The researcher followed ethical principles throughout the study, including proper citation, adherence to format, and collection of relevant literature. They obtained permission from Anchorage School District and Principal, prioritizing clarity and accuracy in consent letters. Data anonymity and

confidentiality were maintained, and participants' safety was ensured through teacher and parent observations. The study was conducted with strict safety and well-being monitoring.

III. RESULTS AND DISCUSSION

Problem number 1. What is the profile of the teacher-respondents in terms of Age, Sex, Highest educational attainment, and Years in teaching kindergarten in Anchorage, Alaska? Profile of the parent-respondents in terms of Age, Sex, and Highest educational attainment?

Table 1.1 reveals that the majority of teachers in Anchorage are middle-aged and mid-career, with the most significant age group being 41-50 years. Male teachers outnumber female teachers, with 28 males and 22 females. Most teachers possess master's degree units, while a smaller proportion hold doctoral units or completed doctoral degrees. Experience in kindergarten teachers ranges from 6-10 years to 16-20 years.

The study reveals that mid-career professionals aged 31-50, with 6-15 years of experience, hold master's degrees, and are predominantly male, impact classroom practices, parental engagement, and program participation in Anchorage kindergartens.

Table 1.1

Profile of Teachers-Respondents in terms of Age, Sex, Highest Educational Attainment, and Years in teaching kindergarten in Anchorage, Alaska

Age	Frequency	Percent	Rank
21 - 30	1	2.0	5
31 - 40	14	28.0	2
41 - 50	25	50.0	1
51 - 60	7	14.0	3
61 and above	3	6.0	4
Total	50	100.0	

Sex			
Male	28	56.0	1
Female	22	44.0	2
Total	50	100.0	

Highest Educational Attainment			
With a master's degree Units	25	50.0	1
Master's Degree Graduate	15	30.0	2
With Doctorate Degree Units	6	12.0	3
Doctoral Degree Graduate	4	8.0	4
Total	50	100.0	

Years in Teaching in Anchorage, Alaska, USA			
1 - 5	10	20.0	3
6 - 10	24	48.0	1
11 - 15	12	24.0	2
16 - 20	4	8.0	4
Total	50	100.0	



The research conducted by Prime et al. (2023) provides evidence for the modestly favorable effects of parenting programs on child cognition and language development. Further evaluations highlight the significance of parental warmth and paternal involvement in emotional regulation (Puglisi et al., 2024). Analyses and policy documents specific to Alaska underscore the importance of family engagement frameworks in early childhood systems, while highlighting ongoing challenges and opportunities for parent-school collaborations within the state.

Table 1.2 shows that 48% of parent-respondents are aged 21-30, with 32% aged 31-40. The majority are male, with high school graduates, post-secondary graduates, middle school completers, and a single elementary school completer. The smaller age groups are 41-50 and 51-60.

Most parents, aged 21-40, are young, male, and have secondary education, with many engaged in post-secondary studies. They support children's early cognitive and emotional development, but lack higher education may impact engagement.

Table 1.2
Profile of Parent-Respondents in terms of Age, Sex, and Highest Educational Attainment

Age	Frequency	Percent	Rank
21 - 30	24	48.0	1
31 - 40	16	32.0	2
41 - 50	8	16.0	3
51 - 60	2	4.0	4
Total	50	100.0	

Sex			
	Frequency	Percent	Rank
Male	30	60.0	1
Female	20	40.0	2
Total	50	100.0	

Highest Educational Attainment			
	Frequency	Percent	Rank
Elementary School Completer	1	2.0	4
Middle School Completer	9	18.0	3
High School Graduate	23	46.0	1
Post Secondary Graduate	17	34.0	2
Total	50	100.0	

The research indicates that younger parents often engage actively in their children's education, despite facing challenges related to limited financial resources and expertise (Tamis-LeMonda et al., 2020). The educational attainment of parents is significantly linked to the cognitive and socioemotional outcomes of their children, as parents with higher education levels are more likely to engage in literacy activities and utilize positive parenting practices (Liu et al., 2021). Recent findings highlight that both fathers and mothers play distinct roles in children's development, with paternal involvement increasingly recognized as crucial for emotional regulation and resilience (Jeong et al., 2021).

