



Nature of Work and Availability Effects on Parent-Initiated Involvement and Styles to Learning Outcomes of Primary Learners

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Abstract

This study investigated parent-initiated involvement and its impact on children's educational achievements, mediated by socioeconomic factors. The respondents, primarily female and aged 31-40, exhibited diverse educational backgrounds, with many holding college degrees or high school diplomas. Parents were notably engaged in monitoring academic progress but showed less involvement in volunteering and seeking guidance. The findings highlighted positive perceptions of parent involvement in communication, consistency, and collaboration, signaling strong foundations for enriching the educational experience through enhanced collaboration and resource-sharing.

Based on the findings, parents are encouraged to actively engage in monitoring and supporting their child's education. Schools should foster volunteer opportunities and enhance communication with parents. Teachers and educators should collaborate with parents to develop tailored educational plans, while schools should provide resources to promote parent engagement and support for academic challenges. These recommendations aim to optimize educational experiences and enhance student learning outcomes.

Keywords

Parent-initiated involvement, Learning outcomes, Nature of work, Learning styles

INTRODUCTION

Extensive research spanning multiple decades has unequivocally demonstrated that parental engagement in the educational process yields notable enhancements in student attendance, social aptitude, and behavioral conduct. Furthermore, this intervention facilitates improved adjustment of younger learners to the school environment. The concept of "parent-initiated involvement" refers to the active engagement of parents in ongoing, reciprocal, and substantive communication pertaining to their child's academic progress and involvement in various school-related endeavors.

The existing gap pertaining to parent-initiated involvement, school partnerships, and children's learning outcomes highlights the necessity for in-depth study that explores the intricate dynamics of these variables. While previous studies have confirmed the existence of a positive relationship between parent-initiated involvement and enhanced academic achievements in children, there is a lack of comprehensive examinations regarding the precise mechanisms by which parent-initiated involvement and successful school partnerships impact academic performance. Furthermore, it is worth noting that there is a significant dearth of research that examines various cultural contexts and socioeconomic backgrounds. These factors play a pivotal role in comprehending the intricate interplay and impact they have on student's learning outcomes. The resolution of this research deficit is of utmost importance for educators, policymakers, and parents in order to formulate empirically grounded approaches that might maximize parent-initiated involvement and foster effective school partnerships, hence augmenting children's academic achievements in diverse educational contexts.

MATERIALS AND METHODS

The present study employed a descriptive-correlational research design with mediation analysis. A survey was employed to collect data pertaining to the mediating power of work nature and availability on parental academic and school

involvement towards improved learning outcomes. Furthermore, the objective was to ascertain the degree to which certain conditions could be observed among this cohort of participants (Formplus, 2020). The survey methodology was chosen due to its distinct approach in collecting data from a substantial sample size. Surveys offer several advantages in academic research.

Firstly, surveys allowed for the inclusion of a wide population, thereby enhancing statistical power and increasing the reliability of findings. Secondly, surveys enabled researchers to collect substantial volumes of data, facilitating comprehensive analysis and exploration of various research questions. Lastly, surveys benefited from the availability of validated models, ensuring the accuracy and validity of the collected information. Despite the potential drawbacks associated with surveys, such as their high cost and the potential for discrepancies in memory accuracy, the validity of a survey mostly hinged on the response rate. However, the researcher took measures to mitigate these concerns by implementing a well-designed survey that allows for thorough analysis of the obtained results.

The researcher meticulously employed a stratified random sampling technique to select the respondents, who were parents of primary grade learners from public elementary schools in the Calauan District. The first step involved identifying the relevant strata within the population based on shared attributes or characteristics. This was achieved by analyzing the characteristics of the population and identifying key attributes that were pertinent to the study. Once the strata were identified, the researcher proceeded to divide the population of parents accordingly. The next step was to determine the sample size for each stratum. This was accomplished using appropriate statistical methods to ensure that the sample sizes were representative of the strata in the population. After determining the sample sizes, the researcher randomly selected individuals from each stratum to be part of the sample. The use of stratified sampling proved to be crucial in this study as it allowed for the division of the sample into mutually exclusive and exhaustive subgroups. This was based on the belief that these subgroups would yield different mean values for the variables being studied, thereby providing a more accurate representation of the population. This rigorous sampling process ensured the reliability and validity of the study's findings (Statistics Canada, 2021).

