



American Journal of Arts and Human Science (AJAHS)

ISSN: 2832-451X (ONLINE)

VOLUME 4 ISSUE 2 (2025)



PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

Dimensions and Factors of Learning Engagement on Learners' Academic Performance

Aren Espinal Baculanta¹, Pepa V. Pontillas¹, Gerlinda Corpuz^{1*}

Article Information

Received: February 15, 2025

Accepted: March 26, 2025

Published: May 21, 2025

Keywords

Academic Performance, Behavioral Engagement, Cognitive Engagement, Emotional Engagement, Learners Engagement

ABSTRACT

Learners' engagement is a measure that reflects the learner's participation in the learning process while academic performance is the measurement of learner's achievement in different subject areas. This research sought to ascertain the dimensions and factors of learning engagement on academic performance of respondents. Specifically, this answer to what extent of the learning engagement in terms of its dimensions as to behavioral, cognitive, and emotional; the level of the learning engagement concerning of family, school, teacher, and peer; the level of the learners' academic performance; the significant relationship between the dimension of learning engagement and their academic performance; and the significant relationship between the factors of learning engagement and their academic performance. The results showed that the level of learning engagement as to behavioral, cognitive, and emotional dimensions was high. The factors of learning engagement in terms of family, school, teacher, and peer were positive. Further, the academic performance of the learners was very satisfactory. On the other hand, the test of relationship between the learning dimension of engagement and the learners' academic performance was significant. In the same way, the test of relationship between the factors of learning engagement and their academic performance was also significant. It can be concluded that the behavioral, cognitive, and emotional aspects together with the factors of learning engagement such as, family, school, teacher and peer are important to academic performance. It is recommended teacher should build a strong and encouraging relationship with their learners to significantly enhance engagement. At the same time, teachers should use collaborative learning strategies for it allow learners to develop a good understanding and a friendly relationship among his/her classmates.

INTRODUCTION

Learning engagement in the past few years was a term defined and used in various ways by authors and researchers in different research areas, especially in the areas of education and psychology. In this paper, learning engagement links to the energy, endeavor, participation, and relationship of the learners towards the people that surround them in which learners interact to have an advantageous impact on their academic success. Learning engagement is essential to the academic success of the learners, but often faces challenging circumstances that affect the impact of their academic performance in the classroom as: learners may become disengaged and uninterested which can result in low academic performance of the learners.

Nevertheless, learning engagement captured a lot of attention because it dwells on the various dimensions and diverse factors that determine academic performance and encourage learners' success. In this research, the researcher concentrated on three dimensions of learning engagement, namely the behavioral, cognitive, and emotional aspects, as well as the four factors of learning engagement specifically: family, school, teacher, and peer interventions, and lastly, its significant impact to learners' academic performance.

Over the years, despite the efforts of the Department of Education, the battle for high-quality education is

still under the DepEd's battle cry. It was stated in the headlines of Mateo (2021) entitled "DepEd is moving to improve the quality of education." According to the caption "Manila Philippines-Following the release of a World Bank report outlining the poor performance of Filipino students in key literacy subjects, an official of the Department of Education gave assurance that reforms are underway to improve the quality of education in the country. The World Bank, in a synthesis report dated June 21, noted a crisis in Philippine education, citing the results of three international assessments that Filipino students recently took part in. The report noted that more than 80 percent of Filipino children do not know what they should know." The researcher sought to address the problem of low performance among Filipino learners by examining the dimensions and factors of learning engagement on academic performance. The study aims to lessen or eradicate disengaged learners that will later on result in much bigger problems, which include the following: high dropout rates, boredom, isolation, poor class attendance, and retention. It is a challenge for all educators to find ways to help those disengaged learners increase their level of engagement, which has positive effects on their academic performance as they face academic struggles in their studies.

Moreover, the researcher finds it vital to conduct a study about the educational engagement of the learners, for it

¹ PHINMA Cagayan de Oro College, Philippines

* Corresponding author's email: canaolivefaith@gmail.com

sought to address the educational gaps and connects to favorable academic performance based on various studies over the years. Student engagement advancement (growth) in writing and math were significantly positively correlated with student involvement and hope (Reckmeyer, 2024). In addition, the study by Lei *et al.* (2018) demonstrated that all aspects of student engagement such as behavioral, emotional, and cognitive had a moderately good relationship with academic success.

Furthermore, this research sought to investigate how the Grade 6 learners' academic success impacted by their family, school, teachers, and peers. The descriptive-correlational method was employed. A patterned and modified questionnaire was used. The respondents' academic achievement was assessed using the general weighted average from the First and Second Quarters. Ultimately, this paper used the Involvement Theory published in 1984 by Alexander Astin to describe the importance of student involvement. It was stated that a student's learning and personal growth in connection with their motivation and behavior would increase with their degree of participation in college.

Hence, the overall aim this study is to ascertain the degree of dimensions and factors of learning engagement are related to in academic performance. The researcher believes that studying learning engagement is interesting since it possesses strong correlation to raising academic success of the learners. Moreover, it helps educators in identifying the dimensions and factors that motivate or hinder learning involvement that could result in poor performance in school or learners' academic success. It is essential considering it contributes to the advancement and educational success of the learners by promoting and sustaining learning engagement. Furthermore, it is important to level up the learning engagement to achieve their full potential by optimizing learning engagement and fostering educational excellence.

LITERATURE REVIEW

This section covers the information taken from books, articles, periodicals, journal, which are related to the subject of the study. It includes the dimensions and factors of learning engagement: such as behavioral, cognitive, and emotional for dimensions and family, school, teacher, and peer for factors of learning engagement. Further, learners' academic performance is also considered.

Dimension of Engagement

Based on this, Delfino (2019) analyzed the magnitude of student engagement specifically in behavioral, emotional and cognitive engagement. It examined on the correlation between academic achievement and student engagement. Delfino believes that in order to give students opportunities to optimize their involvement in the university, the educator and the educational institution should serve collaboratively. With the goal to deliver relevant learning experiences, it would be beneficial to maximize student participation.

Behavioral

In line with behavioral engagement, French (2022) verified that behavioral engagement can be observed by classroom patterns or signs that an educator could utilize to captivate students' focus. Call and response are a new approach some educators employ skillfully to capture students' interest and bring them back to their lessons or homework. The researcher believes that teachers have the expertise to increase the behavioral engagement of the pupils inside the classroom. There are many suggested ways for teachers to level up the behavioral engagement of the pupils. Like for example, teachers should make the pupils feel that they care about them and aside from that, the teacher should also create an environment conducive to learning.

Additionally, according to Rodriguez *et al.* (2021), giving behavioral engagement greater attention provides a significant impact on learning outcomes, particularly for students enrolled in their first academic cycle and those in the first year after it. Rodriguez thinks that students' experiences, relationships with the university, instructors, coworkers, and any other individual linked to the system of higher education would all improve consequently of this influence on maximizing behavioral engagement. It is vital that one first understands the factors that influence before enacting laws and regulations in order to address the issues impacting education in the nation, particularly the poor academic performance of children.

Cognitive

In the list of student engagement dimensions, last but not the least is the cognitive engagement substantiated by Pohl (2020). Pohl affirms that students' investment and interest in their learning, motivation to learn, goal setting, perception of relevance of learning, effort directed toward learning, and use of self-regulated learning strategies.

Additionally, Bernstein (2023) confirmed that learning occurs more readily when pupils are motivated and involved. There are also various studies which stated that student engagement is a factor that could lead to the learner's academic achievement. One of these studies was made by Gallup. He includes more than 110,000 students from 128 schools participated in the study, which found an important positive connection between student academic accomplishment development (growth) in writing and math.

Emotional

Emotional engagement is a student's passion for studying and a sense of belonging in their classroom and institution. Classrooms should be safe spaces where students may participate in lessons and feel like they belong to a community. Students will participate in class if they believe they are an important part of it. who feel like they are a valued part of the classroom will participate more. Students desire acceptance, friendship, and even recognition from their teachers for their efforts (French

2021). The three aspects of student engagement which are behavioral, cognitive and emotional were investigated in the study. Based on the review of the related literature, these three primary dimensions can enhance learning and promote academic success.

Family Factor

According to Ozcan (2023), educational institution is only an organization that supports education, education starts in the family. Ozcan believes that an individual's intellectual state increases with a family's degree of education. Additionally, the academic achievement of the child will be strongly affected since an educated family will assist the child with his studies. The family is the one that supports the education and schoolwork assigned. A household with a sufficient stage of education can help the child understand the parts of a topic that he fails to comprehend, which will also help the child succeed academically in that subject and in general.

In like manner, Salac *et al.* (2022) discovered that the more parents and kids read together at home, the more reading grows significantly and the better the impact on academic performance. In addition, Erol *et al.* (2018) found that the commitment of parents to the education and support of their children enhances the participation of students at the school level. Erol affirms that dedication to the school improves when parents visit their child at school and express interest in him. In addition, it revealed that most students received very excellent and outstanding grades, and that parents often place substantial impact on their children school performance based on respondents' parental engagement in all indicators. Parental involvement in decision-making, communication, school-community connection, and at-home learning has a big impact on students' academic achievement.

In the list, Li *et al.* (2022), according to their study's findings, the parent-child bond significantly impacted college students' academic achievement both directly and indirectly through the chain-mediating functions of gratitude and psychological capital. Li believes that the chain-mediating model's explanatory power increased substantially, suggesting that the three factors of psychological capital, thankfulness, and parent-child relationships fully explained college students' success in school.

In the same way, Roksa *et al.* (2018) analyses were based on a sample of 728 first-year low-income students at eight four-year universities, the findings suggest that family emotional support is crucial for promoting excellent learning outcomes. Roksa thinks that emotional support from family members strengthens psychological health and increases student involvement, which benefits academic achievement.

Additionally, Azumah *et al.* (2018) stated in their findings that the majority of respondents claimed that their parent or parents oversee their homework, suggesting that parents have a responsibility to shape their children's interactions with teachers and peers so

that they can participate in school activities and support their academic progress by encouraging their peer group. Also, Yan (2022) revealed that for each unit boost in parental interest-based expectations of disadvantaged students, the likelihood of becoming a citywide resilient student rose by 14% and 11% among Grade 6 and 9 students, respectively. High parental expectations, higher educational expenditures, and positive self-perceptions seemed to be strong predictors of adolescent cognitive ability, which is in line with earlier findings.

The findings of the different research studies above under the family factor presented the information on the impact of family on students' academic achievement. According to the aforementioned research studies, the important role that families play in the lives of learners contributes to their children's academic performance.

School Factor

School Factor is the second factor that affects learners' engagement. In line with the study of Arnaiz *et al.* (2020), embedded the fundamental role of the school in improving academic performance, as considered by the movement for effective Schools and Inclusive education, calls into question the decisive characteristic given to some variables in academic performance, such as the socioeconomic origin of families. Together with Ali *et al.* (2020) proved that school plays an important role in the academic success of learners. Their research on how schools might help Pakistani secondary school students' academic performance and parental abilities. The conclusion was reached that children's academic performance was greatly and favorably impacted by the school's role in enhancing parenting abilities.

Li *et al.* (2022) determine that the association between academic achievement and social interactions is mediated by school involvement, which is an intermediary variable. They analyze that self-determination theory is a crucial component that can be employed to explain how social connections impact academic success, according to their analysis of the literature on school engagement.

Moreover, Odum *et al.* (2021) investigate whether there were differences in student involvement between two portions of a course delivered by a single instructor in two distinctly designed Active Learning Classrooms. The study's findings were equivocal regarding whether student engagement in the two ALCs differed but in two redesigned classrooms taught by a seasoned teaching member, it did show increases in student engagement over time with active learning.

In like manner, Alsola-Dulay (2020) detailed the conduct and academic achievement of pupils in the Pangantucan district's San Guinto Elementary School throughout the 2012–2013 school year. Dulay study addressed specific issues with students' behavior in the classroom, including how they behaved toward instructors and other authority figures, their peers, and their work and activities. Additionally, it analyzed the students' academic achievement and assessed whether or not classroom

behavior and academic performance are significantly correlated. It suggested that there is a connection between students' behavior toward their classmates, schoolmates, and classwork and activities and their academic achievement.

Moreover, Wang *et al.* (2022) seek to comprehend the ways in which a number of pertinent school- and student-level factors affect undergraduate engineering students' success outcomes. In order to find answers to the research questions, they carried out a multi-school multilevel survey experiment. Overall, there was a substantial correlation between these parameters and the results of the performance of students.

Teacher Factor

Teacher Factor is the third factor that can affect student engagement, as stated by Ojo (2018), which showed that all of the study's sub-variables revealed a strong positive correlation between teachers' professional attitudes and students' academic achievement. It was discovered that the academic performance of the pupils in Ilorin Metropolis was substantially correlated with the instructors' attitudes toward communication, classroom management, pedagogy, and topic competence.