Problem Number 2. What is the composite mean on the level of parental involvement in kindergarten learners' education as observed by the teachers and parents in terms of home-based

learning activities, school-related activities, emotional Support, and encouragement?

Table 2 shows that both teachers (overall mean = 3.62) and parents (overall mean = 3.55) express strong agreement regarding the significant level of parental involvement in the education of kindergarten learners, yielding a composite mean of 3.59, which is interpreted as "Strongly Agree." In the four domains, home-based learning activities (3.59, SA), school-related activities (3.60, SA), emotional Support (3.57, SA), and encouragement (3.58, SA) all reside inside the "Strongly Agree" category. Among them, school-related activities achieved the highest composite mean (3.60, SA), while emotional Support garnered the lowest (3.57, SA). The proximity of mean scores suggests that parental participation is uniformly evident across domains, with only slight variance in emphasis.



Table 2

Composite table on the level of parental involvement in kindergarten learners' education as observed by the teachers and parents

	Teacher		Parent		Composite	
	Mean	VI	Mean	VI	Mean	VI
Home-Based Learning Activities	3.64	SA	3.55	SA	3.59	SA
School-Related Activities	3.61	SA	3.59	SA	3.60	SA
Emotional Support	3.62	SA	3.51	SA	3.57	SA
Encouragement	3.63	SA	3.54	SA	3.58	SA
Level of Parental Involvement in Kindergarten Learners' Education	3.62	SA	3.55	SA	3.59	SA

Legend: 4 (3.50 - 4.00) - Strongly Agree 3 (2.50 - 3.49) - Agree. 2 (1.50 - 2.49) - Disagree 1 (1.00 - 1.49) - Strongly Disagree

It implies that parents actively engage in all facets of their children's early education, encompassing home learning, supporting school activities, providing encouragement, and offering emotional support. The marginally reduced score in emotional support indicates that although parents are generally very involved, there may be a necessity for enhanced techniques to address children's emotional needs, comfort requirements, and emotional regulation. Improving this region can facilitate a balance between cognitive development and socioemotional growth, thereby promoting comprehensive child development.

Fan, Feng, & Zhang (2024) discovered that parental involvement is directly related to students' creativity, with autonomy support and content support being particularly useful. Erdem & Kaya (2020) indicate that parental involvement has a positive, albeit small, impact on academic performance for both home- and school-based involvement. Martinez-Yarza, Solabarrieta-Eizaguirre, & Santibáñez-Gruber (2024) show that home-based family engagement promotes social-emotional development through more school involvement, implying emotional and social results are bolstered when parents and schools operate in alliance. Jeong et al. (2021) found that ongoing parental support at home

improves language and cognitive development in early childhood.

Problem Number 3. What is the composite mean on the impact of parental involvement on the cognitive development of kindergarten learners in terms of attention span, communication, reasoning, and basic numeracy?

Table 3 shows that both teachers (mean = 3.60, SA) and parents (mean = 3.54, SA) strongly agree that parental involvement enhances the cognitive development of kindergarten students, yielding a composite mean of 3.57 (Strongly Agree). Among the evaluated domains, attention span (3.66, SA) and communication (3.67, SA) achieved the highest composite means, signifying that parental participation is most impactful in maintaining focus and improving learners' expressive capabilities. Conversely, reasoning (3.48, A) and basic numeracy (3.46, A) exhibited somewhat lower composite averages, indicating that although parental involvement bolsters these capabilities, additional reinforcement is necessary to enhance children's logical reasoning and fundamental mathematical abilities thoroughly. The findings suggest that sustained parental involvement significantly enhances early cognitive development across various domains.