The survey-questionnaires were subjected to the scrutiny of a public schools district supervisor, a professor of educational management, and a former president of general parent-teachers association. The study utilized survey as a method of gathering information from a sample of parents, with the intention of generalizing the results to the whole Calauan District. The survey used in this study provided a critical source of data and insights for nearly every parent who actively engaged in school activities. The survey-questionnaire used in this study was made up of five major parts.

Part 1 – The first of the research instrument focused on the profile of the parents particularly their nature of employment and availability. Part 2 – This part of the researcher instrument focused on the level parent-initiated involvement in terms of monitoring, volunteering, inquiring, and seeking guidance. Part 3 – This part of the research instrument aimed to describe the involvement styles in terms of communication, consistency, and collaboration. Part 4 – This part of the research instrument focused on the learning outcomes in terms of verbal information, intellectual skills, motor skills, and learning attitude. In the initial phase of the study, the researcher meticulously prepared the survey-questionnaire, ensuring it was comprehensive and covered all the necessary areas of the research. Once the survey-questionnaire was prepared, it was subjected to a thorough review by a panel of experts, which included a public schools district supervisor, a professor of educational management, and a former president of a general parent-teachers association. These experts scrutinized the survey-questionnaire for its content, structure, and relevance to the research objectives. The feedback from the panel of experts was then incorporated into the survey-questionnaire, which involved revising questions, adding new ones, or removing irrelevant ones to ensure the instrument was valid and reliable.

Following this, the revised survey-questionnaire was pilot tested on a small sample of parents. This provided the researcher with initial data and insights into how well the survey-questionnaire worked and whether it needed further refinement. After the pilot testing and any subsequent revisions, the survey-questionnaire underwent a final validation process. This confirmed that the instrument accurately measured what it was intended to measure, ensuring the reliability and integrity of the research. This rigorous validation process ensured that the survey-questionnaire was a valid and reliable tool for gathering data from parents in the Calauan District, contributing to the overall quality and credibility of the research.

RESULTS AND DISCUSSION parent-initiated involvement

Table 1 consolidates the mean scores and standard deviations (SD) for different subscales of parent-initiated involvement, along with an overall score and verbal interpretation.

Table 1 Summary Table for Parent-Initiated Involvement

Subscales	Mean	SD	Verbal Interpretation
Monitoring	3.49	0.72	Often Involved
Volunteering	2.81	1.01	Often Involved
Inquiring	3.4	0.77	Often Involved
Seeking Guidance	2.95	0.95	Often Involved
Overall	3.16	0.86	Often Involved

Legend: 3.50-4.00 Always Involved, 2.50-3.49 Often Involved 1.50-2.49 Sometimes Involved, 1.00-1.49 Seldom Involved

The overall mean score (Mean = 3.16, SD = 0.86) suggests that parents demonstrate a moderate level of involvement across different dimensions of parent-initiated engagement.

While certain aspects like monitoring and inquiring reflect stronger engagement, others such as volunteering and seeking guidance show room for improvement. Strengthening parental involvement in these areas can contribute to a more supportive and enriching educational environment for children. The table shows that parents' highest mean score is observed in the monitoring subscale (Mean = 3.49, SD = 0.72), indicating a relatively strong level of involvement in activities related to monitoring their child's academic progress and school-related behaviors.

The inquiring subscale also received a notable mean score (Mean = 3.40, SD = 0.77), suggesting proactive engagement in fostering curiosity, discussing academic topics, and setting educational goals with their child. Conversely, the volunteering and seeking guidance subscales show lower mean scores (Volunteering Mean = 2.81, SD = 1.01; Seeking Guidance Mean = 2.95, SD = 0.95), indicating opportunities for increased parental involvement in these areas. This highlights potential areas for targeted interventions and support mechanisms to enhance volunteering efforts within the school community and improve communication and collaboration with teachers and school counselors

Involvement Styles

Table 2 consolidates the mean scores and standard deviations (SD) for different subscales of parent involvement styles. Overall, the mean score across all styles is 3.20 with a standard deviation of 0.88, highlighting a consistent and observed level of parental involvement in supporting their child's education through communication, consistency, and collaboration with the school.

