Factors Affecting Academic Performance Among Grade 12 Students

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ABSTRACT

This research study determines the factors that affect the academic performance of Grade 12 students of Concepcion National High School (CHNS), Concepcion, Misamis Occidental during the academic year 2019-2020. The study employed a quantitative research design in determining perceived factors that affect the academic performance of Grade 12 students. A modified questionnaire used by Laguna Polytechnic University was used. The frequency and percentage were used to analyze the grade point average. The weighted average mean was used to analyze the common factors affecting the academic performance of the students. The Mann Whitney U test was used to determine the significant difference between the perceptions of the male and female participants in terms of the perceived factors of academic performance.

The findings suggest that teachers can be a positive influence on a wide variety of their students' short and long-term outcomes, including grades, assessment scores, health, extra-curricular activities, and attendance. However, it is only in the teaching skills as a determining factor of the academic performance that they significantly differ. Male and female students have diverse perspectives on how their teachers' teaching skills influenced their academic performance, but their perceptions of how their interests, study habits, teacher's personality, instructional materials, learning facilities, proper guidance and family stress were relating to their academic performance did not significantly differ.

Concepcion National High School must motivate and capacitate its teachers to improve their teaching skills and practices by using new and updated trends, improving classroom management, using various strategies or teaching aids/devices, and being confident and firm in decision making. They must also be open to suggestions and opinions in order to improve student academic performance.

KEYWORDS: *Factors, Academic Performance, Grade 12 Students*

INTRODUCTION

The academic performance of students is the center around which the whole education system revolves. The success and failure of any educational institution are measured in terms of the academic performance of students. The schools and parents also have very high expectations from students concerning their academic performance. They believe that better academic results may lead to better career options and future security. Academic performance refers to the knowledge attained and designated by marks assigned by the teacher. In an educational context, academic

performance is the educational goal achieved by a student, teacher, or institution over a certain period. It is measured either by examinations or continuous assessments, and the goal may differ from one individual or institution to another. Academic performance is the outcome of education, the extent to which a student, teacher, or institution has achieved their educational goals. Academic anxiety and academic achievement were inversely and significantly related (Murphy and Kulshreshta) [1]. Academic performance is influenced by various factors such as personality, intellectual ability, environment, and others.

The student's academic performance plays a vital role in creating the finest quality alumnae who will become leaders and human resources of a particular country, consequently responsible for the country's social and economic development (Ali et al.,) [2]. The academic performance of the students' has gained significant attention in past researches. The performance of students is affected by psychological, economic, social, personal and environmental factors. Though these factors strongly influence the performance of the students, these factors differ from country to country and person to person. Most of the previous studies on students' academic performance focused on teacher education, class environment, gender difference, teaching style, family educational background, and socioeconomic factors. Other researchers assessed the students' performance through the previous years' result or the outcome of a particular subject (Tahir & Naqvi) [3]. Past students concentrate on various factors such as class plans, class size, reading material, the environment of the class, the innovation utilized as a part of the class and exams frameworks, extra-curricular exercises, family and work exercises.

Previously, most academic performance students were conducted on gender difference, teacher's education, teaching style, class environment, socio-economic factor, and family educational background. The finding of this study varies from region to region, and their results differ in cities and rural areas.

Many researchers discussed the different factors that affect student academic performance in their research. There are two types of factors that affect the students' academic performance. These are internal and external classroom factors, and these factors strongly affect the students' performance. Internal classroom factors include students' competence in English, class schedules, class size, English textbooks, class test results, learning facilities, homework, the environment of the class, the complexity of the course material, teacher's role in the class, the technology used in the class and exams systems. External classroom factors include extracurricular, family problems, work, and financial, social, and other problems. Research studies show that students' performance depends on many factors such as learning facilities, gender and age differences, etc. that can affect student performance (Hansen) [4]. If the students have strong communication skills and have a firm grip on English, it increases their performance. The student's performance is affected by communication skills; it is possible to see communication as a variable that may positively relate to the student's performance in open learning (Al-Mutairi) [5].

Parental encouragement is a factor that affects students' performance. It can be in the form of guidance, concern, care, and approval by parents, which can act as a driving force for the children to make a particular decision in life. Parental encouragement can help the child overcome various difficulties in life, especially in academics. It can be in different forms, such as attending school functions, responding to school obligations, involvement in children's schoolwork, planning for adequate study time, place, and resources, molding desired behavior, and guiding them as per the

instructions of teachers. Parental encouragement is necessary at every stage of life for coping with life in a satisfactory manner.

