

### EFFECTS OF HOME ENVIRONMENT TO THE ACADEMIC PERFORMANCE OF THE GRADE 10 STUDENTS AT STO. NINO NATIONAL HIGH SCHOOL, CAGAYAN, PHILIPPINES

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### **Abstract**

The purpose of this research was to examine the influence of the family environment on the academic achievement of Grade 10 students at Sto. National High School of Nio. The descriptive research approach was applied, and the survey questionnaire was used to collect data. A total of 100 Grade 10 students participated in the survey. The investigation was placed throughout the school year 2021-2022. In terms of academic achievement, this survey discovered that the majority of respondents had good grades and is doing well in their studies. The survey also revealed that the majority of respondents have big families, that their parents' monthly income is less than \$10,000, that both father and mother are college graduates, that they have a nuclear family, and that they watch TV and watch videos are always available at their residence. Also, the majority of respondents are content with their lighting and ventilation, study in the living room, use cellular data, have sluggish access, and occasionally conduct home duties. The Chi-Square test found that the following home environment characteristics had a significant link with respondents' academic performance: parents' economic position, father's educational achievement, and availability of learning resources. Contrary to popular belief, family size, mother's educational level, family structure, lighting, ventilation, home space, kind of Internet connection, Internet connectivity, and domestic duties have no bearing on pupils' academic achievement. Furthermore, this study discovered home environment characteristics that make a substantial impact in the student's performance. Also, this study found home environment factors that have a significant difference in the student's academic performance. They are family size, parents' economic situation, parents' educational achievement, learning materials availability, Internet connection type, and Internet connectivity. Each of these home environment characteristics has a substantial impact on children' educational lives. According to the conclusions of this study, the following factors are not significant: family structure, illumination, ventilation, home space, and domestic tasks. School performance may be attributed to excellent teaching and learning, as well as the collaborative efforts of the teacher, the school, the kids, parents, and their diverse home settings. It is then recommended that parents should have time to visit and monitor their children and make an effort an effort to encourage and provide adequate time for them. Also, teachers should assist in identifying the student's



academic problems and conduct PTA meetings. Lastly, future researchers may conduct similar studies to improve the important role of home environment to the students and helps them to perform well in their studies.

**Keywords:** Home environment, academic performance, descriptive research, grade 10 students

#### INTRODUCTION

Students live with their parents or guardians in their houses. It is the time when the child begins to develop physically, intellectually, emotionally, and socially. The home has an influence on students at the most inconvenient moments. As a result, their home and the people who reside there have a big impact on their happiness. The family is a social unit in any civilisation that gives early stimulation and experience to children (Collins, 2007).

Students live with their parents or guardians in their houses. It is the aggregate of all internal and external factors impacting the life, development, and wellbeing of organisms, according to G.U.A nene (2005). She further noted that the environment might be classified as physical, social, or abstract. The physical environment includes things or materials found at home, school, or in the community. It also encompasses the individuals, siblings, and classmates. The social environment, on the other hand, comprises the individual's social life, societies, and clubs. The abstract environment consists of the reactions, feedback, and replies obtained as a result of interactions with others.

However, student academic achievement is a critical component of education and is seen as the pivot around which the whole educational system revolves. It essentially assesses how effectively pupils have understood a subject or course. It is also the degree to which a student, instructor, or institution has met educational objectives. According to Narad and Abdullah (2016), academic performance is the information learned that is judged by a teacher through marks and/or educational goals set by instructors with students to be reached over a specified period of time. They further stated that these objectives are measured by continual evaluation or examination results.

The atmosphere and academic achievement are mutually beneficial. The home environment serves as a foundation for learning and is an aspect of student life that might influence grades. Students' academic achievement at school is affected by a variety of conditions in their homes. According to Obeta (2014), home environmental elements such as the supply of suitable educational resources, parental monitoring of students' work at home, and love and caring in the student's family can improve students' academic performance. But, if pupils are not encouraged by their families, their academic progress would fail. Poor academic motivation has been linked to a number of negative outcomes, including school retention and dropout, as well as lower school involvement (Gottfried et al., 2008). Unstable, loud, and chaotic home situations are harmful to children's health and development (Dush et al., 2013 & Evans, 2003). As a result, whether good or poor, the family environment plays a significant influence in the lives of every individual. Moreover, Mushtag and Khan (2012) claimed that communication, learning facilities, effective guidance, and family stress are variables influencing student success.