Table 2 Summary Table for Involvement Styles

Subscales	Mean	SD	Verbal Interpretation
Communication	3.24	0.88	Observed
Consistency	3.29	0.85	Observed
Collaboration	3.06	0.92	Observed
Overall	3.20	0.88	Observed

Legend: 3.50-4.00 Always Involved, 2.50-3.49 Often Involved 1.50-2.49 Sometimes Involved, 1.00-1.49 Seldom Involved

The summary table reveals positive perceptions of parent involvement styles across communication, consistency, and collaboration. Parents demonstrate active engagement in communication with teachers and school administration, as indicated by a mean score of 3.24 (SD = 0.88), reflecting a commitment to fostering productive dialogues and mutual understanding. Parents exhibit consistency in their interactions with schools and educators, with a mean score of 3.29 (SD = 0.85). This underscores a dedicated effort to maintain regular engagement and follow-up on discussions related to their child's progress and academic needs. While collaboration scores slightly lower at a mean of 3.06 (SD = 0.92), parents show a willingness to participate in decision-making processes and problem-solving efforts. Opportunities exist to further enhance resource-sharing and community advocacy initiatives.

The findings suggest a strong foundation of parental involvement across key dimensions, with areas for continued growth and enhancement. Strengthening collaboration efforts and promoting resource-sharing can further enrich the educational experience and contribute to a more inclusive and supportive learning environment.

Learning Outcomes

Table 3 presents an overview of learning outcomes across different subscales, as perceived by parents.

Motor Skills exhibit the highest mean score of 3.53 (SD = 0.68), indicating a high level of proficiency in tasks requiring both fine and gross motor coordination.

Table 3 Summary Table for Learning Outcomes

Subscales	Mean	SD	Verbal Interpretation
Verbal Information	3.30	0.76	Moderate High Level
Intellectual Skills	3.25	0.75	Moderate High Level
Motor Skills	3.53	0.68	High Level
Learning Attitude	3.55	0.68	High Level
Overall	3.41	0.72	Moderate High Level

This suggests that children demonstrate strong capabilities in activities such as running, jumping, and performing tasks that demand precision and coordination. Learning Attitude follows with a mean score of 3.55 (SD = 0.68), reflecting high level. On the other hand, Intellectual Skills and Verbal Information both demonstrate lower proficiency with mean scores of 3.25 (SD = 0.75) and 3.30 (SD = 0.76) respectively. Nevertheless, they still showed high level.

The findings from Table 2 have important implications for educational practices and parental involvement. Firstly, the high mean score in motor skills suggests that physical development is strong among children, highlighting the need for comprehensive physical education programs and opportunities for movement-based learning within schools. This can contribute to overall health and well-being while supporting academic success. Secondly, the high levels of verbal information and intellectual skills underscore the importance of language development and cognitive growth in educational settings.

Significance on the Relationship Between Parent Initiated Involvement and the Learning Outcomes

Table 4 presents correlations between different aspects of parent-initiated involvement and various learning outcomes. Monitoring of parents shows significant positive correlations ($p < 0.01$) with all learning outcomes: verbal information ($r = 0.409$), intellectual skills ($r = 0.419$), motor skills ($r = 0.596$), and learning attitude ($r = 0.562$). This suggests that parents who actively monitor their child's academic progress and provide support tend to have children with better learning outcomes across multiple domains.

For instance, consider a scenario where parents regularly check their child's homework completion, communicate with teachers about academic progress, and provide a supportive learning environment at home. These proactive monitoring behaviors correlate with their child's ability to recall information, apply critical thinking, demonstrate physical coordination, and exhibit positive learning attitudes. Such parental engagement underscores the importance of consistent monitoring in fostering holistic development across various learning domains, ultimately contributing to enhanced academic and personal growth in children.

