

Technology and Home Environment Factors as Correlates of Pupil's Learning Outcomes in Epp V

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ABSTRACT: The study aimed to determine the Correlations of Technology and Home Environment Factors in the Pupil's Outcomes in Edukasyon Pantahanan at Pangkabuhayan Grade V among the 100 Grade V pupils at Manggalang I Elementary School for the school year 2022-2023. The study made use of descriptive method where questionnaire was the primary data gathering instrument. Frequency, Percentage, Mean, and Pearson were used in the statistical analysis of data.

The study revealed that most of the respondents were male and 10 years old of Age, belongs to the low family income and the fathers were mostly Elementary graduate and high school level and mothers of the respondents were mostly high school level, the fathers of the respondents were mostly full-time, and the mothers' respondents were mostly unemployed. There is no significant relationship between psychomotor, social environment and EPP V Learning outcomes except between the psychological environment factors and Cognitive performance and between the social environment and Affective performance which were found significant. Therefore, the hypothesis stating that there is no significant relationship between technology factors and EPP V Learning outcomes was partially not sustained.

KEYWORDS: technology, home environment factors, learning outcome, psychological, self-efficacy

INTRODUCTION

In our everyday life, the use of technology is one of the essential parts of everyday living. Nowadays students are considered digital natives and have become accustomed to always being connected to technology. They always use technology in their day-to-day living like mobile phones, laptops, and computers. Students nowadays have a knowledge of how to use technology and it has a factor in their learning outcomes.

According to Savage & Brown (2015), technology is now part of the teaching and learning process in which the students rely on these. Also, to compete in the 21st century global economy is an obvious need for the students to be prepared for the use of technology. Technology is important for life skills in the field of work; teachers and students who are technologically knowledgeable have a better chance of getting a job and do excel in their career paths. Hence, to become meaningful the learning outcomes integrate technology in the classroom setting and during our instruction and it is a very challenging part for us as a teacher.

Mukama and Muola (2010) stated that "Home environment" is not an abstract concept. It is the combination of the physical and psychological environment. The first one includes rooms, basic facilities such as water, shelter, clothes, food, and other physical needs of the individuals, while the psychological environment of a home includes the mutual interactions of family members, respect, say in family matters and such other things. Each aspect has a direct and significant influence on the overall development of students. There are certain influential factors which influence the home environment. It includes the family, authority (head of family), educational status of parents, attitude of parents towards children and financial position of the family; all these factors are significant for home environment (Codjoe, 2007; Mukama, 2010; Muola, 2010).

OBJECTIVES OF THE STUDY

The main objective of this study was to determine the Technology and Home Environment Factors as Correlates of Pupil's Learning Outcomes in EPP V.

METHODOLOGY

Research Design

The researcher utilized the descriptive-survey and descriptive-correlational methods of research in conducting the study. A descriptive research design was employed to determine the profile of the respondents. The other hand, the study used descriptive

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correlational to identify Technology and Home Environment Factors and Pupil's Learning Outcomes in EPP V. Also, will conduct a First Quarter Examination in EPP V base to the lesson discuss that will see the Cognitive, Affective and Psychomotor.

Respondents of the Study

The respondent of the study includes all Grade V Pupils of Manggalang I Elementary School during SY 2022-2023. In the study, out of one hundred fifty-eight (158) total number of Grade V pupils, there are one hundred (100) pupils who participated as respondents in this study with the use of random sampling technique.

Research Procedure

The research study was conceptualized with the assistance of the adviser and other panel members. The researcher provided the panel members with the concept developed, prepared, and suggestions to improve the paper's content.

The researcher of the study sought the approval for the conduct and implementation of the study to the Office of the Schools Division Superintendent of the Schools Division Office of Quezon (SDO – Quezon) through the Office of the Public Schools' District Supervisor and the Principal. Upon approval the administrations of the survey questionnaire conducted to the target respondents.

