Parental Home-Based Learning Involvement and Teacher Instructional Support as Correlates of Pupil Academic Engagement

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ABSTRACT

This study examined parental home-based learning involvement and teacher instructional support and their relationship with pupil academic engagement. It also determined the predictive influence of parental involvement and teacher support on pupils' academic engagement and developed a Parental Involvement and Teacher Support Action Plan based on the findings. The study involved 80 parent-respondents. Data were analyzed using weighted mean, standard deviation, Pearson product-moment correlation, and multiple regression analysis. Findings revealed that parental home-based learning involvement was very high, with homework supervision, home structured routines, and academic parenting receiving high ratings. Teacher instructional support was also very high across learning guidance, home-school communication, and instructional provisioning. Similarly, pupil academic engagement was very high across behavioral, emotional, and cognitive dimensions. Overall parental home-based learning involvement had significant positive relationships with behavioral, emotional, cognitive, and overall academic engagement. It was also significantly related to learning guidance, home-school communication, and overall teacher instructional support, but not to instructional provisioning. Teacher instructional support was significantly associated with pupils' behavioral, emotional, cognitive, and overall academic engagement. Regression analysis showed that instructional provisioning was the only significant individual predictor of pupil academic engagement ($\beta = .312$, $p = .007$). The study concluded that strong parental involvement and teacher support are associated with higher pupil academic engagement, while the availability and appropriateness of instructional resources have significant predictive influence. Based on these findings, a Parental Involvement and Teacher Support Action Plan was developed focusing on structured home-learning routines, home-school communication, instructional provisioning, learner engagement, collaborative monitoring, and accessible support.

Keywords: Parental Involvement, Teacher Instructional Support, Pupil Academic Engagement, Instructional Provisioning, Home-Based Learning

1. INTRODUCTION

Parental home-based learning involvement, teacher instructional support, and pupil academic engagement are critical factors shaping student learning outcomes in contemporary educational contexts. Internationally, parental engagement has been linked with higher academic achievement, favorable attitudes toward school, and enhanced motivation, particularly when families collaborate with schools to support learning at home (Inocian, 2021). At the national and local levels, rising emphasis on home-based learning arrangements—accelerated by digital access, socio-economic disparities, and unprecedented disruptions to traditional schooling—highlights parental involvement as a pivotal mechanism for sustaining instructional continuity and student engagement during remote or hybrid learning periods (Kendall, 2021). In the Philippines, studies examining parent–school partnerships underscore the role of families in scaffolding learning routines, scaffolding, and reinforcing instructional practices, especially in settings where formal school support may be uneven or resource-

constrained. Locally, the Kandugay Elementary School community in Kandugay, Barili, Cebu presents a relevant context for examining how parental home-based involvement interacts with teacher instructional support to influence pupil engagement within the school's learning ecosystem.

A review of related literature demonstrates several recurring themes. First, parental home-based involvement encompasses routine practices such as monitoring progress, facilitating structured study time, providing learning resources, and communicating with teachers about instructional goals and feedback. Research across diverse settings indicates that when parents actively participate in their child's learning at home, students exhibit improved time management, task persistence, and achievement, particularly when parental efforts are aligned with classroom instruction and expectations (Inocian et al., 2019). Second, teacher instructional support—characterized by clear goal setting, timely feedback, scaffolding of complex tasks, and responsive adjustments to student needs—consistently correlates with higher levels of academic engagement and self-regulated learning among pupils (Gador, 2019). Third, pupil academic engagement—encompassing behavioral, cognitive, and emotional involvement in learning activities—mediates the relationship between parental involvement and achievement, with engagement serving as a conduit through which home and school efforts translate into learning gains (Inocian et al., 2020).

In this study, the researcher of this study synthesizes these strands to explore the coexistence and synergy of parental home-based learning involvement and teacher instructional support, and their joint influence on pupil academic engagement from a parent-perspective viewpoint. The literature indicates potential gaps in explicitly examining the parent's perspective on how home-based involvement and perceived teacher support co-occur to shape engagement, particularly in settings like Kandugay Elementary School where rural or semi-rural contexts may present unique logistical and cultural considerations. This research seeks to address that gap by focusing on parent-reported experiences and expectations within the Kandugay Elementary School community, thereby contributing to a more integrated understanding of the home–school dyad in supporting student learning.

The timeliness of this topic is underscored by ongoing shifts in instructional modalities, including distance, blended, and flexible learning models, which necessitate robust home–school collaboration. Observed challenges such as unequal access to digital resources, varied literacy levels among parents, and differential school support highlight the need to examine how parental involvement operates in concert with teacher supports to sustain pupil engagement and learning progress (Inocian, 2021). A research gap exists in explicitly articulating, from a parent's vantage point, how home-based involvement and teacher-provided instructional support interact to shape pupil engagement, particularly within a defined local community context like Kandugay Elementary School. By addressing this gap, the study offers practical implications for school leaders, teachers, and parents to design integrated support strategies that optimize student engagement and learning outcomes in home-based and hybrid learning environments (Kendall, 2021).

The researcher of this study emphasizes a parent-perspective lens to capture lived experiences, practices, and perceptions regarding home-based involvement and instructional support, and how these dimensions influence pupil engagement. The investigation also recognizes potential nuances in parental roles, cultural expectations, and school–community relationships within Kandugay, Barili, Cebu, which may shape engagement dynamics differently from urban settings.

Thus, Parental Involvement and Teacher Support Action Plan is proposed to translate the study's insights into concrete school-level strategies that strengthen parent–teacher collaboration, align home-based learning routines with classroom expectations, and bolster pupil engagement. This research situates Kandugay Elementary School as a focal point for understanding how family and school can co-create an enabling learning environment that sustains high levels of academic involvement among learners in a local Philippine context (Gador, 2019).

2. RESEARCH METHODOLOGY

2.1. Research Design

To gain a comprehensive understanding of the relationships among parental home-based learning involvement, teacher instructional support, and pupil academic engagement at Kandugay Elementary School for the School Year 2026–2027, the researcher will employ a descriptive-correlational research design utilizing a quantitative approach. A carefully structured survey questionnaire, featuring a 5-point Likert scale, will be administered exclusively to the parent-respondents to measure their perceptions. This scale will enable respondents to evaluate their own home-based learning involvement, the instructional support provided by teachers, and the resulting academic engagement of the pupils. Additionally, the questionnaire will gather demographic data to profile the parent-respondents based on age, highest educational attainment, monthly household income, and employment status. This approach will allow for the statistical analysis necessary to address the research questions, specifically utilizing Spearman's rho to identify the significant relationships between parental home-based learning involvement (measured through homework supervision, home structured routines, and academic parenting) and teacher instructional support (measured through learning guidance, home-school communication, and instructional provisioning). It will also determine the significant relationships between parental involvement and pupil academic engagement (measured through behavioral, emotional, and cognitive engagement), as well as between teacher instructional support and those same academic engagement outcomes.