Today's new normal is a watershed moment for children at home. How parents react to changes in their family will have a long-term impact on their children's lives. Because of the various changes brought about by the epidemic, and since no one was prepared, most educators would characterize going into combat unarmed and prepared to lose. Nonetheless, the Department of Education (DepEd) has maintained that "Learning must continue," and that many learning modalities have been researched and investigated to ensure that each would be the greatest fit for students' requirements and interests in continuous learning. This is new to everyone, especially parents, who will play an important role in the new regular setup. Learning will be brought to the children' homes, and



parents will play the role of instructors in certain ways. Parents were confronted with the new difficulty of being both parents and instructors.

In the new normal settings, parents and other caregivers must have a larger part in their child's learning development than they did in the past. More so since most education is increasingly taking place at home rather than on school grounds, without the visible presence of teachers (Varkey Foundation, 2018). According to the results of Azubuike and Aina (2020), parents have obstacles in their abilities to accept responsibilities as instructors for their children. Their expertise, educational experience, and socioeconomic level all influence whether and to what degree their children can study remotely. Inequality in student educational results will emerge from unequal access to distant learning possibilities.

Given the foregoing insights, the researchers believe that these problems can be addressed among the Grade 10 students of Sto. Niño National High School because they are attending classes at home due to the pandemic. Hence, this study find out the effects of home environment on the academic performance of these students during the new normal set up.

#### LITERATURE REVIEW

#### Concept of Home Environment

The home environment has been a prominent focus of investigation in the field of early development for more than a half-century; a consensus is forming that the home environment makes an essential contribution to children's development, learning, and school achievement (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Morrison & Cooney, 2001).

The home environment refers to the child's family background, which comprises all of the people and material resources available in the house that impact the child's life. The house or family is the first institution that a kid attends, which means that the home is where the child's early education and socialization begins (Anonymous, 2019). The house, according to Nwachukwu

and Agulaana (2002), is the fundamental and most essential human institution for the socialization of the kid. The kid's experiences inside the family undoubtedly impact his actions; the family offers the child with the nature required for proper, physical, cognitive, and psychological to social development.

A caring and supportive family environment that encourages competence and adaptive functioning is critical to adolescent well-being. This involves proper structure, parental sensitivity and warmth, suitable discipline and supervision, engaging materials and educational experiences, as well as necessary nourishment (R.H. Bradley, K. Kao, 2011).

The home environment includes parents' emotional warmth while engaging with their children, the provision of exciting and learning activities in the house, and physical surrounds such as play area safety and cleanliness (Leventha & Brooks-Gunn 2001).

Children's surroundings have a huge impact on their wellbeing. A healthy, safe home is essential for a child to grow, learn and explore. According to the National Center for Healthy Housing, a healthy home is housing that is designed, constructed, maintained, and rehabilitated in a manner that is conducive to good occupant health. However, a problematic home environment, by contrast, can have detrimental effects on a child's intellectual, social and emotional development. Research has shown that a negative home environment during the early years of life can lead to impaired development, including poor language skills, behavioral problems and deficits in school readiness based on the study conducted by Ngorosho (2011), it views the home environment as the immediate social environment of the child and thus refers to it as the ecology of child development. Ecology of human development is defined by Bronfenbrenner (1979) as "the scientific study of the progressive mutual interaction between an active growing human being and the changing features of the immediate surroundings in which the developing person lives." The development process is influenced by the relationships between the settings and



the wider contexts in which the settings are embedded. Bronfenbrenner underlines in this regard that the developing individual is not passive to the environment, but rather active and gradually helps to rebuild the environment in which she/he lives. The environment, on the other hand, has an impact on the developing and growing individual through shared encounters with other people, things, and symbols in the environment (Sontag, 1996).

The use of the family environment as a social setting places the argument in the context of sociocultural theory. According to sociocultural theory, human growth is the consequence of a dynamic interplay between a person and the surrounding social and cultural factors. According to Vygotsky (1986), a kid's learning is surrounded by social events that occur when the youngster interacts with individuals in his or her environment. Using language, the kid engages in a variety of social duties (Vygotsky, 1978). Three key elements of the two theories, the ecological theory of human development and the sociocultural theory, must be considered in regard to child development. First, the theories place the kid in his or her social surroundings and highlight the importance of the environment in the child's development. Second, the child's environment is thought to be important in the developing processes. Finally, the theories regard the kid as an active individual who not only influences but is also impacted by the environment. The child's and the environment's ties are mutual.

