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Benefits and challenges of rice tariffication law to the farmers in San Jose, Occidental Mindoro

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Abstract

This study investigated the benefits and challenges of the Rice Tariffication Law for the farmers in San Jose, Occidental Mindoro. This study used the exploratory sequential mixed method. In the qualitative phase, the findings highlighted five (5) emerging significant themes, which this paper further discussed: first, benefits in terms of economic gains and agricultural improvements; second, challenges in terms of economic impact, financial impact, and agricultural practices. The quantitative data were collected from 109 farmers in San Jose, Occidental Mindoro, and then they underwent statistical analyses. To test the reliability of the instrument, a correction formula using the Spearman-Brown coefficient of equal length and computer-generated split-half computation was applied. For inferential problems, the Partial Least Squares-Structural Equation Modeling (PLS-SEM) was used, and results were generated by WarpPLS version 7.0. Weighted means were computed to describe the mean level of each indicator of the benefits and challenges and the status of implementation of the Rice Tariffication Law to the farmers in San Jose, Occidental Mindoro. The results show that the benefits of agricultural improvements and challenges to financial impact and agricultural practices are significantly affected by the Rice Tariffication Law. Applying the iceberg theory to this study, however, the farmers perceive the safety net that the law offers them (the tip of the iceberg), but there are still challenges that require addressing (the submerged section of the iceberg). Consequently, this study recommended that lawmakers revisit the law to guarantee that all farmers, irrespective of their status, can benefit from all RCEF benefits.

Keywords: rice tariffication law, national food authority, economic gains, agricultural improvements, financial impact

Benefits and challenges of rice tariffication law to the farmers in San Jose, Occidental Mindoro

1. Introduction

Farmers are essential participants in the worldwide battle against hunger, because access to high-quality food is necessary for human life. Also, farming is an essential and dependable source of income in the majority of countries around the globe, for it takes hard work, and more importantly, it affects the nation's food security and health (Rebualos et al., 2021). Emphasized in the study of Clapp et al. (2022) that interconnections should exist between the economy, society, ecosystems, livelihoods, and politics to sustain and ensure the food systems' sustainability and ability to contribute to food security. This more expansive perspective corresponds with programs like the Sustainable Development Goals (SDGs), particularly SDG2, and this expressly integrates food security and sustainability: "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture." The Philippines entered the World Trade Organization (WTO) in 1995 to revise quantitative restrictions (QRs) and reduce tariff protection. Under Annex 5 of the WTO agreement, the Philippines, Japan, and South Korea were granted an exemption from eliminating the QR on rice. By the agricultural agreement, reduced tariff rates will replace QRs and other restrictive measures that could stifle free trade (Cororaton & Yu, 2019).

The Philippines asked for and was granted a quantitative restriction on rice imports until 2017. The government has been pursuing rice QRs for several years in an attempt to protect the local rice industry and enable local farmers to prepare for worldwide competition (Vertudes et al., 2020). Twenty-four years after the Philippines participated in the World Trade Organization, import tariffs on rice were finally removed on February 14, 2019, when former President Rodrigo R. Duterte signed the Rice Tariffication Law (RTL) or the Republic Act "11203"—An Act liberalizing the importation, exportation, and trading of rice, lifting for the purpose the quantitative import restriction on rice, and for other purposes." In simple terms, the law authorizes the liberalization of rice imports. The prior import quota on rice will be lifted, allowing traders to import nearly unlimited quantities of rice (Vertudes et al., 2020).

The Rice Tariffication Law, according to Socioeconomic Planning Secretary Karl Kendrick T. Chua, is the greatest model available to support both farmers and consumers. Additionally, he pointed out, "By removing quantitative restrictions, we can fulfill the needs of consumers for a lower retail price of rice as well as use the excess tariff revenues to fund the RCEF and provide further assistance to farmers" (National Economic and Development Authority, 2022). As mentioned by Cororaton & Yu (2019), rice plays an essential role in the Philippine economy and is a vital source of income for millions of Filipino farmers. Therefore, lifting quantity limitations on staple foods allows for an increased supply throughout the country, benefiting consumers through lower prices but at the expense of domestic producers (Estadilla, 2022). However, the government already provides safety nets for Filipino farmers by introducing improved rice-growing seeds, modern farming equipment, expanded rice credit assistance, and rice extension services. Through the Rice Competitive Enhancement Fund (RCEF) program, the funds will be used to establish a competitive domestic rice industry amounting to P10 billion, which shall be generated through the import tariffs on rice (National Economic and Development Authority, 2022).

To ensure that our local agricultural producers can withstand competition from commercially imported rice by the liberalization act's provisions regarding rice as a critical commodity (Tayactac, 2024), the National Food Authority's focus has been shifted to acquiring palay solely from local farmers at a government-supported price. Then, it ensures quality maintenance by storing stocks properly, regularly inspecting their quality, and disposing of the buffer stock during emergencies and calamities through government relief agencies. In Region IV, the top procuring branch is the Occidental Mindoro branch. Therefore, National Food Authority (NFA) Occidental Mindoro is tagged as "little Philippines" from the perspective of the agency nationwide because of its accomplishments and geographical situation. According to the record of the Municipal Agriculture Office (MAO)

of San Jose, there are approximately 17,578 farmers in Occidental Mindoro, and based on the data of NFA for the past three years, there are more or less 77 farmers' cooperatives and associations that sell their rice produce to NFA. And 34% of these farmers are from San Jose alone, and the remainder are from other municipalities of SAMARICA.

Concerning the aforementioned issues, the researcher wants to carry out this research investigation that will present perceptions from the points of view of the farmers in the Municipality of San Jose, Occidental Mindoro, regarding their experiences with the implementation of the Rice Tariffication Law. More specifically, the benefits and challenges they encountered focusing on economic, social, and agricultural impacts; the researcher is confident that the findings of this study will serve as a resource that might raise government awareness to increase understanding of the necessity of facilitating practical solutions that will mainly help farmers.

Statement of the Problem - This study aimed to explore the benefits and challenges of implementing the Rice Tariffication Law (RTL) for the farmers in San Jose, Occidental Mindoro. Specifically, this study sought to answer the following questions. (1) What are the benefits of the Rice Tariffication Law experienced by the farmers in San Jose, Occidental Mindoro? (2) What are the challenges of the Rice Tariffication Law faced by the farmers in San Jose, Occidental Mindoro? (3) What is the level of the benefits of the Rice Tariffication Law experienced by the farmers in terms of economic gains and agricultural improvements? (4) What is the extent of the challenges of the Rice Tariffication Law faced by the farmers in terms of economic impact, financial impact, and agricultural practices? (5) What is the status of the implementation of the Rice Tariffication Law as experienced by the farmers in San Jose, Occidental Mindoro? (6) As faced by the farmers, is the status of the implementation of the Rice Tariffication Law significantly affected by benefits and challenges? (7) What policy recommendations may be proposed to enhance the benefits of the Rice Tariffication Law and address the challenges to support the farmers?

Significance of the Study - This study will prove significant to the following: First, this research is intended for the farmers because it will offer them an opportunity to discuss the benefits and challenges of the Rice Tariffication Law's implementation through their experiences. The research results can additionally provide some recommendations for enhancing farmers' economic success and overall farming well-being to achieve sustainable rice production. Second, the results of the study may aid the Local Government Unit (LGU) of San Jose, Occidental Mindoro, to better comprehend the diverse needs of farmers and may be incorporated into their ordinances. Third, the study's outcome may help related government agencies to address various legal challenges regarding farmers, perhaps making a policy recommendation. Fourth, the outcome of this study may bring understanding to the consumers on how the Rice Tariffication Law influences the price of the rice they consume. Lastly, the study can serve as a guide or reference for future researchers in fostering a broader understanding by promoting discussions at a higher level about the subject or related studies.

Scope and Delimitation of the Study - This research was conducted from May to November 2024 and focused on how the Rice Tariffication Law impacted farmers in San Jose, Occidental Mindoro, to identify the benefits received in terms of economic gains and agricultural improvements and challenges encountered in terms of economic impact, financial impact, and agricultural practices and excludes discussion of effects on other regions or crops. The respondents of this study were limited only to the farmers in San Jose, Occidental Mindoro, with a harvested area of 1-2 hectares and rice farming as their only source of income; they ought to be registered with the Registry System for Basic Sector in Agriculture (RSBSA). Their farm is located in San Jose, Occidental Mindoro, and also presently resides within the municipality of San Jose, Occidental Mindoro. In addition, they are members of a farmers' cooperative or association and were proactively engaged in the farming of rice before, during, and after the RTL's implementation. The criteria mentioned were applied to identify the participants who took part in the data collection process.

2. Methodology

Research Design - This research employed an exploratory sequential mixed method, which combines both

qualitative and quantitative approaches to research. This design aims to create an instrument, a classification for testing, or the identification of variables (Galay, 2022). First, the qualitative design enables the researcher to gather comprehensive and descriptive data regarding the viewpoints and farming experiences, challenges, and benefits farmers encountered. A hybrid interview is the method employed to obtain detailed information on the process, containing in-person and virtual components, which works best for both the researcher and the respondents. And was followed by a quantitative method through a survey questionnaire on the (1) benefits of Rice Tariffication Law (RTL) in terms of their economic gains and agricultural improvements, (2) challenges of RTL in terms of economic impact, financial impact, and agricultural practices, and (3) status of RTL to the farmers of San Jose, Occidental Mindoro.

Respondents of the Study - This study used a purposive sampling technique to determine the respondents who would serve as the study's focal point for the qualitative phase, which provided insights into the topic at hand. This method was used because it was convenient and practical for both the researcher and farmer-respondents, given that the conduct of the interview was during the time farmers were preparing their farms for planting. There were fifteen participants for the hybrid interview, whereas the complete enumeration for the survey questionnaire was one hundred nine (109) farmer-participants.

Research Instrument - The interview guide was the first tool used in the study. Using purposive sampling, fifteen (15) farmers were interviewed to determine the benefits and challenges of the Rice Tariffication Law. The second instrument was a researcher-made questionnaire, which was divided into three parts: Part 1 addresses benefits related to economic gains and agricultural improvements; Part 2 addresses challenges related to economic impact, financial impact, and agricultural practices; and Part 3 tackles the status of the Rice Tariffication Law. The questionnaire used a five-point Likert scale.

For the qualitative design, the interview guide questions were checked by the researcher's adviser. Moreover, the consistency and comprehensibility of the instrument were validated by five (5) experts from the Graduate School of Divine Word College of San Jose (DWCSJ). The questionnaire consisted of three main components: benefits, challenges, and status of the Rice Tariffication Law. Under benefits, there were two sub-components; challenges covered three sub-components; and the status of the Rice Tariffication Law had two sub-components. All sub-components consisted of six-item indicators each.

A group of thirty (30) farmers served as respondents to determine the reliability of the instrument. Ten (10) respondents in each of the municipalities of Calintaan, Rizal, and Magsaysay, and these participants were not included in the final administration of the instrument. Since the questionnaire was administered once, the split-half method was used, which applied the Spearman-Brown coefficient of equal length to test its consistency. The farmers responded to items in the questionnaire, which covers three sections: level of benefits of the Rice Tariffication Law experienced by the farmers in San Jose, Occidental Mindoro, in terms of economic gains and agricultural improvements; challenges of the Rice Tariffication Law faced by the farmers in terms of economic impact, financial impact, and agricultural practices, with 6 items each; and the status of RTL implementation with 16 indicators. The reliability analysis discloses the following results:

Table 1
Reliability Results

Indicators	Number of Items	Reliability Coefficient	Interpretation
A. Benefits of RTL	12	0.973	Very High Reliability
B. Challenges of RTL	18	0.928	Very High Reliability
C. Status of RTL Implementation	16	0.963	Very High Reliability

A generally very high level of reliability of the three sets of indicators resulted from the analysis, which was based on Spearman-Brown coefficients of equal length. The results attest to the acceptability of the instrument and its administration to the final group of respondents.

Data Gathering Procedure - First, for the interview, the researcher prepared an interview guide with questions

that were checked by the researcher's adviser. Second, purposive sampling was used to determine who the participants were. After the participants had been identified, they were informed by the researcher that the primary goal was to obtain consent for their voluntary participation in the study. The third step was preparing all necessary materials, including interview guide questions and an audio recorder. The researcher attempted to record the noteworthy experiences of local San Jose, Occidental Mindoro farmers, specifically the benefits and challenges they encountered after the RTL implementation. Fourth, to gather the primary information required to carry out the research, the researcher conducted a hybrid interview with fifteen individuals. The results of the interview conducted with these selected stakeholders were used to formulate sub-variables. Fifth, the survey questionnaires were formulated and examined by a group of experts to be sure they were valid and to evaluate if they could be modified better. Sixth, the hybrid method was employed in administering the survey questionnaire. The survey was completed by the researcher in twelve (12) days. The collected data were compiled and then thoroughly examined to identify the individual's concerns.

Statistical Treatment of the Data - The qualitative data generated through the interviews of the farmer-respondents underwent thematic analysis. Recording, transcription, tabulation, and coding were done to identify the themes. The initial and final thematic maps were shown to identify the final themes. The weighted mean was used to determine the level of benefits and the extent of challenges of the Rice Tariffication Law and the status of its implementation experienced by the farmers in San Jose, Occidental Mindoro. In addition, WarpPLS version 7.0 was used to determine whether the status of the implementation of the Rice Tariffication Law is significantly affected by the benefits and challenges faced by the farmers.

Ethical Considerations - The study's objectives were disclosed to the participants. They were reassured that the information they provided would be kept confidential; for the sake of privacy, the results of this research will not disclose their names or identities. This study's content was distinctive because it was not copied from any previously published research. The researcher used the American Psychological Association (APA) style to provide credit to the other research studies used as references. The sources and previous studies that served as the bases for the present study have been properly acknowledged and mentioned. The information participants provided was solely used for this particular academic purpose. The researchers ought not to cause any harm to anyone involved during the study.

3. Results and Discussions

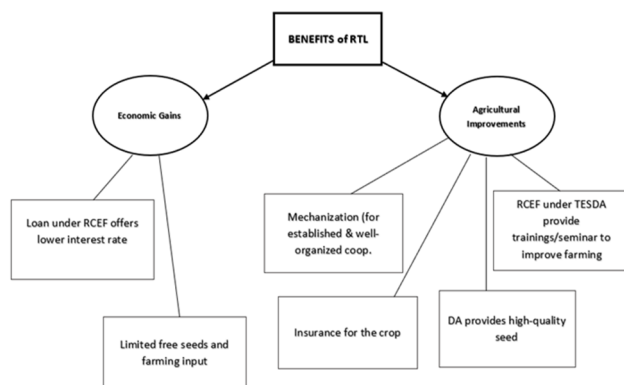


Figure 1. Initial Thematic Map of Benefits of RTL

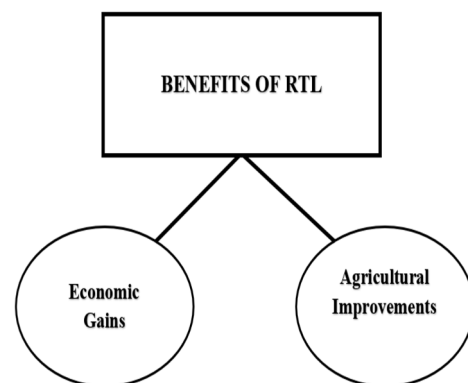


Figure 2. Final Thematic Map of Benefits of RTL

The initial thematic map of the benefits of RTL is shown in Fig. 1, showing the sub-themes drawn in a rectangle. Benefits of the rice tariffication law as the main theme are described from the statements provided by the participants. A total of 6 benefits of the Rice Tariffication Law were summarized in the initial thematic map. Four descriptions are under the category of agricultural improvements. These include enhanced training programs, farm equipment, high-quality seeds, and crop insurance. Two descriptions fall under the category of economic gains; these include affordable interest rates and free seeds and farm inputs. After the descriptions were categorized,

the final thematic map of benefits of RTL, as reflected in Figure 2, reveals two benefits of the Rice Tariffication Law to the farmers of San Jose, Occidental Mindoro. The final themes are presented in semi-circular figures. These include economic gains and agricultural improvements; this is comparable to the findings of the Go (2022) study, which showed that government intermediaries could take the lead in providing necessary innovations to address the issues facing the rice trade and eventually give farmers the ability to establish scale economies and generate some market power by lowering input prices when given adequate and long-term funding. Farmers in San Jose, Occidental Mindoro, achieved economic gains as a result of RTL's benefits in agricultural improvements.

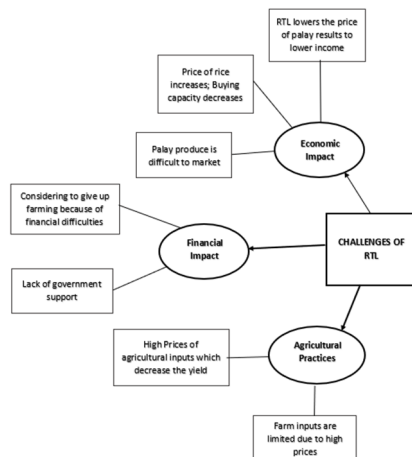


Figure 3. Initial Thematic Map of Challenges

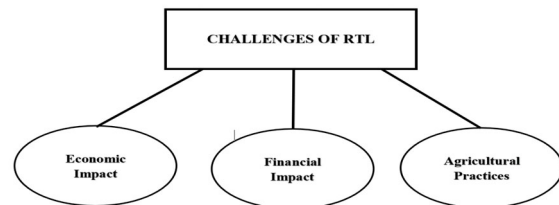


Figure 4. Final Thematic Map of Challenges

Thematic analysis was used to examine the responses provided to the interview question. Recording, transcription, tabulation, and coding were undertaken in order to extract the themes. The initial thematic map of challenges of RTL is shown in Fig. 3, showing the sub-themes drawn in a rectangle. Challenges of Rice Tariffication Law as the main theme are described from the statements provided by the participants. The thematic map outlined 7 challenges pertaining to the Rice Tariffication Law. There are three descriptions under economic impact and two descriptions categorized under both financial impact and agricultural improvements. The economic impact includes the challenge of marketing the palay produce and lowering its price, which, on the other hand, led to an increase in the price of rice, which decreased the farmers' purchasing power in San Jose, Occidental Mindoro. Also, the financial impact includes a lack of government assistance, which is why they are thinking about quitting farming due to financial challenges. Finally, the use of expensive farm inputs has impaired agricultural practices, leading to a decrease in productivity. This is perceived in the study of Rebualos et al. (2021) that farms need to have continuous assistance and a reliable supply of inputs in order to grow and yield more than they anticipated. Following the categorization of the descriptions, the final thematic map of challenges of RTL—which is depicted in Figure 4—reveals three challenges that the rice tariffication law poses to the farmers in San Jose, Occidental Mindoro. Figures in a semicircle represent the final themes. Agriculture practices, financial impact, and economic impact are a few of the challenges farmers have to face, as this study has shown. Likewise, it is evident in the study of Casinillo (2022) that through the RTL implementation, rice farming generated no economic return, and farmers categorically said that their revenue had decreased from the previous cropping seasons. The farmers' agricultural practices are hindered by high farm input prices, which lead to low output and further income loss.

The overall mean rating of the two indicators of the level of the Rice Tariffication Law benefits experienced by farmers is presented in Table 2. Agricultural improvements with a composite mean of 3.99 and economic gains with a composite mean of 3.72. Revealing that the farmers have already benefited from government assistance to help them withstand the effects of the law. This demonstrates the efficacy of the safety nets established by laws to help and support farmers. It is mentioned in the study of Rebualos et al. (2021) that the government also provides safety nets for Filipino farmers by introducing innovations like improved rice-growing seeds and better farming implements. Overall, the benefits of the Rice Tariffication Law experienced by farmers of San Jose, Occidental

Mindoro, in terms of economic gains have a high level of agreement. This means that the RTL benefited the farmers of San Jose, Occidental Mindoro, in terms of economic gains. Because of the financial support RTL offers through accessible and affordable loans, farmers are better able to provide for their farming expenses, which increases productivity. And this outcome validated the results of Briones' (2021) paper that the government should provide financial services, which include strengthening relationships between financial institutions and suppliers of agricultural inputs, to address the financial demands of small farmers.

Table 2

Mean Level of the Rice Tariffication Law Benefits Experienced by Farmers In Terms of Economic Gains & Agricultural Improvements

INDICATORS (ECONOMIC GAINS)	Weighted Mean	Interpretation
1. The government has given me financial assistance through RTL.	4.14	High Level
2. The RTL improved my ability to repay loans.	3.72	High Level
3. The income from farming is enough to support the needs of my family.	3.28	Moderate Level
4. The RTL has made it easier for me to market my product.	3.51	High Level
5. The loan process is easy.	4.03	High Level
6. The loan I availed myself of is used to invest in better farming equipment.	3.63	High Level
Composite Mean	3.72	High Level
INDICATORS (AGRICULTURAL IMPROVEMENTS)		
1. The modernization of farm equipment helps improve my production.	4.14	High Level
2. The concerned government agencies effectively implement the programs of the Rice Competitiveness Enhancement Fund (RCEF).	3.99	High Level
3. The farm equipment I use in farming is from the mechanization program of the Rice Competitiveness Enhancement Fund (RCEF) under RTL.	4.17	High Level
4. The RTL has given me access to better agricultural resources.	4.04	High Level
5. The high-quality seeds provided by the Department of Agriculture improve my rice harvest.	4.00	High Level
6. The RTL has led to improvements in my farming practices.	3.61	High Level
Composite Mean	3.99	High Level
OVERALL MEAN	3.86	High Level

Scale: 4.20-5.00 Very High Level; 3.40--4.19 High Level; 2.60-3.39 Moderate Level; 1.80-2.59 Low Level; 1.00-1.79 Very Low Level

The agricultural improvement indicator demonstrates a high-level outcome with a composite mean of 3.99. All six measures yielded high-level results, with averages ranging from 3.61 to 4.17. The Rice Competitiveness Enhancement Fund (RCEF) mechanization program has benefited the farmers in San Jose, Occidental Mindoro; thus, the relevant government agencies have effectively implemented it. Likewise, the study of Rodriguez & Piadozo (2016) suggests that farm yield is directly impacted by the degree of mechanization; therefore, as agricultural mechanization rises, so does net farm income. Likewise, Munar et al. (2021) asserted that adopting ever-higher levels of mechanization leads to an increase in agricultural output. Analogous to the results of this research, the RCEF program—more precisely, farm mechanization—raises the productivity of farmers in San Jose, Occidental Mindoro. They are increasingly embracing the technologies prevalent in today's farming industry since they deliver favorable outcomes.

Also, high-quality seeds that the Department of Agriculture gave the farmers increased their harvest. Since innovations related to crop production have improved and are continuing to advance, as mentioned in the study of Dogello & Cagasan (2021). Additionally, farmers now have better access to agricultural resources because of the RTL, and this has enhanced their farming practices. As a result of these agricultural improvements, farmers in San Jose, Occidental Mindoro, have chosen to employ enhanced farming techniques, inputs, and equipment to increase productivity and efficiency. This is in line with the study of Cayetano et al. (2023) that a significant portion of farmers believe that this agricultural improvement has improved their revenue, which is a crucial goal of agricultural development programs. Also in support of this, the study of Go (2022) states that government intermediaries could take the lead in introducing the innovations needed to address the issues facing the rice trade and ultimately allow farmers to establish scale economies and exercise some market power by lowering input prices if they are given adequate and consistent funding.

The findings also revealed that the Rice Tariffication Law has improved the farming practices of the farmers.

As recommended by Palis (2020) in his research, the agricultural technical-vocational livelihood stream component should be expanded or reassessed, and scholarships should be awarded to young people who want to pursue studies in college courses with an agricultural specialization. Moreover, based on the study by Binaluyo et al. (2023), to increase local agricultural productivity and earnings, farmers should make the most of their involvement in the RCEF programs, including farm schools, and collaborate with other cooperatives on business expansion.

Applying the theory of change, this high mean can be raised even further to a very high level. According to this view, San Jose, Occidental Mindoro farmers' farming experiences have changed as a result of the enacted Rice Tariffication Law. Furthermore, by allowing the government and other stakeholders to freely discuss the implemented legislation, this step can further benefit the farmers. According to the data, one benefit of RTL is agricultural improvements, which are a result of the farm mechanization program under RCEF. And as suggested by Cayetano et al. (2023), create and implement specialized training programs with an emphasis on raising awareness, offering year-round training opportunities, and accommodating seasonal demands. These programs ought to deal with the changes brought about by the enacted law and support farmers in their efforts to compete with competitors outside the country.

Table 3 displays the overall mean rating of the three indicators of the extent of challenges farmers are facing as a result of the Rice Tariffication Law. Both financial and economic impacts had means of 2.87 and 3.10, respectively, with a moderate extent. On the other hand, with a 3.46 mean, agricultural practices are high. With the lowest mean of the three, the financial impact suggests that farmers in San Jose, Occidental Mindoro, view it as the most challenging. The RTL has a negative impact on the rice growers who are net sellers of palay (Balié et al., 2021). The research of Estropigan et al. (2024) indicates that the method may have been successful in driving down the price of rice, but it also has possible disadvantages for farmers. The outcome demonstrates that RTL did not raise farmers' revenue as the law predicted; rather, after it was implemented, production costs and farming input costs increased.

Among the presented indicators of economic impact, the highest mean is found in items 2 and 3, with a mean of 3.95 and 3.97. This means that the RTL has affected the well-being of farmers because challenges in farming have increased in my community since the implementation of the Rice Tariffication Law. This implies that the law is affecting the farmers' state of being healthy or happy. Thus, the study of Casinillo (2020) shows that the new law appears to be negatively affecting the welfare of the local rice farmers. If farmers' revenue rises, it will have a beneficial influence; nevertheless, the outcome is different. Similarly, in the study of Balié et al. (2021), it was also stated that rice farmers that sell palay harvest suffer because of the RTL. That is why the study of Cabardo (2023) states that many farmers expressed skepticism about continuing the farming tradition, and others stated that they planned to dissuade their children from engaging in farming.

With a composite mean of 2.87, the degree of financial impact resulting from the Rice Tariffication Law encountered by the farmers in San Jose, Occidental Mindoro, is of moderate extent. This outcome implies that farmers confront a relatively significant financial impact; thus, the rice liberalization impacted the prices of farm inputs and production costs, and farmers cannot overcome financial challenges because of this. As suggested by Nueva et al. (2022), any benefits given to consumers were vastly outweighed by the substantial losses suffered by rice growers. Lastly, a composite mean of 3.46 indicates a high extent of outcome in terms of agricultural practices that San Jose, Occidental Mindoro farmers confront due to the Rice Tariffication Law. It demonstrates how agricultural practices have already evolved throughout time. These days, techniques have changed, equipment has been modified, and seeds have been improved. This was possible because, according to Narciso (2021), some farmers have accumulated specialized knowledge about farming procedures through their experiences and methods over time. And without these innovations in the upcoming years, there will probably be fewer farmers, which poses a greater risk to the country's ability to maintain current agricultural methods (Cabardo, 2023).

Table 3

Mean Extent of the Challenges of Rice Tariffication Law Faced by Farmers In Terms of Economic Impact, Financial Impact & Agricultural Practices

INDICATORS (ECONOMIC IMPACT)	Weighted Mean	Interpretation
1. The RTL has a positive impact on my future outlook on farming.	2.79	Moderate Extent
2. The RTL has affected our well-being as farmers.	3.95	High Extent
3. The challenges in farming have increased in my community since the implementation of the Rice Tariffication Law.	3.97	High Extent
4. The RTL implemented makes me feel important as a farmer.	2.64	Moderate Extent
5. The government provides me with sufficient support under the RTL.	2.83	Moderate Extent
6. The RTL considers our needs as small-scale farmers.	2.43	Low Extent
Composite Mean	3.10	Moderate Extent
INDICATORS (FINANCIAL IMPACT)		
1. The rice liberalization has an impact on my livelihood.	4.35	Very High Extent
2. The rice farming after RTL increased my income.	2.83	Moderate Extent
3. The production costs have been reduced since the implementation of the RTL.	2.35	Low Extent
4. The price of the farm inputs (e.g., seeds, fertilizers & pesticides) decreased due to the RTL.	2.40	Low Extent
5. The RTL is the reason why I have overcome additional financial challenges.	2.28	Low Extent
6. The market price for my palay produce is favorable.	2.99	Moderate Extent
Composite Mean	2.87	Moderate Extent
INDICATORS (AGRICULTURAL PRACTICES)		
1. The RTL makes me adopt different farming techniques.	3.54	High Extent
2. The RTL allows me to invest in new agricultural equipment.	3.05	Moderate Extent
3. The mechanization has significantly upgraded my farming productivity.	3.44	High Extent
4. The improved seeds have increased my crop yield.	3.67	High Extent
5. The training classes I attended have improved my knowledge of farming methods.	3.61	High Extent
6. The farming practices I learned from training helped me increase my yield.	3.47	High Extent
Composite Mean	3.46	High Extent
OVERALL MEAN	3.14	Moderate Extent

Scale: 4.20-5.00 Very High Extent; 3.40--4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

However, the findings also suggest that participants fairly consider agricultural practices as challenges. The outcomes show that, thanks to the RCEF rice farm machinery and equipment program, farmers in San Jose, Occidental Mindoro are already implementing new farming techniques that boost productivity. Furthermore, as per the respondents, the RCEF program that involves the production, propagation, and promotion of rice seeds enhances their yield. Lastly, the rice extension service has greatly aided farmers in gaining new farming knowledge that will enable them to increase yield and productivity. This study's application of the Iceberg Theory proves that rice farmers in San Jose, Occidental Mindoro, as the subject of the study, appear to be facing some challenges. The benefits of the Rice Tariffication Law are merely the tip of the iceberg. In contrast, the challenges encountered by local farmers are a section of the submerged area. Based on the survey's findings, farmers now have to deal with issues like the financial and economic effects of the Rice Tariffication Law. Employing the Iceberg Theory, farmers never receive sufficient resources or assistance, regardless of how hard the government works to reinforce the farming sector. Even with the safety nets provided by the law, the implementation of the Rice Tariffication Law continued to have a detrimental effect on the farmers (Rebualos et al., 2021). These are the issues that lie underneath the surface of the iceberg and that our government must resolve in order to provide our farmers with the most support possible.

Table 4 presents the 16 indicators of the implementation of the Rice Tariffication Law experienced by farmers and has a composite mean of 3.29, which is a moderate extent. As a result, the farmers claim that they are in some ways in favor of the law since it helps them improve their crops, but they still believe that they cannot compete with imports. Likewise, the responses provided in the study of Dazo (2023) indicate that farmers are facing difficulty when it comes to competition with imported rice. In addition, the farmers in San Jose, Occidental Mindoro, can increase their production due to the effective implementation of the RCEF initiatives by the particular

government agency. Most importantly, they want to keep farming because they have already benefited from government programs funded by RCEF. The participants reveal that their cooperatives had already given them free use of rice farm machinery and equipment as part of the RCEF program. Local farmers are advised in the study of Binaluyo et al. (2023) to join cooperatives to partake in programs given in the RCEF Mechanization Component that promotes local rice producers' access to relevant postharvest and production technologies and equipment through DA-accredited cooperatives. Before the planting season began, farmers were also given free certified seeds. Additionally, they have previously benefited from low-interest rice credit assistance. In their study, they encourage the cooperatives to take full advantage of the credit support program provided by RCEF. These organizations can assist local farmers in financing their agricultural expenses by providing minimized credit rates. Finally, they have already obtained knowledge gained from training in the advancement of rice crops. To boost local producers' income and competitiveness, it is also recommended in the study of Binaluyo et al. (2023) that the RCEF-Rice Extension Services Program (RCEF-RESP) may extend current initiatives like farm schools and work with more cooperatives on company development.

Table 4

Mean Status of the Implementation of Rice Tariffication Law Experienced by Farmers in San Jose, Occidental Mindoro

INDICATORS	Weighted Mean	Interpretation
1. I am familiar with the Rice Tariffication Law.	3.92	High
2. I am well-informed about the law.	3.43	High
3. I am in favor of the Rice Tariffication Law.	2.78	Moderate
4. The assigned government agencies can effectively implement the RCEF programs.	3.76	High
5. The RCEF programs help me to improve my yield.	3.53	High
6. I can compete with cheap rice imports.	2.28	Low
7. I have already experienced the positive effect of the Rice Tariffication Law.	2.78	Moderate
8. The aforementioned law has positive effects on my means of subsistence.	2.62	Moderate
9. The law helps bring down the price of milled rice in the market.	1.79	Very Low
10. I still want to continue farming rice.	3.59	High
11. The implementation of the Rice Tariffication Law significantly increased average palay production.	3.11	Moderate
12. The government programs under RCEF have already reached me.	3.83	High
13. I have already received the free use of rice farm machinery and equipment from eligible farmers' associations and registered rice cooperatives.	3.83	High
14. The free free, certified inbred seeds are always given before planting season.	3.90	High
15. I already availed myself of the rice credit assistance with minimal interest.	3.84	High
16. The training for skills in rice crop production has already benefited me.	3.65	High
Composite Mean	3.29	Moderate

Scale: 4.20-5.00 Very High; 3.40 -4.19 High; 2.60-3.39 Moderate; 1.80-2.59 Low; 1.00-1.79 Very Low

Table 5

Path Coefficients and p-values for Hypothesis Testing

Path	Beta (β) Coefficient	p-value*	Interpretation
Benefits of RTL			
GAIN→TARIFF	0.062	0.256	Not Significant
IMPROV→TARIFF	0.262	0.002	Significant
Extent of Challenges of RTL			
ECOIMPACT→TARIFF	0.042	0.328	Not Significant
FINIMPACT→TARIFF	0.358	<0.001	Highly Significant
PRACT→TARIFF	0.350	<0.001	Highly Significant

*Significant at $p < 0.05$

The structural equation modelling yielded low *Beta* coefficients ranging from 0.262 to 0.358. These values are generated after the five components were linked to the status of RTL implementation. While these values may appear low, still, these are considered significant to highly significant considering agricultural improvement ($\beta=0.262$, $p=0.002$), financial impact ($\beta=0.358$, $p<0.001$), and agricultural practices ($\beta=0.350$, $p<0.001$). This is due to their entry in the structural model. This result ascertains the rejection of the null hypothesis that the status of the implementation of the Rice Tariffication Law is not significantly affected by the benefits and challenges

faced by the local farmers in terms of agricultural improvements, financial impact, and agricultural practices. It can therefore be stated that the benefits and challenges faced by the local farmers in terms of agricultural improvements, financial impact, and agricultural practices have a significant effect on the status of the implementation of the Rice Tariffication Law.

