

Students' Motivation and Academic Performance in Technology and Livelihood Education



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ABSTRACT: Technology and Livelihood Education (TLE) is a fundamental subject area in Junior High School that aims to provide students with the opportunity to develop technical skills. This study aimed to determine the level of students' motivation and academic performance in TLE-Beauty Care (Nail Care) Services subject and to find the significant relationship between the students' motivation and academic performance while taking the subject. The study employed descriptive-correlational research with content analysis. It utilized an adapted and modified survey questionnaire from Dimaunahan et al. (2021), and students' final rating in TLE-Beauty Care (Nail Care) Services subject as instruments of this study from Grade 10 students who had been previously enrolled in Grade-9 TLE-Beauty Care (Nail Care) Services during School Year 2022-2023 from the four identified schools in Cagayan De Oro City through a purposive universal sampling procedure. Findings revealed that the respondents agreed that they are highly motivated to take TLE- Beauty Care (Nail Care) Services subject that led them to achieve Outstanding academic performance. The variables in motivation such as subject matter, self-efficacy, and self-sufficiency have significant relationships with academic performance except family dynamics. Thus, students take the TLE- Beauty Care (Nail Care) Services subject because they are motivated. Strengthening the integration of the affective targets of learning the subject's basic, common, and core competencies, and the teacher's upskilling for continued professional development is recommended.

KEYWORDS: Academic Performance, Pupils, Students' Motivation, Technical Skills

I. INTRODUCTION

Technology and Livelihood Education (TLE) is one of the learning areas of the Secondary Education Curriculum used in Philippine Secondary Schools. As a subject in high school, its component areas are Home Economics, Agri-Fishery Arts, Industrial Arts, and Information and Communication Technology. TLE as a fundamental subject area in Junior High School aims to provide students with the opportunity to develop technical skills by exposing them to experiences and pieces of training that prepare them for various fields of work. Technology and Livelihood Education (TLE) and Technical Vocational Track Specialization (TVTS) may be taken either in Grades 9 to 12. Schools may offer specialization from the four strands if the minimum number of hours is met.

In the K-12 program of the Department of Education where courses in TLE- Beauty Care are offered, students are expected to obtain Certificates of Competencies (COC) leading to National Certificates 1 or 2 (NCs). COCs and NCs handed out by TESDA are credentials that can be earned in order to be employed immediately following graduation. TLE in the global community allows students to gain knowledge and develop skills that will transform students' lives toward productive ends. This subject is essential because it can help students to be more skillful in many ways and these things can help them in their lives in the near future (Rubio, 2018).

In the case of the Home Economics strand in Senior High school, Beauty Care as one of the Home Economics specializations requires 160 hours of class activities and encounters. This covers the development of the learners' knowledge, skills, and attitude required in performing hands spa, foot spa, manicure and pedicure and nail art. Since each core subject is competency-based, it is inclusive and built around the learners' needs. Learning outcomes revolve around achieving the Basic, Common, and Core Competencies which the learner has to demonstrate independently. Beauty Care as a subject component emphasizes personal development, decision-making, and intrapersonal skills. Taking courses in TLE-Beauty Care introduces the students to a wide variety of potential career paths and opportunities relating to each domain as well as being taught the skills associated with them since it provides a more practical everyday application of the subject matter (Acordova, 2016).

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However, despite the importance given to classroom training in performing learning tasks, there seem to be students who are passive in terms of the learning outcome. While other students are eager and look forward to learning new things each day, others appear less motivated and less driven. Somehow, other students lost sight of the subject's inherent significance and the value it would provide to their lives. The student's academic ratings and performance are commensurate with the level of interest and participation they have shown in their class. The educational psychology literature points out that psychological variable possibly plays a significant role in academic performance (Dimaunahan et al., 2021). However, in the TLE- Beauty Care subject, academic success is largely measured in terms of the acquisition of technical skills. There may seem to be factors that motivate the students to attend to TLE-Beauty Care class or otherwise.

Academic Motivation refers to learners' desire as reflected in their approach, persistence, and level of interest regarding the subject when competence is judged against a standard of performance or excellence (Hu et al., 2021). It could also be equated to the interest of an individual learner to engage in the learning experiences offered (Hulleman et al., 2016). Highly motivated students are expected to make more effort to increase their academic and social achievement in their learning process. When a student fails to meet expectations at school, the student's home and family life should be considered. Several family factors can affect a student's behavior and ability to perform in the classroom (Bennett, 2018). Self-efficacy or one's judgment of capability to successfully perform a particular task refers to an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance and attainments (Betoret et al., 2017). Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. An individual's self-efficacy is known to influence the amount of effort one gives to a particular learning task and the level of persistence when faced with difficulties (Khalique & Singh, 2019).