The thesis views the home environment as a microsystem based on the major elements of the two theories (Bronfenbrenner, 1979). A microsystem, according to Bronfenbrenner, is a pattern of activities, roles, and interpersonal connections experienced by the developing person in a specific physical and material context. An individual's microsystem therefore comprises the culture in which he or she is educated and lives, as well as the other individuals with whom the individual interacts (Zastrov & KirstAshman, 2009).

### The Importance of Home Learning Environment

The environment in which the students learn is Very crucial. In fact, studies suggest that a student's surroundings might affect their success by up to 25%. In other words, get the environment right, and pupils will be able to strive for the heavens and beyond (Cooper, 2018). Furthermore, children's learning behaviors in the classroom are influenced by their home environment, and learning behaviors such as competence motivation, attention, and persistence are critical determinants of academic achievement. Gender, age, ethnicity, urban living, parent educational level, and special education categorization status have all been demonstrated to influence the likelihood of particular learning practices (Schaefer, 2004).

According to education.gov.scot.parentzone, the home learning environment is the sum of all that a student does, their family, and the places to which they have access that affects their growth and learning. The most crucial aspect, though, is their contacts with individuals who offer kids with love, stability, support, dialogue, and great role models in order for them to strive harder in school. A pleasant home learning environment promotes children and young people to be curious about learning and to believe in themselves.

The family and home environment of a kid have a significant influence on his or her language and literacy development, as well as educational performance. Its effect is strongest in the child's early years, but it lasts throughout their school years (Cole, 2011). According to Walle and Lopez (2020), the family environment has a substantial influence on children's emotion perception and understanding. When there is limited expressivity in the family, emotional development might suffer.

Home environment has great impact on learning. The home environment plays a major role to determining the child's personality and also in their achievement (Jayanthi J. & Srinivasan K. 2015). The home has an important influence on the child's academic achievement. What the child learns at home and how his family motivates him



towards education contributes to the child's success in school (Essien, 2002).

In an article "What works in online/distance teaching and learning?" mentioned that, it is also important to remember that there are positives to home-based education – quality education is not always structured, academic or scholastic, and learning occurs in many different contexts. Home life can provide opportunities for students to engage with nature, bond with family, learn civic responsibility, and focus on social health.

Hugo (2012) on his documents of the impacts from home environmental factors, revealed that, the person's principles established since childhood are like letters engraved in the bark of a young tree, which grow, enlarge with it making its integral part. Therefore, right beginning makes the most important part of upbringing education. Nobody ever said that children were easy to rise. They don't come with guidelines or instructions, and they certainly come with a crucial set of physical and emotional needs that must be met.

#### METHODOLOGY

This study used the descriptive survey method of research. A survey is used to collect data from members of a population to determine the current status of the population in respect to one or more variables (Orodho, 2009). Specifically, this study shall use the cross-sectional survey design in order to collect important data on the effects of home environment to the academic performance of students.

The method is appropriate for this study as it typically reports relations among variables, and enables the researchers to obtain descriptions of the current situations of home environment and the academic performance of Grade 10 students.

#### FINDINGS / RESULTS

### I. Demographic Profile of the Students

The frequency and percentage distribution of respondents' profiles by section is shown in Table 1. According to the

table, 38 percent of the responders came from St. Gertrude; 20 percent each from St. Cecilla and St. Elizabeth; 16 percent from St. Juliana; and just 6% from St. Margareth.

Table 1. Frequency and Percentage Distribution according to Section

Section	Frequency	Percentage
St. Gertrude	38	38 %
St. Juliana	16	16 %
St. Margareth	6	6 %
St. Cecilla	20	20 %
St. Elizabeth	20	20 %
TOTAL	100	100 %

In addition, table 2 presents the frequency and percentage distribution of respondents based on their academic grades. It reveals that 39 or 39% of respondents have a grade range of 85-89; 30% have a grade range of 80-84, followed by 22 or 22% of the respondents have a grade range of 90-94, which has a percentage of 22%; 7% have a grade range of 75-79, and 2% have a grade range of 95-100. Generally, the grades of the respondents in their academic performance is relatively high.