Table 3

Composite table on the impact of parental involvement on the cognitive development of kindergarten learners

	Teacher		Parent		Composite	
	Mean	VI	Mean	VI	Mean	VI
Attention Span	3.65	SA	3.66	SA	3.66	SA
Communication	3.70	SA	3.64	SA	3.67	SA
Reasoning	3.51	SA	3.45	A	3.48	A
Basic Numeracy	3.52	SA	3.40	A	3.46	A
Impact of Parental Involvement on Cognitive Development of Kindergarten Learners	3.60	SA	3.54	SA	3.57	SA

Legend: 4 (3.50 - 4.00) - Strongly Agree 3 (2.50 - 3.49) - Agree. 2 (1.50 - 2.49) - Disagree 1 (1.00 - 1.49) - Strongly Disagree



It implies that parents play a crucial role in enhancing children's attention and communication skills, which are essential for school readiness and overall academic achievement. Nonetheless, the comparatively lower evaluations in reasoning and numeracy indicate the need for more focused parental methods, such as involving youngsters in problem-solving dialogues, engaging them in puzzle activities, and assigning daily mathematical tasks. Enhancing these activities at home will not only harmonize the developmental domains but also equip kids for more intricate academic challenges in subsequent education.

This result is in line with Obradović et al. (2021), who revealed that effective parental scaffolding enhances children's self-regulation and control of attention, and Tamis-LeMonda et al. (2020) and Jeong et al. (2021), whose findings indicated home language-rich environments and parenting interventions significantly enhance children's vocabulary and communication.

Mues et al. (2022) illustrated that parental beliefs and home numeracy activities are highly correlated with the problem-solving skills of children early in their lives, whereas Wu et al. (2022) and Silver et al. (2023) demonstrated that frequent parent-child math activities (e.g., math games, sorting items) enhance children's understanding of numbers. Douglas et al. (2021) also described how parents' beliefs about mathematics can determine the math support type and level of math support provided at home, which might account for numeracy variability.

The relatively lower scores in reasoning and numeracy call for more targeted parental approaches, for example, engaging children in problem-solving conversations, taking them through puzzle exercises, and providing them with daily math assignments, as advised by Wu et al. (2022). Strengthening these interventions at home will not only align the domains of development but also prepare children for more complex academic demands in future learning.

Problem Number 4. What is the composite mean on the impact of parental involvement on the emotional development of kindergarten learners in terms of self-regulation, social interaction, learning motivation, and emotional expression?

Table 4 reveals that both teachers (overall mean = 3.31, Agree) and parents (overall mean = 3.24, Agree) consistently agree that parental participation has a positive influence on the emotional development of learners in kindergarten, resulting in a composite mean of 3.28 (Agree). Among the measures, self-regulation had the highest rating (composite mean = 3.45, Agree), with teachers rating it marginally higher at Strongly Agree (3.51), indicating that parental Support significantly enhances children's capacity to manage behavior and urges. Conversely, social contact (3.17, Agree) and learning motivation (3.21, Agree) had the lowest ratings, although emotional expressiveness (3.26, Agree) was scored modestly. The absence of standard deviations, coupled with the same mean values between teachers and parents, indicates a uniform perception across both groups, characterized by negligible diversity in responses.

Table 4
Composite table on the impact of parental involvement on the emotional development of kindergarten learners

	Teacher		Parent		Composite	
	Mean	VI	Mean	VI	Mean	VI
Self-Regulation	3.51	SA	3.39	A	3.45	A
Social Interaction	3.20	A	3.15	A	3.17	A
Learning Motivation	3.19	A	3.24	A	3.21	A
Emotional Expression	3.33	A	3.19	A	3.26	A
Impact of Parental Involvement on Emotional Development of Kindergarten Learners	3.31	A	3.24	A	3.28	A

Legend: 4 (3.50 - 4.00) - Strongly Agree 3 (2.50 - 3.49) - Agree. 2 (1.50 - 2.49) - Disagree 1 (1.00 - 1.49) - Strongly Disagree