Furthermore, the study will analyze these quantitative findings to serve as the empirical basis for the proposed Parental Involvement and Teacher Support Action Plan aimed at optimizing pupil academic engagement within the school community.

2.2. Environment

The study was conducted at Kandugay Elementary School, located in Barangay Candugay, Barili, Cebu. It is an instructional institution operating under the administrative jurisdiction of the Department of Education (DepEd), Division of Cebu Province. To provide an optimal landscape for learning and physical safety, the school features 12 functional institutional buildings that house its classrooms, administrative spaces, and essential facilities. The school is currently managed under the leadership of its School Head, Febilen R. Baruel, who oversees a dedicated faculty of 12 professional teachers. This teaching force is directly responsible for delivering quality basic education to an approximate student population of 100 elementary pupils. The structured yet intimate academic setting of Kandugay Elementary School provides an ideal, representative environment for gathering localized data, ensuring that the participants are well-within a monitored and accessible educational ecosystem.

2.3. Respondents

The respondents of this study were the parents of pupils enrolled at Kandugay Elementary School, located in Candugay, Barili, Cebu. To ensure comprehensive representation and systematic data collection from the target population, total enumeration sampling (universal sampling) was employed. This sampling technique involved including all members of the identified population because the total number of respondents was manageable and clearly defined.

Consequently, a total of 80 parents from the institution were selected as participants in the study. By including all 80 parents in the identified target population, the study aimed to minimize sampling error and obtain reliable, context-specific data regarding home-based learning dynamics. The distribution of the parent-respondents is presented in Table 1.

Table 1. Distribution of Respondents

Respondents	Number of Parents (f)	Percentage (%)
Parent-Respondents	80	100

Total	80	100

2.4. Instruments

The study utilized a researcher-made survey questionnaire specifically designed to assess the relationships among parental home-based learning involvement, teacher instructional support, and pupil academic engagement. The instrument underwent a rigorous validation process conducted by language and content experts to ensure the clarity of the statements and the relevance of the items to educational management and family-school partnership frameworks. A pilot test was conducted before the actual administration of the questionnaire to assess the reliability of the instrument. The internal consistency of the Likert-scale items was determined using Cronbach's alpha to establish the reliability of the instrument before its administration to the actual respondents.

The questionnaire was divided into four parts. Part I gathered the demographic profile of the parent-respondents in terms of age, highest educational attainment, monthly household income, and employment status. Part II measured the level of parental home-based learning involvement at Kandugay Elementary School in terms of three indicators: homework supervision, structured home routines, and academic parenting. Part III assessed the level of teacher instructional support as perceived by the parent-respondents across three dimensions: learning guidance, home-school communication, and instructional provisioning. Part IV determined the observed level of pupil academic engagement as assessed by their parents in terms of behavioral engagement, emotional engagement, and cognitive engagement.

2.5. Data Gathering Procedure

To obtain formal permission to conduct the study, the researcher sent a transmittal letter to the Schools Division Superintendent and the School Head of Kandugay Elementary School. Upon approval of the request, the researcher coordinated with the school administration and class advisers to identify the target parent-respondents. Before the actual administration of the questionnaire, the instrument was validated by experts and pilot-tested to ensure its clarity, reliability, and suitability for the intended participants.

The researcher personally distributed the survey questionnaires to the parent-respondents, provided the necessary instructions, clarified the items when needed, and ensured the confidentiality of their responses. After the data-gathering process, the collected responses were checked, tallied, tabulated, and encoded into the Statistical Package for the Social Sciences (SPSS) for statistical analysis and interpretation.

2.6. Statistical Treatment

To analyze the gathered data, specific statistical tools were employed based on the research objectives. Frequency and percentage distributions were used to describe the demographic profile of the parent-respondents, specifically regarding their age, highest educational attainment, monthly household income, and employment status. To determine the levels of parental home-based learning involvement, teacher instructional support, and pupil academic engagement across their respective indicators, the weighted mean was calculated using responses from a five-point Likert scale. Finally, the Spearman rank-order correlation coefficient was applied to test for significant relationships between parental home-based learning involvement and teacher instructional support, between parental home-based learning involvement and pupil academic engagement, and between teacher instructional support and pupil academic engagement.

2.7. Scoring Procedure

A five-point Likert scale was used to interpret the weighted mean scores of the responses regarding parental home-based learning involvement, teacher instructional support, and pupil academic engagement. The specified mean ranges served as the basis for interpreting the respondents' ratings.

Table 2. Scoring Procedure for Involvement, Support, and Engagement

Mean Range	Adjectival Rating	Verbal Interpretation
4.21–5.00	Strongly Agree	Very High Level / Practiced to a Very Great Extent
3.41–4.20	Agree	High Level / Practiced to a Great Extent
2.61–3.40	Neither Agree nor Disagree	Moderate Level / Moderately Practiced
1.81–2.60	Disagree	Low Level / Practiced to a Limited Extent
1.00–1.80	Strongly Disagree	Very Low Level / Not Practiced at All

Table 2 presents the scoring procedure used to interpret the weighted mean scores for parental home-based learning involvement, teacher instructional support, and pupil academic engagement. A five-point Likert scale was employed, with mean ranges from 1.00 to 5.00 corresponding to five adjectival ratings and their respective verbal interpretations. Mean scores ranging from 4.21 to 5.00 were interpreted as Strongly Agree, indicating a very high level or practices performed to a very great extent. Scores from 3.41 to 4.20 were interpreted as Agree, representing a high level or practices performed to a great extent. Meanwhile, scores ranging from 2.61 to 3.40 were interpreted as Neither Agree nor Disagree, indicating a moderate level or moderately practiced behaviors. Scores from 1.81 to 2.60 were interpreted as Disagree, signifying a low level or practices performed to a limited extent. Lastly, scores from 1.00 to 1.80 were interpreted as Strongly Disagree, representing a very low level or practices that were not performed at all. This scoring procedure provided a consistent basis for interpreting the respondents' ratings and determining the extent of parental involvement, teacher instructional support, and pupil academic engagement.

3. RESULTS AND DISCUSSION

3.1. Profile of the Respondents

This section presents the demographic and participatory profile of the 80 parent-respondents across the selected elementary schools in Pinamungajan, Cebu. It details the essential characteristics of the participants, including their age distribution, educational attainment, occupational status, number of children enrolled, and their level of engagement in school-related activities. These variables provide a foundational understanding of the primary stakeholders' backgrounds, which is essential for contextualizing their perspectives on child protection and child-friendly school initiatives.