Table 2. Frequency and Percentage Distribution according to Academic Grades

Grades	Frequency	Percentage
95 - 100	2	2 %
90 - 94	22	22 %
85 – 89	39	39%
80 - 84	30	30%
75 – 79	7	7%
TOTAL	100	100%

### II. Home Environment of the Students

In this regard, the data in table 3 depicts the frequency and percentage distribution based on family size. According to the table, the majority of the respondents (59%) have a family of 4-6 members; followed by 20% have 1-3 members; 18% have 7-9 members; and only 3% have a family of 10 or more members.



Table 3. Frequency and Percentage Distribution according to Family Size

Family Size	Frequency	Percentage
1-3 members	20	20%
4-6 members	59	59%
7-9 members	18	18%
10 members and	3	3%
above		
Total	100	100%

Table 4 also shows the frequency and percentage distribution based on a parent's financial situation. The majority of the respondents' parents' economic status is below P10,000 (54%), followed by 21% ranging from P10,000 to P20,000; 10% ranging from P20,001 to P30,000; 9% ranging from P40,001 to P50,000; 4% above P50,000; and finally, only 2% ranging from P30,001 to P40,000.

Table 4. Frequency and Percentage Distribution according to Parent's Economic Status

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Parent's economic	Frequency	Percentage
status		
Below P10, 000	54	54%
P10,001 - P20,000	21	21%   Interest
P20,001 - P30,000	10	10%
P30, 001 -	2	2%
P40,000		
P40,001 - P50,000	9	9%
Above P50, 000	4	4%
Total	100	100%

As a result, table 5 reveals the distribution of respondents based on the educational attainment of their parents. With 30 percent of the 100 respondents, the bulk of their father's educational attainment is a college degree, while high school graduate and elementary undergraduate have the same response with 17 percent. With 13 percent for high school undergraduates, 9 percent for college undergraduates, and only 1 percent for short courses, the same reaction occurs with high school undergraduates and primary graduates.

On the other hand, the majority of the respondents' mothers' educational attainment is a college graduate

(32%) followed by a high school graduate and an elementary graduate (both 21%). Additionally, college undergraduate and elementary undergraduate have an equal response of 9% and only 7% for high school undergraduate. This implies that the largest cohort of the parent's educational attainment are college graduates.

Table 5. Frequency and Percentage Distribution according to Parent's Educational Attainment

Father's educational Frequency Percentage		
Frequency	Percentage	
30	30%	
9	9%	
17	17%	
13	13%	
13	13%	
17	17%	
1	1%	
100	100%	
Frequency	Percentage	
32	32%	
9	9%	
21	21%	
7	7%	
21	21%	
9	9%	
100	100%	
	17 13 13 17 1 100 Frequency 32 9 21 7 21	

Hence, results in table 6 present the frequency and percentage distribution by type of family structure. The data shows that the majority of respondents (81%) have a nuclear family, followed by 7 percent for single parent families, and both 6 percent for extended and grandparent families.



Table 6. Frequency and Percentage Distribution according to Type of Family Structure

Type of Family	Frequency	Percentage
Structure		
Nuclear family	81	81%
Single parent family	7	7%
Extended family	6	6%
Grandparent family	6	6%
Total	100	100%

Table 3 shows the respondents' home environment in terms of learning materials availability at home. TV and videos have a weighted mean of 3.07, online resources have a weighted mean of 2.97, relevant reading materials have a weighted mean of 2.68, and textbooks have a weighted mean of 2.67, and these are sometimes available in terms of their descriptive value. While software has a weighted mean of 2.26, maps have a weighted mean of 2.12, computers have a weighted mean of 2.01, and posters have a weighted mean of 1.97, all of which are seldom available. The weighted mean on the chalkboard is 1.60, which isn't available. The overall weighted mean is 2.34, and its descriptive value is seldom available. TV and videos are portable tools which can be used conveniently in learning.

Table 7. Weighted Mean and Descriptive Value according to Availability of Learning Materials at Home

Learning Materials	Weighted Mean	Descriptive Value
Textbook	2.67	Sometimes Available
Software	2.26	Seldom Available
Relevant Reading	2.68	Sometimes
Materials		Available
Online Resources	2.97	Sometimes
		Available
TV and Videos	3.07	Sometimes
		Available
Maps	2.12	Seldom Available
Charts	2.01	Seldom Available
Computers	2.02	Seldom Available
Posters	1.97	Seldom Available
Chalkboard	1.60	Not Available
Overall Weighted	2.34	Seldom Available
Mean		

Additionally, table 8 presents the frequency and percentage distribution according to lighting and ventilation. It is illustrated that in terms of lighting, the majority of the respondents are satisfied with a percentage of 66%, followed by 32% of being very satisfied, and only 2% of being dissatisfied.