Ozcan (2023) demonstrated that the teacher has a crucial role in this regard, along with his academic expertise, life outlook, self-adaptation, and concern for education, all of which ignite students' passion for learning. Furthermore, one of the primary elements influencing academic achievement is the teacher. A pupil who has a good relationship with their teacher will grow up to be a self-assured person. A student will feel more at ease and have greater faith in his teacher if he knows that the teacher pays attention to him in every topic. His academic performance will rise as a result of his increased interest in the lesson. A teacher who inspires or demotivates students might lead to quite different outcomes. The most crucial element influencing academic success is a student's love for his teacher.

In like manner, Sinuhin (2022) showed that greater perceived affective support from teachers encourages students enrolled in distant learning to become more cognitively and psychologically engaged. This suggests that student engagement with educational experiences is correlated with supportive instructor behaviors. Furthermore, this implies that even when students and teachers are geographically separated during distance learning, the affective behaviors of the teachers may have an impact on student engagement, which is crucial for better and enhanced learning results.

The outcomes of the several research papers mentioned above under the teacher factor provided information on the important impact of teachers on students' academic achievement. According to the aforementioned study papers, teachers play an essential part in the lives of their students, which results in their success in school.

Peer Factor

According to Moreira *et al.* (2018), students who perform poorly at school are at risk of becoming disengaged. This study examined whether the size of this effect is influenced by students' perceptions of the support for learning they receive at school from teachers and peers. This study represents one of the first demonstrations, using multilevel analyses, of the significant moderating effect of support for learning on the association between academic performance and indicators of cognitive engagement. Students who reported higher levels of support for learning were least affected by overall poor performance in terms of engagement.

Additionally, Shao *et al.* (2024) demonstrated that peer relationships had a positive and indirect relationship with junior high school students' academic achievement through learning motivation and learning engagement, respectively, and that these relationships were directly and significantly related to junior high school students' academic achievement. Through the sequential mediating functions of learning motivation and learning engagement, the results also showed a strong indirect and positive association between junior high school students' academic achievement and their peer relationships (Shao *et al.*, 2024).

According to Double *et al.* (2019), peer assessment improves academic performance when compared to no assessment, peer evaluation enhances academic performance. Meta-regressions also looked at the moderating effects of educational factors and feedback. The findings indicated that peer evaluation's efficacy was impressively consistent across a variety of settings. Peer assessment as a formative practice is supported by these findings, which also point to various implications for its use in the classroom.

Moreover, Moldes (2019), in line with the senior high school students who were graduating, they experienced several elements concerning peer pressure in the classroom and its connection to their academic pursuits in terms of social belongingness, curiosity, parental cultural-parenting orientation, and education. The findings indicated that a number of factors, including peer pressure, may have an impact on kids' academic success in school. This implies that students' attitudes toward their classmates are not directly harmed by peer pressure. Peer pressure in school typically has an impact on students' academic achievement across a range of subjects. Considering all the research studies presented about the factors that affect student engagement, namely family, school, teacher, and peer. Instances that the learners are facing difficulties in their relationship with the following factors and, as a result, perform badly in school academically. The researcher wanted to present the study of Olana *et al.* (2021). In accordance with the study, one important component of the best possible school participation is the support environment provided by peers, instructors, and families. Students generally participate in their education more when they see supportive elements in their peers, teachers, and families.

Academic Performance

The definition of the term academic success, according to Indeed Editorial Team (2021), is that a certain skill set that aids in learning, remembering, and applying information is frequently necessary for academic success. In this study, the researcher used the general average in the First and Second Quarter to identify the academic performance of the learners at District III of Manolo Fortich, Bukidnon. One of the indicators used in this study is the academic grades. As a matter of fact, the Honor Society (2023) stated that grades are a useful tool for gauging a student's proficiency in a particular subject. This is due to the fact that grades are one of the most objective methods of evaluation and when used as an evaluation tool, it can help both teachers and students. A teacher may wish to change the way they present the pertinent content if they observe that the majority of pupils perform poorly on a certain test. Additionally, they might need to rephrase a test questions. Students may need to improve their time management skills if they receive a low grade. For ideas they find difficult to understand, they may also need to have assistance. In the list, Abubakr (2018) conducted a study to evaluate the connections between academic achievement and student participation. The study looks at the relationship between traditional and experimental measures of academic performance and students' level of engagement. Another study that investigated the students' and learners' academic performance was conducted by Mondia (2019), who stated that pupils of Kitcharao District have a high level of classroom engagement and experiences, which influences pupils' performance. Therefore, there is a significant relationship between classroom engagement and experiences with learners' performance. To sum it up, the Grades 4, 5 and 6 learners participated in class activities, communicated well and felt a sense of belongingness with their experiences with their teachers, peers, and learning materials, resulting in improved academic achievement, school retention, and positive socio-emotional functioning.

On the final note, Ambrose (2023) validated that pupils who are actively involved are not only taking in information. They put out intellectual effort and struggle through difficult concepts in an attempt to make sense of what they are studying. Students who are engaged are driven or thrilled to learn, care about the material, and take responsibility for their own education. It is common to think of classroom interaction in limiting terms, such as students asking and responding to questions. Engagement, however, is more intricate. It can look for any signs of engagement through the interaction of three dimensions of a person's attitude or how an individual evaluates a person, idea, or thing. Cognitive, affective, and behavioral dimensions influence an individual's engagement on any given task or day.

This piece of literature review is directed at better conceptualizing and understanding the dimensions and factors of learning engagement that are essential to the

learners' academic success. Learners who are engaged have a bigger chance to academic achievement as based on the different studies presented.

Statement of the Problem

The study attempted to determine the level of dimensions and factors of learning engagement on academic performance in District III of Manolo Fortich, Division of Bukidnon, for the School Year 2023-2024.

Specifically, this study sought to answer the following questions

1. To what level is the learning engagement in terms of its dimensions as to behavioral, cognitive, and emotional?
2. To what level is the learning engagement in terms of the following factors family, school, teacher, and peer?
3. To what level is the learners' academic performance in the First and Second Quarter of School Year 2023-2024?
4. Is there a significant relationship between the dimensions of learning engagement and their academic performance?
5. Is there a significant relationship between the factors of learning engagement and their academic performance?

Theoretical Framework

The Theory of Involvement, proposed by Alexander Astin in 1985, highlighted the importance of student involvement in the academic success and personal development of the learners. Astin describes how the growth and development of students as a result of participating in extracurricular activities is considered in relation to the desired results for higher education institutions. Three components make up the theory's central ideas. The first is the information provided by the student, including their background, demographics, and any prior experiences. The environment of the student, which encompasses all of the experiences a student might have while attending college, comes in second. Last but not least, there are outcomes that address a student's traits, understanding, attitudes, convictions, and values following graduation from college. Additionally, Astin developed five fundamental presumptions regarding engagement. He maintained that involvement necessitates a commitment of both physical and psychological energy, that it is ongoing and that the amount of energy expended differs from student to student, that involvement can have both qualitative and quantitative components, that the benefits of involvement (or the development of the student) are directly proportional to the degree of involvement (in both quality and quantity), and that there is a correlation between student involvement and academic performance (Astin, 2021).

Further, this theory provides an essential supporting structure, a fundamental framework or blueprint for understanding the impact of engagement on the learners' academic success by establishing clear concepts, variables, and indicators related to student involvement, ultimately leading to improved academic outcomes and personal

growth for students. Moreover, the theory served as a basis for comprehending the salient concepts such as levels of engagement, factors influencing engagement, and outcomes of engagement, which were the significant concepts in this study. It also helped the researcher enhance research efficiency in such a way that the theory provided clear direction for the research process as to formulating hypotheses, research questions, analyzing data results, and formulating conclusions and recommendations. Furthermore, the theory serves as a motivation for the researcher, leading to a better understanding of how engagement influences learners' success and development. Astin's theory acts as a foundational guide that helps researchers and educators grasp the critical elements involved in the study of student engagement and its effects. Lastly, the theory provides factual information that helped shape the direction of this study.

MATERIALS AND METHODS

Research Design

The researcher employed the descriptive-correlational method in this investigation. It involves measuring two variables, comprehending their statistical relationship, and evaluating it without the effect of any unrelated variables. It typically seeks to demonstrate how one variable influence or is linked to another. The results of this approach typically show whether or not there is a significant link between these two beliefs. It is never significant if the calculated value is less than the critical value; however, it is always significant if the computed value is greater than the critical value (Canonizado, 2021). Furthermore, according to Gaille (2020), a correlational research study, two variables are measured using a non-experimental approach. Without outside influences, it is the responsibility of the researchers to evaluate and comprehend the statistical link between them. The following are the advantages of a correlational research study: First, the variable goes through a manipulative process; second, two different data collection methods are available with correlational research; third, the results from correlational research are more applicable; fourth, it offers a beneficial starting position for research; fifth, researchers can determine the direction and strength of each relationship; sixth, a survey method is helpful in correlational research; and lastly, the results of a correlational research study are easy to classify.

Study Setting

The study was conducted in District III of Manolo Fortich, Bukidnon, for the School Year 2023-2024. Manolo Fortich is a first-class municipality located in the province of Bukidnon, Philippines. It is situated in the Northern part of the province, bounded by the municipalities of Libona to the North, Malitbog to the East, Sumilao to the South, and Impasugong to the West. The municipality has a total land area of approximately 163.1 square kilometers and is home to a population of around 51,000 people, as of the 2020 census. The majority of the population are

indigenous Bukidnon people, who are engage in farming, livestock raising, and other agricultural activities. Manolo Fortich is known for its nature attractions, such as the Dahilayan Forest Park, which features a zip line, rope courses, and other adventure activities. The municipality is also home to the Del Monte Golf Course, which is one of the largest golf course in Asia.

In terms of education, Manolo Fortich has forty-two (42) public schools and six private schools, including the Northern Bukidnon Community College, now the Northern Bukidnon State College. The municipality is composed of four equally competitive school districts, namely the Manolo Fortich I, II, III, and IV respectively. The research was conducted in the nine (9) selected public elementary schools. The said district is comprised of ten schools. Each of the schools is headed by a principal/school head. The PSDS, School Heads/Principals and teachers are both aiming for a quality education for the learners. The school locations are all accessible. Schools found in hi-way is Plantation Central Elementary School and Dahilayan Integrated School. The schools were on the rough road but still in nearby place are Camp 1 Elementary School, Gauron Elementary School, Lindaban Elementary School, Kalugmanan Elementary School, Kibulawan Elementary School, Bagalangit Elementary School, Sankan Elementary School.

Thus, the choice of the schools was determined by familiarity with the researcher, ease of access, and proximity to the study area. This can allow the creation of rapport with the respondents during the data collection. Accessibility is really important as it influences data collection, contextual understanding, and ethical consideration. It also enhances the quality and validity of the research findings.

Scope and Limitations

This study focused on the level of dimensions and factors of learning engagement on academic performance in Manolo Fortich III District, Division of Bukidnon, SY 2023-2024. The respondents of this study were the one hundred fifty-two (152) Grade 6 learners in the schools where this study was conducted.

The study limits the dimensions of learning engagement, such as behavioral, cognitive, and emotional, as the independent variables as well as the factors of learners' engagement in terms of family, school, teacher, and peer. Moreover, the dependent variables are the academic performance in the First and Second Quarters of the School Year 2023-2024.

Research Respondents

The respondents of the study were the one hundred fifty-two (152) Grade 6 learners in the nine (9) selected public elementary schools at Manolo Fortich III District, Division of Bukidnon School Year 2023-2024. These participants answered the survey questionnaire in the school where this study was conducted. The distribution of respondents by school is shown in Table 1.

Table 1: Distribution of Respondents

District/School	Population	Respondent
Plantation Central Elementary School	211	55
Sankan Elementary School	84	22
Lindaban Elementary School	74	19
Camp 1 Elementary School	61	15
Dahilayan Integrated School	55	14
Kalugmanan Elementary School	67	17
Gauron Elementary School	15	4
Bagalangit Elementary School	11	3
Mampayag Elementary School	13	3
Total	591	152

Research Instruments

The research questionnaire was the instrument used in gathering information on the dimensions and factors of learner engagement on learners’ academic performance in Manolo Fortich, District III of Manolo Fortich, Division of Bukidnon, School Year 2023-2024. It has three parts: The first part of the questionnaire consisted of the three dimensions of learning engagement such as behavioral, cognitive and emotional. This was patterned and modified from the study of Delfino (2019) entitled Student Engagement and Academic Performance of Students of Partido State University. The said questionnaire was patterned and modified by the researcher to suit the educational engagement of the learners at the elementary level. It was composed of ten items in each dimension.

The second part consisted of the four factors of learning engagement in terms of family, school, and teacher factors. This was patterned and modified by Moreira *et al.* (2009) in their study entitled Psychometric Properties of the Portuguese Version of Student Engagement Instrument and lastly, the Peer Factor questionnaire was patterned and modified in the research study of Moldes *et al.* (2019) entitled Students Peer Pressure and their Academic Performance in School The questionnaire was composed of four (4) main parts to measure the four (4) factors of student engagement composed of ten items in each factors.

Moreover, the questionnaires were patterned and modified by the researcher to suit the engagement level of the elementary learners. On the other hand, the instructions to complete answering the questionnaires were to check the box to what extent the level of learner engagement. On the first part of the questionnaire, the respondents were to rate each engagement on the following scale: 3.70-4.00 At All Times, 2.80-3.69 Most of the Time; 1.90-2.79 Sometimes, and 1.00-1.89 Never.