3.1.1. Age of the Parents

This section presents the demographic profile of the parent-respondents of Kandugay Elementary School in terms of age, highest educational attainment, employment status, and monthly household income. It describes the respondents' personal and socioeconomic characteristics to provide a clearer understanding of their backgrounds and circumstances. These characteristics serve as important contextual information in examining parental home-based learning involvement, teacher instructional support, and pupil academic engagement. The findings may also help identify the needs and circumstances of the respondents and provide a basis for developing appropriate and responsive interventions to strengthen home-school partnerships and support pupils' learning experiences.

Table 3. Age Profile of the Respondents

Age	Frequency	Percentage
25 years old and below	1	1.30

26–35 years old	40	50.00
36–45 years old	25	31.30
46–55 years old	13	16.30
56 years old and above	1	1.30
Total	80	100.00

Table 3 shows the age distribution of the 80 respondents. The largest group consisted of respondents aged 26–35 years old, with a frequency of 40 or 50.0% of the total respondents. This was followed by those aged 36–45 years old, with 25 respondents or 31.3%. Meanwhile, 13 respondents or 16.3% were aged 46–55 years old. Only one respondent or 1.3% was 25 years old and below, and another one respondent or 1.3% was 56 years old and above. Overall, the respondents were predominantly within the 26–45 age range, accounting for 81.3% of the total respondents.

The age distribution indicates that the responses were largely obtained from individuals in the 26–45 age range, suggesting substantial representation from respondents who are likely to have considerable experience and active involvement in the area being studied. The smaller representation of respondents at the youngest and oldest age groups may indicate that their perspectives are less represented in the study. Nevertheless, the distribution provides varied age perspectives that can contribute to understanding differences in experiences, perceptions, or practices across age groups.

This aligns with the study of Criollo-Balladares and Cuichan-Gualavisi, (2023) who emphasize that parental involvement in children's education is essential for improving academic performance and holistic development, and with parallel findings that home-based parental support is a key correlate of student engagement across various contexts.

Highest Educational Attainment of the Respondents

Table 4. Highest Educational Attainment of the Respondents

Highest Educational Attainment	Frequency	Percentage
Elementary Graduate / Undergraduate	11	13.80
High School Graduate / Undergraduate	52	65.00
Vocational / Technical Graduate	11	13.80
College Graduate	6	7.50
Post-Graduate Studies (Master's or Doctorate Units / Degree)	0	0.00
Total	80	100.00

Table 4 shows that the majority of the respondents, 52 or 65.0%, are High School Graduates/Undergraduates. This is followed by Elementary Graduates/Undergraduates and Vocational/Technical Graduates, with 11 respondents or 13.8% each. Meanwhile, 6 respondents or 7.5% are College Graduates. No respondent reported having completed or pursued post-graduate studies.

It implies that the respondents are predominantly at the high school educational level. This suggests that programs, activities, and communication materials intended for the respondents should be presented in a clear, simple, and accessible manner, while avoiding unnecessarily technical language. The educational profile should

also be considered when designing interventions, orientations, training activities, and information materials to ensure that these are understandable and responsive to the respondents' educational backgrounds.

This aligns with the study of Quevedo-Álava et al., (2020) which discusses the role of psicopedagogía and TIC in home-based and COVID-19–driven learning contexts, highlighting the increased reliance on family support and simplified, accessible educational communication to respond to learners' needs. It also resonates with findings that the home environment and parental involvement shape instructional engagement when formal schooling is disrupted, underscoring the need for clear, non-technical materials appropriate to learners with varied educational backgrounds.

3.1.3. Employment Status of the Respondents

Table 5. Employment Status of the Respondents

Employment Status	Frequency	Percentage
Employed (Full-Time)	7	8.80
Employed (Part-Time / Casual)	13	16.30
Self-Employed / Business Owner	7	8.80
Unemployed / Homemaker	53	66.30
Total	80	100.00

Table 5 shows that the majority of the respondents were unemployed/homemakers, with a frequency of 53 or 66.3% of the total respondents. This was followed by those who were employed on a part-time/casual basis, with 13 respondents or 16.3%. Meanwhile, both full-time employees and self-employed/business owners had 7 respondents each, representing 8.8% each.

It implies that the respondents were predominantly unemployed or engaged in homemaking. This employment profile may indicate that many respondents have limited or irregular employment opportunities and may have different levels of financial resources and time availability. Therefore, programs, services, or interventions intended for the respondents should consider their employment circumstances, particularly in terms of accessibility, affordability, scheduling, and flexibility.

This aligns with the study of Angulo-Quiñonez et al. (2024) in examining how family and structural factors influence student engagement and motivation within learning environments, highlighting the role of contextual factors such as learning support and access to resources in shaping academic engagement (Angulo-Quiñonez et al., 2024). This aligns with the broader literature on parental involvement and instructional support as determinants of pupils' engagement, where socio-economic and employment contexts can constrain or enable learning opportunities and time availability for engagement (Angulo-Quiñonez et al., 2024).

3.1.4. Monthly Household Income of the Respondents

Table 6. Monthly Household Income of the Respondents

Monthly Household Income	Frequency	Percentage
₱10,000 and below	62	77.50
₱10,001–₱20,000	12	15.00

₱20,001–₱30,000	4	5.00
₱30,001–₱40,000	2	2.50
₱40,001 and above	0	0.00
Total	80	100.00

Table 6 shows that the majority of the respondents, 62 or 77.5%, reported a monthly household income of ₱10,000 and below. This was followed by 12 respondents or 15.0% with an income of ₱10,001–₱20,000. Meanwhile, 4 respondents or 5.0% reported an income of ₱20,001–₱30,000, while only 2 respondents or 2.5% had a monthly household income of ₱30,001–₱40,000. None of the respondents reported a monthly household income of ₱40,001 and above. Overall, the distribution indicates that most respondents belong to the lower-income household category.

It implies that the respondents generally come from households with limited financial resources. This income profile may influence their capacity to allocate resources for basic needs, education, health, transportation, and other household expenses. The predominance of respondents in the lower-income categories suggests the need for programs, services, or interventions that are accessible, affordable, and responsive to the financial circumstances of the respondents.

This aligns with the study of Lever et al., (2016) who emphasize how family and neighborhood contexts shape children's academic engagement through parental involvement and language-support practices in immigrant families (Lever et al., 2016). It also echoes findings that socioeconomic constraints influence access to educational resources and instructional support, thereby mediating pupil engagement in school (Lever et al., 2016).