Further, in terms of ventilation, 69% of the respondents are satisfied, 23% are very satisfied, 7% are dissatisfied, and only 1% are very dissatisfied. This implies that learners perform better when they have a comfortable learning environment at home, which includes good lighting and ventilation.

Table 8. Frequency and Percentage Distribution according to Lighting and Ventilation

Lighting	Frequency	Percentage
Very satisfied	32	32%
Satisfied	66	66%
Dissatisfied	2	2%
Total	100	100%
Ventilation	Frequency	Percentage
Very satisfied	23	23%
Satisfied	69	69%
Dissatisfied	7	7%
Very Dissatisfied	1	1%
Total	100	100%

As shown in table 9, it indicates the frequency and percentage distribution according to home space. It was discovered that the sala received the highest percentage of 51%, followed by the bedroom at 30%, the study room at 12%, the terrace at 6%, and the backyard at only 1%.

Table 9. Frequency and Percentage Distribution according to Home Space

Space	Frequency	Percentage
Bedroom	30	30%
Study Room	12	12%
Terrace	6	6%
Sala	51	51%
Backyard	1	1%
Total	100	100%



It is reflected in table 10 that 61 or 61% of the respondents' type of Internet connection is cellular data; 31 or 31% used wireless/Wi-fi; 5 or 5 % used cable and 3 or 3% used satellite. The table further reveals that most of the respondents are using cellular data in their studies, which shows a higher percentage than any other Internet connection. This implies that students prefer cellular data because it allows them to access educational materials at any time and from any location.

Table 10. Frequency and Percentage Distribution according to Type of Internet Connection

Type of Internet	Frequency	Percentage
Connection		
Cable	5	5%
Wireless/Wi-fi	31	31%
Satellite	3	3%
Cellular Data	61	61%
Total	100	100%

Moreover, it is presented in table 11 with the frequency and percentage distribution according to Internet connectivity. As shown, the majority of the respondents have medium-speed connectivity with a percentage of 50%, while 37% have slow connectivity, and only 13% have fast connectivity. This study is supported by a report from Michigan State University's Quello Center (2020) that shows slow internet connections from homes in rural areas can contribute to students falling behind academically. This implies that one of the most significant issues faced by students is having slow internet connectivity, which limits their learning potential.

Table 11. Frequency and Percentage Distribution according to Internet Connectivity

Internet	Frequency	Percentage
Connectivity		
Fast Connectivity	13	13%
Medium-Speed	37	37%
Slow Connectivity	50	50%
Total	100	100%

Table 12 presents the respondents' frequency of how often they do the following household chores. As revealed from the data, the majority of the respondents are doing the given household chores "some of the time" with an overall weighted mean of 2.84. These results imply that respondents have more time to do their schoolwork at home.

Table 12. Weighted mean with its descriptive value according to Household Chores

Household Chores	Weighted Mean	Descriptive Value
Doing the laundry	2.74	Some of the Time
Sweeping the	2.67	Some of the Time
backyard		
Washing the dishes	3.23	Some of the Time
Folding washed	2.86	Some of the Time
clothes		
Cooking	2.86	Some of the Time
Cleaning the	2.72	Some of the Time
bathrooms		
Taking out the	2.78	Some of the Time
trash when its full		
Cleaning the floors	3.12	Some of the Time
inside house		
Fetching water	2.71	Some of the Time
Watering the plants	2.73	Some of the Time
Overall Weighted	2.84	Some of the Time
Mean		

Table 13. Analysis of the Difference of Academic Performance of Respondents when Grouped according to their Home Environment

The data in table 13.1 reveals that the respondent's family size and academic performance do significantly differ. This implies that students who have smaller families perform better in school than those from larger families. In the study of Ella,et al. (2015), it reveals that there is a significant difference on the family size of the students' academic performance. This implies that parents have the role to provide the needs of their children especially their educational needs that will motivate them to learn effectively and perform academically in school. To negate this study according to Booth & Kee (2006) identified that learners from large families have lower level of academic performance.