Table 4 Test of Relationship between the Perception on Parent Initiated Involvement and the Learning Outcomes

Parent-Initiated Involvement	Learning Outcomes			
	Verbal Information	Intellectual Skills	Motor Skills	Learning Attitude
Monitoring	.409**	.419**	.596**	.562**
Volunteering	.334**	.401**	.342**	.388**
Inquiring	.480**	.458**	.549**	.591**
Seeking Guidance	.271**	.362**	.244*	.273**

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

Volunteering also demonstrates significant positive correlations ($p < 0.01$) with verbal information ($r = 0.334$), intellectual skills ($r = 0.401$), and learning attitude ($r = 0.388$). Parents who engage in volunteering activities at school show associations with improved learning outcomes, particularly in communication, cognitive abilities, and positive attitudes towards learning. Meaning, parents who actively participate in classrooms or school events might boost their children's verbal fluency and comprehension by directly engaging in educational activities. Furthermore, their involvement creates a setting in which children are motivated to investigate novel concepts and persist in the face of difficulties, so strengthening favorable learning attitudes and scholastic accomplishments. The results emphasize the positive influence of parental volunteering on the overall development and academic achievement of children.

Moreover, when parents ask about their child's learning, there is a strong positive relationship with all learning outcomes: verbal information ($r = 0.480$), intellectual skills ($r = 0.458$), motor skills ($r = 0.549$), and learning attitude ($r = 0.591$). These correlations are statistically significant at a level of $p < 0.01$. This implies that parents who actively participate in conversations on their child's education are more likely to have children who excel in both academic and behavioral areas. An example of this is when parents engage in frequent conversations about school subjects and prompt their child to articulate ideas using their own language. This practice enhances the child's proficiency in expressing themselves verbally, enhances their capacity for critical thinking, improves their physical coordination, and fosters a good disposition towards learning.

Conversely, consulting with educational experts exhibits noteworthy positive associations ($p < 0.05$) with linguistic knowledge ($r = 0.271$) and cognitive abilities ($r = 0.362$). This suggests a tiny yet advantageous correlation between parents seeking expert guidance and their child's success in particular academic domains. Parents who seek guidance from teachers or school counselors to address academic difficulties or developmental requirements can potentially improve their child's verbal and cognitive abilities. These findings emphasize the need of engaging in active questioning and seeking professional advice to promote holistic educational growth in youngsters.

The correlations observed underscore the influential role of parent-initiated involvement in shaping children's learning outcomes. Specifically, active monitoring, volunteering, inquiring, and seeking guidance are associated with positive academic performance, motor skill development, and overall learning attitude. These findings highlight the importance of fostering collaborative partnerships between parents and educators to support children's holistic development.

Research by Perez et al. (2013) and Tarraga et al. (2017) emphasize the significance of parental involvement in promoting positive learning outcomes and academic achievement among children. Similarly, studies by Kraft and Dougherty (2013) highlight the positive impact of parent-teacher collaboration on student engagement and motivation. These studies align with the observed correlations emphasizing the critical role of parental engagement in education.

Significance on the Relationship Between Involvement Styles and the Learning Outcomes

Table 5 presents correlations between different manifestations of involvement styles and various learning outcomes. Effective communication between parents and school personnel demonstrates significant positive correlations with various learning outcomes: verbal information ($r = 0.334$), intellectual skills ($r = 0.439$), motor skills ($r = 0.365$), and learning attitude ($r = 0.420$), all at the $p < 0.01$ level. This indicates that when parents maintain open and frequent communication with teachers and administrators, their children tend to exhibit improved performance across different domains. For example, parents who regularly discuss their child's progress and academic challenges with teachers often

receive valuable insights and tailored support strategies. This proactive communication fosters a supportive environment where teachers can provide targeted interventions and parents can reinforce learning at home, leading to enhanced verbal fluency, cognitive abilities, physical coordination, and positive attitudes towards learning.

Table 5 Test of Relationship between the Manifestations of Involvement Styles and the Learning Outcomes

Involvement Styles	Learning Outcomes			
	Verbal Information	Intellectual Skills	Motor Skills	Learning Attitude
Communication	.334**	.439**	.365**	.420**
Consistency	.359**	.454**	.411**	.466**
Collaboration	.380**	.509**	.369**	.455**

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

Consistency in parental involvement also shows significant positive correlations with learning outcomes: verbal information ($r = 0.359$), intellectual skills ($r = 0.454$), motor skills ($r = 0.411$), and learning attitude ($r = 0.466$), all at the $p < 0.01$ level. This underscores the importance of maintaining ongoing support and follow-up in children's education. For instance, parents who consistently attend parent-teacher meetings, monitor homework completion, and follow up on their child's progress tend to contribute to better academic achievements and overall development. By providing regular encouragement and reinforcement of learning goals, these consistent efforts help strengthen their child's verbal communication, critical thinking abilities, physical capabilities, and enthusiasm for learning.