A study by Obradović, Sulik, and Shaffer (2021) indicates that suitable parental involvement boosts self-regulation while excessive involvement may slow down autonomy formation. Martínez-Yarza et al. (2024) have established that family participation improves socioemotional development extensively through affecting school engagement in accordance with the result that emotional support is a significant parental contribution

On the other hand, Santana-Ferrándiz et al. (2025), affirm that parental sensitivity and empathy develop children's emotional

competence and peer relationships, but regular organized peer experiences remain a necessity to maximize social development

Finally, evidence from Puglisi et al. (2024) is given to support father involvement and warmth in emotions strongly enhancing the regulation of emotions, alongside classroom intervention. Denham and Bassett (2020) contend that overt activities such as storytelling and guided emotional discussion are effective instruments in developing children's ability to express feelings and recommend an adult need for deliberately practicing these activities at home.



Problem Number 5. Are there significant differences in parental involvement levels as perceived by the respondents when grouped according to their profiles?

Table 5 reveals statistically significant differences in the perceived degree of parental participation based on the respondents' profile factors. Specifically, age ($t = -5.168$, $df =$

49, $p < .001$), sex ($t = -25.318$, $df = 49$, $p < .001$), highest educational attainment ($t = -13.739$, $df = 49$, $p < .001$), and years of teaching in Anchorage ($t = -10.362$, $df = 49$, $p < .001$) all exhibit p-values indicated as .000. Since each p-value is below the standard alpha level ($\alpha = .05$), the null hypothesis of "no difference" is rejected for all profile variables.

Table 5
Significant differences in the parental involvement level as perceived by the respondents when grouped according to their profile

	t	df	Sig. (2-tailed)	Decision	Remarks
Age - Level of parental involvement in kindergarten learners' education	-5.168	49	0.000	Reject	Significant
Sex - Level of parental involvement in kindergarten learners' education	-25.318	49	0.000	Reject	Significant
Highest educational Attainment - Level of parental involvement in kindergarten learners' education	-13.739	49	0.000	Reject	Significant
Years in teaching in Anchorage Alaska, USA - Level of parental involvement in kindergarten learners' education	-10.362	49	0.000	Reject	Significant

It implies that perceptions of parental engagement vary among respondent subgroups, influenced by demographic and professional variables. This implies that parent-engagement rules, training, or communication tactics must be customized according to profile, as these elements correlate with significant variations in the perception of parental involvement.

The research by Knopik et al. (2021) supports the finding that family socioeconomic status and parental education significantly influence parental involvement in children's education during and after the COVID-19 pandemic. Woltran (2023) also points out that teacher perceptions of parent involvement are systematically different depending on family background and school setting, implying that teachers' expectations and meanings can be a source of variation in reported levels of participation. These studies together emphasize the necessity for differentiated family engagement efforts to consider socioeconomic and demographic variations among parents.

Problem Number 6. Are there significant differences between the parental involvement level and its impact on learners' cognitive development as perceived by the respondents?

Table 6 demonstrates that the obtained t-value of 0.428, with 99 degrees of freedom and a p-value of 0.669, exceeds the standard alpha level of 0.05. This signifies that there is no statistically significant difference between the level of parental participation and its impact on learners' cognitive development as evaluated by the respondents. Having the elevated p-value, the null hypothesis of "no significant difference" remains valid, and the outcome is classified as Not Significant.

It implies that while parental participation is essential, its perceived Extent does not directly correlate with significant differences in the cognitive development of kindergarten students, as evaluated by the respondents. This suggests that factors such as pedagogical approaches, the educational environment, or individual learner traits may have a more significant or direct impact on cognitive outcomes than parental participation alone.