Meanwhile, the benefits of RTL in terms of economic gains and the challenges faced by farmers on RTL in terms of economic impact failed to enter the structural model, as evidenced by the negligible beta coefficients of 0.062 and 0.042. The corresponding p -values strengthened the non-significance of their effect on the status of RTL implementation as these yielded p -values of 0.256 and 0.328, exceeding the 0.05 level. Therefore, the null hypothesis of the benefits of RTL in terms of economic gains and the challenges faced by farmers with RTL in terms of economic impact is accepted. Based on the findings above, agricultural improvements have a significant impact on the benefits encountered by the farmers of San Jose, Occidental Mindoro. A significant portion of farmers believe that the RCEF program has improved their income, which is a crucial goal of agricultural development programs, according to the Cayetano et al. (2023) study. We may claim that farmers benefit from these improvements in agriculture since, with a P197.84 billion budget for 2024, our government genuinely supports the agricultural sector. Also, the financial impact has a significant effect on the challenges that farmers encountered after the implementation of the RTL. Likewise, the other studies concluded that local producers are also reluctant to increase their investments due to the low returns on their investment (Binaluyo et al., 2023), reckoned by Casinillo (2020), and the low cost of harvest output and the high cost of agricultural inputs have reduced local farmers' incomes. Lastly, the agricultural practice also has a significant impact on the challenges that farmers of San Jose, Occidental Mindoro, have faced. It is mentioned in the study of Briones (2021) that agriculture has been employing fewer people as a result of slower population growth, smaller farms, and falling relative agricultural incomes, all of which have encouraged people to leave the industry.

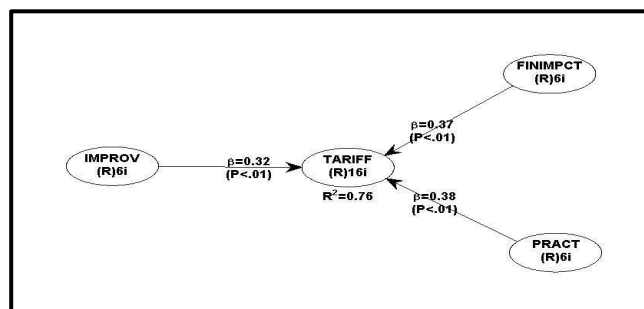


Figure 5. The Emerging Model

Since the structural model revealed two variables that were found not significant, an emerging model is generated. One of these variables that the responses made was very evident: that farmers are having trouble competing with imports of rice and agree that the Rice Tariffication Law makes it harder for them to maintain their rice agricultural operations (Dazo, 2023). This new model reflects only the significant links between the status of the RTL implementation and the exogenous variables. In support of the hypothesis test results, the standardized estimates of the path, effect sizes, and standard error values are disclosed in Table 6. It can be noted that the beta coefficients have slightly increased, and these are supported by p -values, which are all less than 0.001, suggesting a significant effect on the endogenous variable status of RTL implementation. However, the R^2 value of 0.76 remained the same as recorded in the structural model. This percentage of variations in the status of RTL implementation is contributed by the percentage of variations of the benefits in terms of agricultural improvement and the challenges, considering the financial impact and the agricultural practices of the farmers.

The standardized estimates of the path in the emerging model are presented with values ranging from 0.318 to 0.376. These values favor the rejection of the null hypothesis of no significant effect on the benefits of RTL experienced by the farmers and the challenges faced by them on the status of RTL implementation. This finding ascertains that the benefits of RTL, as well as the challenges experienced by the farmers considering agricultural

improvements, financial impact, and agricultural practices, fairly contribute from a medium to large effect (0.213, 0.258, 0.286) on the status of Rice Tariff Law implementation. The significance level reached a p-value less than 0.001, which denotes a highly significant connection between the variables under study. Moreover, standard error values of 0.087 and 0.088 are very low, which suggests the accuracy of the samples with the conclusions drawn about the overall population.

Table 6*Standardized Estimates of the Path in the Emerging Model*

Hypothesis	Standardized Estimates (β)	Standard Error	p-value*	Effect Coefficient**	Effect Size
Benefits of RTL→Status of RTL Implementation					
IMPROV→TARIFF	0.318	0.088	<0.001	0.213	Medium Effect
Extent of Challenges of RTL→Status of RTL Implementation					
FINIMPACT→TARIFF	0.368	0.087	<0.001	0.258	Large Effect
PRACT→TARIFF	0.376	0.087	<0.001	0.286	Large Effect

*Significant at $p < 0.05$

** Effect size coefficient: 0.02 – small, 0.15 – medium, 0.30 – large

The status of the implementation of the Rice Tariffication Law is significantly affected by the agricultural improvements received by the farmers. The study of Cayetano et al. (2023) asserted that the government should be putting an emphasis on efficiency and openness to make sure farmers get the equipment they require promptly and without needless delays. This is important because the study of Rodriguez and Piadozo (2016) shows that farm productivity is directly affected by the level of mechanization; as mechanization improves, so does net farm income. Furthermore, it is also concluded in the study of Dogello and Cagasan (2021) that the innovations and developments in technology in the agricultural production of the Philippines will be one of the milestones in accomplishing a specific objective for everyone. Moreover, the status of the implementation of the Rice Tariffication Law is significantly affected by the financial impact and agricultural practices of the farmers. Casinillo (2022) concluded that the law is intended for them to have an adequate amount of rice, the country's staple food, at a low price for consumers. However, low prices for rice output coincided with rising costs for agricultural inputs, which had an impact on rice producers. Besides, findings from Nueva et al.'s research (2022) show that farmers who have families find that their income is insufficient to support them. In addition, due to the high cost of fertilizers and pesticides, farmers were unable to maintain their rice fields, leading to a decline in productivity.

Table 7*Policy Recommendation to enhance the benefits of the Rice Tariffication Law and address the challenges to support the farmers*

Policy Recommendation	Assigned Agency	Objective	Suggested Implementation	Time Frame
Farm Mechanization program for all farmers	PhilMech - Barangay	To take advantage of the benefits of the farm mechanization program for all farmers, regardless of whether they are individuals or members of a cooperative.	In addition to giving the cooperatives farm mechanization, they may also make the barangay a beneficiary so that individual farmers could benefit from it as well.	throughout the year
Require all farmers to register with RSBSA	Department of Agriculture - Municipal Agriculture Office	To register all farmers with the Registry System for Basic Sectors in Agriculture (RSBSA) to obtain better access to agriculturally-related government services, programs, and information.	Due to the Municipal Agriculture Office's ability to contact even remote farmers, they may establish a team and visit farmers to persuade them to register with the RSBSA. Additionally, they can disseminate information to improve farmers' access to government programs and services relevant to agriculture.	throughout the year

Marketing Collaboration	Local Government Units (LGUs) & National Food Authority (NFA)	To engage in a marketing collaboration and to guarantee that the farmers' palay output reaches a market.	The NFA will undoubtedly buy palay for the farmers, but once they reach their buffer stocking requirement, they can help the qualified cooperatives process their members' palay harvests and then sell them to areas in demand with the LGU's assistance.	before and during the harvesting season
Market Intervention	National Food Authority (NFA)	To bring down the market price of milled rice so that we can continue to purchase reasonably priced rice.	A controlled quantity should be permitted for the NFA to distribute its rice buffer stock to the market at a reasonable price prior to the quality deteriorating. In addition to making rice reasonably priced for the general people, NFA can guarantee that its supply is consistently restocked.	during lean period
Farm inputs support	Department of Agriculture – Department of Trade and Industry– National Food Authority	To provide assistance to farmers and suppliers during the surge in agricultural input prices.	But the DA, through DTI, may assist suppliers in offering farmers affordable farm inputs. And let farmers agree that they will sell their palay to NFA in order to pay for these inputs.	before the planting season

The third policy is a marketing collaboration, which aims at guaranteeing that farmers' palay produce gets marketed. The study of Binaluyo et al. (2023) suggested that the government help local producers promote their products by connecting them with potential customers who may be willing to pay more. The new mandate of the NFA is to procure palay solely from our farmers, and they can only buy enough for the buffer stock requirement. Once the requirement is met, they can help the eligible cooperatives mill the palay that their members have harvested, and the LGU could set up a scheme that would enable the cooperatives to market their goods. Alternatively, they might help the cooperatives sell an excessive amount of milled rice to places where there is a demand and a willingness to pay more. The last policy is farm inputs support, which intends to help all farmers, especially amid the spike in agricultural input costs. It is also recommended in the study of Casinillo (2022) that because agricultural inputs play a major role in helping farmers increase their profits and have a favorable impact on rice production, the government must provide a budget to support impoverished farmers in this area.

4. Conclusions

Based on the summary of the findings presented, the following conclusions are obtained: Most of the farmers in San Jose, Occidental Mindoro, already received benefits from agricultural improvements brought forth by the Rice Tariffication Law, such as farm mechanization, free, certified inbred seeds, low-interest rice credit assistance, and trainings to improve their competencies and understanding of the farming of rice. Also, farmers in San Jose, Occidental Mindoro, consider the financial impact as a challenge associated with the Rice Tariffication Law. Due to the law's intention to reduce rice prices, it affects our farmers since it also drives down the cost of their palay. The benefits of RCEF have already been received by the farmers of San Jose, Occidental Mindoro. One is the REF's low-interest rice credit assistance program; it is very accessible, according to the farmers of San Jose, Occidental Mindoro, which could aid in funding for their farming expenses. However, their family still cannot be supported by the income that they make from farming. Another benefit is that farmers can access advances in equipment and processes attributable to the RCEF program. After the Rice Tariffication Law went into effect, farmers in San Jose, Occidental Mindoro, experienced more challenges in their farming. In some ways, farmers feel like the government ignores their needs. Also, a drop in the price of palay and an increase in the cost of farm inputs add to the financial challenges of a farmer. But with the assistance of training offered under the RCEF program, farmers must embrace new agricultural techniques in order to boost their agricultural output.

Farmers in San Jose, Occidental Mindoro are familiar with and relatively informed about the Rice Tariffication

Law. Additionally, the assigned agencies of government successfully carried out the RCEF programs, increasing the farmers' produce in San Jose, Occidental Mindoro. On the other hand, they think that the law will not help pull down the market price of milled rice. The beneficial effects of agricultural improvement and the challenges that farmers in San Jose, Occidental Mindoro, face in terms of the law's financial impact and agricultural practices have a major impact on the law's actual implementation, as some costly agricultural practices, such as hired labor, are substituted by more efficient machinery. Farmers' cooperatives and associations (FCAs) may be engaged by the local government units (LGUs) in order to enter into a marketing agreement with the National Food Authority (NFA) that would guarantee the agency's assistance to local farmers when purchasing their crops. In addition, the LGU and NFA may collaborate to ensure that their palay is priced favorably.

Recommendations - Based on the findings and conclusions presented, the following recommendations are stated to further develop the benefits of the Rice Tariffication Law and give solutions to the challenges. First, the Department of Agriculture, through LGU and MAO, may encourage all farmers, in particular small farmers, to register with the Registry System for Basic Sectors in Agriculture (RSBSA) to gain better access to government services, programs, and information about agriculture improvements. Second, the Department of Agriculture, through TESDA, may provide farmers with business management training, in addition to farming skills training, so they can properly manage their production and income. Third, through the Municipal Agriculture Office, the local government unit may guide the farmers on how to use the rice credit assistance that has been made available to them. To ensure that they have earnings left over after repaying their loan and can afford the expenses for the next planting season, they need to learn how to use it effectively. Then, the study suggests that when the market price of palay lowers, the National Food Authority may ensure that farmers receive a reasonable recompense for their labor. Farmers should always be able to access a favorable market. Also, when the market's prices for milled rice rocket, the Secretary of the Department of Agriculture may reinstate the NFA's price stability mandate and permit them to distribute affordable rice in the market. It also recommends that the lawmakers reexamine the law and ensure that all farmers, regardless of whether they belong to a farmers' cooperative or organization, receive all RCEF advantages. The researcher suggests that the Department of Agriculture, through MAO, may educate farmers on the effective use of important agricultural inputs in order to maximize the benefits of this and efficiently use them to prevent the waste of farm inputs. Lastly, for future researchers, while the findings of this study might not accurately reflect the experiences of farmers as a whole under this law, they could serve as a basis for future research to learn more about the reactions of local farmers to the Rice Tariffication Law. This will enable farmers, who often feel ignored by society, to voice their concerns.

5. References

- Alcantara, A., Basmala, J., Sepillos, S., & Pasquin, E. (2022). The Influence of Filipino Culture on the Mechanization Program in Nueva Ecija, Philippines. *International Journal of Social and Management Studies (IJOSMAS)* . 3 (1). 208-220. <https://www.ijosmas.org/index.php/ijosmas/article/view/100/83on>
- Region III Philippines Rice Industry. *Journal of Namibian Studies*. 36. 932-959. <https://namibian-studies.com/index.php/JNS/article/view/4639/3221>
- Briones, R. (2019). Welfare Impacts of Rice Tariffication. *Philippine Institute for Development Studies*. 2019-16. <https://hdl.handle.net/10419/240967>
- Briones, R. (2021). Philippine agriculture: Current state, challenges, and ways forward. *Philippine Institute for Development Studies*. <https://www.pids.gov.ph/publication/policy-notes/philippine-agriculture-current-state-challenges-and-ways-forward>
- Cabardo, K. (2023). The Immediate Socio-Economic Impacts of the Rice Tariffic Law of 2019 on Small-Scale Mindanao Rice Farmers. *A paper presented in International Hybrid Conference on "Current Issues in Human Rights and Development Research 2023 (E-Proceedings)*, July 2023. 44–50. <https://ihrp.mahidol.ac.th/2023/international-hybrid-conference-on-current-issues-in-human-rights-and-development-research-2023/>
- Casinillo, L. (2020). Econometric Modelling of Satisfaction in Rice Farming Under Philippine Rice Tariffication

- Law. *Journal of Research and Multidisciplinary*. 3 (2). 326-336.
https://www.researchgate.net/publication/344446855_Econometric_Modelling_On_Satisfaction_In_Rice_Farming_Under_Philippine_Rice_Tariffication_Law
- Casinillo, L. (2022). Modeling Profitability in Rice Farming Under Philippine Rice Tariffication Law: An Econometric Approach. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*. 22 (3). 123-130.
https://www.researchgate.net/publication/364733910_MODELING_PROFITABILITY_IN_RICE_FARMING_UNDER_PHILIPPINE_RICE_TARIFFICATION_LAW_AN_ECONOMETRIC_APPROACH
- Cayetano, E., Cabading, R., Cabardo, S., Dela Cruz, C., & Armas, K. (2023). Factors Affecting Productivity and Challenges Encountered to Rice Competitiveness Enhancement Fund (RCEF) Mechanization Program among Farmers' Cooperative and Associations (FCAs) of Guimba. *International Journal of Advanced Engineering, Management and Science (IJAEMS)*. 9 (12). 21-25.
<https://dx.doi.org/10.22161/ijaems.912.5>
- Clapp, J., Moseley, W., Burlingame, B. & Termine, P. (2022). Viewpoint: The case for a six-dimensional food security framework. *Food Policy*. 106. <https://doi.org/10.1016/j.foodpol.2021.102164>
- Cororaton, C. & Yu, K. (2019). Assessing the Poverty and Distributional Impact of Alternative Rice Policies in the Philippines. *DLSU Business & Economics Review*. 28(2), 169–182.
https://www.researchgate.net/publication/332249000_Assessing_the_poverty_and_distributional_impact_of_alternative_rice_policies_in_the_Philippines
- Dazo, K. J. A. (2023). Lowland rice farmers' awareness on Rice Tariffication Law in General Santos City. Mindanao State University-General Santos. <https://www.researchgate.net/publication/380184587>
- Dogello, J. & Cagasan, U. (2021). A Review on the Status of Crop Production Innovations of the Philippines. *Eurasian Journal of Agricultural Research*. 5 (2), 130-136.
<https://dergipark.org.tr/en/pub/ejar/issue/66343/972896>
- Estadilla, R. (2022). Economic Impacts of Rice Tariffication Law On The Philippine Rice Domestic Market. *International Society for Southeast Asian Agricultural Sciences (ISSAAS)*. 28(1), 76-92.
https://www.researchgate.net/publication/363086135_ECONOMIC_IMPACTS_OF_RICE_TARIFFICATION_LAW_ON_THE_PHILIPPINE_RICE_DOMESTIC_MARKET
- Estropigan, J., Caisip, A., Abante, M., & Vigonte, F. (2024). The Effect Of the Rice Tariffication Law and Price Control Mechanisms on Consumers and the Philippine Rice Industry. *Social Science Research Network Electronic Journal*. <https://doi.org/10.2139/ssrn.4851764>
- Galay, J. (2022). Members' loyalty and participation: Their impacts on the cooperative governance in Samarica, Occidental Mindoro. *International Journal of Research Studies in Management*. 10 (2). 91-104.
[10.5861/ijrsm.2022.24](https://doi.org/10.5861/ijrsm.2022.24)
- Go, K. (2022). Enabling Innovation in the Philippine Rice Industry: The Roles and Key Capabilities of Innovation Intermediaries. *STI Policy and Management*. 7 (1). 1-20.
<http://dx.doi.org/10.14203/STIPM.2022.315>
- Munar, B., Estigoy, M., & Vargas, D. (2021). Awareness Level On Farm Machinery Among Rice Farmers. *Social Science Research Network*. <https://ssrn.com/abstract=3804325>
- Narciso, J. (2021). Indigenous Farming Practices in the Philippines: Old Ways of Doing, New Ways of Thinking for our Food Systems. Food System Stories.
<https://www.foodsystemstories.org/blog/2021/08/04/indigenous-farming-practices-in-the-philippines>
- National Economic and Development Authority (2022). Rice Tariffication Law is the best model that we have to help both farmers and consumers. <https://mirror.pia.gov.ph/press-releases/2022/05/24/rice-tariffication-law-is-the-best-model-that-we-have-to-help-both-farmers-and-consumers-neda>
- Nueva, J., Tanaleon, J., & Besa, A. (2022). Rice Tariffication Law: Education and Views of Farmers in the Southern Philippines. *ASEAN Journal of Science and Engineering Education*. 2(2). 143-146.
https://www.researchgate.net/publication/358511538_Rice_Tariffication_Law_Education_and_Views_of_Farmers_in_the_Southern_Philippines
- Palis, F. (2020). Aging Filipino Rice Farmers and Their Aspirations for Their Children. *Philippine Journal of*

- Science*. 149 (2). 351-361.
https://www.researchgate.net/publication/358347223_Aging_Filipino_Rice_Farmers_and_Their_Aspirations_for_Their_Children
- Rebualos, J., Vistal, J., Sato, S., Cano, J., Camino, J., & Dagohoy, R. (2021). Rice Tariffication Law through the Lens of the Farmers: A Case in the Municipality of Carmen. *International Journal of Research and Innovation in Social Science (IJRISS)*. 5 (8). 195-203. <https://ssrn.com/abstract=3918415>
- Rodriguez, D. & Piadozo, M. (2016). Characterization of Farm Mechanization Among Lowland Rice Farmers in Laguna. *Philippines. Journal of Economics, Management & Agricultural Development*. 2 (2). 97-108. <http://dx.doi.org/10.22004/ag.econ.309285>
- Tayactac, M. (2024). National Food Authority – Community Partnering towards an Ensured Food Security Logistics in Occidental Mindoro. *Psychology and Education: A Multidisciplinary Journal*. 21 (5). 494-508. https://scimatic.org/show_manuscript/3150
- Vertudes, M., Musa, C., Cosilet, M., Salagubang, R., & Balaria, F. (2020). Impact of Rice Tariffication Law in selected Rice Farmers in Nueva Ecija. *Philippines. International Journal of Advanced Engineering, Management and Science (IJAEMS)*. 6 (3). 147-153. <https://dx.doi.org/10.22161/ijaems.63.7>

Pangkabuhayan sa Pagbangon at Ginhawa (PPG) program's impact in stimulating business operations in SAMARICA

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Abstract

This study aimed to identify the challenges affecting business operations and to determine the impact of the *Pangkabuhayan sa Pagbangon at Ginhawa* (PPG) program in stimulating business operations in SAMARICA using a mixed sequential exploratory research design. The respondents of this study were 177 PPG program beneficiaries from SAMARICA. The data collection procedures for this study were divided into two components: interview questions and a researcher-made questionnaire. This study used statistical software SPSS Version 26 to generate the results for the descriptive problems and WarpPLS Version 7.0 to test the significance of the relationships. The results showed the following: (a) the final themes originated from an analysis of the common challenges that affect the respondents' businesses: internal and external factors; (b) most of the respondents are from the manufacturing sector and have been in operation for around 6-10 years; (c) business challenges indicate a high level of agreement; (d) there was a high level of satisfaction, and most businesses were able to receive a sales increase of 5% and higher; (e) business profile posed no direct influence on the status of business operations; and (f) internal and external challenges encountered by business owners significantly relate to the status of their business operations. This study recommends that the Negosyo Center Business Counselors may conduct regular monitoring sessions to check on the beneficiaries and identify any additional support they may need, aside from the business kits they received, to help make their businesses more stable and sustainable.

Keywords: Pangkabuhayan sa Pagbangon at Ginhawa (PPG) program, business challenges, sales performance, satisfaction, mixed sequential exploratory research design

Pangkabuhayan sa Pagbangon at Ginhawa (PPG) program's impact in stimulating business operations in SAMARICA

1. Introduction

Business activities and institutions were formed to help owners maximize their finances and improve their economic situations. However, there were instances when their financial activities faced challenges that thwarted their expectations for more benefits. Expectations for better returns often fail because of the economic cycle (Estevez, 2023), political development (Ghanayem, 2022), climate change (Roundy, 2023), or man-made disasters.

The Philippines, as noted by Radtke & Weller (2020), was the 9th of the most disaster-prone countries in the year 2020. Entrepreneurs should overcome business challenges through hard work and determination. Thus, Dare (2022) mentioned that we need strong leaders with guts, imagination, and skill to encourage involvement, growth, and a high-spirited community. A vibrant economy is a sign of a developed community; nevertheless, the business community must be reminded that business has ups and downs. The pandemic, natural calamities, and inflation were some factors that slowed down the locality's economic growth. Additionally, Sharif (2021) mentioned that these casualties directly and indirectly impact business activities, especially in the aftermath.

In Occidental Mindoro, businesses suffered significant losses due to factors such as typhoons, pandemics, inflation, and such. These challenges that regularly hit the province leave many business owners struggling to sustain their businesses. Recognizing this vulnerability, the Department of Trade and Industry, under its Livelihood Seeding Program (LSP), established the Pangkabuhayan sa Pagbangon at Ginhawa (PPG) Program after Typhoon Yolanda struck the Philippines in 2013. After its establishment, this program has become the DTI's disaster response and recovery efforts. It is one of the government's initiatives to support and restore businesses affected by calamities in the Philippines. It provides livelihood assistance to business owners by helping them recover and restore their businesses after disasters.

The provincial office of the Department of Trade and Industry in Occidental Mindoro provided information on 198 program beneficiaries across four municipalities: San Jose, Magsaysay, Rizal, and Calintaan (collectively known as SAMARICA). Most of these beneficiaries were residents of San Jose. This study aimed to evaluate the impact of the Department of Trade and Industry's Pangkabuhayan sa Pagbangon at Ginhawa (PPG) Program in stimulating the business operations of beneficiaries in SAMARICA in the wake of natural calamities. This study would provide insights into the impact of the Department of Trade and Industry's Pangkabuhayan sa Pagbangon at Ginhawa (PPG) Program on small business owners in Occidental Mindoro, specifically concerning their business recovery and operational restoration following natural calamities.

Statement of the Problem - This study aimed to identify the challenges affecting business operations and to determine the impact of the Pangkabuhayan sa Pagbangon at Ginhawa Program in stimulating business operations in SAMARICA. Specifically, this study sought to answer the following questions: (1) What are the common challenges that affect the respondents' businesses? (2) What is the profile of the respondents' business in terms of business classification and length of operation? (3) What is the extent of the business challenges of the respondents in terms of internal factors and external factors? (4) What is the status of the business operations in terms of satisfaction and sales performance? (5) Is there a significant relationship between the respondents' business profile and the status of business operations in terms of satisfaction and sales performance? (6) Is there a significant relationship between the business challenges encountered by the respondents and the status of business operations in terms of satisfaction and sales performance? (7) What intervention can enhance the Pangkabuhayan sa Pagbangon at Ginhawa program?

Significance of the Study - The result of this study was expected to be beneficial to the following: First, to

the beneficiaries of the PPG program, this study will help them identify common challenges encountered during the business rebuilding process, enabling more effective planning, better advocacy for their needs, and enhanced collaboration with the government on disaster recovery initiatives. Second, to the community, this study will provide insights into how the government's support of businesses influences unemployment rates and economic stability. To the Department of Trade and Industry, the findings of this study will assist them in strengthening the guidelines and processes of the Pangkabuhayan sa Pagbangon at Ginhawa program, thereby enhancing its responsiveness, effectiveness, and the confidence it inspires among business owners. To the business owners, this study will help them understand how different types of businesses benefited from the PPG program. To the academe, this study will encourage academic discussion about the government's significance in business support and economic recovery. Also to the future researchers, this research will provide valuable insights for future researchers exploring similar topics and help readers develop a deeper understanding of the government's Pangkabuhayan sa Pagbangon at Ginhawa program and its implementation. And lastly, to the policymaker, the result of this study will serve as a guideline that will safeguard the business community.

Scope and Delimitation of the Study - The researcher presents the impact of the Pangkabuhayan sa Pagbangon at Ginhawa Program on stimulating business operations in SAMARICA. It was conducted in San Jose, Magsaysay, Rizal, and Calintaan and covered only a 2-year period of beneficiaries of the said program. The respondents of this study were the PPG program's beneficiaries from 2020 and 2022, as these are the only years in which the province received funding for the said program. This study concentrated exclusively on specific business classifications, including manufacturing, food service activities, and retail trade. The manufacturing sector focused solely on food processing, food service activities concentrated on eateries, and the retail trade segment was limited to sari-sari stores. Other types of businesses were not included in this study. The performance of the beneficiaries was assessed through the percentage increase in sales. Other factors related to business performance were not included in this study. The limitation encountered in this study was that some of the beneficiaries were no longer operational; nevertheless, the researcher managed to cover a sufficient scope. Out of 198 beneficiaries, 177 were operational and able to complete the survey.

2. Methodology

Research Design - A mixed sequential exploratory research method was used in this study. Trochim et al. (2016) further explained that this design aims to achieve each variable's advantages and mitigate its weaknesses. The author further explained that employing qualitative and quantitative approaches offers more comprehensive insights into the research problem. The qualitative component employed an open-ended survey question to explore the common challenges that affect the business of the PPG beneficiaries. On the other hand, the quantitative component (output) was the coded theme taken from the final thematic analysis.

Respondents of the Study - The respondents of this study were the PPG program beneficiaries from Magsaysay, San Jose, Rizal, and Calintaan. For the qualitative part, 15 business owners were randomly selected from Sablayan. These business owners were no longer included during the final administration of the questionnaire. The researcher used a complete enumeration of the respondents based on their respective municipalities since the entire population is relatively small and clearly defined. Canonizado (2024) indicated that total population sampling can eradicate any possible bias that may arise from the sampling methods. The respondents included in the study were the Pangkabuhayan sa Pagbangon at Ginhawa program's beneficiaries from Magsaysay, San Jose, Rizal, and Calintaan. The expected total population of the respondents is 198. However, 21 of the businesses have been non-operational and eventually closed. Hence, the remaining 177 served as the total respondents of the study.

Research Instrument - The data for the study were collected through an interview guide, using an open-ended question for the qualitative part, and the quantitative part involved a research-made questionnaire to evaluate the impact of the program in stimulating business operations of the recipients of the business kits. The researcher-made instrument is composed of four (4) parts. The first part is the type of business, part II challenges in business, part III satisfaction, and part IV performance of the respondents. Both parts II, internal and external, have eight (8)

questions, and the beneficiaries' satisfaction has ten items. For the performance, the respondents needed to indicate their sales before and after receiving assistance from the PPG program. For the part of the satisfaction, the researcher based the questions on Department Order 24-126. For the final section of the survey, a self-evaluation of the respondent's sales before and after receiving the PPG program business kit was requested, and an ocular inspection was conducted to validate the self-performance rating of the respondents.

The questionnaire underwent validation through assistance from experts at the Divine Word College of San Jose graduate school and the Department of Trade and Industry personnel. The proponent incorporated the experts' feedback and recommendations when finalizing the survey instrument. The researcher-made questionnaire was tested for its reliability with 30 business owners as respondents. The results of the reliability test using the split-half technique based on the equal-length computation of the Spearman-Brown formula are presented as follows:

Table 1
Reliability Analysis Results

Items	Number of Items	Reliability Coefficient	Interpretation
Internal Factors	8	0.805	High Reliability
External Factors	8	0.861	High Reliability
Satisfaction	10	0.868	High Reliability

There is generally high reliability in the three parts of the questionnaire that were tested. This proves that the questionnaire can be used as the instrument of the study and can be distributed to the final group of respondents.

Data Gathering Procedure - For the qualitative data, the researcher used an interview guide and gathered data through face-to-face interviews. Since the target respondents of the study were not members of any establishment, the letter requesting to be part of the study will be right on top of the questionnaire. The data collected was thematized, it was properly labeled, and organized to correctly facilitate the analysis. It was followed by a coding process. An initial analysis was done, and the final thematic analysis was conducted through a diagram to highlight the basis of the variables for the quantitative part. The data gathering took a month to complete and gather the necessary data.

Statistical Treatment of the Data - The qualitative data were analyzed using thematic coding, while the quantitative data were processed to answer the descriptive part. Frequency and percentage were used to describe the business classification and length of operation in terms of the number of years. Weighted means were used to describe the challenges of the business and the satisfaction of the beneficiaries on PPG. The statistical software, SPSS Version 26, generated the results for the descriptive statistics. To establish the relationship between the independent and dependent variables, and to test the significance of the relationships, the Sequential Equation Modelling using the software, WarpPLS version 7.0, was used. For the interpretation of the response to challenges in business, both the internal and external and the beneficiaries' satisfaction, a 5-point Likert-type scale was used and the following limits were applied: 4.50 – 5.00 described as a very high extent; 3.50 – 4.49 described as high extent; 2.50 – 3.49 described as moderate extent; 1.50 – 2.49 described as low extent; and 1.00 – 1.49 described as very low extent.

Ethical Considerations - The researcher adhered to the Divine Word College of San Jose's graduate school research protocols. Participants' confidentiality and anonymity were preserved throughout the research process. Participants were informed that all collected information would be used exclusively for research purposes. Additionally, the researcher followed the American Psychological Association (APA) 7th edition guidelines to properly attribute prior research consulted during the study. All external sources and studies were appropriately cited and acknowledged.

3. Results and Discussions

The final themes presented in Figure 1 were derived from the analysis and resulted in the following: internal and external factors. These domains contribute to describing the business challenges encountered in handling the

operations of the business owners. Internal factors are issues that arise within a business's operations, while external challenges originate from outside factors that affect the business operation, such as natural disasters. Businesses, as mentioned by Balita (2022), have been dealing with challenges including increased competition, financial difficulties, and other operational roadblocks for years.

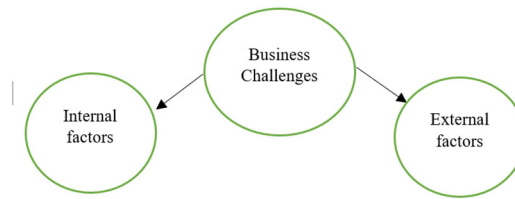


Figure 1. Final Thematic Map for Business Challenges

Table 2 shows the respondents' profile distribution according to business classification and length of operation. In this study, businesses with similar activities are grouped and classified as manufacturing, food service, and retail trade. Manufacturing includes the production of goods, and businesses in this sector play a role in creating products used by consumers. It comprises the largest percentage of 49.7% or 88 business entities. Manufacturing, being the largest sector, contributes extensively to the economy of the community. This can be attributed to the large number of businesses that focus on food processing. This corroborates the report of Balita (2024) that manufacturing contributed about 3.78 trillion pesos in the year 2023, and with a gross domestic product (GDP) contribution of about 3.78 trillion Philippine pesos in 2023. Hence, manufacturing was considered the second-largest sector in the Philippines. However, according to the report, several factors continue to challenge the recovery of the manufacturing industry since the Philippines remains import-dependent for its raw materials.

Table 2

Respondents' Profile Distribution According to Business Classification and Length of Operation (n=177)

Classification	Frequency	Percent
Manufacturing	88	49.7
Food Service Activities	23	13.0
Retail Trade	66	37.3
Total	177	100.0
Length of Operation (in years)	Frequency	Percent
1 – 5	36	20.3
6 – 10	67	37.9
11 – 15	42	23.7
16 – 20	13	7.4
21 and above	19	10.7
Total	177	100.0

The retail trade also shares quite a large portion, basically due to the existence of numerous sari-sari stores across the four municipalities of Occidental Mindoro. This is evidenced by the retail trade, with 66 or 37.3% of the businesses in the area. One reason for this, according to Kamin (2022) is that retail trade, which supplies directly to consumers, is essential to the economy. The findings above are also confirmed by Euromonitor (2024) that despite inflation, retail in the Philippines showed healthy growth before 2023 and continued in 2023. Sales increased in mobility after the pandemic, including the return of Filipinos to their physical offices. The least frequency is focused on food services activities which comprise 13% or 23 out of 177 business entities in the SAMARICA area. The food services industry is reported (Balita, 2024) to lead the food product exports of the Philippines, which include animal or vegetable fats, oils, and processed foods such as bread, cereals, and dairy products. While there are businesses concentrated on providing food services, especially those offering full meals or drinks intended for immediate consumption, these may not be sufficient to cater to the growing population of SAMARICA.

The number of years within which the respondents of the study started their business operation may be considered relatively young, since 67 or 37.9% of them have been in operation for around 6 to 10 years. Another group operating within 11 to 15 years is comprised of 42 or 23.7% and there are 13 or 7.4% who have been in the

business for 16 to 20 years. The longest period in its operation consists of 19 businesses that have thrived for more than 21 years (19 or 10.7%), while the shortest period existing for one year to 5 years of business operation is 20.3%.