On the other hand, in the second part of the questionnaire, the respondents would rate each of the engagements on the following scale: 3.70-4.00 Strongly Agree, 2.80-3.69 Agree, 1.90-2.79 Disagree and 1.00-1.89 Strongly Disagree.

Lastly, the third part deals with the academic performance

of the learners. The General Weighted Average in the First and Second Quarters were used to determine the academic performance of the learners.

Statistical Treatment

Following the collection of data for this study, the researcher employed the following statistical tools:

The variables in the study were described using descriptive statistics like mean and standard deviation. To ascertain whether there is a substantial correlation between academic achievement and the dimensions and determinants of learning engagement, the Pearson Product Moment Correlation Coefficient (r) was also utilized.

Ethical Considerations

The respondents’ identities were protected and remained anonymous. They are not obliged to write their names in the survey questionnaire rather, there are numbers assigned to each of them for their own identity protection. The researcher obtained informed consent from all participating learners before the conduct of the research. It was also comprehensibly and thoroughly explained to the respondents verbally and in writing. There was a letter given to the respondents, which they were requested to sign as a form of consent. The purpose of the data collection process was determined. Also, the participants were informed that they were free to withdraw from the study at any time.

Additionally, the teachers were told to exclude or substitute any personally identifying information (such names, school names, or contact information) during data analysis and reporting. Participants were given pseudonyms in order to conceal their identities. By being securely stored, employing encryption where required, and allowing only authorized persons access, the obtained data was protected. This is to ensure that information and data are not inadvertently leaked to unapproved parties. To make sure that the research design and data handling practices adhered to ethical norms and guidelines, ethical permission was specifically requested from an institutional review board (IRB) or ethics committee.

RESULTS AND DISCUSSION

Problem 1. To What Level is the Dimension of Learning Engagement as to Behavioral, Cognitive, and Emotional?

Table 2 shows the distribution of the level of learning engagement as to behavioral dimension with an overall mean of 3.04 (SD=0.39) described as Most of the time. This means that the learning engagement in the behavioral dimension is High. This implies that the learner exhibits positive behaviors, adhere to academic tasks and school-related activities, and demonstrate proactive participatory behaviors. This high level of behavioral engagement is associated with positive conduct, attendance, effort, participation in class discussions, involvement in academic and co-curricular activities, and perseverance when faced with challenging tasks.

As observed, the learners’ high behavioral engagement reflects their active participation and positive conduct in various aspects of university life, contributing to a more enriching and fulfilling educational experience. When learners actively participate and demonstrate positive conduct in various university activities, from attending lectures to participating in clubs, they contribute to a more vibrant and fulfilling educational environment. Additionally, French (2022) provides an interesting classroom strategy that can potentially boost behavioral engagement: call and response. Teachers can combat monotony and actively draw learners back into the learning process by implementing various cues like clapping or chimes to refocus students. This aligns with the overall point – effective strategies from educators can significantly improve student engagement, a key factor in a successful educational experience.

Table 2: Distribution of the Level of Learning Engagement as to Behavioral Dimension

Indicators	Mean	SD	Description	Interpretation
I raise my hand to participate in class.	3.12	0.61	Agree	High
I ask questions during class discussion.	2.68	0.72	Disagree	Low
I participate actively in group discussions.	3.11	0.71	Agree	High
I do all the homework at home.	3.10	0.74	Agree	High
I come to class every day.	3.18	0.83	Agree	High
I am taking notes during the lecture.	2.97	0.79	Agree	High

Legend:

- 3.70-4.00 At All Times / Very High
- 2.80-3.69 Most of the Time / High
- 1.90-2.79 Sometimes / Low
- 1.00-1.89 Never / Very Low

Among the indicator I respect my classmates and teachers in the school got the highest mean of 3.28 (SD=0.76), described as Most of the Time. This means that the engagement of learners in this indicator is High. This implies a significant level of learning engagement reflecting a positive attitude toward respecting peers and educators within the school environment. The data indicates that learners value and prioritize respect in their interactions with classmates and teachers, highlighting a culture of mutual regard and positive relationships within the school community. This finding underscores the importance of fostering a respectful and inclusive atmosphere that promotes harmonious interactions and a sense of belonging among learners.

As positively perceived, learners recognize the value of respectful behavior towards their peers and teachers, contributing to a conducive learning environment characterized by mutual respect and cooperation. Learners’ attitudes towards respect are aligned with creating a supportive and inclusive school culture where individuals feel valued, acknowledged, and respected. This emphasis on respect not only enhances the social dynamics within the school but also lays the foundation for positive interactions, effective communication, and a sense of community among learners and educators. Furthermore, this consensus among learners underscores

the importance of promoting values of respect, empathy, and consideration as essential components of a healthy school climate. Learners’ attitudes towards respect are not only positive but also indicative of a culture that values interpersonal relationships, empathy, and inclusivity. Schools can cultivate a positive ethos that fosters a sense of belonging, safety, and well-being for all members of the school community, ultimately enhancing the overall educational experience (Smith, 201)

On the other hand, the indicator I ask questions during class discussion got the lowest mean of 2.68 (SD=0.72), described as Sometimes. This means that the engagement of the learners in this indicator is Low. This suggests that learners are less inclined to actively participate by asking questions during class discussions, which can have implications for their level of curiosity, critical thinking, and engagement with the learning material. This implies a potential lack of learner involvement in seeking clarification, exploring concepts further, and actively contributing to the discourse, which could impact the depth of understanding and interaction within the classroom environment.

As observed, learners may face barriers or challenges in engaging actively in questioning during classroom interactions. There are factors of learners’ participation in asking questions, such as confidence levels, perceived value of questioning, or classroom dynamics, which could be addressed through targeted interventions and instructional strategies. Encouraging learners to ask questions not only fosters a deeper understanding of the subject matter but also promotes a sense of ownership

and agency in their learning process, empowering them to actively engage with the material and their peers in meaningful ways.

Moreover, this finding suggests a potential opportunity for educators to implement strategies that stimulate curiosity and dialogue among students to enhance their learning experiences. Educators can cultivate a culture of intellectual curiosity, collaboration, and knowledge construction within the classroom by creating a supportive environment that encourages and rewards questioning (Mok *et al.*, 2021).

Additionally, according to Rodriguez *et al.* (2021), paying

more attention to behavioral engagement is an important influencer of student performance, especially for those who are in the first cycle of studies and in the first year following this cycle. This impact on maximizing behavioral engagement would bring a series of other improvements in the experience of students, in their relationship with the institution, professors, colleagues, and all stakeholders included in the higher education system. In order to tackle the challenges affecting education in the country, especially the low academic performance of students, it is crucial to initially understand the influential factors before introducing policies and regulations.

Table 3: Distribution of the Level of Learning Engagement as to Cognitive Dimension

Indicators	Mean	SD	Description	Interpretation
I ask questions to clarify the content of the lesson.	3.06	0.76	Agree	High
I express my personal ideas and opinions during class discussions.	2.90	0.73	Agree	High
I share with the class when I know the correct response or answer.	2.57	0.91	Disagree	Low
I ask follow-up questions to the teachers if I don't understand the lesson.	3.04	0.73	Agree	High
I can learn and do well in the class.	3.05	0.68	Agree	High
I have an easy learning and understanding the lesson.	2.95	0.68	Agree	High
I ask my teacher to help me if I can't understand my lesson.	2.97	0.83	Agree	High
I like solving mathematics problems.	2.76	0.82	Disagree	Low
I share to my family what I am learning in the class.	3.12	0.75	Agree	High
I learn a lot in school.	3.34	0.84	Agree	High
Overall	2.97	0.38	Agree	High

Legend:

3.70-4.00 *At All Times / Very High*

2.80-3.69 *Most of the Time / High*

1.90-2.79 *Sometimes / Low*

1.00-1.89 *Never / Very Low*

Table 3 shows the distribution of the level of learning engagement as to cognitive dimension with an overall mean of 2.97 (SD=0.38) described as Most of the Time. This means that the learning engagement in the cognitive dimension is High. This implies that learners are actively involved in cognitive processes related to learning, such as critical thinking, problem-solving, and knowledge acquisition. This suggest that learners are deeply engaged in intellectual tasks, demonstrating a strong commitment to understanding and mastering academic content.

As perceived, learning engagement in the cognitive dimension suggests a positive and proactive approach to learning, where learners are actively involved in processing information, making connections, and applying concepts in meaningful ways. Learners, though some are not attentive enough, are not just passively receiving information but are actively constructing knowledge and engaging with the material at a deeper level.

Additionally, this result entails a strong alignment between instructional practices, curriculum design, and learner-learning outcomes. Educators are effectively designing learning experiences that stimulate learners' cognitive processes, challenge their thinking, and establish a

culture of inquiry and exploration. Students' cognitive engagement not only enhances academic achievement but also cultivates essential skills such as analytical reasoning, creativity, and information processing, preparing learners for success in complex and dynamic learning environments (Joshi *et al.*, 2022).

The indicator, I learn a lot in school got the highest mean of 3.34 (SD=0.84), described as Most of the Time. This means that learners' cognitive engagement in this indicator is High. This implies that learner perceive their learning experiences in school as enriching and valuable, indicating a positive attitude towards acquiring knowledge and engaging with academic content. This reflects a strong commitment to learning and a genuine interest in educational pursuits, highlighting the importance of fostering an environment that promotes active cognitive engagement and meaningful learning experiences.

As perceived, most learners demonstrate a willingness to invest effort and time in acquiring new knowledge and skills. They are motivated to explore, understand, and master academic content. On average, most of the learners are not only receptive to learning but also actively seek opportunities to expand their understanding and deepen their knowledge base.

Moreover, research in support of this result suggests a positive correlation between learners' perceptions of learning and their overall academic performance. Learners who are cognitively engaged in their learning

process are more likely to achieve academic success, develop critical thinking skills, and demonstrate a deeper understanding of the subject matter. There is a strong connection between students' attitudes toward learning and their ability to absorb, process, and apply knowledge effectively, underscoring the importance of nurturing cognitive engagement to enhance educational outcomes (McGowen & Davis, 2022).

On the other hand, the indicator I share with the class when I know the correct response or answer got the lowest mean of 2.57 (SD=0.91), described as Sometimes. This means that learners' cognitive engagement on this indicator is Low. This implies that learners are less inclined to actively participate by sharing their knowledge or responses with the class, which can impact their willingness to contribute to group learning and collaborative discussions. The low mean score implies a potential lack of confidence, participation, or willingness to share insights or answers openly, which could hinder

the development of communication skills, critical thinking, and peer learning opportunities within the classroom environment.

As observed, learners have been reluctant to engage in sharing their knowledge or responses with their peers. There is a potential barrier to effective communication, knowledge exchange, and collaborative learning experiences within the classroom, say for instance, the inability to speak English fluently. Learners face challenges in expressing their ideas, articulating responses, or engaging in dialogue with their classmates.

Relevantly, there is an opportunity for educators to implement strategies that promote a culture of collaboration, peer learning, and active engagement in sharing ideas and responses. Creating a classroom climate that nurtures open communication, respect for diverse perspectives, and a willingness to contribute to group discussions helps enhance students' cognitive engagement, social skills, and academic growth (Sharma *et al.*, 2023).

Table 4: Distribution of the Level of Learning Engagement as to Emotional Dimension

Indicators	Mean	SD	Description	Interpretation
I am having fun in the class.	3.18	0.74	Agree	High
I am confident that I can learn and do well in the class.	3.07	0.76	Agree	High
I feel happy to work with other children in the school.	3.18	0.76	Agree	High
I am interested in all the activities in the school.	2.99	0.81	Agree	High
I feel excited to do the different activities in school.	2.96	0.78	Agree	High
I feel determined if I find the task given by the teacher difficult.	2.91	0.75	Agree	High
I am willing to study harder to learn more.	3.20	0.78	Agree	High
I am happy in my school.	3.20	0.71	Agree	High
I feel safe in my school.	3.13	0.76	Agree	High
I feel excited in going to school every day.	2.99	0.87	Agree	High
Overall	3.08	0.44	Agree	High

Legend:

3.70-4.00 At All Times / Very High

2.80-3.69 Most of the Time / High

1.90-2.79 Sometimes / Low

1.00-1.89 Never / Very Low

Table 4 shows the distribution of the level of learning engagement as to emotional dimension with an overall mean of 3.08 (SD=0.44) described as Most of the Time. This means that the learning engagement in the emotional dimension is High. This implies a strong emotional connection and involvement in the learning process. Emotional engagement encompasses feelings of enjoyment, support, belonging, and attitudes towards teachers, peer, and learning experiences, as emphasized in the literature on learner engagement. Positive emotional experiences can enhance motivation, satisfaction, and overall well-being, contributing to improved learning outcomes and academic success.

As perceived, learners feel a sense of belonging, interest in classes, and positive emotions towards their learning experiences. This positive emotional state can foster a supportive and engaging learning environment that

promotes student motivation, perseverance, and self-efficacy. Emotional engagement plays a crucial role in shaping students' attitudes, behaviors, and responses to academic challenges, influencing their overall learning experiences and outcomes.