Thus, this study aimed to look particularly into the elements that influence students' motivation such as the subject matter, family dynamics, self-efficacy, and self-sufficiency. The purpose of this study was to precisely explore the relationship between these characteristics and the degree of academic performance displayed by TLE-Beauty Care students among public Junior High Schools in the Division of Cagayan De Oro City.

This study was anchored on Maslow's Hierarchy of needs and the K-12 curriculum of the Department of Education which would serve as the basis for determining Students' Motivation such as Subject Matter, Family Dynamics, Self-efficacy, and Self-efficiency as it affects Students' Performance in TLE-Beauty Care Specialized Subject. Maslow's hierarchy of needs is a theory of motivation that states the five categories of human needs that dictate an individual's behavior. Those needs are physiological, safety needs, love and belonging needs, esteem needs, and self-actualization needs. Physiological needs are basic needs such as clothing, food, and shelter.

Maslow states that these basic physiological needs must be addressed before humans move on to the next level of fulfillment. Safety needs include protection from violence and theft, emotional stability and well-being, health security, and financial security. The social needs on the third level of Maslow's hierarchy relate to human interaction and are the last of the so-called lower needs. Among these needs are friendships and family bonds—both with biological family (parents, siblings, children) and chosen family. The higher needs, beginning with esteem, are ego-driven. The primary elements of esteem are self-respect (the belief that you are valuable and deserving of dignity) and self-esteem (confidence in your potential for personal growth and accomplishments). Maslow specifically notes that self-esteem can be broken into two types: esteem which is based on respect and acknowledgment from others, and esteem which is based on your self-assessment. Self-confidence and independence stem from this latter type of self-esteem. Self-actualization describes the fulfillment of one's full potential as a person. Sometimes called self-fulfillment needs, self-actualization needs occupy the highest spot on Maslow's pyramid. Self-actualization needs include education, skill development—the refining of talents in areas such as music, athletics, design, cooking, and gardening—caring for others, and broader goals like learning a new language, traveling to new places, and winning awards.

Maslow referred to self-actualization as a "growth need," and he separated it from the lower four levels on his hierarchy, which he called "deficiency needs." According to his theory, if people fail to meet their deficiency needs, they will experience harmful or unpleasant results. Conditions ranging from illness and starvation to loneliness and self-doubt are the byproducts of unmet deficiency needs. By contrast, self-actualization needs can make a person happier but are not harmed when these needs go unfulfilled. Thus, self-actualization needs only become a priority when the other four foundational needs are met. When all levels of Maslow's Hierarchy of Needs are met, students show their full ability and eagerness for learning. The higher up in the hierarchy a student is, the better the motivation, and therefore, the student will experience more effective learning (The e-learning network, 2018).

The K-12 curriculum of the Department of Education delineates the need for skills acquisition among Filipino students and to develop a globally competitive, productive, and responsible citizen equipped with essential competencies, technical skills, and values for both lifelong learning and employment through the eight basic learning areas, one of which is Technology and Livelihood Education (TLE).

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TLE generally includes the basic skills and concepts of home economics, entrepreneurship, information and communication technology (ICT), and agricultural arts as well as Industrial Art (Agluba, 2021). It is offered as an exploratory subject for lower secondary school, particularly in Grades 7 and Grade 8. This course introduces the different mini-courses and learning activities, which will prepare the students to be skillful and competitive before they take the specialization course in Grades 9 and 10. However, the specialization offered in Grades 9 and 10 was based on the school's needs assessment for the offering per locality with special consideration on the needs of the community and schools' resources.

Students' academic performance in a competency-based subject refers to the extent to which students have achieved their full potential according to their specific needs. In a skill-based course such as TLE, skills acquisition in the identified areas such as Beauty care provide the measure of achievement or performance that serves as a benchmark to determine the result and attainment of set goals. (Abaidoo, 2018) identified some factors that contribute to an improvement in academic performance which include regular studying, self-motivation, punctuality and regular class attendance, hard work, and interest in a subject. This research, however, specifically looked into the different motivational factors identified as subject matter, family dynamics, self-efficacy, and self-sufficiency as they affect the performance and academic rating of students in TLE- Beauty Care Specialized Subject.

II. METHODOLOGY

This study was descriptive-correlational with content analysis. It utilized the descriptive survey method or approach that blended quantitative and qualitative data to provide relevant and accurate information which involved collecting by interviewing or administering a questionnaire to a sample of individuals (Eliyawati, 2019). A time-efficient research method, that engaged the people at the center of the research objective. Also, according to McCombes (2022), descriptive survey research attempts to analyze, interpret, and report the present state of the subject matter or problem. It allows to gathering of large volumes of data that can be analyzed for frequencies, averages, and patterns. The study was correlational in the sense that it tried to determine whether a significant relationship existed between the students' motivation and academic performance of the study.

