



# CONTEXTUAL FACTORS IN RELATION TO TECHNICAL VOCATIONAL LIVELIHOOD-HOME ECONOMICS STUDENTS' ACADEMIC PERFORMANCE

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## ABSTRACT

*This study examined the relationship between contextual factors and the academic performance of Senior High School (SHS) learners enrolled in the Technical-Vocational-Livelihood-Home Economics (TVL-HE) strand in Carranglan District, Nueva Ecija. Specifically, it analyzed the extent to which personal, socio-economic, and institutional factors relate to students' first-quarter grades in Food and Beverage Services. A quantitative descriptive-correlational design was used, involving purposively selected Grade 12 learners from three public secondary schools. Data were collected using a validated Likert-scale questionnaire and analyzed through descriptive statistics and Pearson product-moment correlation. Results indicated that all contextual factors were rated at a "good" level. Learners demonstrated high academic performance, with the majority obtaining excellent grades. Correlation analysis revealed significant positive relationships among personal, socio-economic, and institutional factors, with the strongest association observed between personal and institutional variables. Moreover, all factors were significantly associated with academic performance, with socio-economic factors showing the strongest dimension. The findings emphasize the multidimensional nature of academic achievement, highlighting the combined influence of individual attributes, socio-economic conditions, and strengthened institutional support systems. These results suggest the need for integrated, evidence-based interventions that address socio-economic disparities, strengthen institutional mechanisms, and foster learner-centered support to improve academic outcomes in the TVL-HE program.*

**KEYWORDS:** *Academic Performance, Institutional Factors, Personal Factors, Socio-Economic Factors*

## INTRODUCTION

Academic performance is an important indicator of students' readiness for higher education and future employment, particularly in vocational education, where both academic and technical competencies are developed. In the Philippines, the Technical Vocational Livelihood (TVL) strand, particularly the Home Economics (HE) strand, aims to equip Senior High School students with practical skills for employment in industries such as food service, hospitality, and caregiving. However, concerns have emerged regarding the academic performance of students in the TVL-HE strand, especially in rural areas like Carranglan District, where limited local research makes it difficult for schools to fully understand the challenges faced by these learners.

Students' academic performance is influenced by several factors, including personal motivation, socio-economic status, parental support, instructional quality, and the learning environment (Suleiman et al., 2024). In addition to these common factors, TVL-HE students encounter challenges specific to vocational education, such as limited access to learning resources, insufficient equipment, and inadequate facilities for hands-on training, which can negatively affect their learning outcomes (Adanza & Sayson, 2022). Furthermore, effective instructional strategies and supportive school environments play a crucial role

in improving students' motivation, engagement, and overall academic performance (Quilez-Robres et al., 2023).

Given these concerns, this study investigates the factors associated with the academic performance of TVL-HE students in Carranglan District, focusing on personal, socio-economic, institutional, and environmental influences. The study aims to provide insights that can help educators, administrators, and policymakers improve instructional practices, strengthen support systems, and enhance the quality of technical-vocational education. Ultimately, the findings support the goal of promoting inclusive and equitable quality education for vocational learners.

This study examined the relationship between the academic performance of Technical-Vocational Livelihood-Home Economics (TVL-HE) students in Carranglan, Nueva Ecija, and various influencing factors, including personal, socio-economic, institutional, and environmental factors. Specifically, it assessed students' perceptions of these factors, measured their academic performance, examined the interrelationships among personal, socioeconomic, and institutional factors, and investigated the extent to which these contextual factors relate to academic outcomes.



## METHODOLOGY

This study used a descriptive-correlational quantitative design to examine the factors affecting the academic performance of Technical-Vocational Livelihood–Home Economics (TVL-HE) students in Carranglan, Nueva Ecija. Data were collected from a purposive sample of 66 Grade 12 students across three public secondary schools—Burgos National High School, Capintalan National High School, and Carranglan National High School—representing diverse rural learning environments.

A self-administered Likert-scale survey measured students' perceptions of personal, socio-economic, institutional, and environmental factors. At the same time, academic performance was quantified using first-quarter grades in the Food and Beverage Services course. Descriptive statistics (frequency, percentage, mean, and standard deviation) and Pearson's correlation coefficient were used to analyze the data and examine relationships among variables. Ethical standards were observed, including informed consent, confidentiality, voluntary participation, and institutional approval (Allen, 2017; Bryman, 2020; Creswell & Creswell, 2018).

## RESULTS AND DISCUSSION

The results of this study indicate that Technical-Vocational-Livelihood–Home Economics (TVL-HE) students in the Carranglan District perceived personal, socio-economic, and institutional factors as positively influencing their academic performance, with institutional factors receiving the highest mean rating (Mean = 3.13, SD = 0.32), suggesting that the school environment plays a critical role in supporting learning (San & Gou, 2022; Davaatseren et al., 2022). First-quarter grades showed that 57.58% of students achieved Outstanding performance, with an overall mean grade of 89.65, indicating that most students met or exceeded academic expectations.