The above findings appear to conform to the data revealed by Statista Research Department (2024) wherein a survey completed in 2023 disclosed that most of the small businesses in the Philippines and India had a business tenure of one to five years. It was also found that over 20 percent of the surveyed small companies had already been in business for six to ten years, except for small businesses in the Philippines. With a positive outlook on business in the SAMARICA area, it is hoped that these businesses will continue to exist to help boost the economy of the province. But we cannot foresee that a business has its ups and downs, as shown by the twenty-one (21) PPG beneficiaries who ceased their operations. Warren & Szostek (2017) affirmed that the survival of small businesses poses a considerable challenge.

While business activities serve the purpose of helping the owners maximize finances and maintain economic stability, it may be inevitable that they face problems and challenges in the course of their operation. Table 3 discloses what businessmen experience in terms of challenges, and institutions are formed to help owners maximize their finances and improve their economic situations. There are instances, however, when their financial activities are faced with challenges that hinder their positive expectations and benefits. Disclosed in the table is a composite mean of 4.47, describing a high extent of business challenges. This indicated that the beneficiaries of the Pangkabuhayan sa Pagbangon at Ginhawa program were confident in their abilities to manage their day-to-day business operations. However, Singh (2020) argues that the majority of entrepreneurs frequently have an excessive amount of confidence in their skills, leading to poor decision-making, which then causes financial underperformance. Also, Hasyim & Bakri (2024) noted that small business success was further hampered by managerial inefficiencies brought on by a lack of formal training. Additionally, programs for mentorship and continuous development are crucial for enhancing managerial skill sets

Table 3

Mean Extent of Respondents' Challenges in Business In Terms of Internal Factors

INDICATORS (INTERNAL FACTORS)	Weighted Mean	Verbal Description
1. My business has enough capital to operate efficiently.	4.15	High
2. I am confident in my ability to manage cash flows.	4.64	Very High
3. My business has a thorough financial strategy process.	4.62	Very High
4. I possess exceptional planning skills to ensure more detailed business operations.	4.63	Very High
5. I have a clear distinction between personal and business finances.	4.47	High
6. I maintain efficient business operation control.	4.58	Very High
7. My business runs smoothly without frequent disruptions.	4.52	Very High
8. I am prepared for any unexpected business expenses that might threaten my business's financial stability.	4.16	High
Composite Mean	4.47	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

For their business to survive, the owners have to overcome these challenges by employing strategies appropriate to their respective businesses. If businesses were affected by calamities, the Philippine government, through its Pangkabuhayan sa Pagbangon at Ginhawa (PPG) Program under the initiative program of the Department of Trade and Industry, has offered the provision of livelihood assistance to business owners to help them recover and restore their businesses after the calamity/disaster. The success of the program, according to Sapkota (2016), may be attributed to sound policy, resource allocation, and the profiling of the target beneficiaries. Also, Safari & Babazadeh (2024) revealed that internal factors have an impact on the performance, classified into four dimensions: individual, organizational, environmental, and customer level. It appears that business owners in the SAMARICA area experience challenges. According to Noor & Ayob (2021), most challenges arise from the inherent complexity of starting and running a business. However, a statement by Sadiku (2022) concluded that business challenges are not controllable. Moreover, depending on the time frame, all internal aspects, including managerial skills and competencies, access to finance, business experience, and technological expertise, can impact small and medium enterprises, and access to capital is regarded as a major challenge (Loku & Loku, 2020).

However, Mohamad et al. (2017) noted that entrepreneurial capability and technological adoption correlate with small business performance, but the research lacks adequate empirical evidence to establish clear connections between business success and three critical factors, including marketing proficiency, financial capital availability, and knowledge-sharing practices. Thus, pursuing different effective strategies to assist entrepreneurs who face these challenges has been recommended by Engidaw (2022).

The external factors that contribute to the challenges faced by owners in handling business operations are disclosed in Table 4, with a composite mean of 4.25 described as a high extent. This implies that the Pangkabuhayan sa Pagbangon at Ginhawa program's beneficiaries experienced a high extent of business challenges concerning external factors. It may be associated with the small business owners' absence of a business contingency plan and lack of investment in contingency funds. It supported the study of Ramakrishnan (2022), where he noted that businesses are often exposed to unforeseen events that frequently occur without further notice and provide little time for response. Thus, adopting a contingency plan was crucial.

Table 4

Mean Extent of Respondents' Challenges in Business In Terms of External Factors

INDICATORS (INTERNAL FACTORS)	Weighted Mean	Verbal Description
1. The calamities pose a serious threat to my business operations.	4.64	Very High
2. The possibility of unfortunate events (such as fire, earthquake, or landslide) substantially influences my business continuity plan.	4.58	Very High
3. The pandemic-related restrictions have had a significant effect on my business operations.	4.66	Very High
4. The health crises have influenced the buying patterns of my customers.	4.63	Very High
5. My business is focused on enhancing its liquidity despite external challenges such as calamities, fire, local communist armed conflict, and the COVID-19 pandemic.	4.60	Very High
6. The natural disasters have had a substantial impact on my business operations.	4.64	Very High
7. The persistent threat of armed conflict affects my business decisions.	2.72	Moderate
8. I invest in additional security measures to secure my business.	3.54	High
Composite Mean	4.25	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49—Very Low

As the Asian Development Bank (2019) reported, Asia experienced more than one-third of the globe's disasters, thereby affecting 1.7 billion individuals with an estimated 500 billion dollars of damage cost. Liu et al. (2024) also mentioned that the tourism industry has faced several hazards, crises, and tragedies caused by both man-made and natural disasters. In other parts of the world, Sydnor et al. (2016) analyzed the impact and post-disaster damage on the operation of small businesses after a hurricane. It revealed a significant impact that led to the immediate closures of businesses. A study by Ballesteros & Domingo (2015) noted that catastrophes profoundly influence business operations and viability, and particularly, small-medium enterprises struggle the most because of fewer resources and being unstable. Safari & Babazadeh (2024) stated that external and, not individual affect the business performance. Same with the observation of Kowo et al. (2018) that the external environment impacted business performance.

The persistent threat of armed conflict affecting business decisions (2.72) is moderately considered a challenge to owners. Businessmen in the locality are aware that the government, through the police personnel, is already doing its role to secure the community from untoward incidents. Meanwhile, investing in additional security measures to secure the business (3.54) is another challenge highly considered by business owners. This may be because they do not want to experience theft or robbery incidents within the vicinity. This is also why the United Nations (2020), through the UN Working Group on Business and Human Rights, took the lead in underlining the need for businesses to ensure their activities do not fuel tensions and violence. It was reported that over the last decade, with the existence of armed conflicts, businesses have faced complex challenges in avoiding human rights abuses if they operate in or have business relations with others in conflict environments.

In support of the businesses that have been affected by calamities and disasters, the program, Pangkabuhayan sa Pagbangon at Ginhawa (PPG), conducted by the Department of Trade and Industry, served to help in business

recovery and operational restoration. The satisfaction of the beneficiaries of this program is gauged by the indicators reflected in Table 5. A very high level of satisfaction with the PPG program is perceived by the business owners in almost all the indicators, with weighted means that ranged from 4.54 to 4.68. The national government prioritizing self-employment is highly regarded by business owners, with a mean rating of 4.41. Overall, business owners expressed very high satisfaction (4.58) with the government's Pangkabuhayan sa Pagbangon at Ginhawa program.

Table 5

Mean Status of the Business Operations in Terms of Satisfaction with the PPG Program

INDICATORS (SATISFACTION)	Weighted Mean	Verbal Description
1. The requirements for applying PPG program are simplified.	4.56	Very High
2. I appreciate the DTI staff that helped me to avail the PPG program's business kit package.	4.67	Very High
3. The PPG program allows me to rise again.	4.54	Very High
4. The fairness is always observed in the availment of the PPG program's business kit.	4.55	Very High
5. The PPG program has provided me with an opportunity to contribute meaningfully to the community.	4.56	Very High
6. I have been allowed to recover from my economic loss through the PPG program's business kit.	4.56	Very High
7. I am grateful that DTI launched the PPG program to help us, the victims of calamities.	4.68	Very High
8. My current economic situation is becoming better through the PPG program's business kit.	4.54	Very High
9. I am satisfied with the PPG program's business kit that I received.	4.68	Very High
10. The identified priority of the national government is self-employment.	4.41	High
Overall Mean	4.58	Very High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

The very high reception of the business owners on the PPG may be attributed to the opportunities they have received through the initiative of the Department of Trade and Industry. As reported, the DTI (2024) gave support to communities, especially micro-enterprises to resume their business after devastating fire incidents and other calamities, including armed conflicts. Moreover, through DTI's initiative, services like the provision of information materials, enterprise development training, and business counseling and mentoring. From the viewpoint of business satisfaction, according to Lee et al. (2023), supporting individuals in need until satisfying their fundamental needs is the aim of government assistance. Aside from the package received, the beneficiaries are also satisfied with the other projects of the government. The use of e-government resources (Myint, 2022). The primary factors contributing to business satisfaction, as identified in the E-survey of Business Satisfaction on Frontline Government Services (2021), encompass integrity, regulatory requirements, government regulations, communication, reliability, access and facilities, assurance, responsiveness, cost, and the complaint mechanism.

Table 6

Sales Performance of Businesses in Terms of Percent Increase

Percent Increase in Sales	Description	Frequency	Percent
1% - 4%	Minimal increase in sales, customers, and jobs generated	10	5.6
5% and above	Significant increase in sales, customers, and jobs generated	167	94.4
Total		177	100.0

The business owners recorded a significant increase in their sales after PPG after receiving the PPG program's business kit. A large percentage, 94.4% or 167 of them, were able to receive an increase of 5% or higher. Only 5.6% of the business owners, or ten of them, had a minimal increase in sales, which ranged from 1% to 4%. Breaking through a sales plateau, according to Gunn (2022), may be challenging, but can be countered using the right approach. To improve sales, various strategies have been offered. These include revitalizing the sales strategy, providing up-to-date training, encouraging customer referrals, and leveling up customer service.

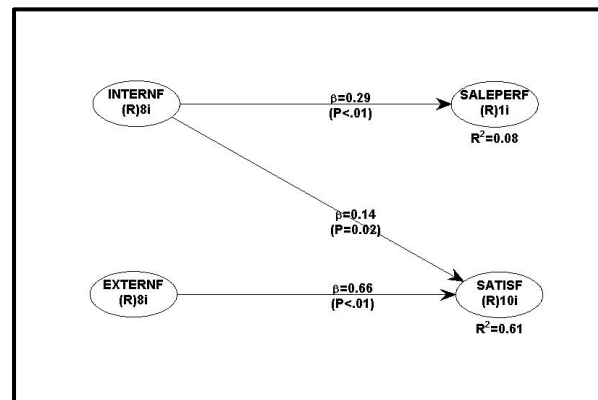
Table 7*Path Coefficients and p-values for Hypothesis Testing*

Path	Beta (β) Coefficient	p-value*	Interpretation
H01: Profile→Status of Business Operation			
CLASSIF→SATISF	-0.040	0.297	Not Significant
CLASSIF→SALEPERF	0.013	0.433	Not Significant
OPER→SATISF	0.045	0.274	Not Significant
OPER→SALEPERF	-0.043	0.282	Not Significant
H02: Challenges Encountered→Status of Business Operation			
INTERNF→SATISF	0.138	0.030	Significant
INTERNF→SALEPERF	0.258	<0.001	Highly Significant
EXTERNF→SATISF	0.649	<0.001	Highly Significant
EXTERNF→SALEPERF	0.047	0.266	Not Significant

*Significant at $p < 0.05$; $p < 0.001$ Highly Significant

The statistical results yielded very low beta coefficients from 0.013 to 0.045 as the two components of the profile were linked to the two indicators of the status of business operations. The result of this first test ascertains the acceptance of the null hypothesis. This implies that the respondents' business profile posed no direct influence on the status of the business operations. On the one hand, the results registered highly significant coefficients of 0.258 and 0.649 in the connection between internal factors and sales performance, and between external factors and satisfaction with the PPG program. While the beta coefficient from the link between internal factors and satisfaction (0.138) appears low, still, it is still considered significant considering the p-value of 0.030. External factors failed to significantly relate to sales performance as shown by the low coefficient of 0.047.

The impact of the challenges on business operations is confirmed in the study of Dragnic (2014) stating that internal factors such as business entity size, technology and product innovation, organizational autonomy, and market roles and external factors such as the general state of the economy, sector, and type of customers have a more or less significant impact on the performance/effectiveness like sales growth. The findings of this study are also supported by the study of Kowo et al., (2018) which revealed that the external business environment has an impact on organizational performance. Thus, business owners have to understand the implications of organizational performance of their business activities to identify opportunities and threats to their business.

**Figure 2. Emerging Model**

Based on the result of the structural model that reflects two independent variables linked to the status of business operation, a new model emerged, which presents only one independent variable, challenges encountered linked to the status of business operation. Figure 2 reveals that internal factors have a significant connection and external factors have a significant connection to satisfaction with the PPG program. The findings of the study of Lee et al. (2023) revealed that negative financial experiences strongly predicted receipt of government assistance. Notably, the research identified a positive relationship between receiving government support and reporting higher levels of financial satisfaction.

Both internal and external factors combined have contributed to a large percentage ($R^2=0.61$) of the business

owners' level of satisfaction with the government's PPG program. While sales performance ($R^2=0.08$) is found to be attributed to the internal challenges in the business operation, it is only to a very small degree. The beta-coefficients (β) ranging from 0.14 to 0.66 have increased and are also with the corresponding p-values or significance levels below 0.05 which emerge as the result of the structural equation modeling. This is supported by the study of Nwodo et al., (2024) examining government incentives provided to industrial companies in South-East Nigeria. The findings revealed that these support measures significantly and positively influenced sales growth performance.

Table 8*Path coefficients, p-values, and Effect size for Ho*

Path	Beta (β) Coefficients	p-values*	Effect Coefficient**	Standard Errors	Effect Size
INTERNF→SALEPERF	0.286	<0.001	0.082	0.071	Small
INTERNF→SATISF	0.145	0.024	0.097	0.073	Small
EXTERNF→SATISF	0.658	<0.001	0.508	0.066	Large

*Significant at $p < 0.05$

** Effect size coefficient: 0.02 – small, 0.15 – medium, 0.30 – large

The emerging model brings out three paths: internal factors linked to both sales performance ($\beta=0.286$, $p<0.001$) and satisfaction ($\beta=0.145$, $p=0.024$) and external factors linked to satisfaction ($\beta=0.658$, $p<0.001$). From among these paths, external factors recorded the largest correlation coefficient (β) of 0.508 when linked to satisfaction on PPG. The rest of the paths show a small effect with size ranging from 0.082 to 0.097. Internal factors contribute a small effect on both the sales performance with 0.082 and satisfaction on the PPG program with 0.097. These significant relationships are supported by the very small standard error values ranging from 0.066 to 0.073. The abovementioned results lead to the rejection of the null hypothesis. Thus, the internal and external challenges encountered by the business owners significantly relate to the status of their business operation.

The findings of the emerging model that shows internal factors pose an influence on sales performance reveal parallelism in the findings of Safari & Babazadeh (2024), which indicated that success in business-to-business sales performance may be influenced by factors categorized into four dimensions: individual, organizational, environmental, and customer level. As the emerging model did not show the influence of external factors on sales performance, the same findings were revealed in Safari & Babazadeh (2024) that the industry growth factor and sales planning related to external factors, environmental, and individual indicators did not affect the success of business-to-business sales performance. In light of the challenges encountered by the business owners, the PPG program has made its contribution to help those affected. As emphasized by Sapkota (2016) in her study, resource allocation, how the population is targeted, and how the program is managed were also considered in attaining the success of government programs aside from the sound policy.

Table 9 outlines a comprehensive strategy for business development, catering to both short-term priorities (such as financial management) and long-term sustainability (including innovation and adaptability). The programs were designed to be progressive, building on one another to create a well-rounded support system for the beneficiaries of the Pangkabuhayan sa Pagbangon at Ginhawa Program in SAMARICA. Specifically, the 6-month Financial Management Literacy Program addressed a key challenge—insufficient funds—identified in the findings. The beneficiaries will gain financial skills through hands-on workshops and personalized consultations led by the Negosyo Center Business Counselors.

The program aimed for an ambitious 80-90% success rate in establishing emergency funds and implementing proper bookkeeping systems. By equipping beneficiaries with these financial tools, the program directly tackles the issue of business closures due to a lack of sufficient funds; the 3-month Strategic Business Continuity Planning Program is an extensive initiative designed to enhance business resilience by focusing on risk management and contingency planning. With success indicators set at 75-100%, the program underscores the critical role of preparedness in business survival. Addressing external challenges that impact operations, it equips beneficiaries with the strategies needed to navigate uncertainties and sustain their businesses effectively; the 4-month Workshop

on Market Expansion and Adaptation brings together multiple stakeholders, including the Department of Trade and Industry's Provincial Office in Occidental Mindoro, to enhance business growth. It incorporates practical strategies such as OTOP (One Town, One Product) hub partnerships and trade fair participation, helping businesses expand their market reach.

Table 9

Proposed Interventions to Enhance the Pangkabuhayan sa Pagbangon at Ginhawa Program

Program Project	Objectives	Strategies/Activities	Persons Involved	Time-Frame	Success Indicator
Financial Management Literacy Program	To improve the financial literacy and management skills of the beneficiaries To develop sustainable funding strategies To establish emergency funds	Workshop series on bookkeeping and financial planning One-on-one financial consultations Emergency fund planning session	Negosyo Center Business Counselors and PPG beneficiaries	6 months	90% implement proper bookkeeping systems 70% report improved cash management 80% of participants establish emergency funds
Strategic Business Continuity Planning Program	To create robust business continuity plans To develop risk management strategies To build resilience against external factors	Risk assessment workshops Business continuity development plan Industry-specific contingency planning	Negosyo Center Business Counselors and PPG beneficiaries	3 months	100% of businesses have documented continuity plans 85% establish risk mitigation strategies 75% create an emergency response protocol
Workshop on Market Expansion and Adaptation	To identify new market opportunities To develop market adaptation strategies To enhance competitive advantage	Market research training (Establish a partnership with the OTOP hubs & join the trade fairs) Digital marketing workshops Competition benchmarking	DTI Provincial Office, Negosyo Center Business Counselors, and PPG beneficiaries	4 months	30% reduction in operational costs 25% improvement in productivity 90% implementation of the quality control system
Resource Mobilization Network Program	To establish funding connections with minimal interest rates such as SB Corp and Landbank To create support networks	Networking events with financial institutions Partnership building workshops	Negosyo Center Business Counselors and PPG beneficiaries	3 months	60% resource additional funding 75% establish beneficial partnerships

Innovation and Adaptability Training	To foster innovative thinking To develop adaptive business models To enhance problem-solving capabilities	Innovation workshops Technology adaptation training Problem-solving boot camps	Negosyo Center Business Counselors and PPG beneficiaries	12 months	70% implement innovative solutions 60% adopt new technologies 80% report improved problem-solving skills
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Success is measured through operational improvements and quality control, directly addressing the need for market expansion and greater efficiency; the 3-month Resource Mobilization Network Program focuses on securing partnerships with financial institutions that offer minimal interest rates, such as SB Corp and Landbank, to provide the beneficiaries with access to low-interest funding. With success indicators set at 60-75%, the program recognizes the challenges of obtaining financial support. It directly addresses the financial resource constraints identified in the findings by facilitating funding opportunities, and the longest initiative, the 12-month Innovation and Adaptability Training program, acknowledges that implementing advanced technologies requires time. It is designed to modernize business approaches by emphasizing technology adoption and problem-solving skills. With success indicators set at 60-80%, it sets realistic goals for integrating new technologies into operations. The program fosters long-term resilience and competitiveness by equipping businesses with the tools to adapt to evolving market conditions. This corroborates the key findings of the study of Adobas et al. (2024) on interventions of the government and the development of the MSMEs that highlighted ongoing business challenges in securing financing, navigating regulatory frameworks, and embracing digitalization. It was also added that despite government initiatives, businesses continue to face challenges in achieving growth and sustainability. Nonetheless, the study also recognized the success of several government programs that offer essential support for the MSMEs. Moving forward, they also mentioned that fostering collaboration between the public and private sectors is vital to empowering MSMEs, driving economic progress, and promoting community development.

4. Conclusions

Based on the findings, the following conclusions are drawn: The common challenges that affect the respondents' businesses are internal and external factors. The business profile of the respondents: most of the respondents are from the manufacturing sector. Most of the Pangkabuhayan sa Pagbangon at Ginhawa program's beneficiaries in SAMARICA have businesses that have been operating for around 6-10 years. The challenges in the business of the PPG program beneficiaries in SAMARICA; The PPG program beneficiaries are confident in their ability to manage cash flows. The pandemic-related restrictions have had a significant effect on the respondents' business operations. The status of the business operations of the PPG program beneficiaries in SAMARICA; The respondents are grateful that the DTI launched the PPG program to help them. The victims of calamities are satisfied with the PPG program's business kit given to them. Most of the PPG program beneficiaries were able to increase their sales to 5% and higher. The significant relationship between the respondents' business profile and the status of business operations in terms of satisfaction and sales performance. There is no significant relationship between the respondents' business profile and the status of business operations. The significant relationship between the business challenges encountered by the respondents and the status of business operations in terms of satisfaction and sales performance; There is a significant relationship between internal factors and sales performance. Despite being able to manage internal factors, small businesses face substantial challenges with financial resources being the primary concern for their sustainability.

Recommendations - The following recommendations are presented concerning the conclusions derived from

significant findings. The Department of Trade and Industry may develop programs that provide business owners with a comprehensive support system that addresses their businesses' internal and external challenges. A tiered assistance structure based on the length of time the business has been in operation (6-10 years) and a program specifically tailored to the needs of food processors may be designed by the said agency. Specialized training on financial and crisis management may be conducted through the Negosyo Centers of each municipality. The customer service feedback mechanism of the mandated agency may be strengthened. It will be a better idea to ensure that all the comments and suggestions are noted and addressed. Training programs centered on conventional techniques for increasing sales may be created by the Department of Trade and Industry. Best practices based on the strategies of successful businesses may be developed standardized business development initiatives that are accessible to all beneficiaries may be crafted by the aforementioned agency. A flexible support strategy that can help businesses regardless of their profile characteristics may be offered. To further improve its implementation, the agency may offer additional training and programs to enhance the beneficiaries' knowledge of business operations. It would also be beneficial for the Negosyo Center Business Counselors to conduct regular monitoring sessions to check on the beneficiaries and identify any additional support they may need, aside from the business kits they received, to help make their businesses more stable and sustainable. Future researchers may consider conducting a study on other factors that may influence business operations such as technological factors, regulatory risk factors, and disruption and sustainability metrics.

5. References

- Adobas, A., Dela Cruz, A., Vigonte, F., & Abante, M. (2024). Government Interventions and MSMEs Development: Policies, Impact and Future Directions. Social Science Research Network. doi.org/10.2139/ssm.4752444
- ADB Annual Report. (2019). ADB Annual Report 2018. In the Asian Development Bank. Institutional Document. www.adb.org/documents/adb-annual-report-2018 http://dx.doi.org/10.22617/FLS190058
- Balita, C. (2024, March 26). Topic: Manufacturing in the Philippines. Statista. https://www.statista.com/topics/11457/manufacturing-in-the-philippines/#topicOverview
- Ballesteros, M., & Domingo, S. (2015). Building Philippine SMEs' Resilience to Natural Disasters. Philippine Institute for Development Studies. pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1520_rev.pdf Discussion Paper Series No. 2015-20 (Revised)
- Canonizado, I. (2024). When to Use Total Population Sampling in a Research Study. https://discover.hubpages.com/education/When-to-use-total-population-sampling-in-a-research-study
- Dare, N. (2022, April 17). The Importance of Community Leadership. Medium. medium.com/@msnickydare/the-importance-of-community-leadership-f9dae6857e2f
- Department of Trade and Industry. (2024). Featured. DTIWEB3. www.dti.gov.ph/
- Development Academy of the Philippines. (2021). 2021 Business Satisfaction e-Survey (e-BizSat). pdc.dap.edu.ph/index.php/business-satisfaction-e-survey-e-bizsat/
- Dragnić, D. (2014). Impact of Internal and External Factors on the Performance of Fast-Growing Small and Medium Businesses * Daša Dragnić. hrcak. srce.hr/file/183967
- Engidaw, A. E. (2021). Exploring internal business factors and their impact on firm performance: small business perspective in Ethiopia. Journal of Innov and Entrepr, 10,25. doi.org/10.1186/s13731-021-00167-3
- Estevez, E. (2023). Investopedia Team. Economic Cycle: Definition and 4 Stages of the Business Cycle www.investopedia.com/terms/e/economic-cycle.asp
- Euromonitor International. (2024). Retail in the Philippines. Euromonitor. www.euromonitor.com/retail-in-the-philippines/report#
- Ghanayem, A. (2022). The Impact of Political Instability on Economic Performance: The Case of The Middle East and North Africa Region. https://pure.hud.ac.uk/ws/portalfiles/portal/67160352/FINAL_THESIS.pdf
- Gunn. (2022). 10 Tips on How to Improve Sales Performance. extu.com/how-to-improve-sales-performance/.

- Hasyim, H., & Bakri, M. (2024). Challenges and Strategies for Small Business Survival. *The Journal of Business and Management Research*, 6(2), 80-90. doi.org/10.55098/tjbmr.v6i2.660
www.researchgate.net/publication/383539747_Challenges_and_Strategies_for_Small_Business_Survival
- Kamin, K. (2022). Bilateral trade and conflict heterogeneity: The impact of conflict on trade revisited. Kiel Institute for the World Economy (IfW Kiel), Kiel. hdl.handle.net/10419/261298
- Kowo, S., Olalekan, S., & Popoola, M. (2018). Impact of External Business Environment on Organizational Performance.
- Lee, Y. G., Hales, E., & Kelley, H. H. (2023). Financial Behaviors, Government Assistance, and Financial Satisfaction. *Social Indicators Research*, 166(1), 85–103. doi.org/10.1007/s11205-022-03051-z
- Liu, L.-W., Pahrudin, P., Tsai, C.-Y., & Hao, L. (2024). Disaster, risk, and crises in tourism and hospitality field: A pathway toward tourism and hospitality management framework for resilience and recovery process. *Natural Hazards Research*. doi.org/10.1016/j.nhres.2024.06.001
- Loku, A., & Loku, N. (2020). Internal factors affecting the performance of small and medium enterprises in Kosovo. *Technium Social Sciences Journal*, 11, 115–127. doi.org/10.47577/tssj.v11i1.1376
- Matriano, M. T. (2022). Global Challenges for Business and Entrepreneurship: Case of Oman. *Advances of Social Sciences Research Journal*, 9(1), 419–425. doi.org/10.14738/assrj.91.11660
www.researchgate.net/publication/358228012_Global_Challenges_for_Business_and_Entrepreneurship_Case_of_Oman
- Mohamad Radzi, K., Mohd Nor, M. N., & Mohezar Ali, S. (2017). The Impact of Internal Factors on Small Business Success: A Case of Small Enterprises under the FELDA Scheme. *Asian Academy of Management Journal*, 22(1), 27–55. doi.org/10.21315/aamj2017.22.1.2
- Myint, A. A. (2022). Users' satisfaction with e-government services. *International Journal of Research in Business and Social Science* (2147- 4478), 11(3), 73–81. doi.org/10.20525/ijrbs.v11i3.1712
- Noor, Y. M., & Ayob, A. (2021). The Challenges and Strategies in Sustaining a Business Among Young Entrepreneurs in Malaysia. *Academy of Entrepreneurship Journal*, 27(6), 1–10.
www.researchgate.net/publication/357837855_The_Challenges_and_Strategies_in_Sustaining_a_Business_Among_Young_Entrepreneurs_in_Malaysia
- Nwodo, S. I., Dike, O. N., & Onyeokoro, S. C. (2024). Effects of Government Incentives on Sales Growth of Selected Industrial Firms in South- East, Nigeria. *International Journal of Business and Management Review*, 12(7), 27–45. doi.org/10.37745/ijbmr.2013/vol12n72745
- Radtke, K., & Weller, D. (2020). World Risk Report. Bündnis Entwicklung Hilft and the IFHV.
www.researchgate.net/profile/Daniel_Weller5/publication/344247841_The_WorldRiskIndex_2020/links/5f6062f292851c0789678709/The-WorldRiskIndex-2020.pdf
- Ramakrishnan, R. (2022). Contingency Planning to Ensure Business-As-Usual. *International Journal of Progressive Sciences and Technologies*, 34(2), 476. doi.org/10.52155/ijpsat.v34.2.4599
www.researchgate.net/publication/366104519_Contingency_Planning_To_Ensure_Business-As-Usual
- Roundy, J. (2023). How Does Climate Change Affect Businesses?
www.techtarget.com/sustainability/feature/How-does-climate-change-affect-businesses-Financial-impacts
- Sadiku, K. M. (2022). External factors and their impact on enterprise strategic management – a literature review. *European Journal of Human Resource Management Studies*, 6(1). doi.org/10.46827/ejhrms.v6i1.1291
- Safari, M., & Babazadeh, T. (2024). A Framework of Critical Success Factors Affecting the Business-to-Business Sales Performance. *International Journal of Management, Accounting and Economics*, 11(3), 2383–2126. doi.org/10.5281/zenodo.10966887
- Sapkota, L. (2016). Social Security Program: A Case on Old Age Allowance Implementation in Tokha Municipality, Kathmandu, Nepal. https://northsouth.edu/newassets/files/ppg-research/PPG_5th_Batch/17_Laxmi_Old_Age_Allowance_Implementation_in_Tokha_Municipality_Kathmandu_Nepal.pdf
- Sharif, Md. B. A. (2021). The Impact of Natural Disasters on Small and Medium Enterprises (SME) in

- Bangladesh. OALib, 08(06), 1–15. doi.org/10.4236/oalib.1107480
- Singh, R. P. (Md. B. A. (2020). Overconfidence: A Common Psychological Attribute of Entrepreneurs Which Leads to Firm Failure. *New England Journal of Entrepreneurship*, 23(1), 25-39. doi.org/10.1108/neje-07-2019-0031
- Statista Research Department. (2024). Asia: business tenure of small businesses by country and length 2023 | Statista. Statista. www.statista.com/statistics/1411235/asia-business-tenure-of-small-businesses-by-country-and-length/
- Sydnor, S., Niehm, L., Lee, Y., Marshall, M., & Schrank, H. (2016). Analysis of post-disaster damage and disruptive impacts on the operating status of small businesses after Hurricane Katrina. *Natural Hazards*, 85(3), 1637–1663. doi.org/10.1007/s11069-016-2652-y
- Trochim, W. M. K., Donnelly, J. P., & Arora, K. (2016). Research methods: The Essential Knowledge Base. Engage Learning. <https://hisp.html.ch/course/view.php?id=543>
- United Nations. (2020). Doing business in conflict areas: UN report details actions to avoid fuelling human rights abuse and stoking violence. OHCHR. www.ohchr.org/en/press-releases/2020/10/doing-business-conflict-areas-un-report-details-actions-avoid-fuelling-human?LangID=E&NewsID=26435
- Warren, G. E., & Szostek, L. (2017). Small Business Strategies for Sustainability Beyond 10 Years. *International Journal of Applied Management and Technology*, 16(1). DOI:10.5590/ijamt.2017.16.1.07

Work environment and work-life balance of auditors of the Commission on Audit (COA) MIMAROPA

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Abstract

COA auditors play a vital role in ensuring government accountability, but chronic understaffing forces each auditor to handle multiple auditees, leading to excessive workloads and stress. The Philippines ranks 59th out of 60 countries in work-life balance, reflecting a broader national struggle. While the COA is improving employee welfare, assessing the COA auditors' work-life balance is crucial for meaningful interventions. This study aimed to explore the impact of profile and work environment on the work-life balance of the auditors in the COA Regional Office IV-B (MIMAROPA). The researcher utilized the sequential exploratory research design on the 117 auditors in COA MIMAROPA. The auditors perceived at a high extent three factors under work environment, such as organizational, work group, and job factor, as well as the six aspects of work-life balance, such as work, family, health, social, extra-curricular activities, and spiritual. The findings indicated that there is a significant influence of work environment factors on the auditors' work-life balance. Conversely, no significant relationship was found between the auditors' profiles, except in extracurricular activities and their work-life balance. In conclusion, COA auditors experience a well-structured work environment, effective teamwork, and job fulfillment, contributing to a positive perception of their roles. Their strong emphasis on work-life balance across various domains highlights the need for continued organizational support to sustain their well-being and productivity.

Keywords: work environment, work-life balance, commission on audit, work group factor, family & health aspect

Work environment and work-life balance of auditors of the Commission on Audit (COA) MIMAROPA

1. Introduction

The work of the Commission on Audit (COA) auditors is pivotal in upholding government accountability, transparency, efficiency, and good governance. They have the primary responsibility of conducting an audit not only on financial matters but also on compliance with existing laws, rules, regulations, and the performance of the auditee. This noble job requires not only audit skills but also qualities of unwavering integrity, profound patriotism, resilience under pressure, and lastly, masterful multitasking skills. The professional demands placed upon auditors are exceptionally high, and it is exacerbated by chronic understaffing. Despite efforts to fill 3,000 to 5,000 vacant positions over the past five years, COA auditors remain understaffed, tasked with auditing over 60,000 government agencies. On average, one COA auditor is responsible for eight agencies, a challenging ratio driven by high attrition rates as employees retire or leave for better opportunities (Mendoza, 2023; Ramos, 2021). This persistent manpower shortage, compounded by significant workloads and external factors such as metro traffic, has led to widespread stress and issues with work-life balance among COA auditors. The intense demands of the job in such conditions heighten the risk of burnout, ultimately affecting employee well-being.

The broader national context mirrors this struggle. According to Remote's Global Life-Work Balance Index 2024, the Philippines ranked 59th out of 60 countries with the highest gross domestic product (GDP), reflecting one of the worst work-life balances globally. While this ranking highlights the pressing need for improvement, the government's ongoing efforts, particularly within COA, to enhance employee welfare are noteworthy. Thus, it is imperative to evaluate the true state of work-life balance among government employees to identify opportunities for meaningful interventions. The organization must focus on how well its employees combine their professional and personal lives so that they can maximize their work (Ramadhania & Sukarno, 2023). Moreover, Kundnani and Mehta (2014) described work-life balance as the "capability to manage stability between work and personal life and to stay dynamic and competitive at work while maintaining a cheerful, healthy home life with necessary ease, despite having work stress and endless actions that need your time and consideration." The work environment has a significant impact on work-life balance (Kusuma & Nandi, 2021). Moreover, it is imperative to give attention to identifying and dealing with the work environment because when employees view their environment negatively, they sometimes experience chronic stress (Saidi et al., 2019).