The respondents answer the survey instruments with the assistance of the researcher to easy understanding of the stated indicators. Afterwards, transcription of the survey and analysis of results of the study was done using Quantitative method. Then the data were collated, tallied, and statistically treated. The tabulation, analysis and interpretation of the data gathered followed.

After retrieving the responses, the researcher started tabulating and LSPU San Pablo's Statistic Center, where she sent a copy of the data matrix along with other supporting documents to assure that the data were statistically treated and correct, especially in determining the perceptions of the respondents toward technology and home environment factors and their underlying variables and their correlation.

The privacy of the research respondents was secured by the researcher. The study did not contain the names of the respondents. The collected data by the researcher through the actual survey form was kept in strict confidential. The data collected from the respondents were provided honestly by the researcher. Other ethical aspects of research were also strictly followed.

Research Instrument

The researcher employed the researcher-made survey questionnaire with close-ended questions to answer the Technology and Home Environment Factors as Correlates of Pupil's Learning Outcomes EPP V. The study was conducted on the First Quarter Examination in EPP V.

Statistical Treatment of Data

All the data gathered were analyzed statistically using the appropriate tools that include the following:

Mean and Standard Deviation were used to evaluate the perception of the respondents on technology and home environment factors. Frequency and percentage were used to determine the profile of the respondents and pupil's learning outcomes in EPP V. Pearson Product Moment Correlation Coefficient were used to determine the significant relationship between the Technology and Home Environment Factors and Pupil's Learning Outcomes in EPP V.

RESULTS AND DISCUSSION

Table 1. Technology Factors as Perceived by the respondents.

Variables	Mean	SD	Verbal Interpretation
Internet Connectivity	3.50	0.32	Very Evident
Adequacy of Technology	3.52	0.34	Very Evident
Knowledge on Technological Tools Used	3.60	0.34	Very Evident
Self-Efficacy	3.65	0.36	Very Evident
Use of technology	3.75	0.25	Very Evident
Overall	3.60	0.32	Very Evident

Legend: 3.50 - 4.0 – Very Evident; 2.20 - 3.49 – Evident;

1.50 - 2.49 – Somewhat Evident;

1.49 – 1.00 – Not Evident

Table 1 presents the results of the respondent's perception on Technology Factors with the overall mean of 3.60 (Very Evident). The result implies that the technology has a positive impact on student learning. Technology causes students to be more engaged; thus, students often retain more information. Because of the arrival of new technologies rapidly occurring globally, technology is relevant to the students. Technology provides meaningful learning experiences.

This result was supported by Tutkun (2011) said the internet is being used as a source for teaching material. Providing information and communication technologies for teaching and learning will have some advantages. First, the students will play a more active

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role, which will help them retain more information. Next, follow-up discussions will contain more detail where students will become more independent. Last, the students will easily process new student-based educational material and their skills will increase. In addition, Kenney (2011) stated that technology is a big part of people's daily lives, it is pertinent and vital that children learn how to use it at an early age. When children use technology tools in elementary schools, a sense of confidence and competence in their computer skills will grow as they get older. Many children today have access to a great deal of technology in their home; this access will result in students being comfortable using technology at school as well. When elementary school teachers use and model different forms of technologies, they actively engage their students and create a stimulating work environment. Furthermore, the sub-variables "Use of technology" gained the highest mean of 3.75 (Very Evident). It means most of the respondents see that use of technology can make learning more fun and exciting to them. On the other hand, the sub-variables "Internet Connectivity" gained the lowest mean of 3.50 (Very Evident). Not all respondents can easily access the internet, most especially in far-flung school areas or rural school buildings without a proper current supply to support the usage of technology. This poor infrastructure affects the revolution underway in the K-12 classrooms as they adopt a new style of classroom setting and pedagogy.

Table 2. Home Environment Factors as Perceived by the respondents.