The school environment is an important part of a child's life, and is defined as the quantity and quality of emotional, social, and cognitive support available to the students throughout their school life. It encompasses both the socio-psychological and physical dimensions, and can play an active role in promoting the all-around development of children. Satisfaction with the behavior of class follows teachers, head of the institution, methods of teaching, time table, and co-curricular activities, which influence their performance in academics, an adjustment in life and society. The child spends most of his time in school and this environment.

The authors of Makewa, Role and Yegoh [6] found that parental encouragement and school environment have a significant influence on the academic performance of senior secondary school students. This study focuses on the eight most common factors that affect the academic performance of students, such as student's interest, study habits, teacher's personality traits, teaching skills, instructional materials, learning facilities, proper guidance, and family stress. These factors have a significant influence on the academic performance of students.

The researcher is one of the Grade-12 Senior High School teachers of Concepcion School (CNHS), Concepcion, Misamis Occidental is motivated to come up with the study in order to determine the factors that affect the academic performance of the Grade-12 Senior High School students.

The researcher believed that this study will help CNHS and the Senior High School teachers improve their students' academic performance by being aware of the factors that affect their students' academic performance. Finding the solution is among the pivotal considerations for improving the school, teachers and students.

Statement of the Problem

This research study determines the factors that affect the academic performance of Grade 12 students of Concepcion National High School (CHNS), Concepcion, Misamis Occidental during the academic year 2019-2020. Based on the findings of the study, recommendations are proposed. Specifically, it discussed the following sub-problems, namely: general point average or grade score of the students; common factors that affect Grade 12 students' academic performance; and test for significant relationship between the students' grade point average and their common factors affecting academic performance; proposed plan of action formulated based on the findings of the study.

METHODOLOGY

The study employed a quantitative research design in determining perceived factors that affect the academic performance of Grade 12 students. A modified questionnaire used by Laguna Polytechnic University was used. The frequency and percentage were used to analyze the grade point average. The weighted average mean was used to analyze the common factors affecting the academic performance of the students. The Mann Whitney U test was used to determine the significant difference between the perceptions of the male and female participants in terms of the perceived factors of academic performance.

RESULTS AND DISCUSSIONS

Table 1 shows that majority of the participants got average level of academic performance. These students got scores which ranged from 80 – 84.9, that 80 or 47.06 percent of them. There were also considerable number of students who performed satisfactorily; out of 170 students, 55 or 32.35 percent got scores which ranged from 85 – 89.9. Only ten or 5.88 percent got poor level of performance whose scores ranged from 75-79.9.

Table 1. *Grade Point Average Distribution of the Students*

Grade Point Average	Frequency	Distribution
75 – 79.9 - Poor	10	5.88
80 – 84.9 – Average	80	47.06
85 – 89.9 - Satisfactory	55	32.35
90 – 94.9 – Very Satisfactory	25	14.71
Total	170	100.00

Common Factors that Affect Grade 12 Students' Academic Performance

The participants were highly interested with getting good grades on tests, quizzes, assignments and projects. This is revealed in the weighted average mean of 4.45 which has the highest value. Generally, the overall mean of 3.94 indicates that the students have high level of interests. As regards the study habits, the participants claimed that their study habits reflected a high level of factors on their academic performance. This is revealed in the overall mean of 3.58 which is denoted as high. The highest weighted average mean of 4.25 indicates very high level of factor for the indicator of "I study harder to improve my performance when I get low grades." Another important indicator exemplifies that "I exert more effort when I do difficult assignments," with 3.87 weighted average mean. These imply that students tend to spend extra mile on their studies when they were a little bit pressured from low grades and from difficult assignments and tasks.

In terms of teachers' personality traits, it appeared that these traits were considered very high level of factors in the students' academic performance. The teachers' good relationship with students, their smartness, confidence and firmness in making decisions, and being open to suggestions and opinions were considered by the students as very important in their academic performance. Generally, the teaching skills also of their teachers were considered high factors in their academic performance as revealed in the overall mean of 3.92; instructional materials were considered as high factor especially the use of chalk and blackboard in explaining their lessons.

The students also noted that having a science laboratory with modern equipment as well as maintaining a school environment that is conducive to learning were important factors in their academic performance as these two indicators were denoted as very high.