This study aimed to explore the impact of profile and work environment in terms of organizational, job, and work group factors on the work-life balance of the auditors in COA Regional Office IV-B (MIMAROPA), which was subdivided into six aspects of life, such as work, family, health, social, extracurricular, and spiritual. Understanding these dynamics is essential, as they will inform the Human Resource Management Office (HRMO) in developing appropriate interventions to ensure the retention of young talents. A strong work-life balance not only improves job satisfaction and decreases stress, but it also plays an important role in retaining a motivated and competent audit workforce, which is required for continual progress in government accountability.

Statement of the Problem - The purpose of this study was to determine the work environment and work-life balance of auditors of COA MIMAROPA. Specifically, it sought to answer the following questions: (1) What are the challenges that the auditors are facing today? (2) What is the profile of the auditors in terms of age, sex, civil status, audit sector, and number of auditees? (3) What is the status of the work environment of the respondents in terms of organizational factor, work group factor, and job factor? (4) What is the level of work-life balance of auditors in terms of work, family, health, social, extracurricular, and spiritual? (5) Is there a significant relationship between the profile of the auditors and their work-life balance? (6) Is there a significant relationship between the level of work environment of the auditors and their work-life balance? (7) What is the possible program to be implemented by COA to improve the work-life balance of auditors?

Significance of the Study - The results of this study will be of great benefit to the following: first, to the Human Resource Management Office (HRMO) of COA, this study can be used as a tool in developing appropriate interventions to enhance existing support to targeted groups not only in COA MIMAROPA but in COA as a whole with a high risk of work-life imbalance. Second, to the COA auditors, as this study may lead to the introduction or enhancement of a support system for auditors to improve their work-life balance. Moreover, for the Senate and Congress, this study can be used by the legislators in their decision-making, particularly in approving the budgets of the COA. Lastly, to future researchers, this study will also provide a significant point of information for future researchers who are yearning to undertake a study similar to this research.

Scope and Delimitation of the Study - This undertaking focused only on ascertaining the level of work-life balance of auditors in COA MIMAROPA. The respondents of this study were the auditors in COA MIMAROPA. Status of work environment was limited to organizational factors, which included organizational policies, hierarchy, conflicts, delegation of duties, supervisor support, and organizational change. Work group factors included communication and working relationships, and job factors included job description, job rotation, work accomplishment, and recognition. On the other hand, the level of work-life balance was measured in terms of work, family, health, social, extracurricular activities, and spiritual. It was answered as positive or negative work-life balance or balance and imbalance. The study focused on the work environment of COA MIMAROPA during the calendar year 2024, with respondents comprising audit team leaders and team members as of August 31, 2024. Out of 221 auditors, 117 were able to complete the survey.

2. Methodology

Research Design - This research employed a sequential exploratory approach, which is a blend of qualitative and quantitative analysis. A qualitative research method was used to identify the challenges that the auditors are facing, and a quantitative method was used to seek answers on the challenges, profile, status of work environment, and the level of work-life balance of auditors. As described by Fraenkel et al. (2013), a researcher first used a qualitative design to explore and to discover the variables of interest. The results of the qualitative phase gave direction to the quantitative phase, and quantitative results are used to validate the qualitative findings (Trochim et al., 2016).

Respondents of the Study - The subjects of this study were the auditors working in the Commission on Audit (COA). For the qualitative aspect, twenty (20) respondents coming from the COA Central Office and from Regions 1 to 18, except MIMAROPA, were tapped and were requested to answer one open-ended question through a Google form, which was uploaded in the exclusive Facebook group of auditors. Their responses were subjected to initial and final thematic analysis. In the quantitative aspect, the respondents were the auditor team leaders and audit team members from the COA assigned in the MIMAROPA Region. The sampling technique used to obtain the sample size for this investigation was simple random sampling. This approach guarantees that every member of the target population has an independent and equal chance of getting chosen. The study reduces selection bias and improves the findings' generalizability by using this method. When seeking an objective representation of the population, simple random sampling is very helpful because it gives each possible respondent an equal chance to be a part of the research. Applying the 5% margin of error and 95% confidence level, it was expected that there would be 146 sample respondents. However, after almost a month of following up on them, 29 were not able to respond online. Thus, the final samples were narrowed down to 117.

Research Instrument - The research instrument for this study was structured into three key components. During the qualitative phase, a Google Forms questionnaire containing a single open-ended question was disseminated to twenty (20) volunteer auditors from the COA Central Office and Regions 1 to 18, except MIMAROPA. The initial thematic map was then developed by analyzing the most frequently occurring terms used by the respondents. Based on this preliminary analysis, a final thematic map was constructed, identifying work environment as a primary variable, with organizational, work group, and job factors categorized as sub-factors under work environment. In the quantitative phase, a survey questionnaire was constructed covering the profile,

work environment, and the work-life balance. The questionnaire was divided into three parts. Part I emphasized the respondents' demographic profile, requiring specific information as regards age, sex, civil status, audit sector, and number of auditees. Part II explored the factors that affect the work-life balance, specifically the work environment with sub-group variables such as (i) organizational factors, (ii) job factors, and (iii) work group factors. Each sub-factor has eight questions. Meanwhile, part III delved into respondents' work-life balance, which has six aspects with corresponding six questions for each aspect, such as (i) work; (ii) family; (iii) health; (iv) social; (v) extracurricular activities; and (vi) spiritual.

Expert validity was established by consulting a panel of subject matter experts. Their knowledge and expertise were beneficial in confirming the relevance and completeness of each question. All their suggestions were incorporated into the revision of the questionnaires. In undertaking the test of reliability of the instrument, thirty (30) auditors from the COA Central Office and Regions 1 to 18, except MIMAROPA, served as reliability respondents. The researcher ensured that they were excluded from the final group of respondents. The inter-item consistency of the instrument was verified using the split-half method since it was administered once. To ensure the correctness of the result, the Spearman-Brown formula was applied, which gave the following coefficients as shown in Table 1.

Table 1
Result of Reliability Analysis

Items	Items	Reliability Coefficients*	Analysis
Work Environment			
A. Organizational Factor	8	0.873	High Reliability
B. Work Group Factor	8	0.962	Very High Reliability
C. Job Factor	8	0.914	Very High Reliability
Work-life Balance			
A. Work	6	0.653	Moderate Reliability
B. Family	6	0.89	High Reliability
C. Health	6	0.896	High Reliability
D. Social	6	0.743	High Reliability
E. Extra-curricular Activities	6	0.722	High Reliability
F. Spiritual	6	0.888	High Reliability

*Based on equal length

The reliability analysis yielded a generally high reliability. While the item "Work" under work-life balance was recorded as moderate reliability, the rest of the reliability coefficients reached high to very high and ranged from 0.722 to 0.962. The result of the reliability analysis confirmed the acceptability of the instrument and can be given to the final group of COA auditors in the MIMAROPA region.

Data Gathering Procedure - The primary source of data was gathered during the qualitative phase. A Google Forms questionnaire containing a single open-ended question was disseminated to twenty (20) volunteer auditors from the COA Central Office and Regions 1 to 18, except MIMAROPA. To facilitate respondent participation, the questionnaire was requested to be posted in an exclusive Facebook group for auditors, which was promptly approved by the group administrator. Once substantial responses were collected from the twenty (20) volunteers, the researcher closed the acceptance of further responses in the Google Form. For the quantitative part, the researcher sent a letter addressed to the regional director of COA MIMAROPA thru the researcher's immediate supervising auditor and the director of administrative, training, and finance services (ATFS), requesting for dissemination of the survey questionnaire thru a Google Forms link, which was later disseminated by the office of the regional director to supervising auditors of different audit groups in the three sectors of the region. It took almost one month for the researcher to complete the survey.

Statistical Treatment of the Data - Thematic analysis was used for the qualitative phase to identify the themes to be used as variables for the quantitative phase. Frequency and percentage were used to describe the profile of the respondents. The weighted mean was utilized to describe the extent of the work environment and the level of work-life balance. Furthermore, to establish the relationship between variables, the researcher employed WarpPLS ver. 7.0. For the interpretation of the response on the work environment and work-life balance, a Likert-type scale

was used, of which the scale and its corresponding description are as follows: 1.00-1.49 (very low extent/level); 1.50-2.49 (low extent/level); 2.50-3.49 (moderate extent/level); 3.50-4.49 (high extent/level); and 4.50-5.00 (very high extent/level).

Ethical Considerations - The researcher followed the rules that the Graduate School of Divine Word College of San Jose offered for research. Throughout the entire study, the answers' confidentiality and anonymity were upheld. It was made clear that all information will be utilized only to forward the goals of the investigation. In addition, The seventh edition of the American Psychological Association (APA) was followed in order to properly credit other research works that were cited. Other sources and studies were properly cited and recognized.

3. Results and Discussions

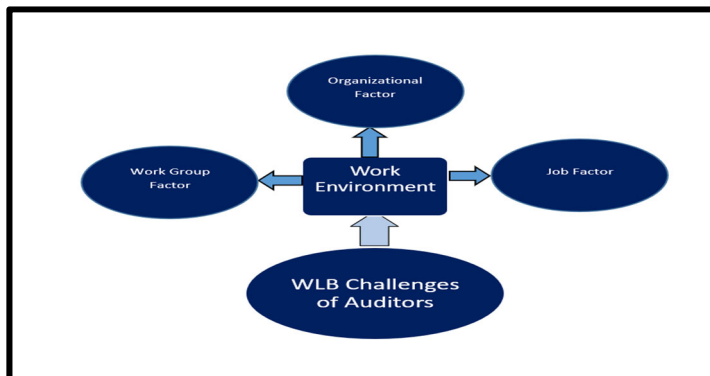


Figure 1. Final Thematic Map for **Work-Life Balance (WLB) Challenges**

The challenges that the auditors face in their work are summarized in Figure 1. As drawn from the analysis, the final themes derived are as follows: job factor, organizational factor, and work group factor (Trochim et al., 2016). These themes contribute to describing the challenges encountered by the auditors, focusing on the work environment, and may impact their work-life balance.

As shown in Table 2, the distribution of the auditors' profiles considering age varies from the youngest age range of 22-29 to the oldest, 62-69. While the last range is 62-69, the actual age of the respondent included in the study is 64. The 117 respondent-auditors represent 53% of the total population. Auditors whose age falls within the range of 30-37 occupy the largest 59.8% in the group. With the inclusion of the age range 22-29, comprising 15.4%, this indicates that the majority are in their prime and belong to early adulthood and early middle age. The remaining groups, 14.5%, 5.2%, 3.4%, and 1.7%, belong to late middle age and late adulthood. These results corroborate the report made by Medley (1980, as cited in Munteanu et al., 2022) about life satisfaction across four adult life stages. The stages of adulthood include early adulthood from age 22-34, early middle age from 35-44, late middle age from 45-64, and late adulthood from 65 and older. With the 2015-2016 implementation of the K-12 system in the Philippine Education (DepEd Order No. 21 s. 2019), the typical age of a grade 12 student is 16 to 18 years old. This is because grade 12 is the last year of senior high school; hence, in the study, the youngest batch of applicants for work starts at age 22. On one end, the voluntary retirement of employees, including accountants and auditors in the Philippine government service, is between 60 and 64, and pursuant to CSC Resolution No. 91-769, unless the service is extended by appropriate authority, retirement shall be compulsory for an employee at sixty-five (65) years of age. Relating the respondents' age groups to work and life balance, the survey conducted by Deloitte Global (2024) disclosed that the Gen Z and millennial groups tend to value highly the pursuit of work-life balance. For younger millennial professionals, according to Gumpal and Cardenas (2021), they enjoy life outside the office, and the Gen X group identifies a balanced life in order to prevent conflict between various tasks in life.

The group of auditors in the study covering the MIMAROPA region consists of the majority of females, with 80 or 68.4%, while the male counterpart has 31.6%. This finding shows that there is greater female representation

in the field of auditing. This result appears in contrast with the findings of Khlif and Achek (2017) about the status of women in accounting and auditing professions, which revealed the under-representation of women in management and audit professions. The synthesis of their empirical findings showed that female representation on the board, audit committee, and CEO leads to more conservative reporting, a higher level of social and environmental disclosure, less tax aggressiveness, and higher audit fees. A report made by the International Labor Organization (2022) regarding global employment trends for youth also revealed a gender gap between men and women. The data showed that in 2021, 27.1% of young women globally were estimated to be in employment versus 39.6% of young men. Young women exhibit a much lower employment-to-population ratio than men across lower-middle-income countries. Considering work perception, according to Walia (2015), females perceive that work interferes more with their personal lives, and this is due to the dual roles they play as both earners and homemakers. Gender prejudices occur in the workplace due to societal standards, and women experienced a lot of stress during the pandemic as a result of dividing domestic duties and employment (Pace & Sciotto, 2021; Rashmi & Kataria, 2021).

Table 2

Respondents' Profile Distribution According to Age, Sex, Civil Status, Audit Sector and Number of Auditees (n=117)

Age	Frequency	Percent
22–29	18	15.4
30–37	70	59.8
38–45	17	14.5
46–53	6	5.2
54–61	4	3.4
62 - 69	2	1.7
Sex		
Male	37	31.6
Female	80	68.4
Civil Status		
Single	58	49.6
Married	58	49.6
Widow	1	0.8
Audit Sector		
Local Government Audit Sector	49	41.9
National Government Audit Sector	50	42.7
Corporate Government Audit Sector	18	15.4
Number of Auditees		
3–5	66	56.4
6–8	10	8.5
9–11	7	6.0
12 and above	34	29.1

* For statistical purposes, the age interval was seven years; hence, the last age indicated was 69.

The profile in terms of civil status shows a tied frequency for single and married auditors, having 58 or 49.6% each. There is only one widow in the group. A qualitative study on the marriage premium in Russia suggests that married men adopt a sense of masculine responsibility, leading them to approach employment with greater seriousness compared to their unmarried counterparts (Ashwin & Isupova, 2014). Meanwhile, married female employees who can balance work and family obligations are more likely to focus on careers that improve their job performance, according to the findings of Anita et al. (2020). On the other hand, employees who live alone and do not have children also struggle with work-life balance, based on the study of Wilkinson et al. (2018). Assumptions regarding work and non-work time, the validity of their work-life balance, a lack of support related to financial and emotional well-being, and vulnerabilities rooted in their jobs were the four specific issues and problems they recognized. However, across civil status categories, the study of Panisoara and Serban (2013) disclosed that no significant difference was found in the degree of work-life balance among single, married without children, married with children below 18, and married with children older than 18. Marital status reveals effects on other aspects, as disclosed by Cai et al. (2024) in their study when they investigated the effects of CEO marital status on credit risk assessments. Their findings showed that firms with married CEOs receive more favorable credit ratings and that firms with married CEOs have a lower bankruptcy risk, less exposure to business uncertainty shocks, and

better institutional corporate social responsibility (CSR) performance, thus giving richer insights into potential mechanisms through which married CEOs improve credit ratings.

The COA in the Philippines audits a variety of entities. Respondents have been assigned to audit various government sectors, namely: local, national, and corporate. In the study, there is an almost equal frequency as far as local (49 or 41.9%) and national (50 or 42.7%) audit sectors are concerned. The corporate government sector covers the lowest, with 18 or 15.4% out of the 117 sample auditees in the MIMAROPA region. Based on COA's (2023) list of Audit Agencies with annual audit reports (AARs) for CY 2022 as of August 23, 2023, there is a total of 1,706 local government audit agencies across cities, municipalities, and provinces in the entire country. Excluded from the published list are AARs from barangays and SK. The national government agencies, including state universities and colleges, and corporate government agencies, including water districts with consolidated annual audit reports in the same year, have a combined total of 879 (Commission on Audit, 2023). The consolidated AARs included the audit reports from provincial/satellite offices or branches of national and corporate government agencies. There were four audit sectors (COA Resolution No. 2021-039, 2021), but the proponent opted to include only the three sectors, namely, local, national, and corporate government audit sectors.

As previously defined, auditees refer to the agencies from the three sectors of government that are being audited by the COA auditors. Covered in the study is a total of 117 auditors, with the largest frequency of 66 or 56.4% corresponding to 3 to 5 auditees. This is followed by 34, or 29.1%, with 12 or more auditees. There are 10 or 8.5% with 6 to 8 auditees and 7 or 6% having 9 to 11 auditees. The preceding figures explain that for one audit team in the MIMAROPA region, it can handle 3 to 8 auditees if these are the national government audit sector and corporate government audit sector, but for the local government audit sector, including barangays, an audit team is tasked to accommodate 9 to 11 and 12 or more auditees. Having the workload of an audit team, the analysis found in the study of Suhaimi et al. (2018) proved that a negative relationship exists between the workload and work-life balance. This suggests that while workload increases, work-life balance deteriorates.

Table 3

Mean Extent of Respondents' Status in Work Environment In Terms of Organizational Factor

INDICATORS (ORGANIZATIONAL FACTOR)	Weighted Mean	Verbal Description
1. The policies affecting my work are properly disseminated or explained to me by the concerned heads/departments/superiors.	4.03	High Extent
2. The operating policies are up-to-date and tailor-made to address current working conditions of auditors.	3.59	High Extent
3. The organizational structure is clear and unambiguous in defining the proper line of authority, responsibility, and reporting.	4.11	High Extent
4. Consensus is arrived at by meeting conflicts.	3.92	High Extent
5. There is an established system that enables me to efficiently and effectively carry out my duties and responsibilities	3.89	High Extent
6. In-depth assessment is done before changes are introduced.	3.56	High Extent
7. My superior takes a personal interest in listening to my work-related problems.	4.03	High Extent
8. The responsibilities and work delegated to me by my superior are adequate and manageable.	3.72	High Extent
Composite Mean	3.86	High Extent

Legend: Scale: 4.50-5.00-Very High; 3.50-4.49-High; 2.50-3.49-Moderate; 1.50-2.49--Low; 1.00-1.49-Very Low

The concept of work environment, as explained by Abun et al. (2021), refers not only to the physical and psychological aspects of the workplace but also includes relationships and emotions among employees. The work environment with the domain and organizational factors focuses on organizational policies, hierarchy, conflicts, delegation of duties, supervisor support, and organizational changes. Responses of the auditors reveal a high extent of organizational environment, having a composite mean of 3.86. This means that the auditors generally perceive organizational factors as supportive of their work environment. The findings imply that there is a system in place that allows auditors to perform their duties successfully, that the organizational structure is clear, and that policies are conveyed properly. Furthermore, disagreements are settled by consensus, and superiors take an interest in

discussing issues about the workplace. While they were still given high ratings, areas like updating rules to suit current working conditions and carrying out in-depth analyses before making changes can still need improvement. These findings prove that the auditors are fully aware of how the agency where they belong operates and try their best to maintain a suitable work environment, considering the factors that affect the organization. Social support (Hammig, 2017), the cost and effect of delegation (Mathebula & Barnard, 2020; Suhaimi et al., 2018), and not disclosing organizational change (Gabutti et al., 2022) are problems, but the problem can be corrected by proper communication (Khaw et al., 2022). As such, conforming with the study of Sparer et al. (2018), this may lead to reduced work-related constraints due to policies and practices that allow a pleasant and supportive workplace environment. With this, as disclosed by Bernards et al. (2021), behavioral requirements for employees were then set to lessen the environment's complexity through rules to a manageable proportion to give clarity to the expectations from them. Omisore and Abiodun (2014) state that those who handle it effectively will experience company benefits and personnel fulfillment.

Furthermore, as the auditors highly perceived that there is a clear and unambiguous organizational structure at COA defining the proper line of authority, responsibility, and reporting, this aligns with the findings of Greer et al. (2018) and Sisodia and Das (2013) on hierarchy as an aspect of organizational design. Job titles indicating levels of position held in the hierarchy with the corresponding mix of expertise and responsibility reflect the fact that organizational hierarchies are typically based on a combination of rank and function, which can facilitate coordination-enabling activities increase team effectiveness but can also influence certain attitudes at work.

Table 4

Mean Extent of Respondents' Status in Work Environment In Terms of Work Group Factor

INDICATORS (WORK GROUP FACTOR)	Weighted Mean	Verbal Description
1. Group members come to me for important matters related to our work.	4.18	High Extent
2. I am aware that my decision may affect the careers and working attitudes of other people.	4.36	High Extent
3. There is great trust among the members of our team.	4.16	High Extent
4. When uncertainties arise in our work, we collaborate to reach a consensus and resolve conflicts effectively.	4.16	High Extent
5. My contribution to the group is given much importance.	4.19	High Extent
6. We maintain open communication to solve issues.	4.15	High Extent
7. I always feel supported and at ease when working with my co-employees.	4.15	High Extent
8. I usually volunteer my ideas without hesitation, and they are well received.	3.94	High Extent
Composite Mean	4.16	High Extent

Legend: Scale: 4.50-5.00-Very High; 3.50-4.49-High; 2.50-3.49-Moderate; 1.50-2.49--Low; 1.00-1.49-Very Low

Psychologists used the term work group to mean the structure, processes, and group dynamics (Zoltan & Vancea, 2015). Wang (2018) added that it is a formal group of people who work together to accomplish a common objective. Work group factors mentioned in the study specifically include consensus in solving conflicts, maintaining open communication to solve issues, and being at home with fellow employees. For this second domain of work environment, a high extent of perception is given with a 4.16 composite mean. This indicates that COA MIMAROPA auditors typically have a great sense of cooperation, teamwork (Wang, 2018), and support from one another in their work groups. Added to that, team members are to assume accountability (Tarricone & Luca, 2002, as cited in Oyefusi, 2022). Being aware of the decision affecting the career and working attitude of other people topped the list with a high 4.36 mean. Notably, auditors acknowledge the significance of their decisions on colleagues' careers and work attitudes, promoting a sense of accountability and responsibility among team members. On the other hand, while all indicators reflect a positive team dynamic, the slightly lower rating on volunteering ideas without hesitation (3.94) suggests that some employees may still feel cautious when expressing their thoughts. The value of effective communication finds agreement in the following findings, stating that communicating effectively is critical for organizations to comprehend people's feelings and perspectives on change (Khaw et al., 2022) and that communication allows organizational activities to scroll appropriately, allowing

interaction among the members' working group (Bucata & Rizescu, 2017). These ratings on the above descriptions confirm that the auditors highly agree that the COA organization in the MIMAROPA region maintains an adequate level of performance relative to factors involving conflict and communication. In fact, according to Adham (2023), fostering open communication of ideas and constructive criticism was found crucial in problem solving and resolving disputes amicably, which applies conflict resolution techniques and interventions.

Job factor, as used in the study, refers to the actual work assignment that is aligned with the job description of the auditor. Switasarra and Astanti (2021) further explain the relationship between the task and position in the hierarchy. Under this domain, a high extent of agreement is accorded with a composite mean of 3.74, although means are slightly lower than those of the two previous domains described. The high extent suggests that auditors in COA MIMAROPA generally perceive their job roles as well-defined, fulfilling, and aligned with their expertise. The highest mean of 4.0 in the list describes the feeling of accomplishment of the assigned tasks given to the auditors. This demonstrates that their roles provide significant engagement, allowing employees to effectively apply their skills and see visible outcomes from their efforts. Meanwhile, for the first time, a moderate extent with the lowest mean of 3.25 was registered on a statement that refers to a balanced current workload and achievability within the allocated time, which is seconded by a statement that describes frequently finding themselves meeting deadlines without sacrificing quality of work with the second-to-lowest mean of 3.52. This suggests that some auditors may find their allocated tasks challenging to carry out within the timeframe provided. While they can meet deadlines without sacrificing quality, the findings show that workload distribution and time management may still require attention to promote job satisfaction and work-life balance.

Table 5

Mean Extent of Respondents' Status in Work Environment In Terms of Job Factor

INDICATORS (JOB FACTOR)	Weighted Mean	Verbal Description
1. My current workload is balanced and achievable within the allocated time.	3.25	Moderate Extent
2. My responsibilities are clear and manageable within my position	3.83	High Extent
3. Information dissemination is existent and effective in my office.	3.94	High Extent
4. I frequently find myself meeting deadlines without sacrificing quality of work.	3.52	High Extent
5. My professional preparation, actual work assignment, and job description are all aligned and harmonized.	3.79	High Extent
6. I feel that my expertise is fully tapped.	3.86	High Extent
7. My assigned tasks give me the feeling of accomplishment.	4.00	High Extent
8. Job rotation improves my work.	3.70	High Extent
Composite Mean	3.74	High Extent

Legend: Scale: 4.50-5.00-Very High; 3.50-4.49-High; 2.50-3.49-Moderate; 1.50-2.49--Low; 1.00-1.49-Very Low

With the auditors' high assessment relative to job factors, particularly on assuming responsibilities that are clear and manageable within their position, this appears to be in conformity with the findings of Kim & Choi (2018), stating that it is critical to prioritize job alignment while employing a highly educated staff as well as how well an individual's traits match their job. With regard to frequently meeting deadlines, Taka's (2023) findings reiterated that the tension from meeting issues among employees creates a detrimental impact on the staff's overall morale, thus resulting in producing partially completed output rather than the excellent quality it requires. Considering the respondents' highly perceived notion of job rotation, Suleman et al. (2022) pointed out that the job rotation technique helps improve learning and allows staff to appreciate the strengths and challenges of other departments, thus promoting information sharing and cross-functional trust. Auditor rotation was also emphasized by Suhayati & Dilyard (2024) in governing how often public accountants in a public accounting company work with the same client. While rotation of auditors could either be required by law or voluntary on the part of management, auditors' independence might be impacted by a long-term relationship with their auditees.

Table 6 discloses the mean level of respondents' work-life balance in terms of work, family, and health. Work-

life balance pertains to an established and organized approach for managing work-life issues (Zahra et al., 2024). Significant transformation, which can be attributed to different factors, resulted in an imbalance between work and life (Rashmi & Katari, 2021). Characterizing work balance yielded a composite mean of 3.96 and is rated with a high agreement of the auditors' assessment. This suggests that the workforce demonstrates a high degree of commitment, punctuality, and interpersonal skills at work—all of which are essential for the success of the organization. Among the six indicators, attending work regularly is rated as very high with a 4.60 weighted mean, while leaving the office within 15 minutes after work hours registered the lowest mean of 3.25, which is described as moderate. As regards work, the auditors highly agree that they enjoy work, although they bring paperwork home. Moreover, they see to it that they arrive on time for work every day and are at peace with their colleagues. The strong positive work-life balance will help the company avoid problems (Abdullah et al., 2022). The auditors' high manifestation of the importance of regular work attendance conforms to Graffeo's (2023) findings about the crucial role of attendance in the workplace since good attendance has been positively associated with increased productivity, dependability, strong work ethics, career advancement opportunities, and team cohesion. Well-being at work has many consequences for individuals, including physical and mental health difficulties, as well as contentment with life, and should therefore be fostered by organizations (Cabrita & Duarte, 2023). In addition, across age groups, according to the Gallup Report (2024), engaging in work decreases loneliness, and in general, working individuals are less lonely than unemployed people (Ward & King, 2017).

Numerous studies have highlighted the positive influence of family (Rony et al., 2023; Musa & Chusairi, 2022). A consistently high rating is registered, describing the family under the work-life balance. A composite mean of 4.07 indicates that COA MIMAROPA Auditors demonstrate a strong sense of family responsibility, open communication, and commitment to family relationships. Auditors highly value family as a key aspect of work-life balance. Musa and Chusairi (2022) found that a supportive family environment significantly enhances job performance and concluded that achieving work-life balance requires a secure and comfortable home atmosphere. This non-work factor—family—continuously contributes to an individual's skills and productivity in the workplace.

Table 6

Mean Level of Respondents' Work-life Balance in terms of Work, Family and Health

INDICATORS (WORK)	Weighted Mean	Verbal Description
1. I bring paperwork home.	3.75	High
2. I attend work regularly.	4.60	Very High
3. I arrive on time for work every day.	4.30	High
4. I leave my office within 15 minutes after my work hour.	3.25	Moderate
5. I enjoy my work.	3.79	High
6. I am at peace with my colleagues.	4.08	High
Composite Mean	3.96	High
INDICATORS (FAMILY)		
1. I spend enough quality time with my family.	3.79	High
2. I exert effort to build relationships within the family.	4.16	High
3. I comply with requests made by my family.	4.15	High
4. I support the request of close family members.	4.14	High
5. I communicate well with my family members.	4.11	High
6. I prioritize family bonding.	4.08	High
Composite Mean	4.07	High
INDICATORS (HEALTH)		
1. I eat nutritionally balanced meals.	3.55	High
2. I exercise at least three times a week.	2.78	Moderate
3. I get an annual medical check-up.	3.21	Moderate
4. I practice effective stress management.	2.65	Moderate
5. I get eight hours of sleep every night.	3.7	High
6. I practice positive thinking.	2.63	Moderate
Composite Mean	3.09	Moderate

Legend: Scale: 4.50-5.00-Very High; 3.50-4.49-High; 2.50-3.49-Moderate; 1.50-2.49--Low; 1.00-1.49-Very Low

Moreover, in the paper of Bello and Tanko (2020), Spillover Theory suggests that work and family are

interdependent, as experiences at home influence work and vice versa. People transfer skills, emotions, attitudes, and behaviors between their roles at home and work, creating a dynamic interaction between the two domains. Meanwhile, the result of the study is inconsistent with the Conflict Theory (Hayes, 2024), which explains that two domains, family and work, are fundamentally contradicting with each other and that they have different expectations and requirements. The paper of Oludayo and Omonijo (2020) discloses that the major factors contributing to an imbalance between family and work life include dependent care responsibilities, poor time management, and insufficient family support. Similarly, Brough et al. (2020) state that juggling work and family commitments is primarily affected by family demands, which also typically make it more difficult for employees to attain the ideal degree of work–life balance.

Moreover, Table 6 shows a moderate level of agreement as regards health description is attained, having a composite mean of 3.09. Getting eight hours of sleep every night obtained the highest mean of 3.70, a high level, while positive thinking had the lowest mean of 2.63, a moderate level. The findings suggest that while employees make some effort to maintain their health, certain aspects of their well-being, such as stress management, exercise, and positive thinking, need improvement. The value of the worker's well-being, according to the findings in the study of Adams (2019), disclosed that well-being is closely linked with health and productivity. It showed that employees who are in good physical, mental, and emotional health are more likely to deliver performance at its optimum in the workplace than employees who are not. The time spent at the workplace, the tasks performed there, and the work environment all affect overall health. Resolving employees' work-life balance was also found crucial in maintaining the health and wellness of the business based on the study of Zheng et al. (2015).

Table 7

Mean Level of Respondents' Work-life Balance in terms of Social, Extra-Curricular Activities, and Spiritual

INDICATORS (SOCIAL)	Weighted Mean	Verbal Description
1. I have an active social life.	3.12	Moderate
2. I have at least one close friend.	4.4	High
3. I am comfortable at social gatherings.	3.37	Moderate
4. I am at ease with my neighbor.	3.83	High
5. I set aside time just for fun.	3.68	High
6. I joined an active social organization.	2.94	Moderate
Composite Mean	3.56	High
INDICATOR (EXTRA-CURRICULAR ACTIVITIES)		
1. I belong to a civic organization.	2.88	Moderate
2. I join a fun run.	2.36	Low
3. I attend personal development offered on the internet.	2.62	Moderate
4. I am willing to learn new skills.	4.38	High
5. I grab opportunities that will build my resume.	3.85	High
6. I sponsor community projects.	2.87	Moderate
Composite Mean	3.16	Moderate
INDICATORS (SPIRITUAL)		
1. I have a meaningful relationship with God.	4.18	High
2. I set aside time every day for spiritual communion.	3.50	High
3. I extend help to the needy.	3.89	High
4. I practice the teaching of my faith.	3.56	High
5. I say my prayer before I sleep.	3.91	High
6. I integrate spirituality with other aspects of my life.	3.91	High
Composite Mean	3.82	High

Legend: Scale: 4.50-5.00-Very High; 3.50-4.49-High; 2.50-3.49-Moderate; 1.50-2.49--Low; 1.00-1.49-Very Low

As shown in Table 7, while there are three indicators rated at a moderate degree, still, the composite mean reached a high mean of 3.56, 3.16, and 3.82, respectively. The findings indicate that although auditors may have less time to attend social gatherings and participate in social organizations, which may be attributed to the bulk of work auditors have to finish, they still generally maintain healthy social relationships. It has been revealed in the study of Geue (2017) that humans' physiological systems are highly responsive to positive social interactions. In fact, the brain is activated when the workplace is characterized by cooperation, trust, and fairness, thus leading to encouragement of future interactions that promote belief and inspire one another. This finding also corroborates

Houston's (2019) conclusion on the importance of positive relationships at the workplace, which disclosed a list of the benefits of social interaction at work. These are employee engagement and satisfaction, shared knowledge, reduced health risks, connection, and team performance, among others. Social support also appears to be similarly beneficial for workplace well-being since it has been demonstrated to lessen work-related stress, according to Hammig (2017). Social support enables individuals to manage demands or work stressors such as work/time pressure or work-family conflict.

Extracurricular and leisure activities, according to Veal (2020), take into account the full range of day-to-day, realm-of-necessity, activities which include not only rest and recuperation and diversion/entertainment but also family-related leisure, including activities with family and close friends. The level of extracurricular activities of the auditors is assessed with a moderate rating of 3.16. The result suggests that auditors prioritize skill-building and career growth but show moderate to low engagement in recreational, physical, and community-based activities. Zahra et al. (2024) provide that to be able to have a healthy work-life balance, one needs to allocate sufficient time and resources to non-work-related activities, such as joining a fun run. Having extracurricular activities is important, and this is revealed in the findings of Kuykendall et al. (2018). It concluded that leisure is crucial for well-being across cultures and stages of life and for subjective well-being when it is focused on meeting psychological needs and making up for values or needs that are not met in other areas. Not to be overlooked, according to Prakash (2018), are other non-work domains such as hobbies, community activities, personal care, and volunteer work. These should be considered by companies while developing work-life balance policies.