Table 13.1. Family size

Family Size	Mean	Computed Value	Probability Value at 5% Level of Significance	Decision
1 - 3	88.80			
members	85.15	F = 3.213	0.026	Reject H₀
4 - 6	86.00			
members	85.33			
7 - 9				
members				
10 and				
above				

As presented in table 13.2, the data showed that the respondents' parents' economic status had a significant difference in their academic performance. Therefore, the high economic status of parents is significantly associated with the student's academic performance. In the study of Asiegbu (2018), stated that the learners with high socio-economic status performs better in their academics. This implies that students who have high parents' economic status have more opportunities for a good education.

Table 13.2. Parents' Economic Status

Parents'	Mean	Computed	Probability	Decision
Economic		Value	Value at 5%	
Status			Level of	
			Significance	
Below	84.87			
10,000	86.90			
10000 -	88.80	F = 2.962	0.016	Reject H₀
20000	85.50			
20001 -	85.56			
30000	91.75			
30,001 -				
40000				
40,001 -				
50,000				
Above				
50,000				

As presented in table 13.3, it shows that the parents' educational attainment of the respondents and their academic performance do significantly differ. It could be

concluded that the higher educational status of parents has a significant and positive relationship with their children's academic achievement. According to Idris et al. (2020) revealed the importance of educated parents and their relationship with school-related decisions. The decisions of highly educated parents are more relevant and reflective as compared to those of less and averagely educated parents. This explains why the educational level of parents positively contributes to the academic achievement of their children.

Table 13.3. Parents' Educational Attainment

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Parents'	Mean	Computed	Probability	Decision
Educational		Value	Value at 5%	
Attainment			Level of	
			Significance	
FATHER				
Short course	86.00			
Elementary	83.35			
undergraduate	84.15	F = 2.586	0.023	Reject H₀
Elementary	85.62			
graduate	86.18			
High school	87.33			
<mark>undergraduate</mark>	88.10			
High school				
graduate				
College				
undergraduate				
College graduate				
MOTHER				
Elem	83.60			
undergraduate	83.86			
Elementary	85.00	F = 3.715	0.004	Reject H₀
graduate	85.67			
High school	87.00			
undergraduate	88.44			
High school				
graduate				
College				
undergraduate				
College graduate				

The result of the analyzed data as shown in the table 13.4 reveals that the type of family structure and academic performance of students do not significantly differ. In support of this study, Azuma et al. (2018) found out that family structure indicated no significant effects on



academic performance of children. In this study regardless of family structure learners can achieve academic excellence with support of parents.

Table 13.4. Type of Family Structure

Type of	Mean	Computed	Probability	Decision
Family		Value	Value at 5%	
Structure			Level of	
			Significance	
Nuclear	85.96			
Family	87.14	F = 0.136	0.939	Accept
Single Parent	86.00			$H_0$
family	85.83			
Extended				
Family				
Grandparent				
Family				

In table 13.5, the data reveals that the availability of learning materials at home influences students' academic performance in school. Learning materials can significantly increase learners' achievement by supporting learning, according to OL Create (2020) supports this data which learning materials are available at home can helps students' learning. This implies that learning materials being available at home can help enhance the quality of learning and improve student performance.

Table 13.5. Availability of learning materials at home

Availability	Mean	Computed	Probability	Decision
of Learning		Value	Value at 5%	
Materials at			Level of	
Home			Significance	
Not	84.05			
Available	85.65	F = 5.674	0.001	Reject H₀
Seldom	86.35			
Available	91.50			
Sometimes				
Available				
Always				
Available				

It can be inferred from table 13.6 that lighting and ventilation accept the hypothesis, which means that these factors do not significantly differ from the students' academic performance. Therefore, this study revealed

that lighting and ventilation conditions of students, this does not affect their performance in school. It is always dependent on their willingness and availability to study more and achieve academic success.

Table 13.6. Lighting and Ventilation

Lighting	Mean	Computed Value	Probability Value at 5% Level of Significance	Decision
Dissatisfied	82.00			
Satisfied	85.45	F = 2.843	0.063	Accept
Very	87.45			$H_0$
Satisfied				
Ventilation				
Very	93.00			
Dissatisfied	83.71	F = 2.274	0.085	Accept
Dissatisfied	85.68			$H_0$
Satisfied	87.52			
Very				
Satisfied				

As shown in table 13.7, the space at home of students does not significantly differ from the academic performance of students. It implies that any space available at home doesn't affects their academic performance at school.