From among the predetermined factors of academic performance, it was the family stress which registered the lowest overall mean of 2.20 interpreted as "low." These findings imply that a lot of students did not consider their family environment and conditions as hindering them from pursuing

their academic endeavors. On the contrary, most of the participants use their situation to inspire themselves to do well in school to have a better future.

Table 2. *Most Common Factors Affecting Academic Performance of the Participants*

Statements	WAM	Interpretation
Student Interest		
1. I make myself prepared for my subjects.	3.85	High
2. I listen attentively to the lecture of my subject teacher.	4.03	High
3. I actively participate in the discussion, answering exercises and/or clarifying things I did not understand.	3.57	High
4. I want to get good grades on test, quizzes, assignments, and projects.	4.45	Very High
5. I always see to it that I am always ready with our lessons when I come to class.	3.81	High
Overall Mean	3.94	High
Study Habits		
1. I do my assignments regularly.	3.67	High
2. I exert more effort when I do difficult assignments.	3.87	High
3. I spend my vacant time doing assignments or studying my lessons.	2.95	Average
4. I study the lessons I missed if I was absent from the class.	3.23	Average
5. I study and prepare for quizzes and tests.	3.72	High
6. I study harder to improve my performance when I get low grades.	4.25	Very High
7. I spend less time with my friends during school days to concentrate more on my studies.	3.56	High
8. I prefer finishing my studying and my assignments first before watching any television program.	3.70	High
9. I see to it that extracurricular activities do not hamper with my studies.	3.32	Average
10. I have specific place for study at home which I keep clean and orderly.	3.56	High
Overall Mean	3.58	High
Teachers' Personality Traits		
1. My teacher has a good relationship with her students.	4.46	Very High
2. My teacher shows smartness, confidence and firmness in making decisions.	4.37	Very High
3. My teacher imposes proper discipline and is not lenient in following the prescribed rules.	4.19	High
4. My teacher has an appealing personality and with a good sense of humor.	3.64	High
5. My teacher is open to suggestions and opinions and is worthy of praise.	4.41	Very High
Overall Mean	4.21	Very High

Teaching Skills

1. My teacher explains the objectives of the lesson clearly at the start of each period.	3.77	High
2. My teacher has mastery of the subject matter.	4.03	High
3. My teacher is organized in teaching our lessons.	3.94	High
4. My teacher is updated with present trends, relevant to our lessons.	3.93	High
5. My teacher uses various strategies, teaching aids/device and techniques in presenting the lessons.	3.92	High
Overall Mean	3.92	High

Instructional Material

1. Chalk and blackboard in explaining the lessons.	4.25	Very High
2. Workbooks/textbooks.	4.08	High
3. Power point presentations (visual aids)	3.54	High
4. Articles	3.45	High
5. Materials for project development	3.83	High
Overall Mean	3.83	High

Learning Facilities

1. Our school library has complete books and other reference materials.	3.61	High
2. Our school has a science laboratory with modern laboratory equipment like microscope, etc.	4.21	Very High
3. Our school has provided the students in the computer laboratory with upgraded computers and LCD projectors.	3.61	High
4. Our classrooms are conducive to learning.	3.99	High
5. Our school environment is conducive to learning.	4.56	Very High
Overall Mean	4.00	High

Proper Guidance

1. My parents always take time to ask me about my assignments and whether I have studied my lessons.	3.61	High
2. My parents take turns in attending PTA meetings to know my school performance.	4.21	Very High
3. My parents can communicate openly to me about my personal and school problems or concerns.	3.60	High
4. My teacher can clearly communicate to me about our classroom rules and my problem in school.	3.99	High
5. Our school rules and policies have disciplined me and guided me to obey rules and teach me to become a better student.	4.56	Very High
Overall Mean	3.99	High

Family Stress Factor

1. I am absent from my classes every time I help my parents earn a living or help take care of my younger sister/brother.	2.12	Low
2. I have to earn money to buy my notebooks, paper, ballpen, and school projects.	2.94	Average

3. I have many brothers and sisters and only my father is working for the family.		2.46	Low
4. There are times that I cannot attend classes because our house is very far from the school and I do not have money for fare and lunch.		1.88	Low
5. I lost interest in going to school because my parents cannot support all my needs.		1.79	Low
Overall Mean		2.24	Low

Legend:
4.21 – 5.00 Very High (VH)
3.41 – 4.20 High (H)
2.61 – 3.40 Average (A)
1.81 – 2.60 Low (L)
1.00 – 1.80 Very Low (VL)