The spiritual aspect, as used in the study, pertains to the meaningful relationship with God, practicing the teaching of faith, and putting God at the center of the family and career. Table 7 presents the result of the average rating of 3.82, a high extent, which indicates that auditors exhibit a strong spiritual commitment in their daily lives. For the spiritual aspect, the highest mean of 4.18 suggests that auditors prioritize having a meaningful relationship with God. Although the statement that refers to setting aside time every day for spiritual communion registered the lowest mean of 3.50, it is still described as high. The findings suggest that the auditors are viewed as having highly spiritual values to lean on. While spirituality and religion have sometimes been used interchangeably, Hill and Dik (2012) contend that a healthy spirituality can be quite independent of a religious framework. In fact, spirituality is understood to be highly individualistic, subjective, process-oriented, and informal, while religiousness tends to be viewed as community-focused, objective, formal, and often observable with outward practices and rituals. However, in the context of work values, as pointed out by Cardos and Mone (2016), religiousness and spirituality affect the individual's work life through work values. As such, based on the theory of work adjustment, work values play a critical role in shaping job-related decision-making.

Table 8

Correlation Coefficients and p-values for Hypothesis Testing - Ho₁

Path	Beta Coefficients	(β)	p-values*	Interpretation
Ho ₁ : Profile → Work-Life Balance				
PROFILE→WKLIFE	0.033		0.361	Not Significant
PROFILE→FAMILY	0.099		0.137	Not Significant
PROFILE→HEALTH	-0.037		0.345	Not Significant
PROFILE→SOCIAL	-0.089		0.163	Not Significant
PROFILE→EXCURR	-0.155		0.042	Significant
PROFILE→SPIRIT	0.127		0.079	Not Significant

*Significant at $p < 0.05$

Table 8 shows the correlation coefficients and p-values for hypothesis testing - Ho₁. Among the work-life balance aspects, extracurricular activity entered the structural model and was found to be negatively influenced by the respondent's profile. The inverse relationship between the two variables is denoted by the beta coefficient (β) of -0.155 with a 0.042 significance (p-value) level. The result of the hypothesis failed to prove that profile variables could influence the auditors' work-life balance, except for extracurricular activities. This suggests that profile factors might limit participation in leisure and recreational activities. Auditors handling 12 or more auditees may

have less time to engage in non-work activities such as joining a fun run or joining a civic organization. Married auditors allot more time to family than to sponsoring a community project, or they may want to engage in other non-work activities. Based on Prakash's (2018) findings, they are having trouble finding time due to work. The role of leisure, as mentioned by Kuykendall et al. (2018), has been found crucial for man's wellbeing in a variety of cultures and stages of life, especially when it focuses on meeting psychological needs and making up for values or needs that are not met in other areas.

Table 9

Correlation Coefficients and p-values for Hypothesis Testing—Ho₂

Path	Beta Coefficients	(β)	p-values*	Interpretation
Ho ₂ : Work Environment → Work-Life Balance				
ORG→WKLIFE	0.184		0.020	Significant
ORG→FAMILY	0.141		0.059	Not Significant
ORG→HEALTH	0.180		0.022	Significant
ORG→SOCIAL	0.221		0.006	Significant
ORG→EXCURR	0.047		0.305	Not Significant
ORG→SPIRIT	0.189		0.017	Significant
WKGRP→WKLIFE	0.331		<0.001	Significant
WKGRP→FAMILY	0.380		<0.001	Significant
WKGRP→HEALTH	-0.007		0.468	Not Significant
WKGRP→SOCIAL	0.183		0.020	Significant
WKGRP→EXCURR	-0.068		0.230	Not Significant
WKGRP→SPIRIT	0.211		0.009	Significant
JOB→WKLIFE	0.309		<0.001	Significant
JOB→FAMILY	0.236		0.004	Significant
JOB→HEALTH	0.470		<0.001	Significant
JOB→SOCIAL	0.297		<0.001	Significant
JOB→EXCURR	0.414		<0.001	Significant
JOB→SPIRIT	0.194		0.015	Significant

*Significant at $p < 0.05$

Table 9 shows the correlation coefficients and p-values for hypothesis testing—Ho₂. The three domains of work environment generally showed a low to moderate connection with work-life balance, as evidenced by the beta coefficients ranging from 0.180 to 0.470. In reference to the computed p-values, organization factors did not relate to family and extracurricular aspects. Work group factors also failed to influence health and extracurricular activities. It is good to note that job factors are successfully connected to all the aspects of work-life balance. While job descriptions are not a reliable means of gauging performance, as revealed in Daribi's (2024) findings, the study suggests that they are essential for guiding employees. In addition, since employees anticipate a well-written job description to prevent role confrontation, this was found to have an impact on the worker's performance and the company's total output. The significant influence of job factors on work-life balance has been underscored by Oludayo and Omonijo (2020) and Tuazon (2024).

Since work-life balance does not imply a proportionate distribution of time between work and leisure pursuits, work patterns must be regulated to achieve fulfillment at work and at home. In so doing, it will enable firms to provide employees the flexibility to balance professional and personal obligations. It can be noted from the findings that organizational factors did not relate to family and extracurricular aspects. This may be due to the employees' purpose of separating work concerns from family concerns. Doing so, they try to leave their work in the office to concentrate on their family at home. Conversely, numerous studies have highlighted the positive influence of family life on work and the reciprocal benefits that work provides to the family, as revealed by Rony et al. (2023). This has been confirmed by Musa and Chusairi (2022), who narrate that family, as a non-work element, can continuously enhance a person's skills or productivity at work.

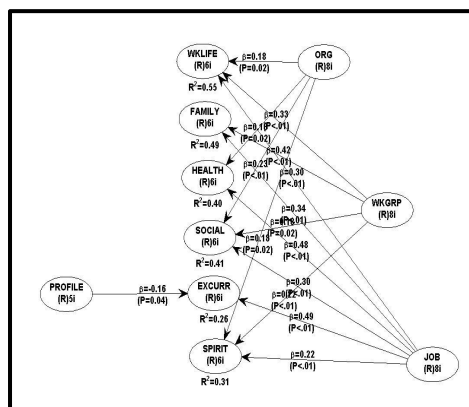


Figure 2. Emerging Model for the Relationship among Profile, Work Environment and Work-life Balance

After some independent variables were found to have no significant connection with the dependent variable, a new model emerges and is shown in Figure 2. The result of the emerging model reflecting no relationship between profile variables (except with extra-curricular activities) and work-life balance shows inconsistency with the findings which concluded that workers in older age groups are more likely to maintain work-life balance (Richert-Kazmierska & Stankiewicz, 2016), pursuit of work-life balance is still highly valued by Gen Z and millennials alike (Deloitte Global, 2024), gender still has a considerable impact on work-life balance as women reported higher levels of conflict between work and home life versus men reporting higher levels of work-life balance (Walia, 2015), employees who live alone and have no children struggle with work-life balance (Wilkinson et al., 2017), married female employees enable the balance between their personal and professional lives (Anita et al., 2020), and with the number of auditees being tantamount to workload, it affects work-life balance (Suhaimi et al., 2018). The findings prove a significant and positive relationship between work environment factors and work-life balance aspects show coherence to some studies that reveal a connection between lower level of work-life balance in middle class and worse mental and physical health (Boroweic & Drygas, 2022), with unwelcoming and unsupportive work environment posing a detrimental impact on employee's success in accomplishing their responsibilities (Lubis et al., 2023), conflict can emerge as people attempt to work together with divergent views (Oni-Oio et al., 2014), the ability to communicate allows interaction and organizational activities to work appropriately (Bucata & Rizescu, 2017), duties and obligations found in the job description explains the relationship between the task details and positions in the hierarchy (Switasarra & Astanti, 2021), and finally, work-life balance showing a high degree of engagement brings better and meaningful link with enhanced performance, commitment to work and satisfaction and fulfillment in life (Zahra et al., 2024).

Table 10

Proposed Work-Life Balance Programs

PROGRAM/ PROJECT	OBJECTIVES	STRATEGIES/ ACTIVITIES	PERSONS INVOLVED	TIMEFRAME	SUCCESS INDICATOR
Streamlining of Recruitment Process	To improve efficiency, reduce hiring time, and attract top talent.	Accelerate selection through implementation of AI-driven candidate analysis for data-backed hiring decisions, conduct panel interviews, video conferencing, or hybrid meetings for deliberation of candidates, and use COA digital signing services (DSS) in selected recruitment paperwork.	Commission Proper (Chairman and Commissioners) Human Resource Management Office (HRMO) Assistant Commissioners Directors Administrative, Training and Finance Services (ATFS) Supervising Auditors Applicant	June to December 2025	A higher percentage of hired auditors resulting in an adequate staffing complement

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PROGRAM/ PROJECT	OBJECTIVES	STRATEGIES/ ACTIVITIES	PERSONS INVOLVED	TIMEFRAME	SUCCESS INDICATOR
Mental Health Program pursuant to Civil Service Commission (CSC) Resolution No. 1901265 or the Guidelines on the Development of Mental Health Program (MHP) in the Public Sector and Republic Act No. 11036 or the Mental Health Act of 2018	To promote overall mental wellness and provide an inclusive, conducive, and supportive work environment for public officials and employees To reduce stress and burn out, increase productivity and engagement and enhance workplace culture	Finalization of COA Guidelines of the Mental Health Program, which, according to the CSC, should include strategies that promote employee-well-being such as physical fitness, teambuilding, regular stress management, organized peer counseling, support groups, and interest groups, continuing mental health awareness and education activities for the agency's workforce. Full implementation of COA MHP Dissemination of approved guidelines to auditors through email and COA portal Inclusion in the proposed budget of the construction of an onsite multi-purpose covered court adjacent to PSAO (for those with available space) that can be used by the auditors in playing basketball, volleyball, badminton, tennis, or even Zumba.	Commission Proper (Chairman and Commissioners) Medical and Dental Unit, Administration Sector/HRMO Assistant Commissioners ATFS Directors Supervising Auditors Auditors	When COA starts the implementation of MHP	Auditors' positive attitude toward their work environment
In connection with the mental health and well-being, conduct of Team building is also proposed. This includes planning and celebrating the accomplishment of every audit group, including teams under CGAS and NGAS.	To improve communication, enhance collaboration and teamwork, boost morale and motivation, and increase productivity.	Inclusion in the proposed budget the conduct of team building for each Audit Group within COA MIMAROPA. Once the budget is approved, the supervising auditors of each audit group may conduct the team building, including planning and celebrating the group's accomplishments.	Regional Director ATFS Supervising Auditors Audit Groups/Teams	June to December 2025	Improved morale, reduced stress, and fostered a stronger support system among colleagues

Table 10 presents the proposed work-life balance programs; this was anchored under the work environment variable; all items under the job factor significantly influence the aspects of work-life balance. To address the issue of workload, the COA may implement streamlining of the recruitment process to reduce hiring time and attract top talent, resulting in an adequate staffing complement, achieving fair distribution of workload, and accomplishing tasks within the allocated time. Hence, the researcher felt the need to address this potential dilemma in the

workforce by the implementation of a mental health program. Fortunately, the COA is in the process of finalizing its own mental health program to provide a caring and supportive working environment. This campaign complies with the CSC Memorandum Circular No. 04, series of 2020, which instructs all government agencies to comply with the CSC Resolution No. 1901265 or the Guidelines on the Development of Mental Health Program (MHP). This resolution is anchored with Section 35 of Republic Act No. 11036, or the Mental Health Act of 2018. The government agencies may use, apply, or customize the MHP model provided that the stated components in the guidelines are present. The MHP should include strategies that promote employee well-being, such as physical fitness, teambuilding, regular stress management, organized peer counseling, support groups, interest groups, and continuing mental health awareness and education activities for the agency's workforce. Well-being at work has some consequences for individuals, including physical and mental health difficulties, as well as contentment with life, and should therefore be fostered by organizations (Cabrita & Duarte, 2023).

4. Conclusions

Based on the findings, the following conclusions are generated: The challenges that COA auditors are facing today revolve around the working environment, which covers three factors such as organizational, work group, and job factors. About the profile of the respondents: Auditors in COA MIMAROPA are in their mid-career stage and are dominated by women. In terms of civil status, half of the population is single and the other half is married. Auditors are represented in equal numbers in both local and national audit sectors, and the common number in the assignment of auditees assigned is 3 to 5. Concerning the status of the working environment, in terms of organizational factors, auditors highly perceive that there is a clear organizational structure, with well-defined policies and lines of authority; relating to work group factors, COA MIMAROPA maintains an adequate level of performance relative to factors involving conflict and communication. Lastly, under job factor, auditors believe that the actual work assignment is aligned to their job description; thus, their assigned tasks give them a feeling of fulfillment. Meanwhile, on the level of work-life balance, the Auditors highly agree that they enjoy work which manifest on their arrival on time and at being peace with their colleagues; they have high regard for the family as part of the work-life balance; they believe that maintaining health is a part of work-life balance; they highlight that participating in social gatherings, such as joining active organizations, is essential for maintaining a healthy work-life balance; leisure is crucial for well-being regardless of the status and stages of life; nourishment of the soul is equally important indicating a high agreement of the COA Auditors on the spiritual aspect in work-life balance; healthy work-life balance enables individuals to allot enough time to leisure activities and quality time with friends and family. Lastly, job factors successfully connect to all aspects of work-life balance.

Recommendations - The researcher recommends the following to further enhance auditors' work-life balance: (1) The HRMO of the COA Central Office, including the Regional ATFS, may strengthen the workforce and ease the audit teams' workload by simplifying and improving the recruitment process and speeding up the applicant's assumption of office. (2) Since the majority of auditors handle 3 to 5 auditees, the COA MIMAROPA may conduct periodic workload assessments to ensure fair distribution of assignments. In addition, since the workforce is women-dominated, gender-responsive policies may be implemented, like wellness programs tailored to their needs (e.g., women's health screening) and support for working mothers. (3) Since auditors perceive to a high extent the work environment and its sub-factors, such as organization, work-group, and job factors, existing programs such as flexible working hours and a work-from-home setup every Friday may be continued and improved by the Commission Proper through the HRMO to support the auditors in managing both professional and personal responsibilities. (4) A mental health program that may offer stress management workshops, meditation sessions, and counseling services should be held. It may also cover programs specifically intended to enhance the auditors' work-life balance by setting aside a calendar period for seminars/trainings involving social activities at the same time, recharging one's emotional and mental energy. (5) To address the negative influence of auditors' profiles on extracurricular activities, COA MIMAROPA may implement engagement initiatives such as (a) community involvement and volunteer work like outreach programs and social responsibility projects like tree planting; (b) the conduct of team building per audit group and at the same time to celebrate their audit accomplishments; and

(c) a workplace wellness program, which may include fun runs and yoga sessions. (6) Since job factors significantly influence all aspects of work-life balance, COA MIMAROPA may regularly assess workload distribution to ensure fairness and efficiency. To address manpower challenges, expediting the recruitment process can help strengthen audit teams and reduce excessive workload. Additionally, when implementing auditor reshuffling, the proximity of an auditor's residence should be considered to minimize relocation burdens and support family stability. (7) The COA MIMAROPA may finalize the COA Guidelines on Mental Health Program and implement it pursuant to CSC Resolution No. 1901265, which is anchored in Republic Act No. 11036 or the Mental Health Act of 2018. In addition, it is also recommended that the streamlining of the recruitment process be done. (8) To gain a broader perspective, future researchers may include a wider geographical scope by examining auditors from multiple regions and may explore other determinants of work-life balance such as leadership style and job satisfaction.

5. References

- Abdullah, H., Kabia, S. & Pandey, P. (2022). Impact of work-life balance on job satisfaction: a study of chhattisgarh. *Journal of Positive School Psychology*. 6 (8), 126-135.
<https://mail.journalppw.com/index.php/jpsp/issue/view/38>
- Abun, D., Nicolas, M. T., Apollo, E. P., Magallanes, T. & Encarnacion, M. (2021) Employees' self-efficacy and work performance of employees as mediated by work environment. *International Journal of Research in Business and Social Science*. 10 (7), 01-15. <http://dx.doi.org/10.2139/ssrn.3958247>
- Adams J. M. (2019). The value of worker well-being. *Public Health Reports®*. 2019;134(6):583-586.
doi:10.1177/0033354919878434
- Adham, T. K. I. (2023). Conflict resolution in team: analyzing the conflicts and best skills for resolution. *Scholars Journal of Engineering and Technology*, 8, 152-162.
10.36347/sjet.2023.v11i08.001
- Anita, R., Abdillah, M. R., Wu, W., Sapthiarsyah, M. F., & Sari, R. N. (2020). Married female employees' work-life balance and job performance: The role of affective commitment. *Pertanika Journal of Social Sciences and Humanities*, 28(3), 1787-1806.
- Ashwin, S. & Isupova, O. (2014). "Behind every great man...": the male marriage wage premium examined qualitatively. *Journal of Marriage and Family*. 76. 10.1111/jomf.12082.
- Bello, Zainab & Garba Ibrahim, Tanko. (2020). Review of work-life balance theories. *GATR Global Journal of Business Social Sciences Review*. 8. 217-227. 10.35609/gjbssr.2020.8.4(3).
- Bernards, B., Van Der Voet, J., Van Der Pas, S., & Groeneveld, S. (2021). Organizational rules and cognitive uncertainty among public professionals: A daily diary study. *Review of Public Personnel Administration*, 41(4), 792-813. DOI: 10.1177/0734371X20943932
- Borowiec, A. A., & Drygas, W. (2022). Work-life balance and mental and physical health among warsaw specialists, managers and entrepreneurs. *International Journal of Environmental Research and Public Health*, 20(1), 492. DOI:10.3390/ijerph20010492
- Brough, P., Timms, C., Chan, X. W., Hawkes, A., & Rasmussen, L. (2020). Work-life balance: definitions, causes, and consequences. *Handbook of Socioeconomic Determinants of Occupational Health: From macro-level to micro-level evidence*, 473-487. DOI:10.1007/978-3-030-05031-3_20-1
- Bucăța, G., & Rizescu, A. M. (2017). The role of communication in enhancing work effectiveness of an organization. *Land Forces Academy Review*, 22(1), 49-57. DOI:10.1515/raft-2017-0008
- Cabrita, C. & Duarte A. (2023) Corrigendum: Passionately demanding: work passion's role in the relationship between work demands and affective well-being at work. *Front. Psychol.* 14:1233821. doi: 10.3389/fpsyg.2023.1233821
- Cai, X., Gao, Y., Wu, Z., & Yuan, J. (2024). Chief executive officer marital status and corporate credit ratings. *International Review of Financial Analysis*. 95, part A, (2024)
103385.doi.org/10.1016/j.rfa.2024.103385
- Cardos, R. A., & Mone, I. S. (2016). Religiousness, spirituality and work values: a step forward for work-life

- balance. *Journal of Evidence-Based Psychotherapies*, 16(1), 67-77. <https://jebp.psychotherapy.ro/vol-xvi-no-1-2016/religiousness-spirituality-and-work-values-a-step-forward-for-work-life-balance/>
- COA (2023). COA audited agencies. Retrieved from <https://www.coa.gov.ph/reports/audit-agencies/>
- COA (2024). COA at a glance. Retrieved from https://coa.gov.ph/coa_at_a_glance/
- Daribi, E. A. (2024). Assessing the effects of job description on employees' performance: the case of university college of management studies (UCOMS). *Global Journal of Human Resource Management*, 12(3), 1-14. DOI:10.37745/gjhrm.2013/vol12n3114
- Fraenkel, J., Wallen, N., & Hyun, H. (1993). *How to design and evaluate research in education 10th ed.* McGraw-Hill Education.
- Deloitte (2024). 2024 Gen z and millennial survey: living and working with purpose in a transforming world. Retrieved from <https://www.deloitte.com/global/en/issues/work/content/genz-millennialsurvey.html>
- DepEd (2019). Retrieved from https://www.deped.gov.ph/wp-content/uploads/2019/08/DO_s2019_021.pdf
- Gabutti, I., Colizzi, C., & Sanna, T. (2022). Assessing organizational readiness to change through a framework applied to hospitals. *Public Organization Review*, 23(1). <https://doi.org/10.1007/s11115-022-00628-7>
- Gallup (2024). State of the global workforce: the voice of the world's employees. Retrieved from <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- Geue, P. E., (2017). Positive practices in the workplace: Impact on team climate, work engagement, and task performance. *Emerging Leadership Journeys*, 10, 70–99. <https://doi.org/10.1177/0021886318773459>
- Graffeo, J.C. (2023). The power of good attendance at work: exploring the pros and cons. Retrieved from <https://www.linkedin.com/pulse/power-good-attendance-work-exploring-pros-cons-carlo-graffeo-jr-/>
- Greer, L. L., de Jong, B. A., Schouten, M. E., & Dannals, J. A., (2018). Why and when hierarchy impacts team effectiveness: a meta-analytic integration. *Journal of Applied Psychology*. 103. 591-613. DOI: 10.1037/apl0000291.
- Groner, E. S. (2018). The effect of organizational culture on work-life balance. Retrieved from StudentPublications.643.<https://cupola.gettysburg.edu/studentscholarship/643>
- Gumpal, M. & Cardenas, R. (2021). Work life balance in the lens of Filipino workers: A generational perspective. *International Journal of Science and Research*, 10 (10), 588-592. DOI: 10.21275/SR201007212347
- Hämmig, O. (2017). Health and well-being at work: The key role of supervisor support. *SSM-Population Health*, 3, 393-402. doi.org/10.1016/j.ssmph.2017.04.002
- Hayes, A. (2024) Conflict theory definition, founder, and examples. Retrieved from <https://www.investopedia.com/terms/c/conflict-theory.asp>
- Hill, C.P. & Dik, B.J. (2012). *Psychology of religion and workplace spirituality*. Information Age Publishing
- Houston, E. (2019). The importance of positive relationships in the workplace. Retrieved from <https://positivepsychology.com/positive-relationships-workplace/>
- International Labour Organization (2022). Global employment trends for youth 2022: investing in transforming futures for young people. Retrieved from https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_853321.pdf
- Khaw, K. W., Alnoor, A., Abrow, H. A. -, Tiberius, V., Ganesan, Y., & Atshan, N. A. (2022). Reactions towards organizational change: A systematic literature review. *Current Psychology*, 42(42). Springer. <https://doi.org/10.1007/s12144-022-03070-6>
- Khelif, H. and Achek, I. (2017). Gender in accounting research: a review. *Managerial Auditing Journal*, Vol. 32 No. 6, pp. 627-655. <https://doi.org/10.1108/MAJ-02-2016-1319>
- Kim, S.-J., & Choi, S. (2018). The effects of job mismatch on pay, job satisfaction, and performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 49. <https://doi.org/10.3390/joitmc4040049>
- Kuykendall, L., Boemerman, L., & Zhu, Z. (2018). The importance of leisure for subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers.
- Kundnani, N., & Mehta, P. (2014). Role of personality traits in balancing work-life. *International Journal of Management Research and Reviews*, 4(7), 722. DOI: 10.13140/RG.2.2.32887.34722

- Kusuma, H. S., & Nandi, S. (2021). A study on work environment, work-life balance and burnout among health workers in Bangalore during covid-19 era. *Orissa Journal of Commerce*, 42 (2), 109-124.
<https://doi.org/10.54063/ojc.2021.v42i02.09>
- Lubis, N., Absah, Y. & Harahap, R. (2023). Analysis of the influence of transformational leadership, work-life balance, and work environment on the employee performance of the land office in medan city with work discipline as a mediating variable. *International Journal of Research and Review*. 10. 93-111.
10.52403/ijrr.20230613.
- Mathebula, B., & Barnard, B. (2020). The factors of delegation success: accountability, compliance and work quality. *Expert Journal of Business and Management*, 8(1).
https://business.expertjournals.com/ark:/16759/EJBM_805barnard76-97.pdf
- Mendoza, J. (2023, November 20). Koko pimentel questions huge number of vacant positions in COA. *Inquirer.Net*, <https://newsinfo.inquirer.net/1862720/pimentel-questions-huge-number-of-vacant-positions-in-coa>
- Munteanu, A. N., Surcel, M., Isvoranu, G., Constantin, C., & Neagu, M. (2022). Healthy Ageing Reflected in Innate and Adaptive Immune Parameters. *Clinical Interventions in Aging*, 17, 1513–1526.
<https://doi.org/10.2147/CIA.S375926>
- Musa, N., & Chusairi, A. (2022, February). Role of Family on Work-Life Balance of Active Workers. *Interdisciplinary Conference of Psychology, Health, and Social Science (ICPHS 2021)* (pp. 151-156). Atlantis Press.
https://www.academia.edu/111962570/Role_of_Family_on_Work_Life_Balance_of_Active_Workers
- Oludayo, A. O., & Omonijo, D. O. (2020). Work-life Balance: Relevance of social support. *Academy of Strategic Management Journal*, 19(3), 1-10. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Work-life+Balance%3A+Relevance+of+social+support.+Academy+of+Strategic+Management+Journal%2C+&btnG=
- Omisore, B. & Abiodun, A. (2014). Organizational conflicts: Causes, effects and remedies. *International Journal of Academic Research in Economics and Management Sciences*, 3(6), 118.
<http://dx.doi.org/10.6007/IJAREMS/v3-i6/1351>
- Oni-Ojo, E. E., Iyiola, O. O., Osibanjo, A. O., & Igbino, E. E. (2014). Managing workplace conflicts in business environment: The role of alternative dispute resolution (ADR). *European Journal of Business and Management*, 6(36), 74-82. <https://www.iiste.org/Journals/index.php/EJBM/article/view/17353>
- Oyefusi, F. (2022). Team and group dynamics in organizations: effect on productivity and performance. *Journal of Human Resource and Sustainability Studies*, 10(1), 111-122. DOI: 10.4236/jhrss.2022.101008
- Pace, F., & Sciotto, G. (2021). Gender differences in the relationship between work–life balance, career opportunities and general health perception. *Sustainability*, 14(1), 357.
<https://doi.org/10.3390/su14010357>
- Panisoara, G., & Serban, M. (2013). Marital status and work-life balance. *Procedia-Social and Behavioral Sciences*, 78, 21-25. DOI:10.1016/j.sbspro.2013.04.243
- Prakash, V. (2018). Work-life balance: Perceptions of the non-work domain. *IIM Kozhikode Society & Management Review*, 7(2), 97-108. DOI: 10.1177/2277975218769505
<http://journals.sagepub.com/home/ksm>
- Ramadhania, S. U., & Sukarno, G. . (2023). Analysis of work-life balance and job satisfaction on employee performance at bank mandiri kupang branch office. *Jurnal Ekonomi Dan Bisnis Digital*, 2(3), 805–816.
<https://doi.org/10.55927/ministal.v2i3.4809>
- Ramos, C. (2021, August 24) Recto urges coa to go on hiring binge to fill 5826 vacancies, *Inquirer.Net*, <https://newsinfo.inquirer.net/1477998/recto-urges-coa-to-go-on-hiring-binge-to-fill-5826-vacancies#ixzz8j09L5s3n>
- Rashmi, K., & Kataria, A. (2021). Work–life balance: a systematic literature review and bibliometric analysis. *International Journal of Sociology and Social Policy*, 42(11/12), 1028-1065. DOI 10.1108/IJSSP-06-2021-0145
- Remote’s Global Life-Work Balance Index (2024). The 10 countries with the best work-life balance in 2024.

- <https://remote.com/en-ph/resources/research/global-life-work-balance-index>
- Richert-Kaźmierska, A., & Stankiewicz, K. (2016). Work–life balance: Does age matter?. *Work*, 55(3), 679–688.doi: 10.3233/WOR-162435
- Rony, M. K. K., Md. Numan, S., & Alamgir, H. M. (2023). The association between work-life imbalance, employees' unhappiness, work's impact on family, and family impacts on work among nurses: A cross-sectional study. *Informatics in Medicine Unlocked*, 38(1). <https://doi.org/10.1016/j.imu.2023.101226>
- Saidi, N. S. A., Michael, F. L., Sumilan, H., Lim, S. L. O., Jonathan, V., Hamidi, H., & Ahmad, A. I. A. (2019). The relationship between working environment and employee performance. *Journal of Cognitive Sciences and Human Development*, 5(2), 14-22. <https://doi.org/10.33736/jcshd.1916.2019>
- Sisodia, S., & Das, I. (2013). Effect of job autonomy upon organizational commitment of employees at different hierarchical level. *Psychological Thought*, 6(2). doi:10.5964/psyc.v6i2.65
- Soni, P., & Bakhru, K. M. (2019). Understanding triangulated collaboration of work-life balance, personality traits and eudaimonic well-being. *Problems and Perspectives in Management*, 17(2), 63. [http://dx.doi.org/10.21511/ppm.17\(2\).2019.05](http://dx.doi.org/10.21511/ppm.17(2).2019.05)
- Sparer, E. H., Boden, L. I., Sorensen, G., Dennerlein, J. T., Stoddard, A., Wagner, G. R., Nagler, E.M., Hashimoto, D., Hopcia, K. H., & Sabbath, E. L. (2018). The relationship between organizational policies and practices and work limitations among a group of hospital patient care workers. *American Journal of Industrial Medicine*. 61 (8), 691-698. <https://doi.org/10.1002/ajim.22864>
- Suhaimi, S. A., Mohamad, M., Seman, K., Nazmi, M. H., Ismail, N. F. H., Rahman, N. I. A. K., ... & Nuralia Nadia Wan Jafri, W. (2018). The effect of workload and role conflict towards work-life balance. *European Proceedings of Social and Behavioural Sciences*, 44. <https://dx.doi.org/10.15405/epsbs.2018.07.02.53>
- Suhayati, E., & Dilyard, J. (2024). Auditor rotation impact on auditor independence and its implication on auditor performance. *Journal of Eastern European and Central Asian Research (JEECAR)*, 11(2), 253–262. <https://doi.org/10.15549 /jeecar.v11i2.1632>
- Suleman, A. R., Bingab, B. B. B., Boakye, K. O., & Sam-Mensah, R. (2022). Job rotation practices and employees performance: do job satisfaction and organizational commitment matter?. *SEISENSE Business Review*, 2(1), 13-27. DOI: 10.33215/sbr.v2i1.730
- Switasarra, A. V., & Astanti, R. D. (2021). Literature review of job description: Meta-analysis. *International Journal of Industrial Engineering and Engineering Management*, 3(1), 33-41. <https://doi.org/10.24002/ijieem.v3i1.4923>
- Taka, Z. (2023). Deadlines meeting challenge in leaders. *American Journal of Leadership and Governance*, 8(2), 1-6. <https://ajpojournals.org/journals/index.php/AJLG/issue/view/439>
- Trochim, W. M., Donnelly, J. P., & Arora, K. (2016). *Research methods: The essential knowledge base*. Singapore Engage Learning
- Tuazon, A. (2024, August 01). Life-work balance. *Inquirer.Net*. <https://opinion.inquirer.net/175657/life-work-balance>
- Veal, A.J. (2020). Is there enough leisure time? Leisure studies, work-life balance, the realm of necessity and the realm of freedom. *World Leisure Journal*. 62(2), 89- 113. DOI: 10.1080/16078055.2019.1667423.
- Wang, Y. (2018). An overview on the team interaction process. *Open Journal of Social Sciences*, 6(12), 1-11. <https://doi.org/10.4236/jss.2018.612001>
- Walia, P. (2015). Gender and age as correlates of work-life balance. *Journal of Organisation and Human Behavior*, 4(1), 13-18. <http://www.publishingindia.com/johb/48/371/2015/>
- Ward, S. J., & King, L. A. (2017). Work and the good life: how work contributes to meaning in life. *Research in organizational behavior*, 37, 59-82. <https://doi.org/10.1016/j.riob.2017.10.001>
- Wilkinson, K., Tomlinson, J., & Gardiner, J. (2018). The perceived fairness of work-life balance policies: A UK case study of solo-living managers and professionals without children. *Human Resource Management Journal*, 28(2), 325–339. <https://doi.org/10.1111/1748-8583.12181>
- Zahra, N., Sulastiana, M., & Fitriana, E. (2024). Exploring the impact of work-life balance on employees: a systematic literature review. *International Journal of Psychological Studies*, 16(3), 86.

<https://doi.org/10.5539/ijps.v16n3p86>

Zhang, X., Qian, J., Wang, B., Jin, Z., Wang, J., & Wang, Y. (2017). Leaders' behaviors matter: the role of delegation in promoting employees' feedback-seeking behavior. *Frontiers in Psychology*, 8, 920.

<https://doi.org/10.3389/fpsyg.2017.00920>

Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. (2015). Developing individual and organisational work-life balance strategies to improve employee health and wellbeing. *Employee Relations*, 37(3), 354-379.

<http://hdl.handle.net/10536/DRO/DU:30071912>

Zoltan, R., & Vancea, R. (2015). Organizational work groups and work teams—approaches and differences. *Ecoforum*, 4(1), 1-13. <https://ideas.repec.org/a/scm/ecofrm/v4y2015i1p13.html>

National drug education program in Calintaan secondary schools and its implementation and challenges

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Abstract

Education can play an essential role in molding students into productive individuals and preventing illegal drugs from reaching them. Using a sequential exploratory design, this study aimed to identify the implementation and challenges encountered by the National Drug Education Program in the Calintaan District. Descriptive statistics were used to answer the descriptive questions, while for the inferential questions and to test the provided hypotheses, partial least squares structural equation modeling (PLS-SEM) was used, and results were generated by WarpPLS version 7.0. There were 343 randomly selected students and 109 teachers from seven (7) secondary schools in the Calintaan District. Based on the respondents' perception, there were three themes of challenges encountered in the implementation of NDEP: teachers' training, schools' schedules, and support towards NDEP. The study revealed that two sets of respondents had dissimilar perceptions of implementing NDEP. The teacher respondents perceived its implementation as high. In contrast, the students perceived it as moderate. Based on these findings, the study concluded that teachers were performing their tasks in implementing NDEP, but the students were not fully aware of its implementation or were not participating. To improve the implementation of NDEP, training, student participation, and consideration of the action plan of the study have been recommended.

Keywords: challenges, implementation, national drug education program, drug prevention program, teachers training

National drug education program in Calintaan secondary schools and its implementation and challenges

1. Introduction

Drug education is essential because this raises awareness among children and is needed to address the growing number of young people using drugs (Coggans et al., 2018). Still, despite its importance, it is often misunderstood (Darcy, 2021). Preventive measures and activities can help to lessen the involvement of learners in illegal drugs (Reza, 2017). Furthermore, education can play an important role in molding our learners into productive individuals and preventing illegal drugs from reaching our learners, since according to the Dangerous Drug Board (2020), approximately 1.67 million, or two out of one hundred Filipinos aged 10 to 69, are current users of drugs. Children are vulnerable and prone to illegal drugs; this statement is supported by Volkow (2020). According to her, children often desire to try new things in the age of development.