Table 6
Significant differences between the parental involvement level and its impact on learners' cognitive development as perceived by the respondents

	t	df	Sig. (2-tailed)	Decision	Remarks
Level of Parental Involvement in Kindergarten Learners' Education					
Impact of Parental Involvement on Cognitive Development of Kindergarten Learners	0.428	99	0.669	Accept	Not Significant



This result implies that while parental participation is important, its perceived extent does not directly correspond to measurable differences in cognitive development outcomes. External influences like quality instruction, classroom environment, and individual student factors might contribute more directly. Wang et al. (2023) revealed that parent involvement operates through learner engagement in learning to influence achievement, with parental involvement alone not being enough without support from classroom engagement approaches. González-Peña et al. (2022) indicated that parental involvement should be complemented by successful pedagogical strategies to significantly enhance cognitive function. Jeynes (2023) also signaled that parental involvement has more robust effects on socio-emotional development

compared to cognitive achievements, indicating that cognitive improvements need parallel school-based interventions.

Problem Number 7. Are there significant differences between the parental involvement level and its impact on learners' emotional development as perceived by the respondents?

Table 7 displays a statistically significant difference between the level of parental involvement in kindergarten learners' education and its impact on their emotional development, as demonstrated by a computed t-value of 6.995 with 99 degrees of freedom and a p-value of 0.000. The p-value, being below the 0.05 significance threshold, leads to the rejection of the null hypothesis, signifying that variations in parental participation significantly affect respondents' perceptions of its influence on learners' emotional development.

Table 7

Significant differences between the parental involvement level and its impact on learners' emotional development as perceived by the respondents

	t	df	Sig. (2-tailed)	Decision	Remarks
Level of Parental Involvement in Kindergarten Learners' Education - Impact of Parental Involvement on Emotional Development of Kindergarten Learners	6.995	99	0.000	Reject	Significant

The Extent of parental participation has a significant influence on the emotional development of kindergarten students. Increased parental engagement, through continuous communication, emotional support, and involvement in school activities, has a positive impact on children's self-regulation, social interaction, motivation, and emotional expression. This discovery highlights the necessity of promoting parental engagement in their children's early educational experiences, as such participation directly fosters emotional competence and resilience.

competence (Martinez-Yarza et al., 2024). This finding emphasizes the importance of encouraging parental involvement in their children's early learning experiences, for the direct effect of such activity is emotional resilience.

Problem Number 8. Are there significant relationships between the impact of parental involvement on kindergarten learners' cognitive and emotional development?

Table 8 reveals that there is no significant relationship between parental involvement and the cognitive and emotional development of kindergarten learners, as evidenced by a Pearson correlation coefficient of -0.065 and a p-value of 0.521. Given that the p-value exceeds the 0.05 significance threshold, the null hypothesis is accepted, indicating that the effect of parental involvement on learners' cognitive development is not necessarily correlated with its effect on their emotional development.

Table 8

Significant relationships between the impact of parental involvement on kindergarten learners' cognitive and emotional development

		Impact of Parental Involvement on Emotional Development of Kindergarten Learners
Impact of Parental Involvement on Cognitive Development of Kindergarten Learners	Pearson Correlation	-0.065
	Sig. (2-tailed)	0.521
	N	100

It implies that parental participation may affect cognitive and emotional development in various ways and to varying extents. Although active parenting can enhance children's learning and

reasoning abilities, it may not directly influence their emotional development, which is likely more affected by factors such as family dynamics, peer relationships, and the educational



environment. This discovery highlights the importance of comprehensive parental involvement, encompassing both cognitive and emotional aspects, in fostering healthy development in early childhood.

Even though active parenting can improve the learning and reasoning skills of children (Choe et al., 2020), it might not have a direct impact on their emotional development, but is probably more influenced by aspects like the dynamics of the family, peer relationships, and the educational environment (Gimenez-Serrano et al., 2022). Parental involvement with a structured approach helps cognitive abilities, while emotional development needs ongoing emotional availability and active nurturing tasks (Saha, 2024). This finding emphasizes the value of extensive parental participation, in both cognitive and emotional dimensions, in healthy early childhood development.