Collaborative efforts between parents and educators demonstrate significant positive correlations with key learning outcomes: verbal information ($r = 0.380$), intellectual skills ($r = 0.509$), and learning attitude ($r = 0.455$), all at the $p < 0.01$ level. This highlights the impactful role of teamwork in supporting children's educational growth. For example, parents who actively participate in school decision-making processes, volunteer in classroom activities, and engage with teachers to tailor learning experiences promote a holistic approach to education. Through collaboration, parents and educators can jointly address learning challenges, implement effective teaching strategies, and cultivate an environment that nurtures effective communication, critical thinking, and motivation in students.

The correlations observed underscore the importance of specific involvement styles—such as effective communication, consistency, and collaboration—in fostering positive learning outcomes among children. These findings highlight the value of establishing strong partnerships between parents and school stakeholders to support holistic development and academic success.

Existing literature by Utami (2022) emphasizes the role of consistent parental involvement in promoting student achievement and well-being. Similarly, Roy and Giraldo-García (2018) highlight the positive impact of collaborative parent-teacher relationships on academic performance and socio-emotional development. These studies align with the observed correlations emphasizing the critical role of active and meaningful parental engagement in education.

Moderating Effect of Nature of Employment on the Relationship between the Parent-Initiated Involvement and Learning Outcome

A moderation analysis was conducted to explore whether the impact of parent-initiated involvement on learning outcomes varies based on the nature of employment. The results indicate that parent-initiated involvement is positively associated with students' learning outcomes, while the nature of employment shows no significant relationship with these outcomes. Specifically, the coefficient for parent-initiated involvement is 0.6058, indicating that increased parental engagement correlates with higher student learning outcomes, a relationship that is statistically significant ($p < 0.05$). Conversely, the coefficient for the nature of employment is 0.0652, suggesting it has no substantive effect on academic achievement. The negative coefficient for the interaction term "Int_1" indicates that there is no interaction effect between parent-initiated involvement and the nature of employment.

Table 6 Moderating Effect of Nature of Employment on the Relationship between the Parent-Initiated Involvement and Learning Outcomes

Model	Coeff	Se	t	P	LLCI	ULCI
Constant	1.4491	.3926	3.6915	.0004	.6706	2.2276
Parent-Initiated	.6058	.1199	5.0522	.0000	.3680	.8436
N of Employment	.0652	.0888	.7339	.4647	-.1110	.2413
Int_1	-.0171	.0282	-.6064	.5456	-.0730	.0388
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.5799	.3363	.1859	17.3934	3.0000	103.0000	0.0000

The positive association underscores how active parental participation in education—through supporting learning activities, communicating with teachers, and creating a conducive home environment—promotes improved academic performance and achievement in students. For example, when parents engage in regular discussions about schoolwork

and encourage learning at home, students tend to demonstrate enhanced comprehension and problem-solving skills. This highlights the critical role of collaborative parent-school partnerships in fostering student learning and development.

Meanwhile, the lack of relationship between parents' employment status and student outcomes suggests that factors such as job type or work schedule do not significantly impact academic success. Whether parents work full-time, part-time, or are unemployed, their involvement in their children's education remains a crucial determinant of academic achievement. Additionally, the absence of an interaction effect indicates that parental involvement and employment status independently influence student outcomes, reinforcing the primary role of parental engagement in shaping educational success. Thus, these findings emphasize the importance of fostering supportive home environments and strengthening parent-school relationships to enhance student learning outcomes effectively.

This finding aligns with previous research that emphasizes the significance of parental involvement in educational outcomes (Durisic and Bunijevac, 2017). On the other hand, the lack of relationship between the nature of employment and student learning outcomes suggests that factors such as parents' occupation or employment status do not significantly influence academic achievement. Regardless of parents' employment situation, their involvement in their children's education remains a crucial determinant of student success. Moreover, the absence of an interaction effect between parent-initiated involvement and the nature of employment indicates that these predictors do not jointly affect student learning outcomes, emphasizing the primary importance of parental engagement in shaping educational outcomes for students (Kalayci and Öz, 2018).