There are no documented instances of children under the age of 17 being arrested for using illegal substances at the Calintaan, Occidental Mindoro Municipal Police Station. However, the Calintaan Municipal Social Welfare and Development Office has received reports of teenagers using cigarettes and alcohol within the premises of the school. Behavioral consequences are another significant consequence of alcohol and drug abuse (Tulu & Keskis, 2015). They emphasized that peer pressure, issues linked to academic adjustment, social problems, environmental factors, socioeconomic considerations, and psychological factors are the most frequent reasons for alcohol and drug usage among students. The most popular and widely used narcotics and alcohols are smoking cigarettes, chewing khat, and consuming various forms of alcohol.

Calintaan has a substantial number of drug misuse, similar to other municipalities in Occidental Mindoro. Children of substance-abusing parents are at higher risk of developing psychiatric disorders and engaging in risky behaviors, especially when exposed at younger ages (Payá et al., 2015). These children often experience identity instability (Asl & Haghi, 2020) and face psychological, physical, and social challenges (Mancheri et al., 2020). Family relationships can both contribute to and be disrupted by drug addiction, leading to isolation, loneliness, and child abuse (Vasconcelos et al., 2015). The effects extend beyond children to include women in families with substance-abusing partners, resulting in psychological breakdown, emotional deprivation, and marital conflicts (Mancheri et al., 2020). Additionally, families affected by addiction often face social isolation, economic constraints, and overall welfare decline (Mancheri et al., 2020). These findings underscore the need for comprehensive interventions and preventive measures to support children and families impacted by substance abuse (Payá et al., 2015; Mancheri et al., 2020).

The National Drug Education Program is anchored to Republic Act 9165, also known as the "Comprehensive Dangerous Drugs Act of 2002." Specifically, Article 4, from Sections 41 to 46, mandates family, campus organizations, school curricula, school heads, supervisors, and teachers of schools to amend and participate, and it aims to use education as a medium to achieve a safe learning environment for learners. In addition, it is also based on Republic Act No. 7624, which states that both public and private schools' intermediate and secondary curricula, as well as non-formal, informal, and indigenous learning programs, must incorporate the negative impacts of drug abuse, addiction, or reliance.

Implementing efforts is made more difficult by the impacted individuals' lack of commitment and insufficient psychosocial support (Mathai, 2022). Drug education programs need to be strengthened with more financing, better planning, training, and increased community involvement to solve these issues. The success of drug abuse prevention programs and the national drug education program depends on the implementation of the school head and teachers in the school. This study aims to determine the extent of the National Drug Education Program activities in schools. In addition, this will serve as an existing database about the extent of implementation of the

National Drug Education Program in the Calintaan District.

Statement of the Problem - This study aimed to identify the implementation and challenges the National Drug Education Program encountered in the Calintaan District. Specifically, the following questions were sought to be addressed. (1) What are the challenges encountered in implementing the National Drug Education Program (NDEP) in the Calintaan District? (2) As assessed by the teachers and students, what is the extent of challenges encountered in the implementation of the NDEP in terms of teachers' training about NDEP, schools' schedules in the implementation of NDEP, and support toward NDEP? (3) What is the extent of implementation of NDEP in Calintaan District as assessed by the respondents in terms of established Barkada Kontra Droga Chapters in the school, information campaigns on anti-drug abuse, involvement of Parent-Teacher-Community Association, and students' organizations in drug prevention activities? (4) Is there a significant relationship between the assessment of the respondents on the extent of challenges encountered and the extent of implementation of NDEP? (5) Is there a significant difference in the extent of implementation of NDEP as assessed by teachers and students? (6) What action plan can be undertaken to improve the implementation of NDEP in Calintaan District?

Significance of the Study - The researcher of this study believes that the results provide a basis for strengthening NDEP in their respective schools to provide more protection for learners. Therefore, the following individuals and organizations will benefit from this research study. First, individuals inside the school - students, teachers, master teachers, the school head, and school administrators—as this suggests, differentiated activities related to strengthening the implementation of NDEP when the study has been concluded. Second, the offices within the barangay and municipality—Barangay, Office of the Municipal Social Welfare and Development (MSWDO), and Local Government Unit (LGU)—by teaching students about the negative consequences of illegal drugs, this study will help the community to reduce the number of drug cases among young people, resulting in one step closer to a drug-free zone. Third, the uniformed personnel - Philippine National Police (PNP) and Philippine Drug Enforcement Agency (PDEA)—This study will serve as another tool in helping the community to become more vigilant and aware of illegal drugs, thus helping the uniformed personnel. Lastly, future researchers may use this as a guide or reference for future studies with similar topics.

Scope and Delimitation of the Study - The respondents of this study were the teachers and students of six (6) high schools from the Calintaan District in the school year 2024-2025. Specifically, it aimed to determine the implementation and challenges encountered by the National Drug Education Program in the Calintaan District and its extent. How the respondents assessed the challenges in the implementation of NDEP in terms of teachers' training about NDEP, schools' schedules in the implementation of NDEP, and support toward NDEP and its implementation in terms of established Barkada Kontra Droga Chapters in the school, information campaigns on anti-drug abuse, and involvement of the Parent Teacher Community Association and student organizations in the drug prevention activities. Furthermore, how teachers and students assessed its implementation in terms of established Barkada Kontra Droga chapters in the school, information campaigns on anti-drug abuse, involvement of parents, teachers, the community, and associations, and student organizations in drug prevention activities. The interview guide was used for the qualitative phase, and a survey questionnaire for the quantitative phase. This was also limited to identifying the extent of implementation of the National Drug Education Program (NDEP) in Calintaan as perceived by the respondents. It was conducted from August 15 to October 15, 2024, during the 2024-2025 school year. The perception of the school heads and parents was not included in the study; thus, it posed another limitation.

2. Methodology

Research Design - The researcher aimed to determine the implementation and challenges the National Drug Education Program encountered in the Calintaan District. To obtain data and determine this specific task, the researcher employed a mixed sequential exploratory method, a combination of qualitative and quantitative methods. A qualitative question was used to gather data from the respondents in the form of a face-to-face interview and/or an online interview for the respondents from far-flung areas who had limited time to spare. Then the data

underwent a thematic analysis. The teacher-respondents were chosen randomly. This was followed by a quantitative method in a survey questionnaire on the challenges encountered and the extent of implementation of the National Drug Education Program in the Calintaan District.

Respondents of the Study - The respondents for the qualitative method of this study were twenty (20) teachers selected randomly, and they were used to collect the data through an interview. Moreover, for the quantitative phase, the respondents were the teachers and students from secondary schools in Calintaan District, and they were randomly selected. The teacher-respondents were considered since they were the implementers of the programs; they know what is happening in the fields, while the students are the target beneficiaries of the program. There were 151 teachers and 3,158 students in junior and senior high schools in the Calintaan District as of August 2024. Using Raosof's sample size calculation, anchored at a 5% margin of error and 95% confidence level, the sample size population of respondents was 109 teachers and 343 students.

Research Instrument - An interview guide and a researcher-made questionnaire were used to collect data for this study. It was specifically designed for the purpose patterned from this study's relevant and related literature. The researcher made the instrument consist of two parts. Part I consists of respondents' challenges encountered in the implementation of NDEP. Part II consists of implementing NDEP as stated in DepEd Memorandum No. 200, as of 2016. The comprehension of the instrument underwent a validity expert check, wherein it was subjected to corrections and suggestions. The researcher used the split-half method, applying Spearman-Brown coefficients of equal length. This research instrument was administered to a group of 30 respondents from the Rizal District, and they were not included in the final administration of the study. Moreover, the validated questionnaires were distributed to the different secondary schools in the Calintaan District. Since the questionnaire was administered once, the split-half method was used. Six components were tested, and each consisted of eight items.

Table 1
Reliability Analysis Results

Items (Implementation of NDEP)	Number of Items	Reliability Coefficient	Interpretation
1. Barkada Kontra Droga Chapters in the School	8	0.949	Very High
2. Information Campaigns on Anti-Drug Abuse	8	0.978	Very High
3. Involvement of Parent-Teacher-Community Association and Student Organizations in Drug Prevention Activities	8	0.902	High
Items (Challenges encountered in the Implementation of the NDEP)			
1. Teachers' Training about NDEP	8	0.947	Very High
2. Schools' Schedules in Implementation of NDEP	8	0.939	Very High
3. Support Toward NDEP	8	0.986	Very High

Based on the given reliability results, a generally very high extent of reliability of the six sets of indicators resulted from the analysis based on Spearman-Brown coefficients of equal length, as reflected in Table 1, showing coefficients from 0.902 to 0.986. The coefficient attested to the acceptability of the instrument and its administration to the final group of respondents.

Data Gathering Procedure - For the qualitative data, the researcher used one set of questions in an interview guide and gathered responses through personal interviews. The interview was conducted after the school head and the respondents approved it. It took place during the teachers' vacation time to avoid the interruption of classes. For quantitative data, the researcher employed a researcher-made questionnaire. The researcher asked permission from the district supervisor and school administrators/principals to conduct the study. Furthermore, following the recent Division Memo No. 00378 s. In 2024, the researcher also sought the approval of the division office. The researcher administered the research instrument through online platforms. Considering the workload of the teacher and student respondents, an online platform was sufficient. On the other hand, some of the geographical locations of Calintaan schools were not favorable to holding an online questionnaire; that was why, despite having an online platform, the researcher also used a hard copy of the research instrument. The researcher conducted respondent interviews to avoid multiple responses from the same respondent. He gathered data for 5 days, considering the

Statistical Treatment of the Data - The qualitative data generated through the interviews of the teacher-respondents underwent thematic analysis. Recording, transcription, tabulation, and coding were done to extract the themes. The initial and final thematic maps were illustrated to identify the final themes. The quantitative data answered the descriptive problems and were processed by the statistical software SPSS version 26. For the inferential problems and to test the provided hypotheses, partial least squares structural equation modeling (PLS-SEM) was used, and results were generated by WarpPLS version 7.0. The 5-point Likert scale was used with the following verbal descriptions; 5 (4.20–5.00) – Very High Extent, 4 (3.40–4.19) – High Extent, 3 (2.60–3.39) – Moderate Extent, 2 (1.80–2.59) – Low Extent, and 1 (1–1.79) – Very Low Extent.

Ethical Considerations - The researcher asked permission from the school district supervisor and school heads/principals of their schools in the Calintaan District to gather data. Trust in the teacher-respondents was given, considering their complete understanding of the objectives and the research process. The research instrument was explained carefully to gather accurate and valid results. During the administration of the instrument, the survey questionnaire was administered personally at a specified time. The confidentiality of the respondents' data was secured during collection, analysis, and findings. All the data and results gathered were guaranteed to be exclusively used for the study. The content of this study was an original paper and was not copied from any existing study. The researcher used the American Psychological Association (APA) style to give credit to the other research studies used as references. Previous studies and resources used as the basis of this study were also correctly cited and acknowledged. This study was intended to contribute to the advancement of education and did not cause any harm to anyone involved during the study's conduct.

3. Results and Discussions

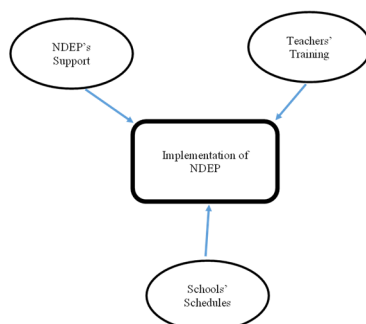


Figure 1. Final Thematic Map

After the descriptions were categorized, the final thematic map, as reflected in Figure 1, revealed three challenges the respondents encountered in implementing NDEP. The final themes are presented in semi-circular figures. These include NDEP's support, as stated by Marigmen-Balinjare et al. (2023) & Vanwesenbeeck et al. (2015); teachers' training, supporting the claims of Mathai (2022), Dalimunthe et al. (2021), & Pereira et al. (2016); and schools' schedules congruent to the statement of Camilotes (2024) & Lester et al. (2014).

Table 2

Mean Extent of Challenges Encountered in the NDEP Implementation in terms of Teachers' Training about NDEP

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. The school head provides technical assistance to teachers integrating NDEP into the lessons.	3.67	High Extent	3.73	High Extent
2. The master teacher guides the teachers in integrating NDEP into the lessons.	3.39	Moderate	3.52	High Extent
3. The NDEP trainings are available for teachers.	3.54	High Extent	3.30	Moderate
4. The NDEP is discussed during Learning Action Cell sessions.	3.37	Moderate	3.43	High Extent

5. The school head discusses NDEP during the PTA meeting.	3.61	High Extent	3.65	High Extent
6. The uniformed personnel visit the school to discuss NDEP.	4.07	High Extent	3.72	High Extent
7. The topics related to NDEP are discussed during in-service training.	3.61	High Extent	3.43	High Extent
8. NDEP is discussed during the focus group discussion of teachers.	3.37	Moderate	3.40	High Extent
Composite Mean	3.58	High Extent	3.52	High Extent

Scale: 4.20-5.00 Very High Extent; 3.40-4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

Table 2 assesses and reveals the challenges encountered in implementing the NDEP, particularly in teacher training. In teacher assessment, out of eight indicators, six of them were perceived as high extent, with means ranging from 3.40 to 4.19. In contrast, two of them, which are the master teachers' guidance and focus group discussion on NDEP, are perceived as moderate, with weighted means of 3.39 and 3.37. On the other hand, students perceived that seven of the eight indicators have a high extent of weighted means. Both teacher and student assessments were interpreted as high extent, with composite means of 3.58 and 3.52, and their overall combined composite mean was 3.55 and could be interpreted as high extent. This implies that the respondents saw the teachers' training about NDEP as being implemented and addressed correctly to improve the National Drug Education Program implementation. This finding argues with the claim of Moreira et al. (2015) and Martínez et al. (2014), as they noted that teachers are not sufficiently trained in NDEP. On the other hand, this satisfies the claim of Gizyatova (2016) and Pereiral et al. (2016), who pointed out that teacher training is an important factor in the success of NDEP.

Table 3

Mean Extent of Challenges Encountered in the NDEP Implementation in Terms of Schools' Schedules in NDEP Implementation

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. The teachers integrate NDEP in class discussions.	3.75	High Extent	3.66	High Extent
2. The school has annual activities related to NDEP.	3.63	High Extent	3.49	High Extent
3. The school allocates time for teachers and students' seminars about NDEP.	3.55	High Extent	3.42	High Extent
4. The teachers conduct home visits to learn about the students' situation.	3.95	High Extent	3.19	Moderate
5. The guidance counselor is available to counsel students when needed.	4.04	High Extent	3.56	High Extent
6. The topics related to NDEP are discussed during class hours.	3.72	High Extent	3.34	Moderate
7. The school has a representative at the Barangay Anti-Drug Abuse Council meetings.	3.83	High Extent	3.57	High Extent
8. The teachers discuss related topics about NDEP during Homeroom PTA meetings.	3.58	High Extent	3.52	High Extent
Composite Mean	3.76	High Extent	3.47	High Extent

Scale: 4.20-5.00 Very High Extent; 3.40-4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

Table 3 reveals the respondents' perception of implementing the National Drug Education Program in terms of the schools' schedules for NDEP implementation. Teachers perceived that the eight indicators were of high implementation extent with weighted means of 3.40-4.19 and yielded an interpretation of high implementation extent with composite means of 3.76 and 3.47, respectively, having an overall composite mean of 3.62 (high extent). This implies that the school allocates enough time to implement the National Drug Education Program. This contradicts the claims of Nasheeda et al. (2018), Vanwesenbeeck et al. (2015), Monteiro et al. (2018), and Thurman & Boughelaf (2015), as they all concluded that the school did not have enough time to implement the drug education program. Pointing to the moderate perception of students on two components, which were home visitation and discussion of NDEP during class hours, Monteiro et al. (2018) revealed that one of the obstacles in the implementation process of a drug education program is the absence of students' boundaries, absence of students

in school, and absence of school team collaboration; thus, it is leading to the participation of students. To improve even more the drug education program even more, Bailey et al. (2018) suggest early childhood drug education, and along with this statement, Warren (2016) noted that drug education needs to be context-appropriate, evidence-based, and adapted to the needs of vulnerable children in order to be as effective as possible. To improve the results of drug education initiatives, preventative tactics must be rricula might not be strong enough to stop adolescents from engaging in dangerous conduct.

Table 4 discloses the mean extent of challenges encountered in the NDEP implementation in terms of support toward NDEP; this yielded a high composite mean of 3.68 for teacher-respondents and a moderate composite mean of 3.34 for student-respondents. Teachers perceived that all eight indicators were of high implementation extent. In contrast, the students perceived that six indicators were moderately implemented, in which allocation of funds was the lowest, having a weighted mean of 3.03. Only support of the PTA and participation of the student leader in the NDEP was perceived as high-extent implementation. Having both of the composite means added, it yielded 3.51 and could be interpreted as high-extent implementation

Table 4

Mean Extent of Challenges Encountered in the NDEP Implementation in Terms of Support Toward NDEP

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. The school allocates funds for NDEP.	3.57	High Extent	3.03	Moderate
2. The Parents-Teachers Association supports activities related to NDEP.	3.88	High Extent	3.51	High Extent
3. The school initiates activities related to NDEP.	3.82	High Extent	3.34	Moderate
4. The student leaders participate in activities related to NDEP.	3.95	High Extent	3.46	High Extent
5. The NDEP brochures and reading materials are available in the school.	3.57	High Extent	3.34	Moderate
6. Resources are available for NDEP.	3.57	High Extent	3.37	Moderate
7. There is an information board about NDEP within school premises.	3.66	High Extent	3.36	Moderate
8. Books and other references are available for teaching NDEP.	3.44	High Extent	3.32	Moderate
Composite Mean	3.68	High Extent	3.34	Moderate

Scale: 4.20-5.00 Very High Extent; 3.40-4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

It is surprising to note that the perceptions of teachers and students were not congruent. Students perceived most of the indicators as moderately implemented, and the lowest among these were the allocation of funds (3.03), availability of books and other references (3.32), and the availability of brochures and reading materials in the school and school-initiated NDEP activities (3.34). With these findings, it could be deduced that there was support for NDEP coming from PTA and student leaders as well as from other sectors, except for the allocation of funds needed to produce materials for NDEP. Supporting the connotation of Kazdough et al. (2018) and Bean (2014), they claimed that the protective factors of learners against illegal drugs are home support, school support, and community support. Additionally, a supportive home environment where concerns about drugs can be discussed and resolved helps young people develop resilience and good mental health. However, this is not true for the budget allocation for NDEP. We can assume that materials like books, multimedia, and other resources are available but limited to teachers' use (Tannenbaum & Sheehan, 2014). Similar to the statements of Pereira (2016) and Mathai (2022), as they mentioned that the primary obstacles to the successful implementation of drug education programs are insufficient financing and funding, resulting in the neglect of the findings of Fidiawati & Solfema (2019) and Bonyani et al. (2017), they concluded that the suitability of materials in the drug education program can increase its success rate.

Table 5 unveils the mean extent of implementation of NDEP in terms of Barkada Kontra Droga chapters in the school. The respondents' perceptions did not match up, as the teachers perceived the eight indicators to be to a high extent, with a composite mean of 3.65. The perception of the students was conflicted with six moderate indicators. The highest among them was the school's orientation about NDEP (3.49), while the lowest was Barkada

Kontra Droga Office (3.05), having a composite mean of 3.28. The average of these composite means was 3.47 (high extent). This finding implies that there were office and Barkada Kontra Droga officers in the high schools of Calintaan District, supporting the vision of the ASEAN Preventive Drug Education Portal (2016), as they mentioned that growing the number of young people who take part in this program, both inside and outside of schools, and eventually uniting them into a movement of young people who serve as role models for their peers, encouraging them to live drug-free, healthy lifestyles, is the goal of institutionalizing it.

Table 5

Mean Extent of Implementation of NDEP in Terms of Barkada Kontra Droga Chapters in the School

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. There are officers of Barkada Kontra Droga in school.	3.77	High Extent	3.32	Moderate
2. There is an office intended for Barkada Kontra Droga.	3.13	High Extent	3.05	Moderate
3. The school organizes NDEP activities.	3.61	High Extent	3.23	Moderate
4. The school gives orientation on NDEP for student leaders.	3.76	High Extent	3.49	High Extent
5. The school holds a Drug Abuse Prevention Month celebration.	3.64	High Extent	3.11	Moderate
6. The parents support activities related to NDEP.	3.90	High Extent	3.57	High Extent
7. The students participate in activities related to NDEP.	3.90	High Extent	3.34	Moderate
8. The school allocates funds for NDEP.	3.48	High Extent	3.10	Moderate
Composite Mean	3.65	High Extent	3.28	Moderate

Scale: 4.20-5.00 Very High Extent; 3.40-4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

However, these offices and officers were not functional enough for students to recognize. Effective drug education and prevention initiatives must consider local kids' opinions and involve peers in the planning process (Deans et al., 2020). To establish credibility, drug education should also affirm youth experiences and address the perceived hierarchy of harm associated with different substances (Deans et al., 2020). From another point of view, Kasim et al. (2021) and Kwan et al. (2015) pointed out that the effects of student and peer leadership on drug prevention initiatives are mixed but encouraging. Lastly, Izma et al. (2023) add that community-based drug education programs, such as those targeted at neighborhood youth groups, promise to increase drug addiction awareness by highlighting the importance of tailored approaches for drug education and leadership programs.

Table 6

Mean Extent of Implementation of NDEP in Terms of Information Campaign on Anti-Drug Abuse

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. The school conducts an anti-drug information campaign.	3.83	High Extent	3.44	High Extent
2. The school has drug abuse information campaign signage.	3.61	High Extent	3.21	Moderate
3. The school allocates a space for the drug abuse campaign in the school paper.	3.54	High Extent	3.08	Moderate
4. The school develops educational materials for the National Drug Education Program.	3.62	High Extent	3.20	Moderate
5. The teachers integrate drug education lessons across learning areas.	3.87	High Extent	3.48	High Extent
6. Resource speakers are invited to the school to discuss topics related to NDEP.	4.05	High Extent	3.55	High Extent
7. The school's social media account is active in posting campaigns against illegal drugs.	3.67	High Extent	3.24	Moderate
8. School organizations are active in campaigning against illegal drugs, liquor, and cigarettes.	3.79	High Extent	3.55	High Extent
Composite Mean	3.75	High Extent	3.34	Moderate

Scale: 4.20-5.00 Very High Extent; 3.40-4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

Table 8 affirms the mean extent of implementation of NDEP in terms of information campaigns on anti-drug abuse. Generally, all eight indicators are perceived by teacher respondents as highly implemented, with a weighted mean ranging from 3.54 to 4.05. This has a composite mean of 3.75 (high extent). Dissimilar to the perception of

student respondents, it has a composite mean of 3.34 (moderate), with half of the indicators interpreted as moderate. The lowest among them is 3.08, the section of NDEP in the school paper. The general composite mean of teacher and student respondents is 3.55 and can be interpreted as a high extent of implementation. This suggests that teachers are using multimedia and social networks to emphasize NDEP and reach the students, which is in line with the conclusion of Tam et al. (2015). This is supported by Pereira et al. (2016), who stated that innovation is necessary in creating new educational opportunities and using it in implementing NDEP. However, the result also implies that the NDEP information campaign is not strong enough, having only a moderate implementation as perceived by the student respondents. Similarly to the statement of Kasim et al. (2021), they stated that social media is one of the challenges in implementing NDEP and reaching out to children. Opposing the statement of Pratiwi et al. (2016), they conclude that information and technology's effects on drug education and prevention greatly alter attitudes toward drug information, and also the statement of Maiyana et al. (2020) and Mimigiannis et al. (2020), as they claimed that social media and smartphone applications are useful instruments in NDEP and prevention initiatives for drug abuse.

Table 7

Mean Extent of Implementation of NDEP in terms of Involvement of Parent-Teacher-Community Association and Pupil/Student Organizations in Drug Prevention Activities

Indicators	Teachers Weighted Mean	Interpretation	Students Weighted Mean	Interpretation
1. The school provides guidance related to NDEP through Homeroom meetings and PTA meetings.	3.79	High Extent	3.66	High Extent
2. The school conducts home visits to know the situation of the learners.	3.94	High Extent	3.33	Moderate
3. The school encourages participation from the parents in school programs on the National Drug Education Program.	3.96	High Extent	3.55	High Extent
4. Students intoxicated with alcohol are not allowed to enter the school.	4.34	Very High Extent	3.58	High Extent
5. The school has a committee on school-based civic awareness.	3.94	High Extent	3.53	High Extent
6. The scout leaders integrate Drug Abuse Prevention in Scouting activities.	3.78	High Extent	3.40	High Extent
7. The scout leaders help implement rules against illegal drugs.	3.80	High Extent	3.39	Moderate
8. The scout leaders reprimand scouts who are caught drinking liquor.	3.94	High Extent	3.30	Moderate
Composite Mean	3.94	High Extent	3.47	High Extent

Scale: 4.20-5.00 Very High Extent; 3.40 -4.19 High Extent; 2.60-3.39 Moderate Extent; 1.80-2.59 Low Extent; 1.00-1.79 Very Low Extent

Table 7 reveals the involvement of parent-teacher-community associations and student organizations in drug prevention activities; the composite mean of teachers' perceptions of the eight indicators was 3.94 (high extent), and its weighted means ranged from 3.40 to 4.19 and were all interpreted as high extent. The highest among them was the prohibition of students entering the school who were intoxicated by alcohol, while the lowest was the participation of the scout leaders in NDEP. On the other hand, students perceived its implementation differently. Out of eight indicators, 3 of them were interpreted as moderately implemented, with weighted means from 3.30 to 3.39, while 5 of them were interpreted as a high extent of implementation, having a composite mean of 3.47 (high extent). The overall weighted mean for this table was 3.71 (high extent). This implies that while the teachers were implementing the NDEP, students did not know its existence sufficiently. This supports the claims of Nurmala et al. (2021), stating that students tend to have no idea about these activities; similarly, Yadav and Parajuli (2021) stated that students' understanding of the drug education program is lacking. However, Naseemullah et al. (2019) and Siddiqui & Salim (2016) pointed out that educational programs significantly increase kids' understanding of drug usage and that some factors—such as age, academic year, and parental education—are linked to greater awareness.

The structural equation modelling recorded low to moderate Beta coefficients, ranging from 0.098 to 0.582, which was presented in Table 8. These values were generated after the three variables under the extent of challenges

encountered in implementing NDEP were linked to the extent of NDEP implementation. While four of these values appeared low (0.143, 0.103, 0.098, 0.131), they were considered significant based on their structural model. A highly significant relationship between the extent of challenges encountered in the implementation of NDEP and its extent of implementation was evident, showing beta (β) coefficients of 0.582 between support to NDEP and established Barkada Kontra Droga Chapters in school; $\beta=0.577$ between support to NDEP and information campaign on NDEP; $\beta=0.178$. Between schools' schedules and parent-teacher-community involvement in NDEP and $\beta=0.384$ between support to NDEP and parent-teacher-community involvement in NDEP. The connection between schools' schedules and established Barkada Kontra Droga Chapters in NDEP implementation failed to enter the structural model, as evidenced by the negligible beta coefficients of 0.056 and its p-value of 0.116, which strengthened the non-significance.

Table 8
Path Coefficients and p-values for H_0

Path	Beta (β) Coefficient	p-value*	Interpretation
TRNG→BKDCHAP	0.143	0.001	Significant
SCHED→BKDCHAP	0.056	0.116	Not Significant
SUPPORT→BKDCHAP	0.582	<0.001	Highly Significant
TRNG→INFO	0.103	0.013	Significant
SCHED→INFO	0.098	0.018	Significant
SUPPORT→INFO	0.577	<0.001	Highly Significant
TRNG→INVOLV	0.131	0.002	Significant
SCHED→INVOLV	0.178	<0.001	Highly Significant
SUPPORT→INVOLV	0.384	<0.001	Highly Significant

*Significant at $p<0.05$; Highly Significant at $p<0.001$

This implies that the challenges encountered in the implementation of NDEP perceived by the respondents and its extent of implementation were significantly correlated; thus, it is true and correct to claim that teacher training, schools' schedules, and support towards NDEP greatly affected the implementation of the National Drug Education Program. Similar to the note of Camilotes (2024), as she mentioned, support services, training of teachers, and lack of resources have a major effect on the program's implementation. From another point of view, the non-significance of schools' schedules and the barkada kontra droga chapter imply that students were not fully aware of the association's existence. Since the structural model revealed a single component that was not significant, a new model emerged. This emerging model reflected only the significant links between the extent of implementation of NDEP and the exogenous variables. Based on the hypothesis test results, the standardized estimates of the path, effect sizes, and standard error values are disclosed in Table 8. It can be noted that the R^2 values of 0.53 and 0.40 remained the same as recorded in the structural model. These represent the percentage of variations (53%, 40%) in the extent of NDEP implementation contributed by the percentage of variations of the extent of challenges encountered in the NDEP implementation.

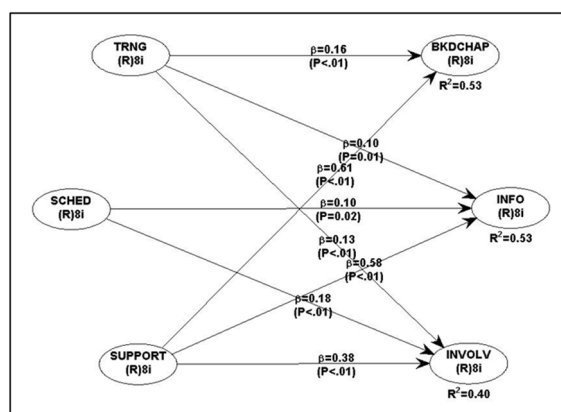


Figure 2. The Emerging Model

The standardized path estimates in the emerging model were displayed with values ranging from 0.103 to

0.609. These values confirmed the rejection of the null hypothesis of no significant relationship between the extent of challenges encountered in the NDEP implementation and the extent of NDEP implementation in Calintaan District, province of Occidental Mindoro. This finding ascertains that the extent of challenges encountered by the teachers and students in the NDEP implementation contributed from small (0.094, 0.058, 0.067, 0.098) to significant effects (0.437, 0.414) on the extent of NDEP implementation. A medium effect of 0.231 was also recorded to support stakeholders' involvement. The significant extent reached a p -value less than 0.01, which marked a highly significant connection between the variables under study. Moreover, standard error values of 0.044 to 0.046 were very low, implying the samples' accuracy in relation to the conclusions drawn about the overall population.

The rejection of the null hypothesis proved that respondents' perceptions of the challenges that affect the implementation of NDEP were accurate. Since the respondents of this study were the teachers (implementers of the program) and students (the target of the program), they were the ones who could identify the areas of NDEP that needed to improve. This is supported by the disclosure of Coelho & Monteiro (2017) and Kärkkäinen et al. (2014), who disclose that the training of teachers is one of the possible ways to strengthen the NDEP. Vanwesenbeeck et al. (2015) cited that lesson and activity time are essential and are required to enhance their execution, which is identical to the note of Nasheeda et al. (2018). They noted that programs that lack rigorous planning are not implemented effectively. Lastly, Kazdough et al. (2018) stated that community, school, and home support are protective factors for students against illegal substances. Even more, a supportive home setting where drug-related concerns may be aired and resolved helps young people build resilience and excellent mental health while also keeping them safer. (Bean, 2014).

Table 9

Analysis of variance on the extent of NDEP implementation as assessed by teachers and students in Calintaan District

Indicators	F-value	p-value	Interpretation
Established <i>Barkada Kontra Droga</i> Chapters in the School	13.218	.000	Highly Significant
Information Campaigns on Anti-Drug Abuse	16.922	.000	Highly Significant
Involvement of Parent-Teacher-Community Association and Student Organizations in Drug Prevention Activities	21.500	.000	Highly Significant

Legend: Significant at p -value<.05

Teachers and students were the two groups of respondents who gave responses to the items in the instrument. Fisher's test (F-test) or commonly known as analysis of variance (ANOVA) was used in investigating the possible differences in their responses considering the three indicators, namely: established *Barkada Kontra Droga* chapters in the school, information campaigns on anti-drug abuse and involvement of Parent-Teacher-Community Association and Student Organizations in drug prevention activities. All computations were set at the 0.05 alpha level of significance.

As shown in Table 9, all p -values reflect 0.000, which was way below the 0.05 alpha level. Hence, the hypothesis of no significant difference between the teachers' and students' assessments on the extent of NDEP implementation was rejected. This is supported by the large values of the variances (F-value) of 13.218, 16.922, and 21.500 for the three indicators. These denote that a highly significant difference existed in the assessment of the two groups of respondents when asked about the extent of implementation of NDEP in the Calintaan District. The result suggests that teachers and students vary in how they perceive the extent of NDEP implementation in the locality. This implies that the NDEP is implemented in Calintaan District since the teacher-respondents perceived it as highly implemented. However, the student-respondents perceived most of its indicators as moderately implemented; thus, this connotes that it was not implemented strongly enough to be noticed by the students.

On the other hand, this result also suggests that most students did not participate in implementing NDEP (Mase et al., 2023; Monteiro et al., 2018). For drug education to be as successful as possible, it must be evidence-based,

context-appropriate, and tailored to the needs of children. Preventative strategies must be regularly assessed and modified to enhance the outcomes of drug education programs. (Warren, 2016). Over and above that, researchers recommend strengthening agency networking through outsourcing drug prevention education programs (Zakaria et al., 2020; Zakaria et al., 2021) and making structural modifications to promote student engagement (Waples et al., 2023) to increase participation.