Moreover, thriving classrooms go beyond just academics. They foster emotional engagement, where students feel enthusiastic about learning and have a strong sense of belonging. This means creating a safe and supportive community where participation is encouraged. When students feel valued – whether through friendships, acceptance, or even a simple “good job” from their teacher – they're more likely to actively engage with the lessons and materials (French, 2022).

The indicator I am willing to study harder to learn more got the highest mean of 3.20 (SD=0.78; SD=0.71), described as Most of the Time. This means that learners' emotional engagement in these indicators is High. This implies that learners exhibit a strong willingness to invest effort in their studies. Learners' dedication and commitment to giving more time and effort to their studies can deepen their ability to understand the

subjects, leading to improved academic performance and accomplishments.

Moreover, the indicator I am happy in my school also got the highest mean of 3.20 (SD=0.78; SD=0.71), described as Most of the Time. This means that learners' emotional engagement in these indicators is High. This implies that learners' express happiness within the school environment. Learners' being happy in school has positive implications for academic performance. It increases learners' motivation and eagerness to participate in class discussions towards academic performance and achievements. Positive emotional engagement in these indicators reflects learners' motivation, satisfaction, and overall well-being, which are important factors influencing their learning experiences and academic performance.

As perceived, a positive emotional state can enhance learners' commitment to learning, perseverance, and overall satisfaction with their educational experiences. Emotional engagement in these areas is necessary for creating a supportive and conducive learning environment that promotes student motivation, engagement, and well-being. Learners' emotional connection to their studies and school environment influences their attitudes, behaviors, and overall engagement in the learning process.

Furthermore, research has shown that emotional engagement plays a significant role in shaping students' attitudes, behaviors, and learning outcomes. High emotional engagement extends beyond academic performance to impact students' overall well-being, social interactions, and self-efficacy. This underscores the significance of nurturing positive emotional connections and experiences within educational practices to enhance

students' holistic development and academic success (Nennig *et al.*, 2023).

On the other hand, the indicator I feel determined if I find the task given by the teacher difficult got the lowest mean of 2.91 (SD=0.75) described as Most of the Time. This means that it still indicates a relatively High level of emotional engagement in response to challenging tasks. This finding implies learners' perseverance, determination, and emotional response to academic difficulties, reflecting their willingness to tackle challenges and overcome obstacles in their learning journey, though they can still persevere more. This result implies that most, not all, learners exhibit a positive emotional response to academic difficulties, showcasing their motivation, grit, and commitment to learning.

As observed, learners' emotional engagement in challenging situations helps them develop a sense of resilience, self-efficacy, and a growth-oriented mindset, which are key attributes for navigating complex academic tasks and achieving success. Learners' determination when faced with difficult tasks reflects their emotional investment in learning, their willingness to persevere, and their ability to overcome setbacks, all of which contribute to their overall academic progress and development.

Furthermore, the high emotional engagement observed in response to challenging tasks indicates that students' emotional experiences play a significant role in shaping their responses to academic difficulties. The willingness to persist and feel determined when tasks are difficult reflects a deep emotional connection to the learning process and a strong sense of intrinsic motivation and perseverance (Joshi *et al.*, 2022).

Table 5: Summary of the Level of Dimensions of Learning Engagement

Indicators	Mean	SD	Description	Interpretation
Behavioral	3.04	0.39	Agree	High
Cognitive	2.97	0.38	Agree	High
Emotional	3.08	0.44	Agree	High
Overall	3.03	0.34	Agree	High

Legend:

3.70-4.00 At All Times / Very High

2.80-3.69 Most of the Time / High

1.90-2.79 Sometimes / Low

1.00-1.89 Never / Very Low

Table 5 shows the summary of the of the level of learning engagement as to behavioral, cognitive, and emotional dimensions with an overall mean of 3.03 (SD=0.34), interpreted as High. This means that the learning engagement in these dimensions is High. This implies that a high level of engagement among learners across these dimensions is a reflection of their active involvement in behavioral, cognitive, and emotional aspects of learning. This suggests that learners are motivated, attentive, and invested in their educational experiences, which can contribute to improved academic performance and overall learning outcomes. This further implies a positive correlation between learners' active involvement and their

academic performance, while taking into consideration the importance of nurturing engagement across multiple dimensions for enhanced learning outcomes.

As observed, most of the learners are actively participating in various aspects of the educational process. This high level of engagement indicates that learners are not just passively receiving information but are actively involved in applying, reflecting, and connecting knowledge across different dimensions. The data implies that learners are demonstrating a holistic engagement that encompasses behavioral actions, cognitive processes, and emotional responses, fostering a comprehensive and enriched learning experience that goes beyond mere academic content delivery.

In fact, research such as that by Bernstein (2022), confirmed that student engagement plays a crucial role in enhancing motivation and facilitating effective learning processes, highlighting the significance of fostering high levels of engagement among students.

Among the indicators, the emotional dimension got the highest mean of 3.08 (SD=0.44), interpreted as High. This means that learners' emotional engagement is High. This implies that learners exhibit a strong emotional connection to their learning experiences, encompassing feelings of enthusiasm, interest, satisfaction, and enjoyment. This indicates a positive emotional state that can enhance learners' motivation, perseverance, and overall well-being within the educational context. This implies that learners' emotional engagement contributes significantly to their overall level of engagement in the learning process.

As observed, positive emotions, such as joy, trust, and satisfaction, have been associated with increased cognitive engagement and academic achievement. Cultivating a positive emotional environment within educational settings can lead to improved learning outcomes, increased learner participation, and a more supportive and inclusive learning atmosphere. Emotional engagement plays a vital role in shaping learners' attitudes, behaviors, and learning experiences, emphasizing the importance of addressing emotional well-being in educational practices.

Relevantly, research has shown that positive emotions play a crucial role in fostering engagement, promoting learning, and influencing learners' attitudes toward academic tasks and challenges. There are significant emotional factors influencing students' learning processes and outcomes. One is the positive emotional experiences of the learners (Dubovi & Tabak, 2021).

On the other hand, the cognitive dimension got the lowest mean of 2.97 (SD=0.38) interpreted as High. This means that learners' cognitive engagement is the lowest level of engagement among the other dimensions, though still indicates High level. This implies that some learners might be passively taking in information rather than actively processing and critically analyzing it. This could be due to factors like poor instructional design, lack of challenge in the coursework, or insufficient opportunities for applying knowledge.

As observed, some learners are falling into a passive learning trap, simply absorbing information without truly grappling with it. This could be caused by a few factors: the way the material is presented might not be engaging enough, the coursework itself might lack challenge, or there might be a shortage of opportunities to actually apply the knowledge they're learning.

Moreover, this finding is in line with the importance of cognitive engagement in learning, as revealed by Greene and Miller in 1996 as cited in the study of Pohl (2020), who emphasized the significance of moving from shallow to meaningful cognitive processing for effective learning outcomes. The lower mean in the cognitive dimension suggests a potential area for improvement in enhancing students' cognitive investment, interest, motivation, goal setting, and use of self-regulated learning strategies.

Also, Delfino (2019) analyzed the extent of student engagement, specifically in behavioral, emotional, and cognitive engagement. It investigated the correlation between student engagement and academic performance. According to Delfino, the teacher and the school should work closely together to give the students opportunities to get the most out of their time at university. In order to provide relevant learning experiences, it would be beneficial to maximize student participation.

In fact, Bernstein (2023) confirmed that when students are engaged, they are motivated, and learning happens more easily. There are also various studies that state that student engagement is a factor that could lead to the learners' academic achievement. This study examined the three dimensions of student engagement, which are behavioral, emotional, and cognitive. Based on the review of the related literature, these three primary dimensions can enhance learning and promote academic success.

Problem 2. To What Level are the Factors of Learning Engagement as to Family, School, Teacher, and Peer?

Table 6: Distribution of the Level of Factors of Learning Engagement as to Family

Indicators	Mean	SD	Description	Interpretation
My family are there for me when I need them.	3.26	0.85	Agree	High
My family wants to know if something good happens at school.	3.19	0.76	Agree	High
My family is willing to help me if I have problems at home.	3.13	0.84	Agree	High
My family wants me to keep trying when things are tough at school.	3.16	0.86	Agree	High
My family gives me reward when I get good grades	3.02	0.92	Agree	High
My family encourages me to do my best in school.	3.27	0.77	Agree	High
My family is very supportive to my studies.	3.19	0.76	Agree	High
My family is proud of my achievements in school.	3.28	0.76	Agree	High
My family encourages me to join in all the activities in the school.	3.14	0.73	Agree	High
My family always attend parent-teacher meeting.	2.93	0.88	Agree	High
Overall	3.16	0.47	Agree	High

Legend:

- 3.70-4.00 *Strongly Agree / Very Positive*
- 2.80-3.69 *Agree / Positive*
- 1.90-2.79 *Disagree / Negative*
- 1.00-1.89 *Strongly Disagree / Very Negative*

Table 6 shows the distribution of the level of factors of learning engagement in terms of family with an overall mean of 3.16 (SD=0.47) described as Agree. This means that the level of family as a factor of learning engagement is Positive. This implies that family plays a crucial role in shaping learners' academic experiences and outcomes. This indicates that there is a significant influence of family on learners' academic experiences and outcomes through behavioral, cognitive and emotional support, role modeling, and parental involvement lead their children to academic success.

As perceived, providing opportunities for family participation in school activities and creating supportive learning environments that foster positive family-school relationships can be achieved through promoting open communication between families and schools. Family factors, such as parental involvement, family structure, and socioeconomic status, can significantly impact learners' academic outcomes.

Research has shown that family background, including socioeconomic status, resources, and ability, can affect the quality of educational opportunities available to children (Lara & Saracosti, 2019). The impact of socio-economic backgrounds on academic success is complex and wide-ranging. Students from more affluent homes routinely perform better academically than their less fortunate peers, according to numerous studies. This disparity may be caused by differentiating factors such parental participation, the availability of educational resources, and involvement in extracurricular activities. However, it's important to understand that family incomes shouldn't serve as a substitute for academic achievement (Munir, Jamal & Iqbal, 2023).

The indicator, my family is proud of my achievements in school got the highest mean of 3.28 (SD=0.76), described

as Agree. This means that the level of family as a factor of learning engagement in this indicator is positive. This implies that family pride in learners' achievements significantly impacts their engagement in school. This indicates that family engagement, as a factor affecting learners' engagement, is positive. This implies that family engagement, particularly in recognizing learners' achievements, plays a crucial role in fostering learners' sense of belonging and motivation in school.

Relevantly, research has shown that family engagement is positively associated with learners' academic achievement, behavior, and social development. Effective family engagement, such as two-way communication and incorporating family input into decision-making processes, can create a culture of collaboration and communication with families, schools, and students (Edutopia, 2022).

On the other hand, the indicator My family always attend parent-teacher meeting got the lowest mean of 2.93 (SD=0.88), described as Agree. This means that the level of family as a factor of learning engagement in this indicator is Positive. This implies that the level of family as a factor of learning engagement in this indicator is positive. This indicates that family involvement in parent-teacher meetings is not as strong as in other indicators, but it is still a significant factor of learning engagement. It further implies that there is room for improvement in encouraging families to participate in parent-teacher meetings, as these meetings are crucial for building relationships between families and schools, improving communication, and addressing academic concerns.

Additionally, research has shown that parental involvement, such as attending parent-teacher conferences, is positively associated with students' academic achievement, behavior, and social development (Hawkins, 2021). Therefore, schools and educators should prioritize strategies to increase family attendance at parent-teacher meetings, such as providing flexible scheduling options, offering translation services, and creating a welcoming and inclusive environment for all families.

Table 7: Distribution of the Level of Factors of Learning Engagement as to School

Indicators	Mean	SD	Description	Interpretation
The rules in my school are fair.	2.97	0.87	Agree	High
Other students in the school like me the way I am.	2.82	0.81	Agree	High
Teachers are willing to listen to the students.	3.26	0.73	Agree	High
Other students in the school care about me.	2.69	0.86	Disagree	Low
Students at my school are there for me when I need them.	2.84	0.81	Agree	High
Most of what is important to know I learn in school.	3.20	0.72	Agree	High
Going to school is important for me.	3.46	0.61	Agree	High
Adults at my school treat students fairly.	2.98	0.77	Agree	High

Legend:

- 3.70-4.00 *Strongly Agree / Very Positive*
- 2.80-3.69 *Agree / Positive*
- 1.90-2.79 *Disagree / Negative*
- 1.00-1.89 *Strongly Disagree / Very Negative*

Table 7 shows the distribution of the level of factors of learning engagement as to school with an overall mean of 3.07 (SD=0.43) described as Agree. This means that the level of school as a factor of learning engagement

is Positive. This means that schools play a crucial role in promoting learner engagement. This implies that schools have a significant impact on learners' academic outcomes, as learners' engagement has been positively associated with academic achievement and success. The implications of this finding are that schools should prioritize strategies to enhance learner engagement, such as fostering positive teacher-learner relationships, promoting a supportive learning environment, and providing opportunities for learner voice and choice.