Home Environment Factors	Mean	SD	Verbal Interpretation
Physical Environment	3.80	0.18	Very Evident
Psychological Environment	3.91	0.11	Very Evident
Social Environment	3.88	0.12	Very Evident
Overall	3.86	0.14	Very Evident

Legend: 3.50 - 4.0 – Very Evident; 2.20 - 3.49 – Evident;
1.50 - 2.49 – Somewhat Evident;
1.49 – 1.00 – Not Evident

Table 2 shows the results of the respondents' perceptions on Home Environment Factors with an overall mean of 3.86 (Very Evident). The physical, psychological, and social environment played a role in the learning outcomes of the respondents, that helped them to their studies.

This result was supported by to Usman & Fadilah (2020), the family environment, likewise, plays an essential role in supporting student learning outcomes by forming the character of a positive family environment; it will also develop students' interests, talents, and achievements in learning. The family environment dramatically contributes to the student's learning process. For learning without good and fun conditions, focusing on the subject matter to be studied will be challenging. Although some children can learn in a noisy atmosphere, they are busy and able to learn when accompanied by music. However, in essence, a person can study well and diligently in a calm, comfortable, safe, peaceful atmosphere, and a good mood, so that the surrounding condition does not interfere with an individual concentration on learning. Hence, a good family environment strongly influences the learning atmosphere, and Tanjung (2020) adds that it reflects harmonious parents and good communication between family members. Furthermore, the sub-variables in home environment factors, "Psychological Environment" gained the highest mean of 3.91 (Very Evident). It means respondents can manage their feelings and emotions, but they also need guidance from their families. On the other hand, the sub-variables "Physical Environment" gained the lowest mean of 3.80 (Very Evident). It seems that it depends upon the family's economic conditions on how the parents can provide for all the needs of their learners.

Table 3. Respondents Learning Outcomes in terms of Cognitive Performance in EPP V

Score	F	%	Verbal Interpretation
24	8	8%	Excellent
15-19	62	62%	Very good
10-14	30	30%	Good
5-9	0	0	Fair
0-4	0	0	Need improvement
Total	100	100%	

Legend: 6 – Excellent; 5– Very good; 4 – Good; 2-3 –Good; 0-1– Need Improvement

The respondents learning outcomes in terms of cognitive performance in EPP V. It reveals that by thorough Examination, the data resulted to a Very Good performance. The majority, or 62% of the respondents score between 15-19. It means most of the respondents have a very good performance in cognitive, consider it that they recall and know what they thought to them. In line with the result, the cognitive domain (Bloom, 1956) involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills.

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Table 4. Respondents learning Outcomes in terms of Affective Performance in EPP V

Score	F	%	Verbal Interpretation
9-10	10	10%	Excellent
7-8	52	52%	Very good
5-6	35	35%	Good
3-4	2	2%	Fair
0-2	0	0%	Need improvement
Total	100	100%	

Legend: 6 – Excellent; 5– Very good; 4 – Good; 2-3 –Good; 0-1– Need Improvement

The respondents learning outcomes in terms of Affective performance in EPP V, which resulted to a Very Good as 52 % of the respondents score between 7-8. It implies in terms of affective performance most of the respondents got a very good score. It means they can handle their emotions, feelings in the subject Edukasyong Pantahanan at Pangkabuhayan (EPP V).

According to (Krathwohl, Bloom, Masia, 1973). The affective domain includes the way we deal with things emotionally, such as feelings, values, appreciation, enthusiasm, motivations, and attitudes. The findings implied that the respondents understand how to value the lesson and affects their emotional development.

Table 5. Respondents learning outcomes in terms of Psychomotor Performance in EPP V.

Score	F	%	Verbal Interpretation
6	2	2%	Excellent
5	26	26%	Very good
4	46	46%	Good
2-3	25	25%	Fair
0-1	1	1%	Need improvement
Total	100	100%	

Legend: 6 – Excellent; 5– Very good; 4 – Good; 2-3 –Good; 0-1– Need Improvement

The respondents in Psychomotor performance in EPP V. The findings reveal that the majority, or 46% of the respondents achieved a good performance which as score 4 (Good). It means, respondents have good results in Psychomotor performance.