Home Space	Mean	Computed Value	Probability Value at 5% Level of Significance	Decision
Sala	85.35			
Terrace	86.43	F = 0.765	0.516	Accept H <sub>0</sub>
Study	87.08			
Room	86.70			
Bedroom				

The data in table 13.8 reveals that the type of Internet connection and a student's academic performance do significantly differ. According to Dvorak (2022), his study showed that the better internet connection have the more students get involved in academic performance.



Table 13.8. Type of Internet connection

Type of Internet Connection	Mean	Computed Value	Probability Value at 5% Level of	Decision
			Significance	
Cellular Data	85.07			
Satellite	91.33	F = 3.171	0.028	Reject
Wireless/Wi-	87.13			$H_0$
fi	88.00			
Cable				

In table 13.9, it reveals that Internet connectivity makes a significant difference to the academic performance of students. It means the faster the connectivity is, the more helpful it is for students in their studies. According to the study conducted by Souvik (2021), the faster the connection have the more opportunity to improve academic performance.

Table 13.9. Internet Connectivity

Internet	Mean	Computed	Probability	Decision
Connectivity		Value	Value at 5%	
			Level of	
			Significance	
Slow	84.41			Inte
Connectivity	86.86	F = 3.855	0.024	Reject H₀
Medium	87.54			
Connectivity				
Fast				
Connectivity				

Table 13.10 indicates the household chores, which do not significantly differ from the academic performance of students. Meaning, no matter how often they do the household chores at their home, this does not affect the student's academic performance. As a result, respondents should manage their time to do academic tasks like homeworks, worksheets, projects and academic requirements.

Table 13.10. Household Chores

Household Chores	Mean	Computed Value	Probability Value at 5% Level of Significance	Decision
Never	85.20			
Seldom	84.60	F = 1.330	0.269	Accept

Some of	86.02		$H_0$
the Time	87.30		
Most of the			
Time			

### DISCUSSION / ANALYSIS

This study was conducted for the purpose of determining the effects of the home environment on the academic performance of the Grade 10 students at Sto. Niño National High School. The descriptive method of research was used, and the survey questionnaire was utilized for gathering the data. The respondents were a sample of 100 Grade 10 students. The inquiry was conducted during the academic year 2021-2022. Of the 100 Grade 10 students, 38% were from St. Gertrude, while St. Cecilla and St. Elizabeth acquired 20% each, then 16% from St. Juliana and from St. Margareth is 6% only. Meanwhile, majority of the respondents have satisfactory grades and are doing well in their studies. On the other hand, this study found home environment factors that have a significant difference in the student's academic performance. These are family size, parents' economic status, parents' educational attainment, availability of learning materials, type of Internet connection, and Internet connectivity. Each of these home environment factors plays a significant role in the educational life of students. In contrast, the following are not significant based on the findings of this study: type of family structure, lighting, ventilation, home space, and household chores.

### CONCLUSION

It is the result of effective teaching and learning, as well as the concerted efforts of the teacher, the school, the students, parents, and their various home environments. As a result, in addition to other factors, a good home environment is required for a child's excellent academic performance. Students' abilities and attitudes toward learning differ. As a result, parents must recognize this and attend to their children as individuals. They should also strive to create and maintain a positive home



environment in which love, hard work, and excellence are encouraged in order to bring out the best in their children's academic performance.

#### LIMITATION AND STUDY FORWARD

The study aimed to assess the effects of home environment to the academic performance of students. This study was limited to the grade 10 students of Sto. Niño National High School.

### CONFLICT OF INTEREST AND ETHICAL STANDARDS

The following ethical considerations were followed in the conduct of the foregoing study:

Research respondents were asked to sign an informed consent form to be officially considered as participants. They were treated with respect for their dignity. They were also briefed about the aim of the study and were allowed to share only what they wanted to relate. They were also given space to think. They were also informed that they could have a choice of not continuing with the interview anytime if they are not anymore interested or comfortable. Besides, only those who would like to give the full consent prior to the study were included. They were also ensured of the protection of their privacy and the adequate level of confidentiality of the research data. Anonymity of individuals and organizations participating in the research were ensured. In the interpretation of the primary data, the researcher avoided any bias or misleading information. The works of other authors used in any part of the dissertation are acknowledged using the APA 7th edition documentation style.

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