Additionally, schools should consider the individual needs and experiences of their students, as factors such as socioeconomic status, family background, and prior academic experiences can influence student engagement. By addressing these factors and implementing evidence-based strategies to promote student engagement, schools can help ensure that all students are successful academically and socially (Delfino, 2019).

The indicator, Going to school is important for me got the highest mean of 3.46 (SD=0.61), described as Agree. This means that the level of school as a factor affecting students' engagement in this indicator is Positive. This implies that learners who view going to school as important are more likely to engage in school activities and be motivated to learn. One of the implications is that schools should consider the individual needs and experiences of their learners, as factors such as socioeconomic status, family background, and prior academic experiences can influence student engagement. Research has shown that student engagement is positively associated with academic achievement, behavior, and social development (Bernstein, 2021). Therefore, schools should prioritize strategies to enhance learner engagement, such as fostering positive teacher-student relationships,

promoting a supportive learning environment, and providing opportunities for student voice and choice.

On the other hand, the indicator Other students in the school care about me got the lowest mean of 2.69 (SD=0.86) described as Disagree. This means that the level of school as a factor of learners' engagement in this indicator is Negative. This implies that learners may not feel a sense of belonging or connection to their school community, which can negatively impact their academic performance and overall well-being. Therefore, a low level of engagement in this indicator may imply a need for interventions aimed at improving the school climate and fostering positive relationships among learners.

Research has shown that student engagement is a multidimensional construct that encompasses affective, behavioral, and cognitive dimensions and is influenced by personal and contextual factors such as school climate, relationships with teachers and peers, and academic challenges. A positive school climate, characterized by supportive relationships, high academic expectations, and opportunities for student involvement, has been associated with higher levels of student engagement and academic achievement (Gray & Diloreto, 2018).

In furtherance, Arnaiz *et al.* (2020) called into doubt the decisive characteristic assigned to specific variables in academic achievement, such as the socioeconomic origin of families, and enshrined the vital role of the school in enhancing academic performance as seen by the movement for effective schools and inclusive education. Together with Ali *et al.* (2020) proved that school plays an important role in the academic success of learners. Their study concluded that the school's role in children's academic performance was significantly and positively influenced by the school's participation in enhancing parenting abilities.

Table 8: Distribution of the Level of Factors of Learning Engagement as to Teachers

Indicators	Mean	SD	Description	Interpretation
My teachers are there for me when I need them.	3.13	0.80	Agree	High
My teachers are interested in me as a person, not just as a student.	3.02	0.78	Agree	High
My teachers understand and care to all the students	3.23	0.71	Agree	High
My teachers enjoy talking to us.	3.19	0.74	Agree	High
My teachers give me a reward if I perform well.	2.85	0.79	Agree	High
My teachers are open and honest with me.	3.20	0.72	Agree	High
My teachers always there to motivate us to do our best.	3.27	0.75	Agree	High
My teachers acknowledge student effort through recognition and praise.	3.16	0.71	Agree	High
My teachers show positive attitude at all times.	3.10	0.66	Agree	High
My teachers use varied activities in presenting the lesson.	3.09	0.69	Agree	High
Overall	3.12	0.44	Agree	High

Table 8 shows the distribution of the level of factors of learning engagement as to teachers with an overall mean of 3.12 (SD=0.44) described as Agree. This means that the level of teachers as a factor of learning engagement is Positive. If the teacher is highly engaged in the learners' learning process, it creates a positive academic

performance and boosts the learning outcomes. Using their knowledge, collective experience, discernment, and measurable student engagement statistics like attendance rate, suspensions, and academic performance, teachers are always looking for ways to enhance their teaching strategies. The idea that teachers have a significant impact

on how students feel at school, and how they think about themselves as students supported by this finding. The causal link also empowers teachers to adapt their practices in response to the individual teaching context they find themselves in and provides a method for feedback. It proves that student engagement, measured by the SEI, is a very effective tool for teachers to evaluate the impact of their practice (Thomas & Nair (2022).

Moreover, one of the best ways to address chronic absenteeism is to building rapport with students and become their mentor. Knowing that their teacher appreciates them and will help them succeed increases students' motivation to attend class. Enhancing these connections and school engagement can boost academic performance as well. You can increase your pupils' intrinsic motivation to learn by developing a personal connection with them. Students acquire a lifelong love of studying when they are engaged in their work and seeking to become experts in it. Students are led for a successful academic career when they put a greater value on mastery and less on grades (Waterford.org., 2024).

The indicator, my teachers always there to motivate us to do our best got the highest mean of 3.27 (SD=0.75), described as Agree. This means that the level of teachers as a factor of learning engagement in this indicator is Positive. This implies that teachers are very important instruments in promoting learning engagement. This indicates that teachers' behaviors, attitudes, and teaching practices can significantly impact students' motivation, interest, and participation in learning activities.

Studies have indicated that favorable teacher-student interactions, supportive classroom environments, and effective instructional strategies can enhance student

engagement and academic outcomes (Delfino,2019). Therefore, teachers need to develop and implement student engagement strategies, such as providing opportunities for student voice and choice, promoting active learning, and cultivating a good rapport with students.

On the other hand, the indicator My teachers give me a reward if I perform well got the lowest mean of 2.85 (SD=0.79) described as Agree. This means that the level of teachers as a factor of learners' engagement in this indicator is Positive, though this implies that the use of rewards by teachers may not be an important driver of engagement, and other factors may be more important. This indicates that the use of rewards may primarily affect behavioral engagement, but it may not necessarily lead to increased emotional or cognitive engagement.

Studies have indicated that student involvement is a complex construct that involves multiple dimensions, including behavioral, emotional, and cognitive engagement. Therefore, while rewards may have some positive effects on student behavior, they may not be the most efficient method to promote student engagement. Instead, other elements include having good relationships with instructors, supportive learning environment, and opportunities for student voice and choice, maybe more important for promoting student engagement (Lombardi *et al.*, 2019).

In furtherance, Ozcan (2023) revealed how teachers affect students' academic performance and stating that teachers had a key to knowledge and attitude towards life. If a teacher pursues his profession with great devotion, he will be able to impact every student. Students that have a good relationship with their teachers will feel more confident.

Table 9: Distribution of the Level of Factors of Learning Engagement as to Peer

Indicators	Mean	SD	Description	Interpretation
I spend much time with my group friends.	3.03	0.89	Agree	High
My friends and I share problems with each other.	2.95	0.87	Agree	High
My friends give me advice in my problems.	2.97	0.87	Agree	High
My friends and I do school activities together.	3.00	0.85	Agree	High
My friends and myself thoughts and opinions to strengthen our bond.	3.05	0.81	Agree	High
My friends help me to improve my academic performance in school.	2.96	0.81	Agree	High
My friends inspire me to work hard in my studies.	2.96	0.82	Agree	High
My friends always help each other with academic difficulties.	2.98	0.81	Agree	High
My friends and I are always focus in our studies.	3.12	0.73	Agree	High
My friends assist me in group work.	3.01	0.86	Agree	High
Overall	3.00	0.54	Agree	High

Legend:

3.70-4.00 Strongly Agree / Very Positive

2.80-3.69 Agree / Positive

1.90-2.79 Disagree / Negative

1.00-1.89 Strongly Disagree / Very Negative

Table 9 shows the distribution of the level of factors of learning engagement as of peer with an overall mean of 3.00 (SD=0.54) described as Agree. This means that

the level of peer as a factor of learning engagement is Positive. This implies that learners perceive their peer as an important factor that affects their level of involvement, participation, and interest in their academic activities. This indicates that learners tend to acknowledge the positive influence of their peers on their engagement. This indicates that learners believe that interacting with their peers, collaborating on projects, and

engaging in discussions or group activities can enhance their motivation, interest, and overall engagement in their learning process.

As observed, interacting with peers, collaborating on projects, and engaging in discussions or group activities can significantly enhance learners' motivation, interest, and overall engagement in their learning process. Learning engagement, motivation, and academic achievement can be enhanced through collaborative learning activities, peer interaction, and group work. These strategies can foster a sense of belonging and community among learners, promote critical thinking and academic achievement, and increase learners' motivation and interest in their learning process.

Research has shown that collaborative learning can be an effective teaching strategy that promotes student engagement, critical thinking, and academic achievement. A study by Nayir (2018) discovered that students' levels of motivation, satisfaction, and engagement were higher when they took part in cooperative learning activities compared to those who worked individually.

Among the indicators, my friends and I are always focus in our studies got the highest mean of 3.12 (SD=0.73), described as Agree. Consequently, the level of peer as a factor of learning engagement in this indicator is Positive. This implies that, on average, learners agree that their friends and themselves are often focused on their studies. It implies that there is a noteworthy degree of agreement among the learners that their peer play a role in promoting a focused and studious environment. However, the moderate variability in responses and the non-exceptionally high mean score suggest that there may still be room for improvement and further fostering of a consistently focused study culture within the peer group. As perceived, peer-to-peer learning is thought of as a mutual learning and training approach in which

participants at the same level coach and learn from one another. Because it enables individuals to work through new ideas and exchange ideas with their peers, it is a successful instrument for improving their skills and knowledge in the workplace. Peer-to-peer learning can benefit organizations by promoting a collaborative work environment, improving social connections among peers, and fostering a knowledge-sharing culture.

Research has shown that peer-to-peer learning can be particularly effective in the workplace. More than half of employees turn to their peers for problem-solving and learning opportunities, per a Harvard Business Review survey. Encouraging employees to share knowledge can improve the skill set of teams, cultivate a collaborative work environment, and build social connections among peers (Reeves, 2022).

On the other hand, the indicator My friends and I share problems with each other got the lowest mean of 2.95 (SD=0.87), described as Agree. Consequently, the level of peer as a factor of learning engagement in this indicator is Positive. This means that, on average, learners agree to some extent that they share problems with their friends. It suggests that there is a certain level of agreement among the learners that their peer play a role in providing support and a platform for problem-sharing. However, it is important to note that the mean score of 2.95 is not exceptionally positive, indicating that there may still be room for improvement in terms of the influence of peers on learning engagement in this particular indicator. While learners generally agree that they share problems with their friends, the level of involvement and depth of sharing might vary among individuals. Peer learning can foster active engagement, promote critical thinking and problem-solving skills, and create a supportive learning community (Tullis & Goldstone, 2020).

Table 10: Summary of the Level of Factors of Learning Engagement

Indicators	Mean	SD	Description	Interpretation
Family	3.16	0.47	Agree	High
School	3.07	0.43	Agree	High
Teacher	3.12	0.44	Agree	High
Peers	3.00	0.54	Agree	High
Overall	3.09	0.39	Agree	High

Legend:

3.70-4.00 Strongly Agree / Very Positive

2.80-3.69 Agree / Positive

1.90-2.79 Disagree / Negative

1.00-1.89 Strongly Disagree / Very Negative

Table 10 shows the summary of the level of factors of learning engagement with an overall mean of 3.09 (SD=0.39), interpreted as Positive. This means that the level of factors affecting learning engagement in terms of family, school, teacher, and peer is positive. This implies that on average, learners agree that these factors have a significant influence on their engagement. It indicates that learners perceive the combined impact of family,

school, teacher, and peers as being substantial in shaping their level of involvement, motivation, and interest in their academic activities. The positive level of factors of learning engagement implies that multiple aspects of their educational environment contribute to their overall engagement levels. For example, supportive family relationships, a conducive school environment, effective teaching practices, and positive peer interactions all play a role in fostering student engagement.

Among the variables Family got the highest mean of 3.16 (SD=0.47), interpreted as Positive. This means that the level of family as a factor of learning engagement in this indicator is Positive, this is the highest among

the factors being studied. This implies that, on average, learners agree that their family plays a significant role in influencing their engagement. It suggests that learners perceive their family as a crucial factor that contributes to their level of involvement, motivation, and interest in their academic activities. Although the mean score of 3.16 is not exceptionally positive, it is the highest among the factors being studied. This implies that learners place a relatively greater emphasis on the influence of their family compared to other factors such as peers, school, or teachers.

According to Ozcan (2021), education begins in the family, while the school is merely an institution that assists with education. A child's success in school will be greatly impacted by an educated family since they will assist the child with his education. The family provides support for the school's program and assignments. In addition to supporting the child excel academically regarding the subject and in general, a family with a sufficient degree of education may assist the young person understand the portions of the subject that he does not understand.

On the other hand, the variable Peer got the lowest mean of 3.00 (SD=0.54) described as Agree. This means that, in terms of this specific indicator, the level of peer as a factor

of learning engagement is relatively positive, although it is considered to have the lowest level of effect on learners' engagement among other factors in the context of this study. This indicates that, on average, learners agree that their peers play a significant role in influencing their engagement. It suggests that learners perceive their peers as an important factor that contributes to their level of involvement, motivation, and interest in their academic activities. This implies that while there is a relatively high level of agreement among learners regarding the influence of peers on their engagement, there may be variations in the specific ways in which peer impact individual learners' levels of involvement and motivation.

Double *et al.* (2020), according to the findings, peer assessment enhances academic achievement when compared to no assessment. The research results showed that peer evaluations performed impressively consistently effective in a variety of contexts. These findings support peer evaluation as a formative practice and raise several implications with its integration into the classroom.