Correlation analyses demonstrated statistically significant relationships among personal, socio-economic, and institutional factors ( $r = .44-.57, p < .01$ ), as well as significant associations between each contextual factor and academic performance (personal:  $r = .47$ ; socio-economic:  $r = .59$ ; institutional:  $r = .46$ ; overall:  $r = .62; p < .01$ ), highlighting the interconnected influence of students' personal traits, family support, and school resources on their learning outcomes (Bernardo, 2019; Sirin, 2015; Wang & Degol, 2016). Specifically, students reported that self-discipline, motivation, and emotional well-being were important personal factors, while family support and access to resources mitigated socio-economic challenges. Institutional support, including teacher guidance, adequate learning materials, and hands-on instructional opportunities, was also viewed as a critical determinant of success (Hattie, 2015; UNESCO, 2016; Yangambi, 2023).

These findings align with prior research emphasizing that academic achievement in vocational and technical programs is shaped by a combination of individual, familial, and institutional factors, underscoring the need for integrated interventions to

enhance student outcomes (Department of Education, 2017; OECD, 2019).

## CONCLUSIONS

The findings of the study indicate that the academic performance of Senior High School Technical-Vocational-Livelihood–Home Economics (SHS TVL–HE) students is influenced by multiple, interconnected contextual factors, including personal, socio-economic, and institutional domains. Academic outcomes are not determined by a single factor but rather by the dynamic interaction of students' personal drive, family support, and school environment. While the majority of students demonstrated excellent academic performance, a subset remained at satisfactory or lower levels, highlighting the need for targeted interventions for learners who face challenges.

Correlation analyses confirmed the strong interrelationship among personal, socio-economic, and institutional factors, suggesting that the learner, home, and school collectively shape educational experiences and outcomes. Notably, socio-economic factors emerged as the strongest predictor of academic achievement, indicating that family resources, parental support, and living conditions significantly influence students' capacity to excel. These findings underscore that academic performance is shaped not only by individual effort and school support but also by the broader socio-economic context in which students live (Bernardo, 2019; Sirin, 2015; Wang & Degol, 2016).

## RECOMMENDATIONS

Based on the findings and conclusions of this study, several recommendations are proposed to enhance the academic performance of Senior High School Technical-Vocational-Livelihood–Home Economics (SHS TVL–HE) students. First, holistic support programs should be strengthened in accordance with the Philippine Professional Standards for Teachers (PPST) Domain 3: Diversity of Learners and Domain 4: Curriculum and Planning. Teachers may foster motivation, resilience, and effective study habits through mentorship, life-skills training, and peer-support initiatives.

Second, targeted interventions for struggling learners should be implemented, utilizing formative assessments to identify students needing additional guidance and providing support through remedial sessions, peer tutoring, individualized mentoring, and increased parental involvement.

Third, collaboration among students, families, and schools should be enhanced, as academic success is a shared responsibility; regular communication, collaborative projects, and professional learning communities can facilitate this partnership.

Fourth, socio-economic barriers affecting student learning should be addressed through school- and community-based initiatives, including scholarships, provision of school supplies, feeding programs, and classroom adaptations to ensure equitable learning opportunities.



Finally, future research should explore additional contextual variables influencing academic performance—such as psychological well-being, digital access, and community

engagement—using larger sample sizes, varied research designs, or longitudinal approaches to provide deeper insights into factors affecting student achievement.

**Table 1**  
*Respondents' Level of Assessment of Their Personal, Socio-economic, and Institutional Factors*

Factor	Mean	Std Deviation	Description	Level of Assessment
Personal Factors	3.09	0.32	Agree	Good
Socio-Economic Factors	3.12	0.35	Agree	Good
Institutional Factors	3.13	0.32	Agree	Good
Overall Mean	3.11	0.27		

**Table 2**  
*Respondents' Level of Academic Performance*

First Quarter Grade	N=66	Percentage (%)	Level of Academic Performance
90-100	38	57.58	Outstanding
85-89	19	28.79	Very Satisfactory
80-84	5	7.58	Satisfactory
75-79	4	6.06	Fairly Satisfactory
		Mean	89.65
	Overall Level of Academic Performance		Very Satisfactory

**Table 3**  
*Summary of Correlation Analysis in the Respondents' Assessment of the Interrelationship of Personal, Socio-economic and Institutional Factors (n=66)*

Variables Correlated	r-value	p-value	Decision	Interpretation
Personal and Socio-Economic	0.50	0.00	Reject null hypothesis	Significant
Personal and Institutional	0.57	0.00	Reject null hypothesis	Significant
Socio-Economic and Institutional	0.44	0.00	Reject null hypothesis	Significant

**Table 4**  
*Relationship of the Contextual Factors with the Respondents' Academic Performance (n=66)*

Variables Correlated	Computed r-value	p-value	Decision	Interpretation
Contextual Factor along with Personal and Academic Performance	0.47	0.00	Reject Null hypothesis	Significant
Contextual Factor along Socio-Economic and Academic Performance	0.59	0.00	Reject Null hypothesis	Significant
Contextual Factor along with Institutional and Academic Performance	0.46	0.00	Reject Null hypothesis	Significant
Overall Contextual Factor and Academic Performance	0.62	0.00	Reject Null hypothesis	Significant



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