Table 10

Action plan for the improvement of NDEP implementation in Calintaan District

Objectives	Strategies	Person Involved	Time Frame	Resources		Success Indicator
				Fund	Source	
Teachers' Training About NDEP						
Conduct monthly technical assistance to teachers from Master Teachers and the school head on integrating NDEP into lessons.	Focus group discussion Learning Action Cell	Teachers Master Teachers School Head	April To July	5,000.00	MOOE SEF Canteen	Conducted at least four technical assistance sessions per teacher in one year
Conduct capacity training for teachers, parents, and students.	Parents and Peer Education Workshop Exhibit Symposium Culminating Activities	Parents Students Teachers Master Teacher School Head SDO	July to April	10,000.00	MOOE SEF PTA	Conducted at least four training related to NDEP within the year
Schools' Schedule in NDEP Implementation						
Home Visitation of advisers to their students.	Communication Letter of teachers to parents approved by the school head Schedule of advisers' visits to their students	Teachers Parents Students	July to April	5,000.00	MOOE PTA	The advisers are aware of and have visited students at home.
Support Toward NDEP						
Integration of NDEP activities and materials on SIP and AIP	Collaborative meetings of the school head, teachers, stakeholders, and students.	School Head Teachers Parents Students	July to April	2,000.00	MOOE	Updated SIP and AIP with allocated budget to NDEP
Updating of School NDEP corners and Information Board	Tapping the NDEP coordinators, class advisers, and School Heads	NDEP coordinator s Class advisers School Head	July to April	2,000.00	MOOE PTA	Updated NDEP corners and Information Board
Barkada Kontra Droga Chapters in the School						
Creation of Barkada Kontra Droga Chapters in the School	Election of Officers Designation/ Creation of Office for barkada kontra chapters	Teachers School Head Students	July to April	1,000.00	MOOE Canteen	Functional Office and Officers of Barkada Kontra Droga Chapters in the School

National drug education program in Calintaan secondary schools and its implementation and challenges

Celebration of Drug Abuse Prevention Month	Invitation of uniformed personnel, the barangay committee, and other stakeholders to plan, initiate, and conduct this activity	Teachers School Head Barangay Commi-ttee Uni-formed Personnel	July to April	5,000.00	MOOE PTA Canteen	Conducts the Drug Abuse Prevention Month every year
Information Campaign on Anti-Drug Abuse						
Development of Educational Materials Intended for NDEP	Integration of NDEP during INSET and LRMDS celebration	Teachers School Head Students	July to April	3,000.00	MOOE PTA Canteen	Creation of Educational Materials for NDEP
Posting activities of the School's social media account against illegal drugs	Tapping the school ICT coordinator	ICT coordinator- tor NDEP coordinator- tor School Head	July to April	1,000.00	MOOE	Weekly activity log of the school's social media.
Involvement of Parent-Teacher-Community Association and Pupil/Student Organizations in Drug Prevention Activities						
Integration of NDEP into scout activities	Creating a base activity about NDEP for scouts	Scout leaders	July to April	1,000.00	Scout Funds	Conducted one scouting activity a year with the integration of NDEP
Collaboration of School and Barangay on a campaign against illegal Drugs	Participation of the School staff at the BADAC and BEPOC meeting of the barangay	School Head Barangay Officials	July to April	0	Barangay Fund	Zero drug cases inside the school premises.

Table 10 shows the action plan made by the researcher for the improvement of NDEP implementation. After assessing the questionnaire results, an action plan was created based on the respondents' responses. This action plan is intended to improve and strengthen the implementation of the National Drug Education Program in the Calintaan District following the directive of DepEd Memorandum No. 200, s. 2016 and Republic Act No. 7624. On the other hand, this supports the claim of Akpan (2020) about the classical and operant conditioning theory, wherein he stated that students would become aware of an activity's presence if they were repeatedly exposed to it. Additionally, that reinforcement will make an action stronger and more likely to happen again in the future. Lastly, Corr (2016) stated that punishments and rewards are needed for the success of school activities.

4. Conclusions

Based on the findings of this study, the following conclusions are drawn. In general, it can be said that there were three challenges encountered by the respondents with the implementation of NDEP. These were teachers' trainings, schools' schedules in the implementation of NDEP and support toward NDEP, in terms of training and schools' schedules as assessed by the respondents, they were able to overcome the challenges because they perceived its implementation as highly implemented teachers training for NDEP was highly implemented in Calintaan District, the schools in Calintaan District allocated enough time to implement the National Drug

Education Program, there was support for NDEP coming from PTA and student leaders as well as from other sectors in Calintaan high schools, except for the allocation of funds needed in the production of materials for NDEP, the extent of implementation of the NDEP in Calintaan District was high, combining the weighted mean from the perception of the teacher and student-respondents, the high schools in the Calintaan District had offices and Barkada Kontra Droga personnel, but they were not operational enough to be identified by the students, teachers reached out to students and highlighted NDEP in its Information Campaigns on anti-drug abuse, NDEP was implemented by teachers, but the students were not fully aware of its existence and they were moderately involved in it, training, time schedule and support toward NDEP had a significant effect on the extent of implementation of NDEP, teachers' and students' responses were not congruent, concluding that teachers perceived the implementation of NDEP as high, but the students perceived it as moderately implemented, and an Action plan that can undertaken to improve the implementation of NDEP in Calintaan District.

Recommendations - Based on the aforementioned conclusions, the following recommendations are presented. It is recommended that the school head and district supervisor conduct training for teachers about the National Drug Education Program with the participation of students. Schools Division Office can develop guidelines on how to integrate National Drug Education Program in lesson and school activities, the practices inside the Calintaan District in its implementation of National Drug Education Program highlighting the teachers' training, schools' schedules and support toward National Drug Education Program are recommended to be shared with other districts, though the implementation of extent in Calintaan District was high, improvement through the perspective of the students is recommended by knowing their interest, and perspective through focus group discussions, the Schools Division Office may consider the recalibration of National Drug Education Program's implementation in other districts to cope with the fast-paced development of the learners, the teachers, master teacher, and school head may validate the participation of the students in the Implementation of National Drug Education Program to know its extent of effectiveness, school head and School Division Office are encouraged to consider the action plan made based on the result of this study, and for future researchers, a follow-up study covering the aspects of National Drug Education Program can be done to validate the result of this study.

5. References

- Akpan, B. (2020). Classical and Operant Conditioning—Ivan Pavlov; Burrhus Skinner. In: Akpan, B., Kennedy, T.J. (eds) Science Education in Theory and Practice. Springer Texts in Education. Springer, Cham.
https://doi.org/10.1007/978-3-030-43620-9_6
- ASEAN Preventive Drug Education Portal (2016). Philippines' Preventive Drug Education Approach, <https://www.cnb.gov.sg/aseanpde/who-we-are/preventive-drug-educationapproaches/philippines>
- Asl, Z. N., & Haghi, S. (2020). Sociological Study of Identity Instability in Children of Parents with Drug Addiction. DOI:10.46652/RGN.V5I23.604
- Bailey, M., Wasson, S., & Roberts, B. (2018). Increasing Awareness of Substance Abuse and Addictions: Does Early Childhood Drug Education Provide Diversion from Using Drugs and/or Alcohol? <https://doi.org/10.14434/iujur.v4i1.24553>
- Bean, P. (2014). Drugs and Crime. <https://doi.org/10.4324/9780203077146>
- Bonyani, A., Safaeian, L., & Chehrazi, M., (2017). A high school-based education concerning drug abuse prevention. DOI: 10.4103/jehp.jehp_122_17
- Camilotes A. (2024). Implementation of National Drug Education Program and Community Responses In Tibungco District. DOI: 10.5281/zenodo.11220898/NIJSE.2024, ISSN 3028-1261
- Coelho, F., & Monteiro, S. (2017). Drug Education: Possibilities of Distance Learning in Continuing Teacher Training. <https://doi.org/10.18264/EADF.V7I2.577>
- Coggans, N., Haw, S., & Watson J. (2018). Education and drug misuse: school interventions. <https://doi.org/10.4324/9780429447853-3>
- Corr, P. J. (2016). Reinforcement sensitivity theory of personality questionnaires: Structural survey with

- recommendations. *Personality and Individual Differences*, 89, 60-64.
<https://doi.org/10.1016/j.paid.2015.09.045>
- Dalimunthe, H., Firman, & Bentri A. (2021). Development of Group Counseling Service Guidelines for Increasing Student Religiosity in Drug Abuse Prevention. <https://doi.org/10.24036/4.15387>
- Dangerous Drug Board (2020). Dangerous Drugs Board Annual Report 2020. Ensuring The Continuity Of Drug Prevention And Control Programs And Services Amid the Pandemic.
https://ddb.gov.ph/images/annual_report/Annual_Report_2020.pdf
- Darcy, C.(2021). Drug Education Best Practice for Health, Community and Youth Workers: A Practical and Accessible Tool-Kit. DOI: 10.1177/0017896920950338
- Deans, E., Ravulo, J., Blignault, I., and Conroy E,. (2020). Understanding the needs of local youth to inform drug and alcohol prevention and harm reduction services: a qualitative study.
<https://doi.org/10.1002/hpja.393>
- DepEd Memorandum No. 200, s. 2016- Strengthening the National Drug Education Program in Schools. (n.d..), from <https://www.deped.gov.ph/2016/11/23/november-23-2016-dm-200-s-2016-strengthening-the-national-drug-education-program-in-schools/>
- Fidiawati, L., Firman, F., & Solfema, S. (2020). Development Of Group Counseling Guidelines For Student Self-Control Improvement In Prevention Of Drug Abuse. *Journal of Indonesian Science and Technology Applications*, 4(1), 24–31. DOI: 10.24036/4.14340
- Gizyatova, L. (2016). Teachers' Training Experience as a Critical Determinant of the Quality of Drug Education among Students. <http://dx.doi.org/10.15405/epsbs.2016.07.47>
- Izma, H., Intannia, D., Lingga H. N. et al. (2023). Drug Education to Cadres and Youth Organizations in Landasan Ulin Tengah Subdistrict. <https://doi.org/10.20527/jpmp.v1i3.10191>
- Kärkkäinen, S., Hämeen-Anttila, K., Vainio, K., Keinonen T. (2014). Teacher Education as a Promoter of Health: Teacher Students' Perceptions about Medicine Education,
http://www.scientiasocialis.lt/pec/node/files/pdf/vol58/82-98.Karkkainen_Vol.58.pdf, ISSN 1822-7864
- Kasim, A., Karim, M., Muchtar, S., Asis A., M. S. & Tenri A. (2021). School Drug Education and Leadership Agility: Narcotics Crime Study in Children. <https://doi.org/10.24191/ajue.v17i4.16204>
- Kazdough, H., El-Ammari A., Bouftini, S., El Fakir S., & El Achhab Y. (2018). Adolescents, Parents and Teachers' Perceptions of Risk and Protective Factors of Substance Use in Moroccan Adolescents: A Qualitative Study. <https://doi.org/10.1186/s13011-018-0169-y>
- Kwan, P., S. Sussman, S., and T. Valente, T. (2015). Peer Leaders and Substance Use Among High-Risk Adolescents. <https://doi.org/10.3109/10826084.2014.977395>
- Lester. L., Midford, R., Cahill, H., Mitchell, J., Ramsden, R., Foxcroft, D., & Venning, L. (2014). Cannabis and Harm Minimisation Drug Education: Findings from the Drug Education in Victorian Schools Study. DOI: 10.13188/2330-2178.1000012
- Maiyana, E., Susanti, M., Supratman, Tria, Y., & Ramdalel. (2020). Application of the Android System for Anti-Drug Information. <https://doi.org/10.1088/1742-6596/1471/1/012001>
- Mancheri, H., Alavi, M., Sabzi, Z. & Jahangir, M. (2020). The effects of addiction on children and women: A Qualitative Study. <https://doi.org/10.22038/IJP.2019.45214.3718>
- Marigmen-Balinjare, M. L., Lanestosa, F. A., & Limos-Galay, J. A. (2023). Personal and professional characteristics of teachers in relation to the academic performance of students in San Jose National Agricultural and Industrial High School. *International Journal of Research Studies in Management*, 11(2), 41-50. DOI: 10.5861/ijrsm.2023.1015
- Martínez, J., Vicario-Molina, I., González, E., Ilabaca P. (2014). Sex education in Spain: the relevance of teachers' training and attitudes. <https://doi.org/10.1080/02103702.2014.881652>
- Mase, R. (2023) Academic Performance of the Grade 4 Pantawid Pamilya Pilipino Program (4Ps) Beneficiaries in Rizal District, (Unpublished Research Study)
- Mathai, L. (2022). Evaluation of Challenges Facing Implementation of Alcohol and Drug Abuse Mitigation Programmes with Reference to the Presbyterian Churches of Kenya. DOI: 10.5296/ijch.v9i2.20224
- Mimigiannis, C., Gallos, P., & Mantas, J. (2020). The Drug Addicts' Usage of Information and Communication
-

- Technologies. <https://doi.org/10.3233/SHTI200734>
- Monteiro, E. P., Henrique Pinto Gomide, H. P., & da Costa, P. H. A. (2018). Barriers and Facilitators to Implement Preventive Practices to Drug Abuse. <http://dx.doi.org/10.1590/1982-4327e2835>
- Moreira, A., VóvioI, C., & Michelil, D. (2015). Drug abuse prevention in school: challenges and possibilities for the role of the educator. <http://dx.doi.org/10.1590/S1517-97022015011670>
- Nasheeda A., Abdullah, H. B., Steven Eric Krauss, S. E., Ahmed N. B. (2018). A Narrative Systematic Review of Life Skills Education: Effectiveness, Research Gaps and Priorities. DOI: 10.1080/02673843.2018.1479278
- Nurmala, I., Muthmainnah, M., Hariastuti, I., Devi Y. P. & Ruwandasari N. (2021). The role of knowledge, attitude, gender, and school grades in preventing drugs use: Findings on students' intentions to participate in peer education program. <https://doi.org/10.4081/jphr.2021.1972>
- Paya, R., Giusti, B., Succani, A. P., Mastandrea E. B., & Figlie N.B. (2015). Children of Substance Abusing Parents: Child Behavior Data of. <https://www.avensonline.org/wp-content/uploads/JAP-2330-2178-03-0020.pdf>, Corpus ID: 263350482
- Pereira, A. P. D., Paes, A. Sanchez, Z. (2016). Factors associated with the implementation of programs for drug abuse prevention in schools. DOI:10.1590/S1518-8787.2016050005819
- Pratiwi, H., , N., Vitis Vini Fera V., Warsinah W., & Sholihat N. (2016). The effect of education on knowledge, attitude, and ability to communicate drug information. <https://doi.org/10.26874/kjif.v4i1.51>
- Reza, I. (2017). The Role of Parents in Overcoming Drug Abuse in The Younger Generation. <https://doi.org/10.19109/psikis.v2i1.1056>
- Siddiqui, A., & Salim, A.(2016). Awareness of substance use and its associated factors in young Saudi students. DOI:10.5455/JMAS.217010
- Tam, C. L., Chie, Q. T., Bonn, G., Wong C. P., Dang H. M. & Khairudin R. (2015). Drug Abuse, Relapse and Prevention Education in Malaysia: Perspective of University Students through a Mixed Methods Approach. <https://doi.org/10.3389/fpsy.2015.00065>, ISSN: 1664-0640
- Tannenbaum, C., & Sheehan, N. (2014). Understanding and preventing drug–drug and drug–gene interactions, <https://sci-hub.se/https://doi.org/10.1586/17512433.2014.910111>, DOI: 10.1586/17512433.2014.910111
- Thurman, B., & Boughelaf, J. (2015). “We don’t get taught enough”: An assessment of drug education provision in schools in England. <https://doi.org/10.1108/DAT-03-2015-0014>
- Tulu S. K., & Keskis, W. (2015). Assessment of Causes, Prevalence and Consequences of Alcohol and Drug Abuse among Mekelle University, CSSL 2nd Year Students. DOI:10.12691/ajap-3-3-1
- Vanwesenbeeck, I., Westeneng, J., de Boer T., Reinders J., & Zorge R. (2015). Lessons Learned from a Decade Implementing Comprehensive Sexuality Education In Resource-Poor Settings: The World Starts With Me. DOI: 10.1080/14681811.2015.1111203
- Vasconcelos, A. C. M., Araújo, L. N., & Porto, L. G. M. (2015). Family Relationships and Chemical Dependence: A Literature Review. <https://doi.org/10.4034/RBCS.2015.19.04.11>
- Volkow, N. (2020). National Institute on Drug Abuse, Drugs, Brains, and Behavior: The Science of Addiction. <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preventing-drug-misuse-addiction-best-strategy>
- Waples, L., Carlisle, V., & Maynard, O. (2023). “They’re doing it anyway, let’s have a conversation about it”: exploring student and stakeholder attitudes towards drug education programmes for University students,. <https://doi.org/10.1080/09687637.2023.2181148>
- Warren F. (2016). ‘What works’ in drug education and prevention?, <https://www.semanticscholar.org/paper/%E2%80%98What-works%E2%80%99-in-drug-education-and-prevention-Warren/e2d7d16c777725c34d42e5c2dd46277fed055f8c>, Corpus ID: 227444244
- Zakaria, E., Ibrahim, F., & Hassan, N. (2020). Relationships between Acceptance, Readiness, Logistic and Incentive, and Participation in Drug Prevention Education Program Among B40 Families,
- Zakaria, E., Ibrahim, F., & Naser A. (2021). Sustaining the Low Income Family Participation in Drug Prevention Based Program: The Promising Factors. DOI: 10.6007/ijarbss/v11-i6/10239

Tracer study on the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center

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Abstract

This tracer study on the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center examined the demographic profiles, training specialization, certification status, and employment performance of scholar-graduates from 2019 to 2022. A descriptive-correlational research approach was employed, utilizing a researcher-made questionnaire to gather data. Statistical analyses were employed to determine relationships among key variables, including frequency distribution, weighted mean, percentage distribution, and multiple stepwise regression. Findings revealed that most scholar-graduates are young adults, predominantly male, and belong to lower- to middle-income households. The majority hold college degrees and have pursued technical specializations such as Driving NCII and Masonry NCII, with many obtaining a National Certificate II. Employment outcomes indicate that a significant portion are in full-time jobs with their job performance rated as "Very High". The study established significant relationships between scholar-graduates' profiles and their specialization, certification, and employment status. However, no significant link was found between their profile and workplace performance. Specialization is significantly related to both employment status and job performance, whereas certification does not directly influence employment status. The study recommends increasing female participation in scholarship programs, strengthening employment linkages, expanding training programs to include emerging industries, providing continuous upskilling opportunities, supporting entrepreneurial initiatives, and conducting regular program assessments. These enhancements aim to improve the effectiveness of the ROMTTAC program in facilitating sustainable employment and career growth for its graduates.

Keywords: ROMTTAC tracer study, TESDA, employment status, certification status, training specialization

Tracer study on the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center

1. Introduction

The Philippine labor market significantly improved as the country recorded its lowest unemployment rate since April 2020. The Philippine Statistics Authority documented the rate decreased from 7.4% in October to 6.5% in November 2021. This led to a net employment creation of 1.7 million, which translates to 2.9 million more Filipinos employed. This comparison has been made from the pre-pandemic level, signaling economic recovery. However, the underemployment rate marginally increased from 16.1% in October to 16.7% in November 2021 (National Economic Development Authority, 2022). Underemployed are those looking for more extended hours or higher-paying jobs and settled with part-time arrangements due to skill misalignment (Inquirer, 2022).

The increase and decrease in numbers can be traced back to the skilled and skilled workers aiming for employment for the past years. NEDA-MIMAROPA (2019) explicated in their Annual Regional Economic Situationer (ARES) that the employment rate increased by 0.30% from 95.3% in 2018 to 95.6% in 2019. The total number of jobs generated in MIMAROPA increased by 73.09 percent from 9,297 jobs in 2018 to 16,092 jobs in 2019. All MIMAROPA provinces recorded an increase in jobs generated. Among the provinces, Oriental Mindoro posted the highest increase in the number of jobs generated, from 2,173 in 2018 to 6,717 in 2019. On the other hand, Occidental Mindoro recorded a change of 65.42%, which generated 1,012 in 2018 and 1,674 in the following year.

Reflecting on the numbers from the previous years, Occidental Mindoro generated means to maintain and increase the employment rate without sacrificing skilled workers. Alignment of the job to the skills acquired by the workers supplements the objective of technical-vocational training centers across the country. As Section 2 of RA 7796 specified, TESDA mandates to provide relevant, efficient, accessible, and high-quality technical education and skills development in support of a globally competitive Filipino middle-level workforce responsive to and by Philippine development goals and priorities. With this, the municipality of Rizal, a particular town in the province, created Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC) by the Republic Act 10815 series of 2016. This technical-vocational school aims to provide opportunities for scholar-graduates to be trained and be well-adept with various specialized skills offered in an agricultural province. As the economy changes, so does workers' demand, necessitating technical-vocational education to assure graduates with in-demand skills. The continuous demand for middle-skilled and skilled TVET graduates aids the Philippines' economic progress. Over 5% of the country's working-age population has completed some form of training under TESDA, which makes them far more likely than average to participate in the labor market. With this, vocational streams and clusters should be used to teach transferable abilities to prepare students for careers that demand similar competencies (Asian Development Bank, 2021).

Relevant to the aim of ROMTTAC, this tracer study recognizes the need to determine the employment outcomes of scholar-graduates who underwent training in various specializations from 2019 to 2022. These specializations include Agricultural Crops Production NC I, Organic Agriculture Production NC II, Farmers Field School on Production of High-Quality Inbred Rice and Seed Certification and Farm Mechanization, Rice Machinery Operations NC II, and a 3-Year Diploma Program in Agricultural Technology. Other programs covered Animal Production (Swine) NC II, Agroentrepreneurship NC II, III, and IV, Driving NC II, Masonry NC I and NC II, Food Processing NC II, Domestic Work NC II, and Bread and Pastry Production NC II. Additionally, technical skills training such as the Assembly of Solar Nightlight and Post Lamp, Trainers Methodology Level I, and Facilitate eLearning Sessions were also provided. Mapping out the performance of the graduates will assist the TESDA Provincial Office in enhancing the curriculum, improving trainer effectiveness, and expanding training offerings to better align with industry demands and workforce needs.

Statement of the Problem - This tracer study aimed to determine the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC) for four years from 2019 to 2020, 2021, and 2022. Specifically, the study sought to answer the following questions: (1) What is the scholar-graduates' profile in terms of age, sex, civil status, socio-economic status, highest educational attainment, existing occupation, and classification as ROMTTAC scholar graduate? (2) What is the status of the scholar-graduates in terms of TESDA specialization and Competency Assessment and Certification? (3) What are the outcomes of ROMTTAC scholar-graduates considering their employment status and performance? (4) Is there a significant relationship between the scholar-graduates' profile and their status in terms of TESDA specialization and Competency Assessment and Certification? (5) Is there a significant relationship between the scholar-graduates' profile and the outcomes considering their employment status and performance? (6) Is there a significant relationship between their status as scholar-graduates and their outcomes in terms of employment status and performance? (7) What enhancements can be proposed to improve the ROMTTAC program?

Significance of the Study - Technical Vocational and Education Training (TVET) is highly demand-driven and viewed as a tool to help equip the people with the necessary skills for employment. The continuous implementation of different scholarship programs by TESDA in Rizal and Occidental Mindoro before and during the COVID-19 pandemic provides employment opportunities despite challenges. This tracer study aimed to determine the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC) for four consecutive years from 2019, 2020, 2021, and 2022. The findings will shed light on the following focal persons and organizations. To the industry and other government agencies, this study may serve as a valuable reference for assessing the whereabouts and performance of TESDA graduates through the Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC), as well as in revising curricula to enhance technical-vocational courses. Moreover, for TESDA, this study will provide references for the formulation of sound policy decision-making regarding TVET policies, plans, and reforms vital for human capital and development for individual and economic progress in the province of Occidental Mindoro. To the administration of technical-vocational institutions (TVIs), the data gathered will serve as a basis for management decisions in upgrading scholar-graduates' level of performance and benchmarking with interventions to increase the passing percentage for national assessment and employment rate. To technical vocational education trainers, the findings will aid in recognizing existing problems that need to be addressed and modifying strategies to enhance the teaching-learning experience. To future scholar-graduates, the outcomes of this study can serve as a blueprint for identifying high-demand employment opportunities in the province of Occidental Mindoro, guiding their choice of specialization. Lastly, for future researchers, this study may serve as a foundation for further research using other variables to determine factors that may have influenced a higher employment rate after taking TESDA training programs.

Scope and Delimitation of the Study - The main purpose of this study was to determine the employment outcomes of technical-vocational education training (TVET) scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC). This considers the respondents' profile, which includes age, sex, civil status, socio-economic status, highest educational attainment, existing occupation, and classification as ROMTTAC scholar-graduates. Along with it is the scholar-graduates' status in terms of TESDA specialization and competency assessment, certification, employment outcomes, employment status, and their performance. Respondents of the study were those who underwent training in 2019, 2020, 2021, and 2022, who can be residents and non-residents of Rizal, Occidental Mindoro. The study was delimited from the aforementioned consecutive years and did not attempt to gather information from more than one thousand graduates. There were six respondents for 2019 due to the limited number of scholar-graduates who pioneered the program; 76 scholar-graduates for 2020; 130 for 2021; and 122 for 2022, respectively, as obtained through simple random sampling with a total of 334 respondents.

2. Methodology

Research Design - A descriptive-correlational design was employed in this study. Descriptive research was used to describe the profiles, status, and outcomes of ROMTTAC scholar-graduates. Moreover, the correlational research method was used to measure the relationship and the strength of the relationship among the identified variables. The researcher made use of the descriptive-correlational method of research to figure out the relationship between the respondents' profiles, the status of scholar-graduates in terms of TESDA specialization and competency assessment and certification, and the employment status and the scholar-graduates' performance of Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC).

Respondents of the Study - The study's respondents were scholar-graduates of ROMTTAC from 2019 to 2022, selected through simple random sampling. Due to the limited number of pioneer graduates, there were only six respondents in 2019, while 76 were selected in 2020, 130 in 2021, and 122 in 2022, totaling 334. Driving NC II had the highest enrollment among the automotive and land transportation sectors, with 50 trainees in 2019, 295 in 2020, 206 in 2021, and 163 in 2022, of which 95 were sampled. The Theoretical Driving Course, introduced in 2022, had 56 enrollees, with seven sampled. Organic Agriculture Production NC II saw significant enrollment in the agriculture, forestry, and fishery sectors, with 134 trainees in 2020, 212 in 2021, and 94 in 2022, from which 58 were sampled. Rice Machinery Operations NC II had 52 enrollees in 2020, 96 in 2021, and 58 in 2022, with 28 sampled. Other notable programs include the production of high-quality inbred rice, seed certification, and farm mechanization (48 enrollees in 2021, 45 in 2022, 13 sampled) and produce organic concoctions and extracts (225 enrollees in 2021, 30 sampled). For Technical-Vocational Education and Training (TVET), Trainers Methodology Level I had 49 trainees in 2020, 45 in 2021, and 44 in 2022, with 19 sampled. The construction sector included Masonry NC I (38 enrollees in 2020, 55 in 2021, and 42 in 2022, with 18 sampled) and Masonry NC II, introduced in 2021 (14 enrollees that year, 50 in 2022, and nine sampled). Contact Tracing Level II was introduced in the Human Health/Health Care sector in 2021, with 23 enrollees and 22 in 2022, with six sampled. The electrical and electronics sector had solar night lights and post lamp assemblies (25 enrollees in 2021, 3 sampled). The processed food and beverages sector included processed food by sugar concentration (25 enrollees in 2021, 3 sampled), food processing NC II (137 enrollees in 2022, 18 sampled), meat processing (61 enrollees in 2022, 8 sampled), and processed smoked fish and salted egg (53 enrollees in 2022, 7 sampled). The tourism (hotel and restaurant) sector introduced bread-making in 2022, with 40 enrollees and five sampled. Lastly, the Diploma in Agricultural Technology program, launched in 2022, had 50 enrollees, with seven sampled.

Research Instrument - A researcher-made questionnaire was developed and utilized as the main instrument of this study, patterned after the conceptual framework and its relation to the problem of the study. The researcher gathered its content from books, online journals, unpublished theses, and other materials related to the issue under study. A set of questionnaires was used to support the content of this study. The first comprised the scholar-graduates' profile, which included age, sex, civil status, socioeconomic status, highest educational attainment, existing occupation, and the classification as ROMTTAC scholar-graduates. The second part was designed to draw information on the status of scholar-graduates in terms of TESDA specialization/s and competency assessment and certification/s. The third part consisted of the employment outcomes of scholar-graduates in terms of employment status and performance. The performance was measured through a twenty-five-item questionnaire using the Likert scale.

The questionnaire in each initial stage was presented to the panel of experts for validation of the survey and later distributed for reliability testing. The researcher tapped the expertise of the adviser and professors from the graduate school program of Divine Word College of San Jose. Upon validation, the researcher began the formulation of the final copy of the questionnaire, considering all the suggestions.

The researcher-made questionnaire in the form of a questionnaire underwent inter-item reliability using the test-retest method. Thirty respondents were asked to answer the twenty-five (25) items about their level of performance in the workplace. An interval of one week was allotted before the second test was administered to the

same group of respondents. The reliability analysis was done using the Cronbach's Alpha measure, which was computed based on the standardized items. The table below shows the result of the reliability analysis.

Table 1

Reliability Analysis Results

Items	Reliability Coefficient	Interpretation
Performance in the workplace	0.987	Very High Reliability

The result discloses a very high reliability of the items in the instrument as evidenced by the large coefficient of 0.987. The questionnaire was then administered to the final set of respondents.

Data Gathering Procedure - The researcher used a hybrid approach, combining face-to-face and online surveys via printed forms and Google Forms to accommodate respondents' locations and ensure safety. Google Forms, a cost-free online survey tool, facilitated the transition from physical to digital questionnaires. Necessary permits were obtained from the head of ROMTTAC, and the scholar-graduates' list was acquired from the scholarship focal while preparing survey instruments. Respondents were informed about the study's nature, data privacy, and confidentiality in compliance with Section 8 of Republic Act 10173 (Data Privacy Act of 2012), with informed consent secured before data collection. Surveys for 2019–2021 respondents were distributed and retrieved over three months through social media (Facebook, Twitter, and Instagram) and face-to-face interactions. Based on a panel member's suggestion, 2022 graduates were included, resulting in additional data collection for two weeks.

Statistical Treatment of the Data - The study employed descriptive-correlational statistics to analyze the employment outcomes of scholar-graduates from Rizal Occidental Mindoro TESDA Training and Accreditation Center (ROMTTAC). Frequency, percentage, and weighted mean computation were used to describe respondents' profiles, TESDA specializations, competency assessments, certifications, and employment outcomes, including employment status and performance. To assess scholar-graduates' performance, a 5-point Likert-type scale was applied, with mean scores interpreted as follows: 4.50–5.00 (very high), 3.50–4.49 (high), 2.50–3.49 (moderate), 1.50–2.49 (low), and 1.00–1.49 (very low). Multiple stepwise regression was used to identify significant predictor variables by systematically adding or removing them based on statistical criteria, refining models related to scholar-graduates' performance and employment outcomes. Additionally, Partial Least Squares (PLS-SEM) was applied to test hypotheses and inferential probabilities. For data processing, SPSS version 26 was utilized for descriptive statistics (frequency, percentage, and weighted mean). In contrast, WarpPLS version 7.0 was used for SEM-PLS analysis to ensure accurate and reliable statistical interpretations.

Ethical Considerations - Ethical considerations were upheld to protect the rights and privacy of all participants. The researcher ensured that respondents were treated respectfully, and no personal information was collected without explicit consent. To maintain privacy and confidentiality, all data remained untraceable to individuals, and respondents' identities were kept anonymous, with the gathered information used solely for research purposes. Informed consent was obtained through a comprehensive consent letter attached to the survey questionnaires, outlining the study's objectives and participant expectations. Respondents confirmed their voluntary participation and understanding of the study's implications before providing any information.

3. Results and Discussions

The profile distribution of ROMTTAC scholar-graduates in terms of age and sex indicates that the majority are young adults aged 17-32 (61%) and predominantly male (70.4%). This aligns with Cuadra et al. (2019), who found that younger graduates tend to adapt more quickly to evolving industry demands. Similarly, the Philippine Statistics Authority (2020) reported that over 60% of individuals aged 15 and older actively participate in the workforce. CHED (2022) also highlights that scholarship programs are primarily accessed by individuals in the early stages of their careers, further supporting this study's finding that most ROMTTAC scholar-graduates belong

to the 17–32 age group. The high percentage of male enrollees reflects TESDA’s (2020) report, which states that vocational programs often attract more men due to societal norms favoring them in technical fields. Similarly, Illo (2016) highlights gender disparities in vocational training, attributing them to societal expectations regarding labor roles. Professions such as masonry and driving, for instance, tend to attract more male enrollees due to cultural norms associating these occupations with men (Rodriguez, 2025). In terms of civil status, the majority of the scholar-graduates are single, comprising 59.3% (198 respondents), followed by married individuals at 38.6% (129 respondents). A small percentage, 2.1% (7 respondents), are widowed. The high proportion of single scholar-graduates suggests that most are younger individuals who have not yet married, a trend supported by the Philippine Statistics Authority (PSA, 2020), which states that single individuals tend to have higher labor force participation due to fewer family obligations. However, the significant presence of married scholar-graduates indicates that educational opportunities are also being accessed by individuals with family responsibilities seeking to improve their employability (Asian Development Bank, 2021).

In terms of socio-economic status, more than half of the respondents (50.3%) earn below P10,000 monthly, indicating that ROMTTAC scholarships largely benefit individuals from low-income backgrounds. This finding is consistent with the Philippine Institute for Development Studies (PIDS, 2024), which highlights that government-subsidized vocational programs primarily target financially disadvantaged sectors. Regarding highest educational attainment, 52.1% of graduates hold a college degree. This supports Ignacio and Tabu (2018), who noted that many individuals with degrees pursue technical and vocational education and training (TVET) to enhance employability and acquire specialized skills. Occupation-wise, a significant number of graduates (23.7%) are engaged in farming. This reflects TESDA (2021) data on the role of vocational education in boosting agricultural employment. Furthermore, the diverse classifications of scholars indicate the program’s inclusivity, supporting ADB’s (2021) claim that TVET serves as an avenue for economic mobility across various demographics.