Problem 3. To What Level is the Learners' Academic Performance (GWA) in the First and Second Quarters of School Year 2023-2024?

Table 11: Distribution of the Level of Learners' Academic Performance in the 1st Quarter of S.Y. 2023 – 2024

Level of Learners' Performance	First Quarter	
	Frequency	%
Outstanding	24	15.79
Very Satisfactory	70	46.05
Satisfactory	41	26.97
Fairly Satisfactory	17	11.18
Did Not Meet Expectations	0	0.00
Total	152	100
Mean	85.31	
Sd	4.03	

Table 11 shows the distribution of the level of learners' academic performance in the First Quarter of the School Year 2023 – 2024 among 152 learners. Most of the learners have a Very Satisfactory performance both in the first quarter with a frequency of 70 (46.05%) of the total population. The high number of "very satisfactory" performance outcomes indicates that the majority of learners have succeeded academically. This shows that these learners have done well and consistently achieve the requirements. Also, learners have demonstrated a high level of achievement and proficiency in the subject matter or skills being assessed.

Moreover, there are learners who have a Fairly Satisfactory performance both in the first with a frequency of 17 (11.18%) of the total population. The prevalence of "fairly satisfactory" performance outcomes suggests that it is not exceptionally high but it is also considered low. This indicates that these students meet the expectations but may have room for improvement.

On the other hand, no learners have the performance of Did Not Meet Expectations in the first quarter. This means that no learners are struggling to grasp the essential concepts and skills. Furthermore, the result indicates that the school's teaching methods and support systems are effective in helping students meet their academic goals and that no students are struggling to grasp the essential concepts and skills.

Several studies posed some significant findings on why students perform very satisfactorily in class. Studies have shown that students who use self-regulated learning strategies, such as reviewing and reflecting on their previous performances, are more likely to achieve very satisfactory performance. These strategies help students stay motivated and focused on their goals (Marie *et al.*, 2022).

Moreover, students who have satisfactory study habits, such as reviewing and reflecting on their previous performances, are more likely to achieve very satisfactory performance (Etcuban *et al.*, 2019).

Effective learning strategies, such as setting goals, reviewing notes, and practicing regularly, are essential for achieving a very satisfactory performance.

Students who use these strategies are more likely to stay organized and focused, leading to better academic outcomes (Oco, 2024).

Table 12: Distribution of the Level of Learners’ Academic Performance in the 2nd Quarter of S.Y. 2023 – 2024

Level of Learners’ Performance	Second Quarter	
	Frequency	%
Outstanding	37	24.34
Very Satisfactory	75	49.34
Satisfactory	23	15.13
Fairly Satisfactory	17	11.18
Did Not Meet Expectations	0	0.00
Total	152	100
Mean	86.68	
Sd	4.33	

Table 12 shows the distribution of the level of learner’s academic achievement during the Second Quarter of the School Year 2023-2024. Most of the learners have a Very Satisfactory performance in the Second Quarter with a frequency of 75 (49.34%) of the total population. Most learners have reached an excellent level of academic achievement, as indicated by the predominance of “very satisfactory” performance outcomes. This means that the majority of learners have done well and consistently fulfill the requirements. Also, learners have demonstrated a high level of achievement and proficiency in the subject matter or skills being assessed.

Moreover, there are learners who have a Fairly Satisfactory performance with a frequency of 17 (11.18%) of the total population. The prevalence of fairly satisfactory performance outcomes suggests that it is not exceptionally high, but it is also not considered low. This indicates that these students meet the expectations but may have room for improvement.

On the other hand, no learners have the performance of Did Not Meet Expectations in the second quarter. This means that no learners are struggling to grasp the essential

concepts and skills. Furthermore, the result indicates that the school’s teaching methods and support systems are effective in helping students meet their academic goals and that no students are struggling to grasp the essential concepts and skills.

According to Peñeda *et al.* (2019), individual learning and development with the help and assistance provided by those people around them can lead to better academic performance. However, there are factors to take into consideration, such as classmates’ behavior, method of teaching, and parental supervision, which must exist to achieve beneficial outcomes in connection to the achievement of pupils in school. Educators will be able to determine strategies and interventions that will improve their teaching approaches and methodologies attributed to the distinguished factors influencing academic in a laboratory school. Hence, the educational institution needs to be developed into an atmosphere that encourages learning by improving classmates’ conduct towards each other and reaching out to those who struggle with learning.

Table 13: Summary of the Level of Learners’ Academic Performance in the First and Second Quarters

Grading Period	Mean	SD	Description/Interpretation
First Quarter	85.31	4.03	Very Satisfactory
Second Quarter	86.68	4.33	Very Satisfactory
Overall	85.99	4.23	Very Satisfactory

Legend:

90-100 Outstanding

85-89 Very Satisfactory

80-84 Satisfactory

75-79 Fairly Satisfactory

Below 75 Did Not Meet Expectations

Table 13 presents the summary of the level of learners’ academic performance in the First and Second Grading Periods with an overall mean of 85.99 (SD=4.23), described as Very Satisfactory. This indicates that the

learners’ academic performance, on average, has been highly satisfactory throughout this period. The very satisfactory overall mean score implies that a majority of the learners have exhibited a high level of academic success and demonstrated competence in their studies. This indicates that the students have continuously met or surpassed the minimum requirements, exhibiting exceptional achievement throughout a number of subjects and assessments.

According to the extremely satisfactory assessment, the

schools and educators have used successful teaching and learning strategies, providing a comfortable learning atmosphere for the students. It reflects the dedication and commitment of the educators in facilitating the learners' academic success.

In addition, research has indicated that active, student-centered instructional strategies have been proven more effective at changing behavior than traditional lecturing methods (National Center for Education Statistics, 2020). In particular, the academic performance in the Second Quarter received a higher mean grade rating of 86.68 (SD=4.33) described as Very Satisfactory. This indicates that learners' academic performance in the second quarter was high, though not exceptionally high. This implies that they continuously achieved or excelled the expected standards set forth and shown an extensive understanding of the course contents. This suggests that the learners displayed a greater degree of determination, attention, and dedication to their studies throughout the second quarter. They probably demonstrated an outstanding work ethic, participated actively in educational endeavors, and showed a desire to learn.

As observed, the very satisfactory academic performance of most of the learners during the second quarter can be attributed to several factors. While other students who have been rated very satisfactory have satisfactorily performed academically, other students who have gained such ratings were due to additional and bonus points awarded to them for having been participating in co-curricular and extra-curricular activities inside and outside the school. Even though this is the researcher's observation, this does not invalidate the efforts of the teachers in employing differentiated instruction and technologically-enhanced instruction in their classes.

Additionally, the implementation of technology-enhanced learning tools and digital resources, as emphasized in a report by the Department of Education, has likely facilitated student engagement and academic progress, leading to improved performance during the second quarter. Additionally, the focus on formative assessments and feedback mechanisms, as recommended in educational research by Brown and Lee (2020), may

have played a role in guiding student learning and enhancing academic outcomes throughout the quarter.

Meanwhile, in the First Quarter, the learners received a lower overall mean grade of 85.31 (SD=4.03) described as Very Satisfactory. This indicates that the learners' academic performance during the first quarter was still highly satisfactory, despite a bit lower compared to the second quarter. The very satisfactory total mean grade implies that the learners did well and achieved a good level of academic success and showed proficiency in their studies throughout this period. The very satisfactory rating suggests that the learners performed well across various tasks and assessments in the first quarter, meeting or slightly exceeding the expected standards. It indicates that they had a solid grasp of the curriculum content and were able to apply their expertise and abilities effectively. Moreover, the very satisfactory rating implies that the learners demonstrated and attained good academic performance and, at the same time, showed a positive attitude toward learning and were actively involved throughout the first quarter (DepEd, 2024).

In addition, the increase in academic performance in school has been associated with the implementation of school feeding programs. The School Feeding Program has proven to have an advantageous effect on encouraging learners to attend school. Academic performance improved as students perform better as a result of the school-based feeding program. The school-based feeding program was very helpful, especially to those students from low-income families who often attend class without breakfast and refuse to pay attention or have unwillingness to follow the lessons. Additionally, the SFP had a role in encouraging food-insecure parents to send their children to school (Derese & Marisennayya, 2023). Research has shown that school feeding programs offer students balanced and sufficient meals that can lead to improved educational performance, concentration levels, and intellectual growth among students (Assefa, 2023).

Problem 4. Is There a Significant Relationship between The Dimensions of Learning Engagement and Their Academic Performance?

Table 14: Results of the Test on Relationship between Dimension of Learning Engagement and Their Academic Performance

Dimension of Learners' Engagement	Learners' Academic Performance		
	First Quarter	Second Quarter	Overall
Behavioral	r = 0.403	r = 0.410	r = 0.419
	p = 0.001	p = 0.001	p = 0.001
	S	S	S
Cognitive	r = 0.200	r = 0.198	r = 0.205
	p = 0.014	p = 0.015	p = 0.011
	S	S	S
Emotional	r = 0.201	r = 0.237	r = 0.226
	p = 0.013	p = 0.003	p = 0.005
	S	S	S

Overall	r = 0.309	r = 0.327	r = 0.327
	p = 0.001	p = 0.001	p = 0.001
	S	S	S

Legend for p-value: **significant at $p < 0.001$ alpha level: *significant at $p < 0.05$ alpha level S – significant; NS – not significant

Table 14 shows the test of the relationship between the dimension of learning engagement and the learners' academic performance with an overall r-value of 0.327 ($p=0.001$) interpreted as Significant. This indicates that as learning engagement increases, their academic performance also tends to improve. The relationship is moderate, indicating that academic success may also be influenced by other variables. This implies that promoting learning engagement can contribute to better academic outcomes.

The study by Lei *et al.* (2018) found that all aspects of student engagement—behavioral, emotional, cognitive, and overall—had a medium positive correlation with academic success. To put it further, academic success was associated to a greater degree in overall behavioral, emotional, and cognitive engagement.

Moreover, among the relationships between the dimensions of learning engagement and their academic performance, Behavioral Dimension and Learners' Academic Performance got the highest r-value of 0.419 ($p=0.001$), interpreted as Significant. This means that as the behavioral engagement of learners increases, their academic performance also significantly improves. This implies that active participation in academic activities and efforts to perform tasks, which are key components of behavioral engagement, play a crucial role in enhancing academic outcomes. Furthermore, this implies that fostering behavioral engagement, such as learners' involvement in learning activities, is essential for promoting academic success and achievement.

However, this finding does not go along with the findings of a study by Sukor *et al.* (2021) underscore the critical role of emotional engagement in academic achievement. Their research revealed that emotional engagement is the most impactful factor, accounting for nearly 38.6% of

the variation in student performance. This suggests that prioritizing strategies that promote active participation in learning can significantly improve student outcomes.

On the other hand, Cognitive Dimension and Learners' Academic Performance got the lowest r-value of 0.205 ($p=0.011$) interpreted as Significant. This implies that while cognitive abilities play a role in academic performance, the impact is not as strong as other dimensions of engagement.

Cognitive ability was divided into five ability, representational, information processing, logical reasoning, and thinking conversion. The impact of each on academic performance was examined. Structural equation modeling (SEM) was used to examine the mediating function of self-discipline ability between academic accomplishment and cognitive capacity, and planning was examined as a moderating variable in the mediating effect (Shi & Qu, 2022).

According to the study's findings, academic success and cognitive function are strongly positively correlated.

Educators ought to concentrate on learners experiencing poor academic performance in order to help them excel in their studies. To this end, educators should use a variety of teaching tools, including audio-visual aids, charts, and actual objects. Additionally, they ought to use a range of teaching methods as well. Schools should also provide cognitive training, reasoning classes, quiz contests, and other activities to help students improve their cognitive skills. Enhancing pupils' cognitive abilities will improve their academic achievement (Kaur & Prajapati, 2022).

Problem 5. Is There a Significant Relationship between the Factors of Learning Engagement and Their Academic Performance?

Table 15: Results of the Test on Relationship between the Factors of Learning Engagement and Their Academic Performance

Dimension of Learners' Engagement	Learners' Academic Performance		
	First Quarter	Second Quarter	Overall
Family	r = 0.363	r = 0.324	r = 0.353
	p = 0.001	p = 0.001	p = 0.001
	S	S	S
School	r = 0.284	r = 0.331	r = 0.318
	p = 0.001	p = 0.001	p = 0.001
	S	S	S
Teacher	r = 0.273	r = 0.286	r = 0.288
	p = 0.001	p = 0.001	p = 0.001
	S	S	S

Peers	r = 0.202	r = 0.251	r = 0.234
	p = 0.012	p = 0.002	p = 0.004
	S	S	S
Overall	r = 0.336	r = 0.357	r = 0.357
	p = 0.001	p = 0.001	p = 0.001
	S	S	S

Legend for p-value: **significant at $p < 0.001$ alpha level; *significant at $p < 0.05$ alpha level S – significant; NS – not significant

Table 15 shows the test of the relationship between the factors of learning engagement and their academic performance with an overall r-value of 0.357 ($p=0.001$), interpreted as Significant. Consequently, there is a positive correlation between the factors of learning engagement and their academic performance. This suggest that as these factors, which may include family, school, teacher, and peer engagement, increase or improve, learners’ academic performance tends to enhance accordingly. This suggests that a combination of various aspects of engagement, such as emotional connection to learning, cognitive abilities, active participation in activities, and social interactions, collectively contribute to better academic outcomes. Overall, these findings indicates that a holistic approach focusing on enhancing multiple dimensions of learning engagement may result to improved academic performance, highlighting the importance of considering a range of factors in educational settings.