As said by, (Simpson, 1972) psychomotor domain includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. Based on the results, the students need to improve their psychomotor performance.

Table 6. Correlations between Technology and Home Environment Factors and Pupil's Learning Outcomes in Epp V

Learning Outcome in EPP V	Cognitive	Affective	Psychomotor
	Technology Factors		
Internal Factors			
Internet Connectivity	0.105	0.140	-0.010
Adequacy of Technology	-0.166	-0.038	0.035
Knowledge of technological tools used	0.059	-0.003	0.020
External Factors			
Self-efficacy	0.094	0.127	0.155
Use of technology	-0.055	0.092	0.063
Home Environment Factors			
Physical Environment	-0.063	0.111	-0.064
Psychological Environment	-.207*	-0.041	0.006
Social Environment	-0.145	-.229*	0.024

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

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

The results of the significant relationship between Technology and Home Environment factors and Learning outcomes in EPP V. Findings reveal that all the technology factors as well as external factors in terms of Internet Connectivity, Adequacy of Technology, Knowledge of technological tools used, as well as external factors such as Self-efficacy, Use of technology do not significantly relate to the learning outcomes in terms of cognitive, affective, and psychomotor performances of the students.

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While the Home Environment Factors in terms of psychological environment ($r = -.207^*$) have a significant relationship to Cognitive performance, the Social Environment ($r = -.229^*$) has a significant relationship to the affective performance of the respondents. Furthermore, findings revealed that the physical environment was not associated with the Cognitive, Affective, Psychomotor Performances of the students in EPP V. The Psychological Environment was likewise not significantly related to the students' learning outcomes in EPP V. On the other hand, with students affective ($r = -.229^*$) learning outcomes.

Similarity, as stated by Parveen (2007) and Muola (2010), believes that the home environment hinders or supports children's overall development. Parents' attitudes play a dominant role, and where they are supportive, they enhance children's performances and have positive impacts on their development. Interactions with family members are beneficial for students as they enable them to improve their linguistic, social, and intellectual skills. There is evidence that a supportive home environment enhances a child's confidence in himself or herself and enables them to be social. This confidence helps students develop their adjustment capabilities in different environments, which positively influences their educational performances. Students living in non-supportive home environments struggle in every walk of life, including educational life (Parveen, 2007; Bandhana & Sharma, 2012).

CONCLUSION

1. The hypothesis states that there is no significant relationship between technology factors and learning outcomes in terms of cognitive, affective, and psychomotor performances of the student, as supported by evidence, hence it is sustained.
2. The hypothesis states that in the Home Environment Factors in terms of psychological environment have a significant relationship to Cognitive performance, the Social Environment has a significant relationship to the affective performance of the respondents, but Physical environment was not associated with the Cognitive, Affective, Psychomotor Performances of the students in EPP V, hence the hypothesis by this regard is partially accepted.

RECOMMENDATIONS

In the light of the findings and conclusions of the study, the following recommendations are offered:

1. The students may be aware of the psychological and social environment that they are encountering so that it will not hinder their learning outcomes.
2. The students may aspire higher and at the same time work harder to attain the excellent level.
3. Emphasis on how to improve the psychomotor performance of the students may be prioritized by utilizing different activities that can motivate the students to work well.
4. Parents should make out time to reach out with their children's teachers from time to time to update them with their children's progress. This will help identify the student's problems to manage it promptly before it affects the students.
5. Continue providing students with access to the basic technologies that are most important to their learning outcomes.
6. Future researchers may use other instruments and adopt different frameworks and methodology of measuring the Technology and Home Environment Factors and Pupil's Learning Outcomes in EPP V.

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