Table 3. *Summary of the Tests of Significant Difference in the Perceived Factors of Academic Performance When Participants Were Grouped According to Sex*

Variables	Mann Whitney U	Z-score	P-value	Decision
Students' Interest	9	0.627	0.53	Not Significant
Study Habits	40.5	0.68	0.497	Not Significant
Teachers' Personality	12	0	1	Not Significant
Teaching Skills	0	2.507	0.012	Significant
Instructional Materials	10	0.418	0.674	Not Significant
Learning Facilities	8	0.836	0.400	Not Significant
Proper Guidance	9	0.627	0.529	Not Significant
Family Stress	11	0.209	0.834	Not Significant

The summary of the tests for significant difference between the perceptions of the male and female participants revealed that it is only the teacher's teaching skills that their perceptions were significantly different. The findings pointed out that the Mann Whitney U test value of 0, with z-score of 2.507 at the 0.012 probability value was significant. The perceptions of the participants were almost the same when it comes to how they considered the other factors as contributing to their academic performance.

CONCLUSIONS AND RECOMMENDATIONS

The participants considered their teacher's personality traits as very highly affecting their academic performance based on their perceptions. The other attributes like students' interests, study habits, teaching skills, instructional materials, learning facilities and guidance of parents were highly attributing their academic performance. However, they perceived that family stress mattered only in low level. The findings are supported by Chamberlain [7] and Chetty, Friedman and Rockoff [8]. According to them, teachers can be a positive influence on a wide variety of their students' short and long-term outcomes, including their grades, assessment scores, health, extra-curricular activities, and attendance.

It is only in the teaching skills as a determining factor of the academic performance of the participants that they significantly differed. Male and female students have diverse perspectives on the how their teachers' teaching skills influenced their academic performance. The students' perceptions on how their interests, study habits, teacher's personality, instructional materials, learning facilities, proper guidance and family stress were relating their academic performance did not significant differ. Male and female students registered almost similar perspectives on how these factors have contributed their academic performance.

The need for teachers to improve teaching skills and enhance teaching practices by using new and updated trends in teaching relevant to the lesson, improve classroom management, use various strategies or teaching aids/devices in presenting the lessons by being able to explain the objectives of the lessons clearly. To establish good relationship with the students by being confident and firm in decision making, by imposing proper discipline in accordance to school rules and policies but open to suggestions and opinions. Concepcion National High School must motivate and capacitate its teachers by sending them to trainings and seminars and learn in order to improve their relationships with students thus, improve students' academic performance.

REFERENCES

i. Murthy, C.G. & Kulshreshtha, R. (1999). Academic Anxiety and Academic Achievement. Journal of Indian Education 2, 29-37.

ii. Ali, et al. (2009). The Factors Influencing Students' Performance atUniversiti Teknologi MARA Kedah, MalaysiaNorhidayah. Management Science and Engineering ISSN 1913-0341 Vol.3 No.4 2009. Available from: https://www.researchgate.net/publication/43245445_The_Factors_Influencing_Students%27 _Performance_at_Universiti_Teknologi_MARA_Kedah_Malaysia

iii. Tahir, S., & Naqvi, S.R. (2006). Factors affecting students' performance. Bangladesh e-journal of sociology, 3(1), 2.

iv. Hansen, J. B. (April 2000). Student Performance and Student Growth as measure of success: A evaluator's perspective. Paper presented at Annual Meeting of the American Educational Research Association. New Orleans, Louisiana.

v. Al-Mutairi, A. (2011). Factors affecting business students' performance in Arab Open University: The case of Kuwait. International Journal of Business and Management, 6, 146-155. doi: 10.5539/ijbm.v6n5p146

vi. Makewa, Lazarus Ndiku; Role, Elizabeth; Role, Jesse; Yegoh, Ernest. (2011). School Climate and Academic Performance in High and Low Achieving Schools: Nandi Central District, Kenya. https://www.researchgate.net/publication/215656347_School_Climate_and_Academic_Perf ormance_in_High_and_Low_Achieving_Schools_Nandi_Central_District_Kenya

vii.   Chamberlain, G. E. (2013). Predictive effects of teachers and schools on test scores, college attendance, and earnings. Proceedings of the National Academy of Sciences, 110, 17176–17182. https://doi.org/10.1073/pnas.1315746110

viii. Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. American Economic Review, 104, 2633–2679. https://doi.org/10.1257/aer.104.9.2633