Notably, this result was supported by Lei *et al.* (2018) as their study’s result found a clear link between learner engagement and academic success. Overall engagement had a positive and moderately strong correlation with achievement. Digging deeper, all three areas of engagement – behavior, emotion, and thinking – were mostly positively linked to good grades. But here’s the interesting part: how students reported their engagement, their cultural background, and even their gender seemed to influence the strength of these connections. This suggests these factors play a role in how engagement translates to achievement.

Moreover, among the relationships between the factors of learning engagement and their academic performance, Family and Learners’ Academic Performance got the highest r-value of 0.353 ($p=0.001$) interpreted as Significant. This means that a positive relationship exists between family involvement and learners’ academic performance, suggesting that family support and engagement play a vital role in learners’ academic success. This relationship implies that learners with strong family support and involvement are more likely to perform better academically. Furthermore, this suggests that educational institutions and policymakers should consider and promote family involvement in learners’ education to enhance their academic performance.

This result is assisted by Shariffard *et al.* (2020). Their study investigated academic burnout among nursing and paramedical students. They found that family work, internal motivation, lack of motivation in general, and how students manage their personal lives alongside school

were the strongest factors influencing burnout levels.

On the other hand, Peer and Learners’ Academic Performance got the lowest r-value of 0.234 ($p=0.004$) interpreted as Significant. This implies that while there is a positive correlation between the two factors, the relationship is relatively weaker compared to other factors, such as family involvement. This implies that while peer relationships can influence academic performance, their impact is not as strong as family support and involvement. This suggests that educational institutions and policymakers should consider the function of family involvement in improving learners’ academic performance, in addition to fostering positive peer relationships.

Hence, numerous research studies have been conducted on how student engagement changes throughout school years in traditional classrooms. This shows that engagement isn’t static - it goes up and down over time because of various influences, like a student’s motivation, the teachers they have, their peers, the difficulty of the work, and even the social environment of the school itself (Zhen *et al.*, 2019).

CONCLUSION

Given the study’s results, the following conclusions were made as it can be concluded that the dimensions are significantly relating, namely: behavioral, cognitive, and emotional, and factors such as family, school, teacher, and peer, are significantly related to learning academic performance. The level of learning engagement as to behavioral, cognitive, and emotional dimensions is high. Additionally, the factors of learning engagement in terms of family, school, teacher, and peer is positive. Moreover, the level of learners performed academically during the first and second grading periods is very satisfactory. On the other hand, the test of relationship between the learning dimension of engagement and the learners’ academic performance is significant. In the same way, the test of the relationship between the factors of learning engagement and academic performance is significant.

REFERENCES

- Abbas, A., Ademilua, T., & Olawuwo, A. A. (2024). Impact of parental involvement on children’s academic performance of secondary school students in Katsina Local Government, Katsina State. *Deleted Journal*, 2(3), 25–33. <https://doi.org/10.54536/jir.v2i3.3309>
- Abubakr, A., Abubakar, Y. U., & Itse, J. D. (2019). *Students’ engagement in relationship to academic performance.*

- ResearchGate. <https://doi.org/10.13140/RG.2.2.10743.98725>
- Alani, F. S., & Hawas, A. (2021). *Factors affecting students' academic performance: A case study of Sohar University*. ResearchGate. <https://www.researchgate.net/publication/354723769>
- Ali, N. (2020). *Linking academic performance of children with neighbourhood services: A gender-based analysis*. ResearchGate. https://www.researchgate.net/publication/363587154_Linking_Academic_Performance_of_Children_with_Neighbourhood_Services_A_Gender_Based_Analysis
- Ali, N., Ullah, A., Shah, M., Ali, A., Khan, S. A., Shakoor, A., Begum, A., & Ahmad, S. (2020). School role in improving parenting skills and academic performance of secondary school students in Pakistan. *Heliyon*, 6(11), e05443. <https://doi.org/10.1016/j.heliyon.2020.e05443>
- Alsola-Dulay, L. (2020). Classroom behavior and academic performance of public elementary school pupils. *International Journal of Research Publications*, 56(1). <https://doi.org/10.47119/ijrp100561720201297>
- What is student engagement? (2024b, October 1). *THE Campus Learn, Share, Connect*. <https://www.timeshighereducation.com/campus/what-student-engagement>
- Elevate—The HonorSociety.org Magazine | HonorSociety.org. (2024, September 11). <https://www.honorsociety.org/articles/are-%20grades-%20good-way-measure-academic-success>
- Arnaiz-Sánchez, P., De Haro, R., García, S. A., & Ruiz, A. B. M. (2020). Schools that promote the improvement of academic performance and the success of all students. *Frontiers in Psychology*, 10, Article 2920. <https://doi.org/10.3389/fpsyg.2019.02920>
- Assefa, Y., Moges, B. T., & Kumar, T. (2023b). Modelling the predictive effects of social media on the relationship between students' engagement and academic achievement in higher education institutions. *Education*, 10(1). <https://doi.org/10.1080/2331186x.2023.2207801>
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297–308. <https://psycnet.apa.org/record/1985-18630-001>
- Azumah, F. D., Samuel, K., & Onzaberigu, N. J. (2018). Effects of family structure on the academic performance of children: A case study of Ayeduase R/C Junior High School in the Kumasi metropolis, Ghana. *International Journal of Social Science Studies*, 6(10), 11. <https://doi.org/10.11114/ijsss.v6i10.3643>
- Bernstein, L. (2023). Student engagement: Why it matters. *Xello*. <https://xello.world/en/blog/student-engagement/what-is-student-engagement/>
- Bernstein, L. (2021). What is student engagement and why does it matter? *Xello*. <https://xello.world/en/blog/student-engagement/what-is-student-engagement/>
- Brown, A., & Lee, C. (2020). Enhancing student learning through formative assessments. *Educational Research Journal*, 25(3), 112–125.
- Caal, P. (2020). *A qualitative research project on factors affecting students' performance in a secondary school in Western Belize*. ResearchGate. https://www.researchgate.net/publication/342343656_A_qualitative_research_project_on_factors_affecting_students_performance_in_a_secondary_school_in_Western_Belize
- Castro, K. (2024). Philippines grade scale. *Gradecalculator.io*. <https://gradecalculator.io/philippines/>
- Chen, F., Sakyi, A., & Cui, Y. (2021). Linking student, home, and school factors to reading achievement: The mediating role of reading self-efficacy. *Educational Psychology*, 41(10), 1260–1270. <https://doi.org/10.1080/01443410.2021.1953445>
- Costales Canonizado, I. (2021). *A closer look at descriptive correlational method of research*. HubPages. <https://discover.hubpages.com/education/A-Closer-Look-at-Descriptive-Correlational-Method-of-Research>
- DeFauw, C., Levering, K., Msipa, R. T., & Abraham, S. (2018). Families' support and influence on college students' educational performance. *Journal of Education and Development*, 2(1), 11. <https://doi.org/10.20849/jed.v2i1.312>
- Delfino, A. P. (2019b). Student engagement and academic performance of students of Partido State University. *Asian Journal of University Education*, 15(3), 42–55. <https://doi.org/10.24191/ajue.v15i3.05>
- Deng, Y., Cherian, C., Khan, N. U. N., Kumari, K., Sial, M. S., Comite, U., Gavurová, B., & Popp, J. (2022). Family and academic stress and their impact on students' depression level and academic performance. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsyg.2022.869337>
- DepEd K-12 grading system steps for computing grades. (n.d.). TeacherPH. https://www.teacherph.com/deped-grading-system/#google_vignette
- DePED RPMS frequently asked questions (FAQ) - TeacherPH. (2022b, July 23). *TeacherPH*. <https://www.teacherph.com/deped-rpms-frequently-asked-questions/>
- DePEDPH. (2024). DepEd grading system: How grades are computed in Philippine schools. *DepEd PH*. <https://depedph.com/deped-grading-system/>
- Derese, M., & Marisennayya, S. (2023, April 1). *The effects of school feeding programs on students' academic achievement in public primary schools of Wolaita Zone, southern Ethiopia*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4422108
- Double, K. S., McGrane, J. A., & Hopfenbeck, T. N. (2019). The impact of peer assessment on academic Performance: A Meta-analysis of control group studies. *Educational Psychology Review*, 32(2), 481–509. <https://doi.org/10.1007/s10648-019-09510-3>
- Dubovi, I., & Tabak, I. (2021). Interactions between emotional and cognitive engagement with science on YouTube. *Public Understanding of Science*, 30(6), 096366252199084. <https://doi.org/10.1177/0963662521990848>

- Investigating the mental health of the staff working in the petrochemical company of Ilam. (n.d.-b). *Kheirollahipour | European Online Journal of Natural and Social Sciences*. <https://european-science.com/eojnss/article/view/639>
- Erol, Y. C., & Turhan, M. (2018). The relationship between parental involvement and engagement to school. *International Online Journal of Educational Sciences*, 10(5). <https://doi.org/10.15345/iojes.2018.05.017>
- Etuban, J. O., Capuno, R., Necasario, R., Espina, R., Padillo, G., & Manguilimotan, R. (2019). Attitudes, study habits, and academic performance of junior high school students in mathematics. *International Electronic Journal of Mathematics Education*, 14(3). <https://doi.org/10.29333/iejme/5768>
- Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 97–131). Springer Science + Business Media. https://doi.org/10.1007/978-1-4614-2018-7_5
- Facilitating and assessing student engagement in the classroom. (2023, January 23). *Center for Teaching & Learning*. <https://www.colorado.edu/center/teaching-learning/2023/01/23/facilitating-and-assessing-student-engagement-classroom>
- French, B. (2022, March 13). What is engagement? *Teach Better*. <https://teachbetter.com/blog/what-is-engagement/>
- Gaille, L. (2020, January 17). 12 advantages and disadvantages of correlational research studies. *Vittana*. <https://vittana.org/12-advantages-and-disadvantages-of-correlational->
- Galugu, N. S., & Samsinar, S. (2019). Academic self-concept, teacher's support, and student engagement in the school. *Jurnal Psikologi Pendidikan Dan Konseling*, 5(2), 141. <https://doi.org/10.26858/jppk.v5i2.10549>
- Gana, M., Rad, D., & Stoian, C. D. (2023). Family functioning, parental attachment, and students' academic success. *Journal of Infrastructure, Policy and Development*, 8(1). <https://doi.org/10.24294/jipd.v8i1.2565>
- Gilbert, J. (2024). Student involvement theory and Generation Z. *FSU*. https://www.academia.edu/36881972/Student_Involvement_Theory_and_Generation_Z
- Gray, J., & Diloreto, M. (2018). The effects of student engagement, student satisfaction, and perceived learning in online learning environments. *NCPEA International Journal of Educational Leadership Preparation*, 11(1). <https://files.eric.ed.gov/fulltext/EJ1103654.pdf>
- Hart, S. R., Stewart, K., & Jimerson, S. R. (2011). The Student Engagement in Schools Questionnaire (SESQ) and the Teacher Engagement Report Form-New (TERF-N): Examining the preliminary evidence. *Contemporary School Psychology*, 15(1), 67–79. <https://doi.org/10.1007/bf03340964>
- Hawkins, A. (2024, August 1). Absenteeism in schools: How families boost attendance. *ParentPowered – Evidence-Based Family Engagement*. <https://parentpowered.com/blog/family-engagement/absenteeism-in-school/>
- Hodges, B. T. (2023, July 21). School engagement is more than just talk. *Gallup.com*. https://www.gallup.com/education/244022/school-engagement_talk.aspx
- Husaini, Y. A., & Shukor, N. S. A. (2023). Factors affecting students' academic performance: A review. *ResearchGate*. https://www.researchgate.net/publication/367360842_Factors_Affecting_Students'_Academic_Performance_A_review
- James, O. (n.d.). Teachers' professional attitudes and students' academic performance in secondary schools in Ilorin metropolis of Kwara State. *ERIC*. <https://eric.ed.gov/?id=EJ1203831>
- Jones, B. J. M. (2023). The future of education: K-12 superintendents' views. *Gallup.com*. <https://www.gallup.com/education/242375/future-education-superintendents-views.aspx>
- Joshi, D. R., Adhikari, K. P., Khanal, B., Khadka, J., & Belbase, S. (2022). Behavioral, cognitive, emotional, and social engagement in mathematics learning during the COVID-19 pandemic. *PLOS ONE*, 17(11), e0278052. <https://doi.org/10.1371/journal.pone.0278052>
- Kaur, G., & Prajapati, P. (2022). Academic achievement in relation to cognitive ability among secondary school students. *Scholarly Research Journal for Humanity Science & English Language*, 10(52). <https://doi.org/10.21922/srjhsel.v10i52.11520>
- Kirk Ambrose. (2023). *THE Campus Learn, Share, Connect*. <https://www.timeshighereducation.com/campus/authors/kirk-ambrose>
- Lara, L., & Saracosti, M. (2019). Effect of parental involvement on children's academic achievement in Chile. *Frontiers in Psychology*, 10(1), 1–5. <https://doi.org/10.3389/fpsyg.2019.01464>
- Laursen, B., & Veenstra, R. (2021). Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research. *Journal of Research on Adolescence*, 31(4), 889–907. <https://doi.org/10.1111/jora.12606>
- Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517–528. <https://doi.org/10.2224/sbp.7054>
- Li, J., Huang, J., Hu, Z., & Zhao, X. (2022). Parent-child relationships and academic performance of college students: Chain-mediating roles of gratitude and psychological capital. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.794201>
- Li, Y., Qiu, L., & Sun, B. (2020). School engagement as a mediator in students' social relationships and academic performance: A survey based on CiteSpace. *International Journal of Crowd Science*, 5(1), 17–30.