3.2. Level of Parental Home-Based Learning Invovlement

This section presents the level of parental home-based learning involvement in terms of homework supervision, home-structured routines, and academic parenting. It examines how parents support their children's learning by monitoring and assisting with school assignments, establishing conducive study environments and consistent learning routines, and providing academic guidance, encouragement, and learning resources. The results are analyzed using weighted means, standard deviations, and verbal interpretations to determine the extent of parental participation in supporting pupils' academic development and engagement.

Table 7. Homework Supervision

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
I regularly check my child's notebooks for assigned homework.	4.53	0.57	Strongly Agree
I regularly check my child's learning modules and printed materials for assignments.	4.54	0.55	Strongly Agree
I sit down with my child to guide them when they struggle with difficult lessons.	4.59	0.52	Strongly Agree
I assist my child in completing assignments.	4.61	0.49	Strongly Agree

I review my child's completed assignments before they submit them to their teacher.	4.49	0.53	Strongly Agree
I explain complex concepts to my child when they struggle to understand their homework.	4.64	0.48	Strongly Agree
I monitor my child's progress on long-term school projects.	4.53	0.59	Strongly Agree
I track my child's progress on academic requirements (e.g., assignments, exams, etc.).	4.54	0.57	Strongly Agree
Overall Weighted Mean	4.56		Strongly Agree

Table 7 shows that the respondents strongly agreed with all statements concerning their assistance and monitoring of their children's academic requirements, as indicated by weighted means ranging from 4.49 to 4.64. The highest weighted mean was obtained by explaining complex concepts when the child struggles to understand homework (4.64), followed by assisting the child in completing assignments (4.61) and guiding the child when experiencing difficulty with lessons (4.59). The lowest weighted mean was for reviewing completed assignments before submission (4.49), although it was still interpreted as Strongly Agree. The overall weighted mean of 4.56 indicates a consistently high level of parental involvement in supporting children's academic tasks.

It implies that parents are highly involved in their children's academic learning by providing guidance, assistance, monitoring, and support in completing school requirements. This suggests that parental involvement serves as an important form of academic support, particularly when children encounter difficult lessons or homework. The relatively low standard deviation of 0.54 also indicates that the responses were generally consistent across the respondents.

This aligns with the study of (Caliskan, 2025) and related works on parental involvement as a core predictor of children's academic outcomes, particularly highlighting home-based learning support, guidance, and monitoring as key determinants of engagement and achievement.

Table 8. Home Structured Routines

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
I establish a specific, regular schedule or time for my child to study at home.	4.5	0.595	Strongly Agree
I designate a quiet and distraction-free space for my child to study at home.	4.575	0.569	Strongly Agree
I ensure my child's study area at home has adequate lighting.	4.5	0.595	Strongly Agree
I strictly limit my child’s gadget usage during designated study hours.	4.65	0.48	Strongly Agree

I enforce a consistent bedtime and sleep schedule for my child on school nights.	4.488	0.503	Strongly Agree
I ensure my child remains alert and prepared for school days.	4.475	0.503	Strongly Agree
I verbally praise my child when they exert effort in their studies.	4.488	0.503	Strongly Agree
I reward my child for achieving good grades and academic progress.	4.363	0.621	Strongly Agree
Overall Weighted Mean	4.505		Strongly Agree

Table 8 shows that the respondents strongly agreed with all statements regarding home-structured routines. The overall weighted mean of 4.505 indicated a very high level of parental involvement in establishing structured home-learning routines. Among the indicators, strictly limiting the child's gadget usage during designated study hours obtained the highest weighted mean of 4.650, followed by designating a quiet and distraction-free study space, with a weighted mean of 4.575. Meanwhile, rewarding the child for achieving good grades and academic progress obtained the lowest weighted mean of 4.363, although it was still interpreted as Strongly Agree. The standard deviations, ranging from 0.480 to 0.621, indicated relatively consistent responses among the respondents.

It implies that parents consistently established structured routines, provided suitable study environments, regulated distractions, and encouraged their children's academic efforts at home. The findings suggest that parental involvement extended beyond academic rewards and included maintaining regular study schedules, ensuring adequate lighting, promoting healthy sleeping habits, and providing verbal encouragement to support children's learning.

This aligns with the study of Nie & Mavrou, (2025) who document that parental involvement and expectations shape young learners' attitudes and motivation toward learning, highlighting the role of home context in educational engagement. This aligns with broader findings that structured home routines and parental support correlate with higher pupil engagement and academic outcomes, reinforcing the importance of home-based learning involvement as a determinant of instructional effectiveness.

Table 9. Academic Parenting

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
I consistently praise and reward my child for their academic efforts and good grades.	4.5	0.503	Strongly Agree
I provide supplementary reading materials and school supplies to support my child's learning.	4.41	0.567	Strongly Agree
I set clear, high, yet realistic academic expectations for my child's school performance.	3.98	0.795	Agree
I discuss my child's academic strengths and areas for improvement with them.	4.41	0.567	Strongly Agree

I encourage my child to take responsibility for their own learning and academic progress.	3.98	0.795	Agree
Overall Weighted Mean	4.26		Strongly Agree

Table 9 shows that the respondents strongly agree overall that they provide support for their children's academic learning, as reflected by the overall weighted mean of 4.26. The highest-rated statement is consistently praising and rewarding children for their academic efforts and good grades, with a weighted mean of 4.50. This is followed by providing supplementary reading materials and school supplies and discussing children's academic strengths and areas for improvement, both with a weighted mean of 4.41. The statements concerning setting realistic academic expectations and encouraging children to take responsibility for their own learning obtained 3.98, interpreted as Agree.

It implies that parents generally demonstrate strong involvement in supporting their children's academic development through encouragement, provision of learning resources, communication, and guidance. The relatively lower ratings on fostering realistic academic expectations and learner responsibility suggest the need to further encourage parents to help children develop independence, accountability, and ownership of their learning.

This aligns with the study of (Tanque & Brobo, 2024), which reports that parental participation—encompassing home-based learning support and communication with schools—relates positively to learners' educational outcomes and emphasizes the role of parental involvement in promoting learning engagement and academic achievement, while also noting that certain facets (e.g., setting high expectations and fostering learner independence) may require stronger emphasis to maximize impact (Tanque & Brobo, 2024). Additionally, Caño et al. (2017) corroborate that home learning environments and two-way school-home communication are key channels through which parental involvement influences student performance, underscoring the need for ongoing collaboration between parents and teachers. Together, these findings support placing emphasis on comprehensive home-based support, resource provision, and constructive dialogue to bolster pupil engagement and achievement (Tanque & Brobo, 2024).