Problem number 9. Intervention program can be developed to strengthen parental involvement in the development of kindergarten learners.

“Strengthening Parental Involvement for Enhanced Cognitive and Emotional Development of Kindergarten Learners”

I. RATIONALE

This intervention program is designed to address the study's findings, which revealed significant differences in parental involvement based on age, sex, educational attainment, and years of teaching experience, as well as a strong influence of parental participation on children's emotional development, but not on their cognitive growth. To bridge these gaps, the program focuses on building parents' Awareness, strengthening parent-teacher partnerships, and providing targeted Support in both cognitive and emotional domains. By offering structured activities, seminars, and inclusive Support groups, the program aims to foster balanced and meaningful parental involvement, ensuring that children receive consistent guidance in both their learning and emotional well-being.

Program/Activity	Objective	Time Frame	Estimated Cost	Expected Output
1. Parent Orientation and Awareness Seminar	To address differences in parental participation based on age, sex, and educational attainment by informing parents of their critical role in both cognitive and emotional development	Quarterly (Every 3 months)	\$300 per session (venue, materials, speaker honorarium)	Increased awareness and equalized perception of involvement across parental profiles
2. Parent-Teacher Partnership Workshops	To strengthen collaboration between teachers and parents regardless of years of teaching experience, ensuring unified strategies for learner development	Bi-annual (2 times a year)	\$500 (workshop kits, facilitation costs)	Improved parent-teacher communication and shared strategies in supporting learners
3. Cognitive Enrichment Home Activities (Take-Home Kits)	To sustain cognitive development despite no significant direct impact of parental involvement (finding: Not Significant), by providing guided activities parents can facilitate at home	Monthly	\$200 per batch of kits	Parents become more confident facilitators of cognitive learning at home
4. Socio-Emotional Parenting Sessions	To address the significant link between parental involvement and emotional development by equipping parents with emotional coaching, empathy building, and positive discipline techniques	Every 2 months	\$400 (psychologist/trainer, materials)	Strengthened emotional support from parents, leading to improved emotional regulation among learners
5. Inclusive Parenting Support Groups	To reduce differences in parental participation caused by demographic factors by creating peer support groups where parents of different ages, sex, and educational backgrounds share experiences and strategies	Monthly	\$100 (refreshments, group materials)	More inclusive and balanced parental involvement regardless of profile factors
6. Monitoring and Evaluation (Surveys & Feedback)	To continuously assess the impact of interventions on both cognitive and emotional development	Every end of quarter	\$150 (printing, data analysis tools)	

IV. CONCLUSION

The study reveals that most teacher-respondents are middle-aged professionals, with a slightly higher proportion of men than women. They have completed master's degree programs or taken master's degree units, and have been teachers for six to 10 years. Parent-respondents are predominantly young adults, predominantly male, and have completed high school as their highest educational attainment. Teachers and parents agree that parental involvement is beneficial for kindergarten learners' cognitive development, particularly in enhancing attention span and communication skills. However, additional support is needed for reasoning and fundamental math. Parents also

believe parental involvement helps kindergarteners emotionally develop by teaching them to manage emotions effectively, emotional expression, social connection, and motivation. Perceptions of parental involvement vary significantly by age, sex, educational level, and years of teaching experience. There is no significant relationship between parental participation and both cognitive and emotional development, suggesting that its impact on one domain does not inherently influence the other.

The study highlights the importance of both teachers and parents in children's early education, highlighting the need for balanced participation and support for emotional needs. While



parents play a crucial role in enhancing attention and communication skills, a greater emphasis on reasoning and numeracy is needed. Personalizing engagement strategies and training to accommodate specific respondent profiles is essential. However, cognitive development in kindergarten is more influenced by pedagogical approaches, educational settings, and individual student attributes. Parental involvement affects children's cognitive and emotional development differently, requiring holistic engagement.