- <https://doi.org/10.1108/ijcs-02-2020-0005>
- Lei, H., Cui, Y., & Zhou, W. (2018b). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality: An International Journal*, 46(3), 517–528. <https://doi.org/10.2224/sbp.7054>
- Limniou, M., Sedghi, N., Kumari, D., & Drousiotis, E. (2022). Student engagement, learning environments, and the COVID-19 pandemic: A comparison between psychology and engineering undergraduate students in the UK. *Education Sciences*, 12(10), 671. <https://doi.org/10.3390/educsci12100671>
- Lombardi, E., Traficante, D., Bettoni, R., Offredi, I., Giorgetti, M., & Vernice, M. (2019). The impact of school climate on well-being experience and school engagement: A study with high-school students. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02482>
- Maamin, M., Maat, S. M., & Iksan, Z. H. (2021). The influence of student engagement on mathematical achievement among secondary school students. *Mathematics*, 10(1), 41. <https://doi.org/10.3390/math10010041>
- Mulaudzi, I. C. (2023). Factors affecting students' academic performance: A case study of the university context. *ResearchGate*. https://www.researchgate.net/publication/378709144_Factors_Affecting_Students'_Academic_Performance_A_Case_Study_of_the_University_Context
- Marie, R., Ann, J., Sausal, J., Coscos, R. M. M., Doncillo, J. A. D., Sausal, J. M., Tanquilan, M. C. M., Tumana, S. R. S., & Uchang, J. T. (2022). Self-regulated learning strategies on students' academic performance in mathematics through flexible learning. *International Journal of Applied Science and Research*, 5(4), 26–40. <https://doi.org/10.56293/ijasr.2022.5404>
- Mateo, J. (2021). 'DepEd moving to improve quality of education.' *Philstar.com*. <https://www.philstar.com/headlines/2021/07/03/2109847/dep-ed-moving-improve-quality-education>
- McGowen, M. A., & Davis, G. E. (2022). A numerical indicator of student cognitive engagement and mathematical growth. *International Electronic Journal of Mathematics Education*, 17(1), em0669. <https://doi.org/10.29333/iejme/11473>
- Bayoumy, H. M. M., & Alsayed, S. (2021b). Investigating relationship of perceived learning engagement, motivation, and academic performance among nursing students: A multisite study. *Advances in Medical Education and Practice*, 12, 351–369. <https://doi.org/10.2147/amep.s272745>
- Mok, S. S., Sukimin, I. S., Zainal Abidin, N. S., Rahmat, N. H., Anyau, E., & Varma, S. B. (2021). Conflicts in group work: Are they all bad? *International Journal of Academic Research in Business and Social Sciences*, 11(11). <https://doi.org/10.6007/ijarbss/v11-i11/11246>
- Moldes, V. M., Biton, C. L. L., Gonzaga, D. J., & Moneva, J. C. (2019). Students, peer pressure, and their academic performance in school. *International Journal of Scientific and Research Publications*, 9(1), 8541. <https://doi.org/10.29322/ijsrp.9.01.2019.p8541>
- Moreira, P., Dias, A. A., Matias, C., Castro, J., Gaspar, T., & De Oliveira, J. P. (2018). School effects on students' engagement with school: Academic performance moderates the effect of school support for learning on students' engagement. *Learning and Individual Differences*, 67, 67–77. <https://doi.org/10.1016/j.lindif.2018.07.007>
- Moreira, P., Vaz, F. M., Dias, P. C., & Petracchi, P. (2009). Psychometric properties of the Portuguese version of the student engagement instrument. *Canadian Journal of School Psychology*, 24(4), 303–317. <https://doi.org/10.1177/0829573509346680>
- Moreland University. (2023, May 2). Deepening students' emotional engagement. *Moreland University*. <https://moreland.edu/resources/blog-insights/emotional-engagement-in-hybrid-learning>
- MSc, O. G. (2023a). Bronfenbrenner's ecological systems theory. *Simply Psychology*. <https://www.simplypsychology.org/bronfenbrenner.html>
- Munir, J., Faiza, M., Jamal, B., Daud, S., & Iqbal, K. (2023). The impact of socio-economic status on academic achievement. *Journal of Social Sciences Review*, 3(2), 695–705. <https://doi.org/10.54183/jssr.v3i2.308>
- Nayir, F. (2018). The relationship between student motivation and class engagement levels. *Eurasian Journal of Educational Research*. <https://www.bing.com>
- Nennig, H., States, N., Macrie-Shuck, M., Fateh, S., Kirbulut Gunes, Z. D., Cole, R., Rushton, G., Shah, L., & Talanquer, V. (2023). Exploring social and cognitive engagement in small groups through a community of learners (CoL) lens. *Chemistry Education Research and Practice*, 24(3), 1077–1099. <https://doi.org/10.1039/D3RP00071K>
- Oco, R. (2024). Factors related to the student's performance in English, science, mathematics, psychology, and education: A multidisciplinary journal. *Psychology & Education*, 2024(1), 39–48. <https://doi.org/10.5281/zenodo.10647509>
- Odum, M., Meaney, K., & Knudson, D. V. (2021). Active learning classroom design and student engagement: An exploratory study. *ResearchGate*. https://www.researchgate.net/publication/351362670_Active_learning_classroom_design_and_student_engagement_An_exploratory_study
- Ogunsakin, R. E., Moyo, S., Oludayo, O., Olugbara, O. O., & Israel, C. (2021). Relating student engagement indicators to academic performance using multiple correspondence analysis. *Cybernetics and Information Technologies*, 21(1), 87–102. <https://doi.org/10.2478/cait-2021-0007>
- Ojo, O. J. (2018). Principals' management techniques and students' academic performance in secondary schools, Ilorin East LGA, Kwara State. *Anatolian Journal of Education*, 3(1). <https://doi.org/10.29333/aje.2018.312a>

- Olana, E., & Tefera, B. (2022a). Family, teachers, and peer support as predictors of school engagement among secondary school Ethiopian adolescent students. *Cogent Psychology*, 9(1). <https://doi.org/10.1080/23311908.2022.2123586>
- Ozcan, M. (2023a). Factors affecting students' academic achievement according to the teachers' opinion. *ResearchGate*. https://www.researchgate.net/publication/374848078_Factors_Affecting_Students%27_Academic_Achievement_according_to_the_Teachers%27_Opinion
- Peñeda, F. P., Ticoy, T. A., & Rabuya, C. A. (2019). Filipino students' perceptions of factors affecting their academic performance in school: A qualitative study. *Zenodo (CERN European Organization for Nuclear Research)*. <https://doi.org/10.5281/zenodo.5559205>
- Pohl, A. J. (2020). Strategies and interventions for promoting cognitive engagement. In *Springer eBooks* (pp. 253–280). https://doi.org/10.1007/978-3-030-37285-9_14
- Qiu, Y., & Ye, P. (2023). The influence of family socio-economic status on learning engagement of college students majoring in preschool education: The mediating role of parental autonomy support and the moderating effect of psychological capital. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1081608>
- Ravaglia, R. (2023, March 25). Student engagement matters more than attendance; why don't schools track it? *Forbes*. <https://www.forbes.com/sites/rayravaglia/2023/03/25/student-engagement-matters-more-than-attendance-why-dont-schools-track-it/>
- Reckmeyer, B. M. (2025, March 25). Focus on student engagement for better academic outcomes. *Gallup.com*. <https://www.gallup.com/education/267521/focus-student-engagement-better-academic-outcomes.aspx>
- Reeves. (2022, April 9). A guide to peer to peer learning. *Best Mentorship Software: Together Mentoring Software*. <https://www.togetherplatform.com/blog/a-guide-to-peer-to-peer-learning>
- Rodríguez-Muñoz, A., Antino, M., Ruiz-Zorrilla, P., & Ortega, E. (2021). Positive emotions, engagement, and objective academic performance: A weekly diary study. *Learning and Individual Differences*, 92, 102087. <https://doi.org/10.1016/j.lindif.2021.102087>
- Roksa, J., & Kinsley, P. (2018). The role of family support in facilitating academic success of low-income students. *Research in Higher Education*, 60(4), 415–436. <https://doi.org/10.1007/s11162-018-9517-z>
- Epstein model of parental involvement and academic performance of learners. (n.d.). Salac | *European Online Journal of Natural and Social Sciences*. <https://european-science.com/eojnss/article/view/6398>
- Shariffard, F., Asayesh, H., Haji Mohammad Hosseini, M., & Sepahvandi, M. (2020). Motivation, self-efficacy, stress, and academic performance correlation with academic burnout among nursing students. *Journal of Nursing and Midwifery Sciences*, 7(2), 88. https://doi.org/10.4103/jnms.jnms_30_19
- Sharma, P., Akgun, M., & Li, Q. (2023). Understanding student interaction and cognitive engagement in online discussions using social network and discourse analyses. *Educational Technology Research and Development*. <https://doi.org/10.1007/s11423-023-10261-w>
- Shao, Y., Kang, S., Lu, Q., Zhang, C., & Li, R. (2024b). How peer relationships affect academic achievement among junior high school students: The chain mediating roles of learning motivation and learning engagement. *BMC Psychology*, 12(1). <https://doi.org/10.1186/s40359-024-01780-z>
- Sinuhin, A. R. (2022). Perceived teacher affective support and cognitive and psychological engagement among STEM students in distance learning. *International Multidisciplinary Research Journal*, 4(2), 1–7. <https://doi.org/10.54476/3832251>
- Smith, K. R. (2023, June 15). Teaching and learning 'Respect' and 'Acceptance' in the classroom. *Faculty Focus | Higher Ed Teaching & Learning*. <https://www.facultyfocus.com/articles/equality-inclusion-and-diversity/teaching-and-learning-respect-and-acceptance-in-the-classroom/>
- Sukor, R., Ayub, A. F. M., Rashid, N. K. M. A. R. A., & Halim, F. A. (2023). Relationship between students' engagement with academic performance among non-food science students enrolled in food science course. *Journal of Turkish Science Education*, 18(4), 638–648. <https://doi.org/10.36681/tused.2021.95>
- Swargiary, K. (2023). Learning behaviors and academic performance: A comparative study. *ResearchGate*. <https://doi.org/10.32388/ayzvwv>
- Thomas, J., & Nair, M. (2022). Investigating teacher influence on student engagement in high schools. *The Australian Educational Researcher*, 50(3), 661–681. <https://doi.org/10.1007/s13384-022-00511-w>
- Tullis, J. G., & Goldstone, R. L. (2020). Why does peer instruction benefit student learning? *Cognitive Research: Principles and Implications*, 5(1). <https://doi.org/10.1186/s41235-020-00218-5>
- Verma, R. (2023b). Does emotional intelligence make you an effective teacher? A study of higher education institutions. *American Journal of Education and Technology*, 2(4), 24–29. <https://doi.org/10.54536/ajet.v2i4.2108>
- Wang, X., Dai, M., & Mathis, R. S. (2022). The influences of student- and school-level factors on engineering undergraduate student success outcomes: A multi-level multi-school study. *International Journal of STEM Education*, 9(1). <https://doi.org/10.1186/s40594-022-00338-y>
- Waterford.org. (2024, July 9). Why strong teacher-student relationships matter. *Waterford.org*. <https://www.waterford.org/education/teacher-student-relationship>
- Xu, X., Shi, Z., Bos, N. A., & Wu, H. (2023). Student engagement and learning outcomes: An empirical

- study applying a four-dimensional framework. *Medical Education Online*, 28(1). <https://doi.org/10.1080/10872981.2023.2268347>
- Yan, Y., & Gai, X. (2022b). High achievers from low family socioeconomic status families: Protective factors for academically resilient students. *International Journal of Environmental Research and Public Health*, 19(23), 15882. <https://doi.org/10.3390/ijerph192315882>
- Zhen, R., Liu, R., Wang, M., Ding, Y., Jiang, R., Fu, X., & Sun, Y. (2019). Trajectory patterns of academic engagement among elementary school students: The implicit theory of intelligence and academic self-efficacy matters. *British Journal of Educational Psychology*, 90(3), 618–634. <https://doi.org/10.1111/bjep.12320>