3.3. Level of Teacher Instructional Support

This section presents the level of teacher instructional support in terms of learning guidance, home-school communication, and instructional provisioning. It examines how teachers facilitate pupils' learning through clear instructions, timely feedback, remedial assistance, and guidance in developing effective and independent study habits. It also explores the extent to which teachers maintain communication with parents regarding pupils' academic performance, attendance, behavior, and learning needs, as well as their provision of appropriate, accurate, and accessible instructional materials. The findings provide insights into the role of teacher instructional support in fostering a conducive learning environment and promoting pupils' academic engagement.

Table 10. Learning Guidance

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
The teacher provides clear and easy-to-follow directions for all learning tasks and activities.	4.48	0.59	Strongly Agree
The teacher offers immediate feedback on my child's test results.	4.51	0.5	Strongly Agree

The teacher provides helpful feedback on my child's test results.	4.48	0.5	Strongly Agree
The teacher offers immediate feedback on my child's performances.	4.46	0.5	Strongly Agree
The teacher provides helpful feedback on my child's performances.	4.44	0.59	Strongly Agree
The teacher offers extra explanations when my child struggles to understand a lesson.	4.58	0.5	Strongly Agree
The teacher provides remedial learning materials or activities for topics my child finds difficult.	4.61	0.49	Strongly Agree
The teacher breaks down difficult math lessons into simpler steps for students.	4.64	0.48	Strongly Agree
The teacher breaks down difficult reading lessons into simpler steps for students.	4.46	0.53	Strongly Agree
The teacher guides my child on how to develop effective study habits.	4.41	0.61	Strongly Agree
The teacher guides my child on how to develop independent study habits.	4.64	0.51	Strongly Agree
Overall Weighted Mean	4.52		Strongly Agree

Table 10 shows that teacher instructional support in terms of learning guidance obtained an overall weighted mean of 4.52, verbally interpreted as Strongly Agree. Among the indicators, breaking down difficult mathematics lessons into simpler steps and guiding learners in developing independent study habits received the highest weighted mean of 4.64 each. This was followed by providing remedial learning materials or activities for difficult topics, with a weighted mean of 4.61. Meanwhile, guiding learners in developing effective study habits obtained the lowest weighted mean of 4.41, although it was still interpreted as Strongly Agree. The standard deviations, ranging from 0.48 to 0.61, indicated relatively consistent responses among the respondents.

It implies that teachers consistently provide clear instructions, timely and helpful feedback, additional explanations, remedial learning support, and guidance in developing effective study habits.

Table 11. Home-School Communication

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
The teacher updates me regularly regarding my child's academic performance.	4.58	0.5	Strongly Agree
The teacher updates me regularly regarding my child's behavior and conduct in school.	4.56	0.5	Strongly Agree

The teacher maintains accessible and open communication channels for parents.	4.63	0.49	Strongly Agree
The teacher responds promptly to parent inquiries and messages.	4.54	0.55	Strongly Agree
The teacher conducts regular parent-teacher conferences to discuss student performances.	4.64	0.51	Strongly Agree
The teacher informs me promptly if my child is absent or missing classes.	4.7	0.46	Strongly Agree
The teacher contacts me if my child is falling behind in schoolwork.	4.66	0.5	Strongly Agree
The teacher welcomes my suggestions and feedback regarding my child's learning needs.	4.66	0.48	Strongly Agree
Overall Weighted Mean	4.62		Strongly Agree

Table 11 shows that all teacher–parent communication practices were rated Strongly Agree, with weighted means ranging from 4.54 to 4.70. The highest-rated practice was the teacher informing parents promptly when their child is absent or missing classes (WM = 4.70, SD = 0.46). This was followed by contacting parents when the child is falling behind in schoolwork and welcoming suggestions and feedback regarding the child's learning needs, both with a weighted mean of 4.66. The lowest-rated item was the teacher responding promptly to parent inquiries and messages (WM = 4.54, SD = 0.55). The overall weighted mean of 4.62 indicates a consistently strong level of agreement among the respondents.

It implies that teachers generally maintain regular, accessible, and responsive communication with parents regarding learners' academic performance, attendance, behavior, and learning needs. The findings further suggest that sustaining timely communication and strengthening responsiveness to parent inquiries may help support continued parent involvement in learners' education.

This aligns with the study of (Pagdilao & Paguyo, 2023) and related work on parental engagement during disruptions, which emphasizes that regular, accessible, and timely home–school communication supports sustained parental involvement and student engagement in adverse contexts. The presented table demonstrates consistently strong teacher–parent communication practices, echoing findings that prompt updates, conference opportunities, and responsive channels are associated with higher academic engagement and ongoing parental involvement.

Table 12. Instructional Provisioning

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
The teacher distributes complete printed modules and worksheets.	4.69	0.542	Strongly Agree
The teacher distributes accurate printed modules and worksheets.	4.70	0.461	Strongly Agree

The teacher distributes high-quality printed modules and worksheets.	4.70	0.461	Strongly Agree
The teacher utilizes creative visual aids and charts to explain lessons.	4.63	0.513	Strongly Agree
The teacher uses learning objects to explain lessons.	4.63	0.498	Strongly Agree
The teacher provides clear learning guides that tell parents exactly how to assist at home.	4.68	0.471	Strongly Agree
The teacher gives contextualized, real-world examples that make lessons relatable to pupils.	4.59	0.495	Strongly Agree
The teacher ensures that all learning materials match the developmental level of the pupils.	4.74	0.443	Strongly Agree
Overall Weighted Mean	4.67		Strongly Agree

Table 12 shows that the respondents strongly agreed with the teachers' instructional provisioning, as reflected by the overall weighted mean of 4.67. The highest-rated statement was that teachers ensured all learning materials matched the developmental level of the pupils, with a weighted mean of 4.74. This was followed by the distribution of accurate and high-quality printed modules and worksheets, both with a weighted mean of 4.70. Meanwhile, the lowest-rated statement was the use of contextualized, real-world examples that made lessons relatable to pupils, with a weighted mean of 4.59. Nevertheless, all statements received a rating of Strongly Agree. The standard deviations, ranging from 0.443 to 0.542, indicated relatively consistent responses among the respondents.

It implies that teachers consistently provided complete, accurate, developmentally appropriate, and varied learning materials to support pupils' learning needs and help parents assist their children at home. The findings also suggest that teachers should sustain the quality and accessibility of instructional materials while further strengthening the use of contextualized, real-world examples to make learning more meaningful and relevant to pupils' everyday experiences.

This aligns with the study of (Harper et al., 2021), who describe how emergency remote instruction during the COVID-19 era reshaped parental involvement in home-based math learning, highlighting the reliance on school-provided resources and the need for stronger teacher–parent collaboration to sustain high-quality home learning (Harper et al., 2021). The findings emphasize that parental engagement strategies benefit from explicit guidance and contextualized materials, aligning with the present study's conclusion that teachers' provision of complete, accurate, and developmentally appropriate learning materials supports pupil academic engagement and parental facilitation at home (Harper et al., 2021).