Moderating Effect of Nature of Employment on the Relationship between the involvement Styles and Learning Outcomes

A moderation analysis was conducted to examine whether the relationship between involvement styles and learning outcomes varies based on the nature of employment. The findings indicate that involvement styles are positively associated with students' learning outcomes, while the nature of employment shows no significant relationship with these outcomes. Specifically, Involvement Styles has a coefficient of 0.5223, indicating that increased engagement through various styles (such as communication, consistency, and collaboration) correlates with higher student learning outcomes, a relationship that is statistically significant ($p < 0.05$). Conversely, the coefficient for the nature of employment is 0.1228, suggesting it has minimal impact on academic achievement. The negative coefficient for the interaction term "Int_1" further indicates that there is no interaction effect between involvement styles and the nature of employment. The positive correlation underscores how different styles of parental involvement contribute to academic achievement. For example, when parents maintain open communication with teachers, follow through consistently on educational goals, and collaborate with school staff on learning initiatives, students often demonstrate improved comprehension, problem-solving abilities, and overall academic performance. This highlights the importance of adaptable and responsive parental approaches that cater to the individual needs and learning styles of their children.

Meanwhile, the lack of relationship between parents' employment status and student outcomes suggests that factors such as job type or work schedule do not significantly influence academic success. Whether parents work full-time, part-time, or are unemployed, their involvement through varied styles remains a critical factor in supporting students' educational journey. Additionally, the absence of an interaction effect underscores that involvement styles and employment status independently affect student outcomes, reinforcing the primary role of parental engagement in fostering positive educational outcomes. Thus, these findings underscore the value of flexible parental approaches and collaborative efforts with schools in promoting student success effectively.

Table 7 Moderating Effect of Nature of Employment on the Relationship between the involvement Styles and Learning Outcomes

<i>Model</i>						
	Coeff	Se	t	P	LLCI	ULCI
Constant	1.7162	.3401	5.0462	.0000	1.0417	2.3908
Involvement Styles	.5223	.1024	5.1004	.0000	.3192	.7254
N of Employment	.1228	.0712	1.7244	.0876	-.0184	.2640
Int_1	-.0373	.0221	-1.6876	.0945	-.0812	.0065
<i>Model Summary</i>						
R	R-sq	MSE	F	df1	df2	p
.5295	.2804	.2015	13.3762	3.0000	103.0000	.0000

In contrast, the lack of a significant relationship between parents' nature of employment and students' learning outcomes suggests that variables such as occupational status or employment type do not have a discernible impact on academic achievement. Whether parents are employed full-time, part-time, or unemployed, their level and type of involvement in their children's education remain pivotal factors influencing academic success. For instance, parents who actively participate in school activities, maintain consistent communication with teachers, and support learning at home contribute significantly to their children's academic growth and performance. This underscores the enduring importance of parental engagement regardless of their professional circumstances.

Moreover, the absence of an interaction effect between involvement styles and the nature of employment suggests that these factors do not collaboratively influence students' learning outcomes. This highlights that while parental

involvement plays a crucial role in academic achievement, other factors beyond employment status, such as socioeconomic background, educational resources, and community support, may also impact students' educational outcomes. Thus, fostering a supportive home environment and establishing effective parent-school partnerships remain essential strategies for enhancing student success across diverse educational settings.

This observation underscores the significance of flexible and adaptive parental approaches, emphasizing how parental support, guidance, and collaboration positively impact students' educational journey (Bartolome et al., 2017). In contrast, the absence of a significant relationship between the nature of employment and students' learning outcomes suggests that factors such as parents' occupational status or employment type do not exert a notable influence on academic achievement (Shah and Hussain, 2021). Regardless of their employment circumstances, the degree and type of parental involvement remain influential factors shaping students' success in academics. Furthermore, the lack of an interaction effect between involvement styles and the nature of employment implies that these variables do not synergistically affect students' learning outcomes, emphasizing that other factors beyond parental engagement and employment status may contribute to students' academic performance.