This study utilized a purposive universal sampling procedure because the respondents of this study were the Grade 10 students who took TLE-Beauty Care (Nail Care) Services Specialized Subject in Grade-9 School Year 2022-2023 from the schools that offered the same subject in Cagayan de Oro City Division. These schools are Cagayan de Oro City High School, Bulua National High School, Macasandig National High School, and Angeles Sisters National High School.

The data was gathered, tallied, tabulated, and analyzed. In analyzing and interpreting the information gathered, descriptive and inferential statistics were employed. To determine the students' motivation as to their subject matter, family dynamics, self-efficacy, and self-sufficiency, mean and standard deviation were used while the students' Final rating was described using the frequency counts, and percent. Inferential statistics such as the Pearson Product-Moment Correlation Coefficient (Pearson r) was used to determine the significant relationship that existed between the independent variables which are subject matter, family dynamics, self-efficacy, self-sufficiency, and the dependent variable, the students' final rating or academic performance.

III. RESULTS AND DISCUSSION

Problem 1. What is the level of students' motivation in TLE-Beauty Care (Nail Care) Services Subject as to:

- 1.1 Subject Matter;
- 1.2 Family Dynamics;
- 1.3 Self-efficacy and
- 1.4 Self-sufficiency?

Table 1: Overall Students' Motivation in TLE-Beauty Care (Nail Care) Services Subject

Students' Motivation	Mean	SD	Description	Interpretation
Subject Matter	4.19	0.83	Agree	High Motivation
Family Dynamics	3.51	1.09	Agree	High Motivation
Self-efficacy	4.28	0.82	Strongly Agree	Very High Motivation
Self-sufficiency	4.03	0.85	Agree	High Motivation
Overall	4.00	3.59	Agree	High Motivation

Note: 4.21 -5.00 Very High Motivation; 3.41 - 4.20 High Motivation; 2.61 – 3.40 Moderately High Motivation; 1.81 – 2.60 Low Motivation; 1.00 – 1.80 Very Low Motivation

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Table 1 shows the overall extent of Students' Motivation in TLE-Beauty Care (Nail Care) Specialized Subject as to Subject Matter, Family Dynamics, Self-efficacy, and Self-sufficiency. It reveals that it has an overall mean of 4.00 with $SD=3.59$, described as Agree and interpreted as High Motivation. This implies that the students considered all these variables important, positive, and mutually directional since they all contributed to a varying degree, to the motivation needed to either excel or merely pass the subject. Hayes (2023) stated that when two or more different variables move in the same direction, they theoretically are influenced by the same external forces.

As can be seen from the table, Self-efficacy has the highest mean of 4.28 with an $SD=0.82$ described as Strongly Agree and interpreted as Very High Motivation. This means that students are motivated to attend the TLE-Beauty Care (Nail Care) Services Subject because they believe they know the subject or they believe that the subject is easy to understand and easy to perform. This belief, according to Cherry (2023), increases the level of self-efficacy and influences what they can do. People can have self-efficacy in different situations and domains, such as school, work, relationships, and other important areas.

On the other hand, Family Dynamics has the lowest Mean of 3.51 with $SD=1.09$, which is described as Agree and interpreted as High Motivation. This means that students chose TLE-Beauty Nail Care Specialized subject not so because of family's desire and influence. But, as found in the discussion in Table 2, they chose to take the subject to please their families. It is called parent-pleasing which according to Harkonen et al. (2017) is more than simply complying with a parent's instructions or even wanting their love and affection — both of which are completely normal. Holmes (2022), added to the idea that most children want to please their parents, so they can feel more accepted and secure in the family constellation.

Problem 2. What is the level of students' Academic performance in the TLE Beauty Care (Nail Care) Services Subject?

Table 2: Students' Performance in the TLE- Beauty Care (Nail Care) Services Subject.

General Average	Scale	Frequency	Percentage	Description
90-100	5	106	62%	Outstanding
85-89	4	34	20%	Very Satisfactory
80-84	3	24	14%	Satisfactory
75-79	2	6	4%	Fairly Satisfactory
Below 75	1	0	0%	Did Not Meet Expectations

Table 2 shows the frequency and percentage distribution of the students' academic performance of TLE- Beauty Care (Nail Care) Services subject, School Year 2022-2023 from learners of the four identified schools of Cagayan De Oro City Division. The majority of the learners have an outstanding academic performance with a total of 106 respondents at 62% with grades ranging from 90-100%. This means that most students base their self-worth not only on academic evaluations such as periodic exams and quizzes but also on performances and tasks that require actual demonstrations and visual results. The grade or rating is the total representation of the component of the grading system which gives 60% emphasis on the hands-on activities or performance tasks that are a trademark of Technology and Livelihood Education (TLE) subjects. The remaining 20% of Quizzes and 20% of Periodical Exam are what make up the total component of a grade. There are generally two forms of student assessment that are most frequently discussed in the teaching and learning process. The first, **summative assessment**, is an assessment that is implemented at the end of the course of study. Its primary purpose is to produce a measure that "sums up" student learning. Summative assessment is comprehensive and is fundamentally concerned with learning outcomes (DO No. 8, s. 2015).