3.4. Level of Pupil Academic Engagement

This section presents the level of pupil academic engagement in terms of behavioral engagement, emotional engagement, and cognitive engagement. It examines pupils' participation in classroom activities, completion of academic requirements, adherence to school rules, and demonstration of punctuality and perseverance in learning tasks. It also explores pupils' emotional connection to school, including their attitudes toward learning, sense of belonging, and ability to cope with academic challenges. Furthermore, it assesses pupils' cognitive involvement

through their willingness to explore additional learning materials, ask questions, connect prior knowledge with new lessons, reflect on mistakes, and engage in challenging academic tasks.

Table 13. Behavioral Engagement

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
My child listens attentively during classroom instruction and discussions.	4.38	0.6	Strongly Agree
My child actively participates in recitations and classroom activities.	4.24	0.56	Strongly Agree
My child completes the required homework.	4.55	0.63	Strongly Agree
My child completes the required performance tasks.	4.5	0.5	Strongly Agree
My child submits homework on or before the set deadlines.	4.66	0.48	Strongly Agree
My child submits performance tasks on or before the set deadlines.	4.59	0.5	Strongly Agree
My child follows classroom and study rules diligently.	4.41	0.61	Strongly Agree
My child follows classroom and study rules without needing constant supervision.	4.39	0.61	Strongly Agree
My child exerts maximum effort on schoolwork, even when tasks are difficult.	4.48	0.57	Strongly Agree
My child stays focused on schoolwork, even when tasks are difficult.	4.34	0.65	Strongly Agree
My child maintains excellent daily attendance.	4.59	0.59	Strongly Agree
My child arrives on time for school.	4.61	0.49	Strongly Agree
Overall Weighted Mean	4.48		Strongly Agree

Table 13 shows that the parents strongly agreed that their children demonstrated behavioral engagement, as reflected in the overall weighted mean of 4.48. Among the indicators, submitting homework on or before the set deadlines obtained the highest weighted mean of 4.66, followed by arriving on time for school (4.61) and submitting performance tasks on or before the set deadlines (4.59). The lowest weighted mean was recorded for actively participating in recitations and classroom activities (4.24), although it was still interpreted as Strongly Agree. The standard deviations, which ranged from 0.48 to 0.65, indicated relatively consistent responses among the parents.

It implies that the children generally demonstrated positive behavioral engagement, particularly in meeting academic deadlines, maintaining attendance and punctuality, and completing school requirements. The findings also indicated that the children generally followed classroom and study rules, remained focused, and exerted

effort in their schoolwork. However, classroom participation could still be further encouraged and supported to sustain their active involvement in learning activities.

This aligns with the study of (Negrini, 2016), which emphasizes behavioral, emotional, and cognitive dimensions of student engagement and the critical role of contextual supports and high expectations in promoting sustained school involvement. It also echoes findings that parental home-based involvement and teacher instructional supports jointly influence pupils' engagement by shaping routines, expectations, and timely completion of academic tasks.

Table 14. Emotional Engagement

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
My child shows positive feelings about going to school every day.	4.7	0.46	Strongly Agree
My child takes great pride in their academic accomplishments.	4.58	0.65	Strongly Agree
My child takes great pride in their school milestones.	4.41	0.67	Strongly Agree
My child speaks positively about school experiences at home.	4.59	0.65	Strongly Agree
My child feels a strong sense of belonging and comfort within their school community.	4.63	0.49	Strongly Agree
My child remains emotionally composed when facing difficult academic tasks.	4.33	0.47	Strongly Agree
My child persists in completing lessons despite academic frustrations.	4.44	0.55	Strongly Agree
Overall Weighted Mean	4.52		Strongly Agree

Table 14 shows that the respondents strongly agreed that their children demonstrated emotional engagement in school, as reflected by the overall weighted mean of 4.52. The highest-rated statement was "My child shows positive feelings about going to school every day," with a weighted mean of 4.70, followed by the child's sense of belonging and comfort within the school community, with a weighted mean of 4.63. Meanwhile, the lowest-rated statement was "My child remains emotionally composed when facing difficult academic tasks," with a weighted mean of 4.33, although it still received a rating of Strongly Agree. The standard deviations, ranging from 0.46 to 0.67, indicated relatively consistent responses among the respondents.

It implies that the children generally exhibited positive attitudes toward school, took pride in their accomplishments, felt a sense of belonging, and persisted in learning despite academic challenges. However, maintaining emotional composure when facing difficult academic tasks received a comparatively lower rating, suggesting the importance of providing appropriate encouragement, emotional guidance, and a supportive learning environment to help pupils manage academic frustrations and sustain their engagement in school.

This aligns with the study of Martínez (2021) (Martínez, 2021), Cadena et al. (2019) (Martínez, 2021), and Attard and Holmes (2020) (Martínez, 2021), who converge on the notion that home-based parental involvement and supportive instructional practices bolster learners' emotional and academic engagement by enhancing positive school attitudes, sense of belonging, persistence, and proactive task engagement. Collectively, these

sources corroborate that blended-learning and family–school collaboration can strengthen students' emotional connection to schooling and resilience during challenging tasks, aligning with the reported very high engagement in Table 16 and underscoring the role of supportive home and school environments in sustaining engagement across academic tasks (Martínez, 2021).

Table 15. Cognitive Engagement

Statements	Weighted Mean	Standard Deviation	Verbal Interpretation
My child goes beyond required readings to find extra information about their lessons.	4.31	0.47	Strongly Agree
My child asks thought-provoking questions to truly understand the "why" behind topics.	4.16	0.54	Agree
My child tries to connect new lessons to things they have already learned in previous grades.	4.29	0.46	Strongly Agree
My child reflects on their mistakes in exams.	4.18	0.63	Agree
My child actively tries to correct their mistakes in exams.	4.25	0.67	Strongly Agree
My child chooses challenging tasks over easy ones to test and improve their skills.	4.36	0.58	Strongly Agree
Overall Weighted Mean	4.26		Strongly Agree

Table 15 shows that the respondents strongly agree that their children demonstrate higher-order learning behaviors, as indicated by the overall weighted mean of 4.26. Among the statements, choosing challenging tasks to test and improve skills obtained the highest weighted mean of 4.36, followed by going beyond required readings to find additional information with 4.31. The lowest weighted mean was recorded for asking thought-provoking questions to understand the "why" behind topics at 4.16, although it was still interpreted as Agree. The standard deviations ranging from 0.46 to 0.67 indicate relatively consistent responses among the respondents.