The study recommends professional development for teachers and parents, addressing demographic and educational gaps for optimal involvement. It also suggests addressing emotional needs, encouraging home-based reasoning and numeracy exercises, and implementing resources for parents' social competencies. It emphasizes enhancing pedagogical techniques, optimizing learning environments, and promoting active parental involvement. It also advocates for uniform support for academic and emotional development.

REFERENCES

- Barnett, M. A., Paschall, K. W., Mastergeorge, A. M., Cutshaw, C. A., & Warren, S. M. (2020). Influences of parent engagement in early childhood education centers and the home on kindergarten school readiness. *Early Childhood Research Quarterly*, 53, 260–273. <https://doi.org/10.1016/j.ecresq.2020.05.005>
- Castro, M., Expósito-Casas, E., & López-Martín, E. (2021). Parental involvement on student academic achievement: A meta-analysis. *Educational Research Review*, 33, 100391. <https://doi.org/10.1016/j.edurev.2021.100391>
- Chen, J.-H., Husa, R. A., Jonson-Reid, M., & Parrish, J. W. (2024). Risk and protective factors for parental involvement and early indicators of school achievement in Alaska. *Maternal and Child Health Journal*, 28(5), 926–934. <https://doi.org/10.1007/s10995-023-03872-5>
- Choe, D., Kim, Y., & Park, S. (2020). Parents' and adolescents' perceptions of parental support and academic achievement. *Journal of Adolescence*, 80, 1–10. <https://doi.org/10.1016/j.adolescence.2020.01.003>
- Denham, S. A., Ferrier, D. E., & Bassett, H. H. (2020). Preschool teachers' socialization of emotion knowledge: Considering socioeconomic risk. *Journal of Applied Developmental Psychology*, 67, 101103. <https://doi.org/10.1016/j.appdev.2020.101103>
- Douglas, A.-A., Zippert, E. L., & Rittle-Johnson, B. (2021). Parents' numeracy beliefs and their early numeracy support: A synthesis of the literature. In J. J. Lockman (Ed.), *Advances in Child Development and Behavior* (Vol. 61, pp. 279–316). <https://doi.org/10.1016/bs.acdb.2021.05.003>
- Erdem, C., & Kaya, M. (2020). A meta-analysis of the effect of parental involvement on students' academic achievement at pre-school, elementary, and secondary levels. *Journal of Learning for Development*, 7(3), 367–383. <https://doi.org/10.56059/jl4d.v7i3>
- Fan, H., Feng, Y., & Zhang, Y. (2024). Parental involvement and student creativity: A three-level meta-analysis. *Frontiers in Psychology*, 15, Article 1407279. <https://doi.org/10.3389/fpsyg.2024.1407279>
- Ghazali, N. H. C. M., Saat, N. Z. M., & Daud, S. M. (2023). Parental involvement and preschool children's cognitive development: A systematic literature review. *International Journal of Early Childhood Education and Care*, 12(1), 1–14. <https://doi.org/10.37134/saecj.vol12.1.1.2023>
- Gimenez-Serrano, S., et al. (2022). Parental warmth and developmental change in familism values among Latinx adolescents. *Journal of Research on Adolescence*, 32(4), 1025–1039. <https://doi.org/10.1111/jora.12791>
- Jeong, J., Franchett, E. E., Ramos de Oliveira, C. V., Rehmani, K., & Yousafzai, A. K. (2021). Parenting interventions to promote early child development in the first three years of life: A global systematic review and meta-analysis. *PLOS Medicine*, 18(5), e1003602. <https://doi.org/10.1371/journal.pmed.1003602>
- Lanjekar, P. D., Joshi, S. H., Mhaske, P. M., Khiste, M. S., Mahale, S. T., & Bhisale, R. S. (2022). The effect of parenting and the parent-child relationship on a child's cognitive development: A literature review. *Cureus*, 14(11), e30574. <https://doi.org/10.7759/cureus.30574>