Moderating Effect of Availability of Parents on the Relationship between the Parent-Initiated Involvement and Learning Outcomes

A moderation analysis was conducted to explore whether the relationship between parent-initiated involvement and learning outcomes depends on the availability of parents in school. The results indicate that parent-initiated involvement is positively associated with students' learning outcomes, whereas the availability of parents in school shows no significant relationship with these outcomes. Specifically, Parent-initiated involvement has a coefficient of 0.5305, indicating that increased parental engagement correlates with higher student learning outcomes, a relationship that is statistically significant ($p < 0.05$). In contrast, the coefficient for the availability of parents in school is -0.0021, suggesting it has negligible impact on academic achievement. The positive coefficient for "Int_1" further indicates that there is no interaction effect between parent-initiated involvement and the availability of parents in school.

Table 8 Moderating Effect of Availability of Parents on the Relationship between the Parent-Initiated Involvement and Learning Outcomes

<i>Model</i>	Coeff	Se	t	P	LLCI	ULCI
Constant	1.7070	.5074	3.3639	.0011	.7006	2.7134
Parent-Initiated	.5305	.1589	3.3387	.0012	.2154	.8456
Availability	-.0021	.1181	-.0179	.9858	-.2363	.2321
Int_1	.0024	.0373	.0631	.9498	-.0716	.0763
<i>Model Summary</i>						
R	R-sq	MSE	F	df1	df2	p
.5748	.3304	.1875	16.9433	3.0000	103.0000	.0000

This positive association highlights how active parental participation in their children's education—through involvement in school activities, supporting learning at home, and communicating with teachers—positively impacts academic success. For example, when parents attend school events, engage with educators, and reinforce learning outside the classroom, students often exhibit improved academic performance, critical thinking skills, and overall educational engagement. This underscores the crucial role of parental involvement in shaping students' learning experiences and outcomes.

Furthermore, the model's overall low fit ($R\text{-sq} = 0.3304$) suggests that while parent-initiated involvement significantly influences student outcomes, other unmeasured factors beyond parental availability and engagement may also contribute to variations in academic achievement. Therefore, fostering a supportive home-school partnership remains essential for optimizing student success, ensuring that parental involvement continues to play a pivotal role in educational attainment regardless of the parents' physical presence at school.

The positive correlation observed between parent-initiated involvement and students' learning outcomes underscores the significant impact of parental engagement on academic achievement. When parents take the initiative to participate actively in their children's education by supporting learning activities, communicating with teachers, and creating a conducive learning environment at home, students typically experience improved academic performance. This finding highlights the essential role parents play as partners in their children's educational journey, emphasizing the importance of fostering collaborative relationships between home and school to support student success.

Conversely, the lack of relationship between the availability of parents in school and students' learning outcomes suggests that merely being physically present in the school environment does not significantly influence academic achievement. While parental presence in school settings can provide opportunities for involvement in school activities and interactions with teachers, it appears that the quality and nature of parental engagement, rather than mere presence, are more influential factors in determining student success. Furthermore, the absence of an interaction effect between parent-initiated involvement and parental availability in school indicates that these variables do not interact to impact students' learning outcomes significantly, highlighting the multifaceted nature of parental engagement and its differential effects on academic achievement.

When parents take the initiative to participate actively in their children's education by supporting learning activities, communicating with teachers, and creating a conducive learning environment at home, students typically experience improved academic performance (National Center on Safe Supportive Learning Environments, 2021). This finding highlights the essential role parents play as partners in their children's educational journey, emphasizing the importance of fostering collaborative relationships between home and school to support student success. Conversely, the lack of relationship between the availability of parents in school and students' learning outcomes suggests that merely being physically present in the school environment does not significantly influence academic achievement (Farooq et al., 2019). While parental presence in school settings can provide opportunities for involvement in school activities and interactions with teachers, it appears that the quality and nature of parental engagement, rather than mere presence, are more influential factors in determining student success.

Moderating Effect of Availability of Parents on the Relationship between the Involvement Styles and Learning Outcomes

A moderation analysis was conducted to determine if the relationship between involvement styles and learning outcomes varies based on the availability of parents in the school. The findings reveal that different involvement styles are positively associated with students' learning outcomes, whereas the availability of parents in school shows no significant relationship with these outcomes. Specifically, Involvement Styles has a coefficient of 0.3924, indicating that increased parental engagement through various styles correlates with higher student learning outcomes, a relationship that is statistically significant ($p < 0.05$). Conversely, the coefficient for the availability of parents is 0.0184, suggesting it has minimal impact on academic achievement. The negative coefficient for the interaction term "Int_1" further indicates that there is no interaction effect between involvement styles and the availability of parents in school.