It implies that the children generally demonstrate positive learning behaviors that involve independent learning, connecting prior knowledge with new lessons, reflecting on mistakes, and taking on challenging tasks. These behaviors may be further strengthened through learning activities that encourage questioning, reflection, critical thinking, and active engagement with lessons.

This aligns with the study of (Lin et al., 2025) and related work showing that parental home-based learning involvement and instructional support bolster student engagement through promoting independent learning, integration of prior knowledge, reflection, and engagement with challenging tasks (Lin et al., 2025).

3.5. Significant Relationships

This section presents the significant relationships between parental home-based learning involvement and teacher instructional support. It examines the relationships between homework supervision, home-structured routines, and academic parenting and the different dimensions of teacher instructional support, namely learning guidance, home-school communication, and instructional provisioning. Using Spearman's rank-order correlation

coefficient, the analysis determines the strength, direction, and statistical significance of the relationships between these variables. The findings provide a basis for understanding how parental participation in children's home learning is associated with teachers' instructional practices and support for pupils' academic development.

Table 16. significant relationship between level of parental home-based learning involvement and the teacher instructional support

	Learning Guidance	Home-School Communication	Instructional Provisioning	Teacher Instructional Support
Homework Supervision	.160	.408**	.095	.295**
	.156	.000	.403	.008
Home Structured Routines	.248*	.264*	.221*	.349**
	.027	.018	.048	.002
Academic Parenting	.271*	.438**	-.116	.297**
	.015	.000	.306	.007
Parental Home-Based Learning Involvement	.278*	.464**	.089	.391**
	.012	.000	.433	.000

Legend: **-Highly significant @0.01 *-Significant @0.05 ns-not significant

Table 16 shows the correlation between parental involvement dimensions and the different areas of school support. Homework Supervision has a significant positive relationship with Home-School Communication (r = .408, p = .000) and Teacher Instructional Support (r = .295, p = .008), but has no significant relationship with Learning Guidance and Instructional Provisioning. Home Structured Routines show significant positive relationships with all four areas, particularly with Teacher Instructional Support (r = .349, p = .002). Academic Parenting has significant positive relationships with Learning Guidance (r = .271, p = .015), Home-School Communication (r = .438, p = .000), and Teacher Instructional Support (r = .297, p = .007), but has no significant relationship with Instructional Provisioning (r = -.116, p = .306). Meanwhile, Parental Home-Based Learning Involvement demonstrates significant positive relationships with Learning Guidance (r = .278, p = .012), Home-School Communication (r = .464, p = .000), and Teacher Instructional Support (r = .391, p = .000), but not with Instructional Provisioning (r = .089, p = .433).

It implies that stronger parental involvement, particularly through structured home routines, home-school communication, academic parenting, and home-based learning activities, is generally associated with greater learning guidance and teacher instructional support. The consistently significant relationships with Home-School Communication suggest that active parental involvement may be particularly connected with stronger communication between parents and the school. However, the nonsignificant relationships with Instructional Provisioning indicate that parental involvement does not necessarily correspond to the provision of instructional materials or resources, which may depend more on school-based factors and available resources.

This aligns with the study of Lapuhapu & Oco, (2024) and related work showing that stronger parental home-based involvement, home-school communication, and structured home routines are consistently linked with higher academic engagement and perceived teacher instructional support, while provisioning of instructional materials shows weaker or nonsignificant associations. The synthesis across studies indicates that active parental engagement supports learning guidance and teacher support more than resource provisioning, underscoring the central role of family–school collaboration in pupil engagement.

Table 17. Significant Relationship Between the Level of Parental Home-Based Learning Involvement and Pupil Academic Engagement.

	Behavioral Engagement	Emotional Engagement	Cognitive Engagement	Pupil Academic Engagement
Homework Supervision	0.216	0.235*	0.144	0.219
	0.054	0.036	0.202	0.051
Home Structured Routines	0.225*	0.278*	0.236*	0.270*
	0.045	0.012	0.035	0.016
Academic Parenting	0.159	0.173	0.291**	0.217
	0.158	0.124	0.009	0.053
Parental Home-Based Learning Involvement	0.257*	0.285*	0.260*	0.288**
	0.022	0.010	0.020	0.010

Legend: **-Highly significant @0.01 *-Significant @0.05 ns-not significant

Table 17 shows the relationship between parental involvement practices and the different dimensions of pupil academic engagement. Homework supervision has a significant positive relationship with emotional engagement (r = .235, p = .036), but its relationships with behavioral, cognitive, and overall academic engagement are not statistically significant. Home structured routines show significant positive relationships with behavioral engagement (r = .225, p = .045), emotional engagement (r = .278, p = .012), cognitive engagement (r = .236, p = .035), and overall pupil academic engagement (r = .270, p = .016). Academic parenting has a significant positive relationship only with cognitive engagement (r = .291, p = .009), while its relationships with behavioral, emotional, and overall academic engagement are not statistically significant. Meanwhile, parental home-based learning involvement demonstrates significant positive relationships with behavioral engagement (r = .257, p = .022), emotional engagement (r = .285, p = .010), cognitive engagement (r = .260, p = .020), and overall pupil academic engagement (r = .288, p = .010).

It implies that consistent home-based routines and active parental involvement in learning are associated with higher levels of pupil academic engagement across behavioral, emotional, and cognitive dimensions. Homework supervision appears particularly related to pupils' emotional engagement, while academic parenting is particularly associated with cognitive engagement. These findings suggest that structured routines and meaningful parental participation in home-based learning may support pupils' engagement in school-related activities.

This aligns with the study of Vinokur et al., (2023), which emphasizes how prosocial educational approaches that foster social, emotional, and cognitive development in the learning environment can enhance student engagement and collaborative participation beyond traditional instruction.

Table 18. significant relationship between the level of teacher instructional support and pupil academic engagement.