There are only 6 at 4% of students got the lowest grade. There were no students who failed in the TLE Beauty Care (Nail Care) Specialized subject. This means that although the quizzes and periodical exams are as equally important as the performance tasks, chances are high for those students to pass the subject even if they fall short on the written examinations. It is by way of remediations and repeat hands-on performances that students are given to redeem themselves to truly pass the subject. It is important to recognize that both summative and formative assessments indicate the *purpose* of the assessment, not the *method*. Different methods of assessment can either be summative or formative in orientation depending on how the instructor implements them (DO No. 08, s. 2015).

Problem 3. Is there a significant relationship between the students' level of motivation and academic performance in the TLE-Beauty Care (Nail Care) subject?

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Table 3: Pearson's Correlation Test between Extent of Students' Motivation and Performance in the TLE-Beauty Care (Nail care) subject

Independent Variable	r-value	p-value	Description	Interpretation
Students' Motivation				
Subject Matter	0.40	0.00	C	Significant
Family Dynamics	0.17	0.07	NC	Not Significant
Self-Efficacy	0.35	0.00	C	Significant
Self Sufficiency	0.35	0.00	C	Significant

C = Correlated

Significant when computed p-value <0.05

NC = Not Correlated

Table 3 shows Pearson's correlation test between students' motivation and performance in TLE-Beauty Care (Nail Care) Services subject. It took the analysis at the independent variable level by looking at the correlation test while holding the dependent variable constant at a time. As can be seen from the same table, subject matter, self-efficacy, and self-sufficiency are significant at 0.05. In summary, taking it at the coefficient level, these motivations are correlated to students' performance in TLE-Beauty Care (Nail Care) Services Subject, with a p-value less than 0.05.

The test reveals a significant correlation between the dependent variable and the three independent variables which are the subject matter, self-efficacy, and self-sufficiency, wherein, if the students' motivation variables change their direction, the performance of the students in TLE-Beauty Care also changes in the same manner or direction. This means that subject matter, self-efficacy, and self-sufficiency matter in the grades of the students. These three variables of motivation inspired them to enroll in the subject as Kurt et al. (2017) said that motivation is one of the most important factors that will influence students' achievements or performance. Furthermore, Family Dynamics has a significant level of 0.17%, which is described as not correlated and interpreted as not significant. Students enrolled in the subject simply because they love the subject and not because of the influence enforced on them by their respective families.

The result shown if taken into the lighter side of the matter, is somehow a manifestation of how far can just family members influence students' decisions since this is the stage wherein the students are expected to learn to affirm themselves. Although family behavior and educational support could cultivate positive learning habits and affect the academic performance of the students, family influence could also mean a burden to carry for the students who feel that they want a different career or subject from what their families are willing to support. In summary, taking it at the coefficient level, the motivation, family dynamics is not correlated to students' performance in TLE-Beauty Care (Nail Care) Services subject, with a p-value less than 0.05, thus, the correlation analysis yielded the null hypothesis test (Ho) with the findings of no correlation at all

IV. CONCLUSIONS

Based on the findings of the study, the following conclusions and implications are presented:

1. Students like TLE Beauty Care (Nail Care) Services subject because they believe that the subject is easy to learn and could improve their beauty.
2. The majority of the students got higher assessments in the summative and hands-on performances of the subject which entitles them to get an outstanding academic performance.
3. The students like the subject, they are eager to learn so they get good grades. They acknowledge the role and importance of family dynamics in their studies however, it doesn't influence their performance in the class or affect their grades at all.

V. RECOMMENDATIONS

Based on the findings and conclusions of the study, the following are strongly recommended:

1. To sustain students' motivation and likeability of the subject, it is good for teachers provide relevant and trendy instruction tailored to suit the demands of the present times.
2. It is good for learners to be evaluated accurately in conformity to the TESDA assessment method based on the defined competency standards. thus, aside from *Class Records*, the *Progress Chart* and *Achievement Chart* are essential.

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3. To ensure students' future well-being, parents have to be involved in their children's studies no matter how little influence they might be able to have.

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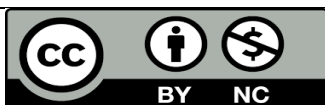
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