- Liu, K., et al. (2022). Parents' perception or children's perception? Parental involvement and student engagement. *Frontiers in Psychology*, 13, 977678. <https://doi.org/10.3389/fpsyg.2022.977678>
- Liu, Y., West, S. G., & Dawson, D. B. (2021). Parental education and early child development: Pathways of influence on academic and socioemotional skills. *Early Childhood Research Quarterly*, 54, 15–27. <https://doi.org/10.1016/j.ecresq.2020.08.004>
- Martinez-Yarza, N., Solabarrieta-Eizaguirre, J., & Santibáñez-Gruber, R. (2024). The impact of family involvement on students' social-emotional development: The mediational role of school engagement. *European Journal of Psychology of Education*. <https://doi.org/10.1007/s10212-024-00862-1>
- Obradović, J., Sulik, M. J., & Shaffer, A. (2021). Learning to let go: Parental over-engagement predicts poorer self-regulation in kindergartners. *Journal of Family Psychology*, 35(8), 1160–1170. <https://doi.org/10.1037/fam0000838>
- Organisation for Economic Co-operation and Development (OECD). (2024). Parental emotional support and adolescent well-being. OECD Publishing. https://www.oecd.org/en/publications/parental-emotional-support-and-adolescent-well-being_2b7a2ac6-en.pdf
- Prime, H., Andrews, K., Markwell, A., Gonzalez, A., Janus, M., Tricco, A. C., Bennett, T., & Atkinson, L. (2023). Positive parenting and early childhood cognition: A systematic review and meta-analysis of randomized controlled trials. *Clinical Child and Family Psychology Review*, 26(2), 362–400. <https://doi.org/10.1007/s10567-022-00423-2>
- Puglisi, N., Rattaz, V., Favez, N., & Tissot, H. (2024). Father involvement and emotion regulation during early childhood: A systematic review. *BMC Psychology*, 12, 675. <https://doi.org/10.1186/s40359-024-02182-x>
- Ringoot, A. P., Jansen, P. W., Kok, R., van Ijzendoorn, M. H., Verlinden, M., Verhulst, F. C., Bakermans-Kranenburg, M., & Tiemeier, H. (2022). Parenting, young children's behavioral self-regulation and the quality of their peer relationships. *Social Development*, 31(3), 715–732. <https://doi.org/10.1111/sode.12573>
- Thümmler, R., Engel, E.-M., & Bartz, J. (2022). Strengthening emotional development and emotion regulation in childhood – As a key task in early childhood education. *International Journal of Environmental Research and Public Health*, 19(7), 3978. <https://doi.org/10.3390/ijerph19073978>
- Tamis-LeMonda, C. S., Luo, R., McFadden, K. E., Bandel, E., & Valloton, C. D. (2020). Early home learning environment



- predicts children's 5th grade academic skills. Applied Developmental Science, 24(4), 281-297.*
<https://doi.org/10.1080/10888691.2018.1446046>
23. Varshney, N., Temple, J. A., & Reynolds, A. J. (2022). *Early education and adult health: Age-37 impacts and economic benefits of the Child-Parent Center preschool program. Journal of Benefit-Cost Analysis, 13(1), 57-90.*
<https://doi.org/10.1017/bca.2022.4>
24. Williams, K. E., So, K.-T., & Siu, T.-S. C. (2020). *Parental involvement in supported playgroups: Connections with parenting experiences and child development. Children and Youth Services Review, 118, 105364.*
<https://doi.org/10.1016/j.chilyouth.2020.105364>
25. Wu, J., Barger, M. M., Oh, D., & Pomerantz, E. M. (2022). *Parents' daily involvement in children's math homework and activities during early elementary school. Child Development, 93(5), 1347-1364.* <https://doi.org/10.1111/cdev.13774>
26. Zhu, X., et al. (2024). *Parental influence on child social and emotional functioning. Frontiers in Psychology, 15, 1392772.*
<https://doi.org/10.3389/fpsyg.2024.1392772>