	Behavioral Engagement	Emotional Engagement	Cognitive Engagement	Pupil Academic Engagement
Learning Guidance	0.150	0.182	0.181	0.168
	0.184	0.107	0.107	0.137

Home-School Communication	0.362**	0.385**	0.228*	0.348**
	0.001	0.000	0.042	0.002
Instructional Provisioning	0.292**	0.478**	0.174	0.352**
	0.009	0.000	0.122	0.001
Teacher Instructional Support	0.342**	0.429**	0.249*	0.359**
	0.002	0.000	0.026	0.001

Legend: **-Highly significant @0.01 *-Significant @0.05 ns-not significant

Table 18 shows the relationship between the different parental involvement dimensions and pupil academic engagement in terms of behavioral, emotional, cognitive, and overall academic engagement. Learning Guidance shows no significant relationship with behavioral engagement (r = .150, p = .184), emotional engagement (r = .182, p = .107), cognitive engagement (r = .181, p = .107), and overall pupil academic engagement (r = .168, p = .137). In contrast, Home-School Communication has significant positive relationships with behavioral engagement (r = .362, p = .001), emotional engagement (r = .385, p = .000), cognitive engagement (r = .228, p = .042), and overall pupil academic engagement (r = .348, p = .002). Instructional Provisioning also has significant positive relationships with behavioral engagement (r = .292, p = .009), emotional engagement (r = .478, p = .000), and overall pupil academic engagement (r = .352, p = .001), but its relationship with cognitive engagement is not significant (r = .174, p = .122). Similarly, Teacher Instructional Support has significant positive relationships with behavioral engagement (r = .342, p = .002), emotional engagement (r = .429, p = .000), cognitive engagement (r = .249, p = .026), and overall pupil academic engagement (r = .359, p = .001). Overall, the significant relationships indicate that higher levels of Home-School Communication, Instructional Provisioning, and Teacher Instructional Support are associated with higher levels of pupil academic engagement, while Learning Guidance does not show a statistically significant relationship with pupil academic engagement.

It implies that strengthening home-school communication, providing appropriate instructional resources and support, and enhancing teacher instructional support may contribute to improved pupil academic engagement. The findings also suggest that these forms of support are particularly relevant to pupils' behavioral and emotional engagement, while cognitive engagement may require more specific academic and learning-focused interventions. Since Learning Guidance did not show a significant relationship with academic engagement in this study, schools and parents may consider complementing learning guidance with more consistent communication, instructional support, and other concrete forms of academic assistance.

This aligns with the study of Feng et al., (2019), which highlights that teacher support and parental autonomy support are positively related to student motivational processes and engagement, suggesting that adult support enhances academic engagement through autonomous motivation mechanisms (Feng et al., 2019). Additionally, research linking parental involvement and teacher support to academic engagement across contexts supports the interpretation that home-school interactions and instructional support bolster behavioral and emotional engagement, with mixed findings for cognitive engagement requiring domain-specific strategies.

3.6. Predictive Influence of Parental Home-Based Learning Involvement and Teacher Instructional Support on Pupil Academic Engagement

This section presents the predictive influence of parental home-based learning involvement and teacher instructional support on pupil academic engagement. It examines the extent to which homework supervision, home-structured routines, academic parenting, learning guidance, home-school communication, and instructional provisioning predict pupils' academic engagement. Multiple regression analysis is used to identify the individual contribution and statistical significance of each predictor while controlling for the other variables in the model. The findings provide insights into which aspects of parental involvement and teacher instructional support significantly predict pupil academic engagement.

Table 19. Regression Analysis of Parental Home-Based Learning Involvement and Teacher Instructional Support as Predictors of Pupil Academic Engagement

Predictor	Unstandardized B	Std. Error	Standardized Beta	t	Sig.	Tolerance	VIF
Constant	*0.847*	*0.835*	—	*1.014*	*0.314*	—	—
Homework Supervision	*-0.089*	*0.161*	*-0.09*	*-0.551*	*0.584*	*0.403*	*2.484*
Home Structured Routines	*0.133*	*0.172*	*0.125*	*0.772*	*0.443*	*0.41*	*2.437*
Academic Parenting	*0.131*	*0.101*	*0.166*	*1.294*	*0.2*	*0.647*	*1.546*
Learning Guidance	*-0.013*	*0.103*	*-0.014*	*-0.123*	*0.903*	*0.815*	*1.227*
Home-School Communication	*0.214*	*0.137*	*0.193*	*1.564*	*0.122*	*0.706*	*1.417*
Instructional Provisioning	*0.405*	*0.147*	*0.312*	*2.756*	*0.007*	*0.834*	*1.198*

Dependent Variable: Pupil Academic Engagement

Table 19 shows that among the predictors included in the regression model, only Instructional Provisioning significantly predicts pupil academic engagement ($\beta = .312$, $t = 2.756$, $p = .007$). Homework Supervision, Home Structured Routines, Academic Parenting, Learning Guidance, and Home-School Communication do not significantly predict pupil academic engagement individually ($p > .05$). The VIF values ranging from 1.198 to 2.484 indicate no serious multicollinearity problem among the predictors.

It implies that instructional provisioning is the significant individual predictor of pupil academic engagement in the model, suggesting that providing appropriate learning materials and instructional resources is an important factor associated with pupils' academic engagement.

This aligns with the study of Bazán-Ramírez et al., (2021) and its synthesis with Epstein's framework on family involvement in learning at home, which links parental support and provision of home learning environments to student engagement and achievement. It also echoes prior work highlighting instructional provisioning as a key predictor of engagement, consistent with the regression findings that access to appropriate learning materials and resources supports pupil engagement.

4. CONCLUSION

Based on the findings, the parent-respondents are predominantly early- to middle-aged adults with high school-level education, mostly unemployed or homemakers, and belonging to lower-income households, emphasizing the need for accessible and affordable home-school interventions. Despite socioeconomic challenges, parental home-based learning involvement is very high, characterized by structured home routines, active guidance, and consistent homework supervision. Correspondingly, pupils display a very high level of academic engagement across behavioral, emotional, and cognitive dimensions. Furthermore, significant relationships exist between

parental involvement, teacher instructional support, and pupil engagement; however, regression analysis indicates that teacher instructional provisioning is the sole significant predictor of pupil academic engagement, whereas individual parental involvement factors do not serve as independent predictors.

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Competing interests

Authors have declared that no competing interests exist.

Authors' Contributions

Ruth N. Cedeño conceptualized the study, performed the statistical analysis, formulated the research protocol, and wrote the initial draft of the manuscript. Author Janeth L. Lacostales provided methodological oversight and guided the conceptual framework of the learning retention enhancement program. Authors Katrin Mae I. Dantes, Norinyl A. Malazarte, Vicar R. Antiquina, Earl M. Alterado, and Danilo L. Libradilla managed the literature review, instrument validation, and data collection procedures. All authors read and approved the final manuscript.

Ethical approval

The study strictly adhered to ethical research standards to protect participants' rights and welfare. Official clearance was obtained from Kandugay Elementary School, and written informed consent was secured from all parent-respondents, emphasizing voluntary participation and the right to withdraw without penalty. Data privacy, confidentiality, and anonymity were maintained by restricting data access to the researcher and replacing personal identifiers with alphanumeric codes during SPSS processing. Finally, academic integrity was preserved through honest and accurate data reporting to ensure the resulting Action Plan reflects authentic community perspectives.

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