For instance, when parents actively communicate with teachers, consistently support their child's educational goals, and collaborate on school activities, students tend to perform better academically and develop stronger cognitive and social skills. This highlights the crucial role that diverse parental involvement styles play in enhancing educational outcomes, regardless of the parents' physical presence at the school.

Table 9 Moderating Effect of Availability of Parents on the Relationship between the Involvement Styles and Learning Outcomes

<i>Model</i>	Coeff	Se	t	P	LLCI	ULCI
Constant	2.0929	.4883	4.2857	.0000	1.1244	3.0614
Involvement Styles	.3924	.1492	2.6307	.0098	.0966	.6882
Availability	.0184	.1042	.1770	.8599	-.1883	.2252
Int_1	-.0009	.0325	-.0281	.9776	-.0653	.0635
<i>Model Summary</i>						
R	R-sq	MSE	F	df1	df2	p
.5130	.2631	.2063	12.2609	3.0000	103.0000	.0000

Despite the significant impact of parental involvement styles, the model's overall low fit ($R\text{-sq} = 0.2804$) suggests that other factors beyond parental availability and involvement styles may also influence academic achievement. This underscores the importance of a multifaceted approach to supporting student success, where parental engagement is complemented by other supportive measures such as quality teaching, adequate resources, and a conducive learning environment. Thus, fostering strong home-school partnerships remains essential for optimizing student learning outcomes.

The observed positive association between involvement styles—such as hands-on participation, collaborative efforts, or supportive roles—and students' learning outcomes underscores the pivotal role parental engagement plays in academic achievement. When parents actively engage in various styles of involvement tailored to their children's needs and preferences, students typically experience enhanced learning experiences and improved academic performance. This finding emphasizes the importance of flexible and adaptable parental approaches, highlighting how parental support, guidance, and collaboration positively impact students' educational journey.

Conversely, the lack of a significant relationship between the availability of parents and students' learning outcomes suggests that the mere presence of parents may not exert a substantial influence on academic achievement. While parental availability in school settings may provide opportunities for involvement in school activities and interactions with teachers, it appears that the quality and nature of parental engagement, rather than mere availability, are more influential factors in determining student success. Furthermore, the absence of an interaction effect between involvement styles and parental availability indicates that these variables do not interact to significantly impact students' learning outcomes, highlighting the complexity of parental engagement and its differential effects on academic achievement.

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CONCLUSION

Considering the results of this study, the researcher arrived at the following conclusions.

1. There is a significant relationship between parent-initiated involvement perceptions and learning outcomes, rejecting the null hypothesis that there is no association. Specifically, active monitoring, volunteering, inquiring, and seeking guidance by parents are linked to improved learning outcomes across multiple domains, supporting the alternative hypothesis that parental involvement positively impacts student achievement and development.
2. The study concludes a significant relationship between manifestations of involvement styles and learning outcomes, rejecting the null hypothesis of no association. Effective communication, consistency in involvement, and collaboration between parents and educators correlate positively with higher levels of academic performance, cognitive abilities, and positive learning attitudes among children. These results underscore the importance of fostering robust parent-school partnerships to optimize educational experiences and outcomes, aligning with the alternative hypothesis that specific involvement styles contribute to enhanced student learning and development.
3. The nature of employment does not significantly moderate the relationship between parent-initiated involvement and learning outcomes. This is supported by the non-significant coefficient for the interaction term (Int_1) in the moderation analysis, indicating that variations in parents' employment status do not alter the positive association between parent-initiated involvement and students' learning outcomes.
4. The availability of parents does not significantly moderate the relationship between parent-initiated involvement and learning outcomes. This is supported by the non-significant coefficient for the interaction term (Int_1) in the moderation analysis, suggesting that parental presence in the school environment does not exert a substantial influence on the positive association between parent-initiated involvement and students' learning outcomes.

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DECLARATION OF CONFLICT

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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