Table 2

Profile Distribution of ROMTTAC Scholar-Graduates by Age, Sex, Civil Status, Socio-Economic Status, Highest Educational Attainment, Existing Occupation, and Classification as ROMTTAC Scholar-Graduate (n=334)

Age	Frequency	Percent
17-24	112	33.5
25-32	92	27.5
33-40	52	15.6
41-48	47	14.1
49-56	26	7.8
57-64	5	1.5
Total	334	100.0
Sex	Frequency	Percent
Male	235	70.4
Female	99	29.6
Total	334	100.0
Civil Status	Frequency	Percent
Single	198	59.3
Married	129	38.6
Widow	7	2.1
Total	334	100.0
Monthly Income	Frequency	Percent
Below P5,000	14	4.2
P5,000-P9,999	168	50.3
P10,000-P14,999	44	13.2
P15,000-P19,999	39	11.7
P20,000-P24,999	10	3.0
P25,000-P29,000	22	6.6
P30,000 and above	37	11.1
Total	334	100.0

Educational Attainment	Frequency	Percent
Elementary	26	7.8
Junior High School	96	28.7
Senior High School	37	11.1
College/Bachelor's Degree	174	52.1
Master's Degree	1	.3
Total	334	100.0
Occupation	Frequency	Percent
Government Employee	35	10.5
Farmer	79	23.7
Teacher/Tutor	19	5.7
Driver	13	3.9
Mechanic	15	4.5
Laborer	13	3.9
Food Service Related	9	2.7
Mason	7	2.1
Trainer	17	5.1
Facilitator	5	1.5
Vendor	8	2.4
Operator	11	3.3
Business Owner	6	1.8
Sales related	10	3.0
Agriculture Related	11	3.3
BHW	10	3.0
Construction Related	7	2.1
Manager	1	.3
Office Related	26	7.8
Security Personnel	9	2.7
Health Services Related	3	.9
Seaman	2	.6
Government-Elected Officer	2	.6
House helper/Delivery Rider	4	1.2
Cooperative Related	4	1.2
Firefighter	2	.6
Others	6	1.8
Total	334	100
Classification as ROMTTAC Scholar-Graduates	Frequency	Percent
4Ps Beneficiary	25	7.5
Displaced Worker	3	.9
Industry Workers	25	7.5
Out-of-School Youth	13	3.9
TESDA Alumni	38	11.4
Victim of Natural Disaster & Calamities	13	3.9
Agrarian Reform Beneficiary	4	1.2
Farmers & Fishermen	113	33.8
OFW Dependent	2	.6
Returning/Repatriated OFW	3	.9
TVET Trainers	4	1.2
Balik Probinsya	1	.3
Indigenous People & Cultural Communities	5	1.5
RCEF-RESP	40	12.3
Student	11	3.3
Uniformed Personnel	34	10.2
Total	334	100

Table 3 presents the TESDA specialization status of ROMTTAC scholar-graduates, highlighting various technical and vocational skills acquired by the scholars. The most common specialization is driving NCII, with 95 scholars (28.4%), followed by Masonry NCII (17.7%), which suggests a strong emphasis on construction and transportation-related skills. Other notable specializations include Produce Organic Concoctions and Extracts (9.0%), Food Processing NCII (5.4%), Contract Tracing Level II (5.7%), and TM Level I (8.4%), indicating that some scholars are engaged in agriculture, food processing, healthcare, and education-related fields. The data suggests a high demand for construction and driving-related jobs, which aligns with industry needs. According to TESDA (2021), construction and transportation remain among the most sought-after skills due to the country's

infrastructure development projects. Additionally, the presence of agricultural and food processing specializations, such as Organic Agriculture Production NCII and Process Smoked Fish and Salted Ereflectects, reflects a focus on agribusiness and food sustainability. The Asian Development Bank (2021) highlighted that TVET training in agriculture significantly enhances employment prospects in rural areas. The inclusion of Contract Tracing Level II implies that some scholars were trained for health and safety roles, possibly in response to the COVID-19 pandemic.

A study by TESDA (2022) confirmed that specialized health training programs, such as contact tracing and caregiving, played a crucial role in workforce preparedness during the pandemic. While construction, transportation, and agriculture-related fields dominate the list, specialized skills such as meat processing, bread making, and solar night light and post lamp assembly have lower enrollment, which may indicate limited job opportunities or lower demand in certain regions. According to Epetia & Villena (2023), the demand for technical skills varies by locality, with urban areas requiring more service-related skills and rural areas focusing on agriculture and construction. Overall, the TESDA specialization data reveal that ROMTTAC scholars are equipped with skills tailored to job market demands, particularly in construction, transportation, agriculture, and food processing, ensuring employability in relevant industries. These findings align with national employment trends, where TESDA programs have been shown to significantly improve labor market integration and workforce readiness.

Table 3

Status of ROMTTAC Scholar-Graduates in Terms of TESDA Specialization

TESDA Specialization	Frequency	Percent
Driving NCII	95	28.4
Theoretical Driving Course	7	2.1
Organic Agriculture Production NCII	59	17.7
Masonry NCI	18	5.4
Masonry NCII	9	2.7
FFS	12	3.6
RMO NCII	28	8.4
TM Level I	19	5.7
Contract Tracing Level II	6	1.8
Solar Night Light & Post Lamp Assembly	3	.9
Process Food by Sugar Concentration	3	.9
Produce Organic Concoctions and Extracts	30	9.0
Food Processing NCII	18	5.4
Meat Processing	8	2.4
Process Smoked Fish and Salted Egg	7	2.1
Bread-Making Process	5	1.5
Diploma Agricultural Technology	7	2.1
Total	334	100

Table 4

Status of ROMTTAC Scholar-Graduates in Terms of Competency Assessment and Certification

Competency Assessment and Certification	Frequency	Percent
Certificate of Competency	75	22.5
National Certificate I	37	11.1
National Certificate II	222	66.5
Total	334	100

Table 4 presents the status of ROMTTAC scholar-graduates in terms of competency assessment and certification. The majority of graduates, 222 individuals (66.5%), obtained a National Certificate II (NCII), indicating a high level of technical competency and qualification for employment in their respective fields. Additionally, 75 graduates (22.5%) received a Certificate of Competency (COC), while 37 scholars (11.1%) acquired a National Certificate I (NCI). This distribution reflects the effectiveness of TESDA's structured certification framework in assessing technical proficiency. The high percentage of scholars with NCII suggests that most graduates have achieved an advanced level of technical proficiency, making them more competitive in

the job market. According to TESDA (2021), NCII holders are more likely to secure employment in technical fields, as this level of certification qualifies individuals for skilled positions requiring independent work. The presence of NCI and COC holders indicates that some scholars are still in the process of upskilling or specializing in specific areas, which aligns with the competency-based education approach of the Philippine TVET system. TESDA's Competency Assessment and Certification (CAC) system ensures that graduates meet workplace standards through rigorous assessment methods such as practical demonstrations, oral questioning, and written exams (Budhrani et al., 2018). Furthermore, TESDA (2023) has implemented initiatives to make certification more accessible and responsive to industry demands, supporting scholars in achieving nationally recognized qualifications. Overall, the data highlight the effectiveness of the ROMTTAC training programs in equipping scholars with nationally recognized certifications, thereby enhancing their employability and career prospects. This aligns with findings by Garcia (2023), who emphasized that obtaining TESDA certifications significantly improves workforce integration and job security.

Table 5*Outcomes of ROMTTAC Scholar-Graduates as to Employment Status*

Employment Status	Frequency	Percent
Casual	13	3.9
Part-time	108	32.3
Full-time	169	50.6
Self-Employed	144	13.2
Total	334	100

Table 5 presents the employment outcomes of ROMTTAC scholar-graduates based on their employment status. The majority of the graduates, 169 individuals (50.6%), are employed in full-time positions, indicating that more than half have secured stable and long-term employment. Additionally, 108 graduates (32.3%) are engaged in part-time work, which may suggest flexibility in employment opportunities or ongoing skill development. TESDA (2021) reported that TVET graduates experience higher employability rates due to their practical skills, making them competitive in the workforce. Meanwhile, 44 graduates (13.2%) have chosen self-employment, highlighting entrepreneurial initiatives and the ability to create independent income sources. Studies show that self-employment among TVET graduates is increasing, as technical skills enable individuals to establish small businesses and alternative livelihood opportunities (Asian Development Bank, 2021). Lastly, a small portion, 13 graduates (3.9%), are employed on a casual basis, which could indicate temporary or project-based job arrangements. The data suggest relatively positive employment outcomes, with a significant number securing full-time or part-time work and some pursuing self-employment ventures. Research by Vandenberg & Laranjo (2020) found that TVET graduates generally have higher employment rates and earnings than those without technical training. Furthermore, a study by Abing & Conchada (2023) indicated that graduates of alternative learning systems who underwent TVET training had a 26% higher likelihood of securing employment, reinforcing the effectiveness of TESDA programs in improving job prospects. Overall, the employment outcomes of ROMTTAC scholar-graduates align with national trends, demonstrating that TVET programs contribute significantly to workforce integration, skill development, and economic empowerment.

Table 6*Mean of Performance of ROMTTAC Scholar-Graduates*

INDICATORS (PERFORMANCE)	Weighted Mean	Verbal Description
1. I possess the technical skills and knowledge needed for the job.	4.41	High
2. I understand and speak the language in which business is conducted.	4.42	High
3. I am capable of communicating in speech and writing.	4.37	High
4. I observe protocols in reporting using standard operating procedures.	4.57	Very High
5. I have the ability to solve work-related problems.	4.38	High
6. I listen attentively to instructions and follow orders as instructed.	4.60	Very High

7. I have the ability to learn new skills and knowledge on the job.	4.49	Very High
8. I can obtain and convey workplace information.	4.50	Very High
9. I easily adapt to the existing technology relevant to the enterprise.	4.36	High
10. I am enthusiastic about learning skills and the latest advancements related to the job.	4.45	High
11. I work well in a group to achieve a goal.	4.59	Very High
12. I can produce outputs on time while working with little supervision.	4.44	High
13. I can easily adapt to the work environment.	4.46	High
14. I have the ability to handle stress and pressure on the job.	4.43	High
15. I accept other jobs other than those specified in the job description.	4.42	High
16. I find my workplace an interesting environment where I can grow personally and professionally with the support of my employer.	4.42	High
17. I find my workplace an interesting environment where I can grow personally and professionally with the support of my employer.	4.50	Very High
18. I take my work very seriously, as shown in the optimum amount of time it takes to finish a task.	4.46	High
19. I make sure that the quality of my work is always on point to avoid unnecessary problems.	4.48	High
20. I embody excellent work ethics, such as taking initiative and meeting deadlines.	4.47	High
21. I maintain a good reputation among my co-workers and employers.	4.54	Very High
22. I maintain level-headed behavior in tense situations.	4.47	High
23. I receive fair compensation for the amount of work I complete.	4.44	High
24. I always observe punctuality at work.	4.48	High
25. I challenge myself to accomplish the task for the day on a frequent basis.	4.55	Very High
Composite Mean	4.47	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Table 6 presents the mean performance of ROMTTAC scholar-graduates, with a composite mean of 4.47, which falls under the "high" interpretation category. This suggests that, on average, the scholar-graduates demonstrate strong performance across various workplace competencies. These findings align with the TVET Journal (2023), which highlights the role of TVET in addressing skill gaps and ensuring graduates are well-prepared for employment. Among the performance indicators, the highest-rated competency is "listening attentively to instructions and following orders" (4.60), followed closely by "working well in a group to achieve a goal" (4.59) and "observing protocols in reporting using standard operating procedures" (4.57). These results highlight the scholar-graduates' strong discipline, teamwork, and adherence to workplace guidelines, which are crucial for productivity and efficiency in professional settings. This aligns with TESDA's 2022 Study on Employment of TVET Graduates (SETG), which found that teamwork and compliance with protocols are among the top-rated skills by employers, contributing to high employment rates among TVET graduates. Meanwhile, the lowest-rated competency is "easily adapting to the existing technology relevant to the enterprise" (4.36), though it still falls under the "high" category. This suggests that while the graduates perform well in technology adaptation, there may be room for improvement in digital literacy and technical training. The Asian Development Bank (2021) emphasized that TVET programs must continuously evolve to meet Industry 4.0 demands, particularly in digital literacy and technological proficiency. Given the increasing integration of automation and digital tools in various industries, strengthening technical upskilling initiatives could further enhance the employability of ROMTTAC scholar-graduates. These findings suggest that while ROMTTAC scholar-graduates excel in teamwork, discipline, and compliance with workplace standards, efforts to enhance digital adaptability should be considered to keep pace with industry partners, and integrating advanced technical training modules may help address this area for improvement.

Table 7*Path coefficients, p-value for Hypothesis Testing*

Path	Beta Coefficients	(β)	p-values*	Interpretation
H01: Profile → Status as ROMTTAC Scholar-Graduates				
PROFILE→SPEC	-0.401		<0.001	Highly Significant
PROFILE→CERTIF	0.272		<0.001	Highly Significant
H02: Profile → Employment Outcomes				
PROFILE→STATUS	0.318		<0.001	Highly Significant
PROFILE→PERF	0.067		<0.117	Not Significant
H03: Status as ROMTTAC Scholar-Graduates → Employment Outcomes				
SPEC→STATUS	0.153		0.003	Significant
SPEC→PERF	-0.146		0.004	Significant
CERTIF→STATUS	0.069		0.112	Not Significant
CERTIF→PERF	-0.126		0.012	Significant

Legend: p < 0.001 Highly Significant; p < 0.05 Significant

The statistical analysis of path coefficients demonstrates a significant relationship between the demographic profile and the classification of ROMTTAC scholar-graduates. As seen in Table 7, the path coefficients indicate that profile significantly predicts specialization ($\beta = -0.401$, $p < 0.001$) and certification ($\beta = 0.272$, $p < 0.001$). These findings highlight the crucial role of demographic factors in determining scholar-graduate status, aligning with Orbeta & Corpus (2024), who emphasized that background characteristics influence vocational choices and credential acquisition. The results also indicate an inverse relationship between profile and specialization ($\beta = -0.401$), suggesting that as demographic diversity increases, specialization choices may shift. According to the Asian Development Bank (2021), access to TVET programs is influenced by socio-economic factors, personal motivations, and labor market demands, which could explain the varying specialization choices among scholar-graduates. Both relationships are highly significant, highlighting the crucial role of demographic factors in determining scholar-graduate status. These findings provide strong statistical evidence to reject the null hypothesis, confirming that the scholar-graduates' profile has an influence on their classification within the ROMTTAC scholarship program.

Moreover, Table 7 also presents the path coefficients for the relationship between scholar-graduates' profiles and employment outcomes. The results indicate that profile significantly predicts employment status ($\beta=0.318$, $p<0.001$), suggesting that demographic factors, including age, socio-economic background, and educational attainment, influence the likelihood of securing employment. This is consistent with findings from TESDA (2021), which reported that employment rates among TVET graduates are shaped by personal and educational background. However, the relationship between profile and performance ($\beta=0.067$) $p=0.117$ is not significant, indicating that while demographic factors influence employment status, they do not necessarily determine workplace performance. This suggests that workplace competencies are more influenced by technical training, work experience, and skill application rather than demographic characteristics (Epetia & Villena, 2023) emphasize that graduates with hands-on experience demonstrate better performance than those with theoretical knowledge alone, reinforcing the importance of practical training in vocational education. The statistical analysis reveals that while demographic characteristics contribute to employment acquisition, skill-based factors such as specialization and industry experience play a greater role in actual workplace performance. These findings align with the OECD (2018), which states that certifications and training outcomes, rather than personal background, are stronger predictors of job performance in technical fields.

In addition to the third hypothesis, the path coefficients for the relationship between specialization, certification, and employment outcomes. The results indicate that specialization significantly predicts employment status ($\beta=0.153$), supporting the idea that specialized training plays a crucial role in securing jobs. Vandenberg & Laranjo (2020) found that TVET graduates with industry-specific training have higher employability rates, reinforcing this finding. Furthermore, specialization is significantly associated with performance ($\beta=-0.146$,

indicating that while specialization improves job attainment, its direct effect on performance varies. Abing & Conchada (2023) suggested that while technical training enhances employment opportunities, job performance depends on workplace experience and further skill refinement. Certification significantly affects performance ($\beta = -0.126$, $p = 0.012$), implying that certification levels contribute to variations in work efficiency. However, certification does not have a significant effect on employment status ($\beta=0.069$, suggesting that possessing a certification alone may not directly influence job attainment. According to TESDA (2023), employer hiring decisions are influenced by a combination of experience, practical skills, and certification. This aligns with the OECD (2018), which states that while TVET certification enhances employability, industry-specific work experience remains a key determinant of career success. The results underscore the importance of both specialization and certification in shaping employment outcomes. Specialization plays a more prominent role in securing jobs, while both specialization and certification impact job performance. These findings reinforce the value of competency-based training in TVET programs, emphasizing the need for continuous skills development and industry alignment.

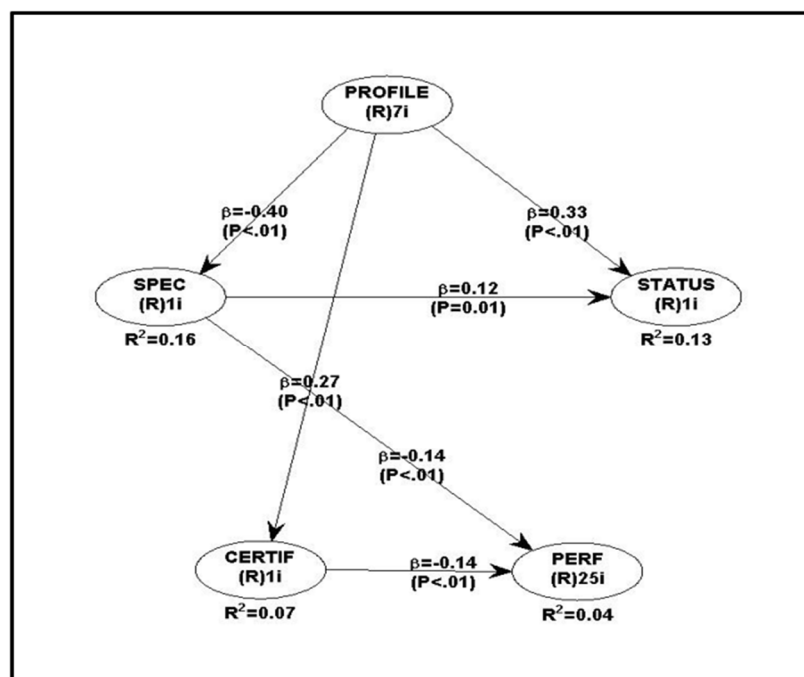


Figure 1. Emerging Model

Based on the result of the structural model, a new model emerges showing no direct links between profile and performance and between certification and status. The emerging model retains low to moderate correlation coefficients (β), signifying direct connections. The contributions of profile to specialization, certification, and employment status accounts are 16% ($R^2=0.16$), 7% ($R^2=0.07$), and 13% ($R^2=0.13$), respectively. The combined contribution of profile and specialization to employment status accounts for 13% ($R^2=0.13$). Additionally, the respondents' level of performance with $R^2=0.04$ or 4% indicates the combined contribution of specialization and certification. These findings align with studies emphasizing that TVET employment outcomes are influenced by a mix of specialization, certification, and work experience rather than demographic factors alone. The Asian Development Bank (2021) noted that practical training and industry collaboration are key determinants of graduate employability. Similarly, OECD (2018) emphasizes that technical skill mastery and competency-based certification have a greater impact on job retention and career growth than background factors alone. Except for the p-value of 0.01, all the remaining paths recorded $p<0.01$, indicating that they are considered highly significant. These results reinforce the importance of specialization and certification in enhancing employment status and job performance, demonstrating the continued relevance of TVET programs in equipping graduates with industry-aligned skills.

Table 8*Standardized Estimates of the Path in the Emerging Model*

Hypotheses	Standardized Estimates (β)	<i>p</i> -value*	Standard Error	Effect Coefficient*	Effect Size
Ho1: Profile → Status as ROMTTAC Scholar-Graduates					
PROFILE→SPEC	-0.401	<0.001	0.053	0.161	Medium
PROFILE→CERTIF	0.272	<0.001	0.054	0.074	Small
Ho2: Profile → Employment Outcomes					
PROFILE→STATUS	0.326	<0.001	0.054	0.109	Small
Ho3: Status as ROMTTAC Scholar-Graduates → Employment Outcomes					
SPEC→STATUS	0.125	0.013	0.056	0.018	Small
SPEC→PERF	-0.142	0.005	0.056	0.020	Small
CERTIF→PERF	-0.135	0.008	0.056	0.018	Small

*Significant at $p < 0.05$

** Effect size coefficient: 0.02 – small, 0.15 – medium, 0.30 – large

Table 8 presents the standardized estimates of the path coefficients within the emerging model, which refines the relationships between profile, specialization, certification, and employment outcomes. The results indicate that profile has a medium effect on specialization ($\beta = -0.401$, $R^2 = 0.16$), confirming its significant influence on specialization choices. However, its effect on certification ($\beta = 0.272$, $R^2 = 0.07$) and employment status ($\beta = 0.326$, $R^2 = 0.109$) is small, though still statistically significant. This aligns with findings by TESDA (2021), which highlighted that TVET enrollees' specialization choices are shaped by demographic factors such as socio-economic background and industry needs.

Additionally, the specialization's effect on employment status ($\beta = 0.125$, $R^2 = 0.018$) and performance ($\beta = -0.142$, $R^2 = 0.020$) is small, implying that while specialization contributes to job placement and workplace performance, its impact is limited. Talento et al. (2022) found that TVET graduates with industry-specific training exhibit higher employability, though the direct link between specialization and performance varies depending on work experience and sector demands. Certification similarly has a small but significant effect on performance ($\beta = -0.135$, $R^2 = 0.018$), reinforcing the idea that while certification plays a role in job performance, it does not directly determine employment status. Garcia (2023) emphasized that while certifications are valuable for demonstrating competency, practical experience remains the key determinant of job retention and career advancement.

These findings support previous studies emphasizing that TVET employment outcomes are shaped by a combination of skill acquisition, certification, and work experience rather than demographic factors alone. The Asian Development Bank (2021) highlights that practical training and industry exposure are essential in ensuring graduate employability. Moreover, a study by Budhrani et al. (2018) underscores that competency-based education and certification alone are insufficient; instead, continuous skill enhancement through workplace immersion plays a crucial role in long-term career success. Low standard errors (ranging from 0.053 to 0.056) further confirm the accuracy and reliability of these estimates, ensuring that conclusions drawn about the population hold statistical significance. The results lead to the rejection of the three null hypotheses, establishing that the profile of ROMTTAC scholar-graduates significantly influences their employment status and employment outcomes. Additionally, their status as scholar-graduates also plays a vital role in shaping their employment pathways, highlighting the value of structured vocational training and certification programs in workforce development.

Table 9*Proposed Enhancements to Improve the ROMTTAC Program*

Program/Project	Objectives	Strategies/Activities	Persons Involved	Time Frame	Success Indicator
Age-Specific Training Modules	To provide training programs suited to different age groups to enhance employability and career readiness.	Develop modular training programs for scholar-graduates aged 17–32, including career coaching and employment readiness workshops.	School Administrators, Trainers, Industry Experts	Year-round implementation	Higher employment rate among graduates

Program/ Project	Objectives	Strategies/ Activities	Persons Involved	Time Frame	Success Indicator
Gender-Inclusive Programs	To promote gender equality in technical and vocational education.	Conduct gender sensitivity training, provide scholarships for women in male-dominated fields, introduce specialized training programs tailored for women in entrepreneurship, leadership, STEM fields, and skilled trades. Establish mentorship programs connecting female trainees with successful women professionals.	NGOs, Local Government Units (LGUs), TESDA, Private Companies, Women's Advocacy Groups, Industry Leaders	Bi-annual training sessions	Increased female participation in technical programs, more women securing leadership roles and employment
Socio-Economic Support Integration	To equip students with financial literacy and livelihood skills.	Conduct financial literacy seminars and entrepreneurship training, and provide access to microfinancing.	Financial Advisors, Community Leaders, Business Mentors	Quarterly workshops	Improved financial independence and business startups among students
Expansion of Specializations	To align training programs with industry demands.	Introduce new TESDA courses in digital marketing, renewable energy, and e-commerce.	TESDA, Industry Experts, Trainers	Annually	Increased enrollment in new specialization courses
Strengthening Employment Linkages	To enhance job placement opportunities for graduates.	Partner with private companies for internships, apprenticeships, and direct hiring. Collaborate with DTI and DOST to provide funding support for business ventures. Organize job fairs.	Career Counselors, HR Managers, Employers	Semi-annual job fairs	Higher job placement rate
Performance Enhancement Initiatives	To improve student competencies through assessments and mentorship.	Conduct competency based assessments, soft skills training, and mentorship programs.	Trainers, Alumni Mentors, Industry Partners	Year-round	Higher certification pass rate and improved job performance of graduates
Financing Skills Development	To equip students with financial management skills for career and entrepreneur-ship success.	Conduct workshops on budgeting, investment, and funding opportunities. Provide access to financial planning resources.	Financial Experts, Business Mentors, Educators	Quarterly	Increased financial literacy and improved financial decision-making among students
Marketing Skills Training	To develop students' ability to market products, services, and personal branding for employment and business success.	Provide training in digital marketing, branding, social media management, and business promotion techniques.	Marketing Professionals, Business Leaders, Trainers	Bi-annual training sessions	Improved employability and entrepreneurial success of students

Several studies emphasize the importance of targeted strategies in improving TVET outcomes. According to UNESCO (2022), age-specific training modules enhance employability by addressing skill gaps in younger and older populations. Gender-inclusive programs are crucial for promoting equal opportunities in technical education (World Bank, 2021), particularly in fields where women are underrepresented. Research by the Asian Development Bank (2020) highlights the significance of socio-economic support integration, including financial literacy and entrepreneurship training, in preparing TVET graduates for long-term career success.

Expanding specializations in response to labor market demands has been shown to improve graduate employability (ILO, 2023). Strengthening employment linkages through partnerships with industries and apprenticeship programs significantly increases job placement rates (TESDA, 2021). Furthermore, performance

enhancement initiatives, such as competency-based assessments and mentorship programs, help graduates develop the necessary skills for career success (Garcia, 2023). Internationally, TVET systems have demonstrated success in enhancing workforce readiness. Germany's dual training system effectively integrates vocational education with industry experience, leading to high employment rates (OECD, 2019). Switzerland's apprenticeship-based model ensures that over 70% of students secure employment immediately after graduation (European Commission, 2020). South Korea has successfully aligned TVET with advanced technology sectors, preparing graduates for global competitiveness (ADB, 2021). Australia's TAFE system fosters entrepreneurship and self-employment through specialized skills training (ILO, 2023). These global success stories highlight the potential for TVET programs in the Philippines to become a key driver of financial independence and economic growth. By strengthening industry linkages, expanding specializations, and promoting entrepreneurship, the Philippines can shift the perception of TVET as an alternative to office jobs and position it as a direct pathway to sustainable careers, self-employment, and economic resilience. With strategic partnerships, upskilling initiatives, and financial literacy programs, TVET graduates in the Philippines can break away from job-seeking limitations and become financially stable professionals, business owners, and industry leaders, contributing significantly to national development (TESDA, 2023; UNESCO, 2022; World Bank, 2021).

4. Conclusions

Based on the findings, ROMTTAC scholar-graduates primarily belong to the early career-age group, with a significant gender disparity in scholarship accessibility. Most beneficiaries are young, likely in the early stages of their careers and have attained a college or bachelor's degree. A substantial portion of scholar-graduates work in agriculture, with farmers and fishermen representing the largest group. Driving and masonry are the most common TESDA specializations, highlighting the importance of transportation and construction skills. In terms of employment outcomes, most scholar-graduates are employed full-time and demonstrate strong workplace performance, with a composite mean of 4.47, categorized as high. There is a highly significant relationship between scholar-graduates' profiles and their status concerning TESDA specialization and competency assessment and certification. Furthermore, a significant relationship exists between the scholar-graduates' status and their specialization and performance and certification and performance, though certification does not significantly impact employment status, indicating that job experience and work environment may play a more critical role in job performance. Similarly, specialization is significantly related to employment status, performance, and certification, but certification does not directly influence employment, suggesting that industry demand and work experience are more decisive factors in securing jobs. If properly implemented, the proposed enhancements could improve the effectiveness of the ROMTTAC Program in facilitating sustainable employment and career growth for scholar-graduates.

Recommendations - In light of the conclusions derived from significant findings, the following recommendations are proposed: ROMTTAC should encourage gender-inclusive participation in scholarship programs by implementing targeted initiatives such as scholarship grants for underrepresented groups, gender-awareness campaigns, and training programs in non-traditional fields to foster inclusivity and equal opportunities. Strengthening career support and employment linkages through partnerships with industries, government agencies, and private companies can enhance job placement rates. Expanding technical and vocational training offerings to include emerging industries like digital technology, renewable energy, and e-commerce will improve graduates' employability. Continuous upskilling and certification support should be provided through ongoing training, advanced certification, and refresher courses to maximize workplace performance and job retention. Supporting entrepreneurial and self-employment initiatives by facilitating access to financial assistance from agencies like DTI and DOST, along with business development training, will help scholar-graduates establish sustainable enterprises. Conducting regular program assessments and graduate tracer studies through surveys and industry feedback will ensure continuous program improvement. Strengthening career guidance and counseling services by offering mentorship programs and career counseling will help graduates align their skills with industry demands. Lastly, further research on TESDA programs should be conducted to refine the ROMTTAC program, ensuring its

long-term effectiveness in facilitating sustainable employment and career growth for scholar-graduates.

5. References

- Abing, M. J. J., & Conchada, M. I. P. (2023). The influence of vocational education and training on employment prospects of the ALS graduates: An impact evaluation study. <https://www.dlsu.edu.ph/wpcontent/uploads/pdf/conferences/research-congress-proceedings/2023/SEP-03.pdf>
- Asian Development Bank. (2021, March). Technical and vocational education and training in the Philippines in the age of Industry 4.0. <https://www.adb.org/sites/default/files/publication/679041/tvet-philippines-age-industry.pdf>.
- Asian Development Bank Institute. (2020). *Policy maker e-training: Financial inclusion in Asia and the Pacific*. Asian Development Bank. <https://www.adb.org/news/events/policy-maker-e-training-financial-inclusion-asia-pacific> on March 1, 2025
- Asian Development Bank (2021). Technical and Vocational Education and Training in the Philippines in the Age of Industry 4.0. www.adb.org
- Asian Development Bank. (2021). Innovations in technical and vocational education and training: Global best practices and lessons for developing economies. Asian Development Bank. <https://www.adb.org/>
- Budhrani, K. S., D'Amico, M. M., & Espiritu, J. L. D. (2018, March). Developing a skilled workforce through technical and vocational education and training in the Philippines. <https://www.researchgate.net/publication/324888548>
- Commission on Higher Education. (2022). Scholarship programs and higher education access in the Philippines. <https://www.ched.gov.ph/scholarship-report-2022>
- Cuadra, L. J., Laure, M. R. K. L., & Gonzaga, G. L. (2019, August). The use of tracer study in improving undergraduate programs in the university. <https://www.researchgate.net/publication/335429907> on May 6, 2022.
- Epetia, M. C. F., & Villena, I. C. F. (2023, May). Responding to the changing needs of the labor market: Overview of the country's TVET. Commission on Higher Education. <https://edcom2.gov.ph/media/2023/06/Pids-Policy-Note-2023-10-TVET.pdf>.
- European Commission. (2020). Vocational education and training in Europe: Trends and challenges. *Publications Office of the European Union*. <https://ec.europa.eu/>
- Garcia, D. S. (2023, July 17). Senator wants more TVET programs with higher level of certifications. <https://thepost.net.ph/news/nation/senator-wants-more-tvet-programs-with-higher-level-of-certifications/>
- Ignacio, M. C. B., & Tabu, L. P. (2018, May 21). The TESDA Women's Center tracer study of graduates from 2014–2016. <https://twc.tesda.gov.ph/advocacy/researches/11.pdf>
- Illo, J. F. I. (2016). Gender profile of the TVET sector. [https://www.tesda.gov.ph/Uploads/File/GAD/2019/Gender%20Profile%20of%20the%20TVET%20Sector%20\(final\).pdf](https://www.tesda.gov.ph/Uploads/File/GAD/2019/Gender%20Profile%20of%20the%20TVET%20Sector%20(final).pdf)
- International Labour Organization. (2023). The future of technical and vocational education and training: Trends and innovations. *International Labour Organization*. <https://www.ilo.org/> on January 5, 2024
- Inquirer (2022). Seven million underemployed workers a cause for concern. www.newsinfo.inquirer.net
- National Economic and Development Authority MIMAROPA Region (2019). Annual Regional Economic Situationer. www.mimaropa.neda.gov.ph
- National Economic Development Authority (2022). Ph Records Lowest Unemployment Rate since the Start of the Covid-19 Pandemic. www.neda.gov.ph
- OECD Local Economic and Employment Development (LEED). (2018, January). The role of technical and vocational education and training (TVET) in fostering inclusive growth at the local level in Southeast Asia. <https://www.oecd.org/content/dam/oecd/en/publications/reports/2018/11>.
- Orbeta, A. C., Jr., & Corpus, J. P. P. (2024). Issues in Philippine TVET: Responsiveness to industry demand and

- barriers to access among disadvantaged youth.
<https://pidswebs.pids.gov.ph/CDN/document/pidsrp2403.pdf>.
- Organisation for Economic Co-operation and Development. (2019). OECD skills strategy 2019: Skills to shape a better future. *OECD Publishing*. <https://doi.org/10.1787/9789264313835-en>
- Philippine Institute for Development Studies. (2024, September 5). *Socioeconomic classes and income groups*. Freedom of Information Philippines. <https://www.foi.gov.ph/agencies/pids/socioeconomic-classes-income-groups/>
- Philippine Statistics Authority. (2020, August 7). Employment situation in January 2020
<https://psa.gov.ph/statistics/labor-force-survey/node/162867>.
- Rodriguez, L. L. (2025). Patriarchy and women's subordination in the Philippines. *CPD Journals*.
<http://cpdjournals.upd.edu.ph> on February 13, 2025
- Talento, M. S. D. P., Tandang, N. A., Rogelio, R. A. O., & Araña-Roldan, R. A. S. (2022, June). Factors influencing the employment of female graduates of technical and vocational education and training program in the Philippines. https://philjournalsci.dost.gov.ph/images/pdf/pjs_pdf/vol151no3/.
- Technical Education and Skills Development Authority. (2020). Study on the development of TVET graduates. https://www.tesda.gov.ph/Uploads/File/Researches/2020_SETG.
- Technical Education and Skills Development Authority. (2021). Study on the development of TVET graduates. https://www.tesda.gov.ph/Uploads/File/Researches/2021%20SETG%20Full%20R_eport_final.pdf.
- Technical Education and Skills Development Authority. (2022). The National Technical Education and Skills Development Plan (NTESDP) 2018–2022. https://sea-vet.net/images/seb/initiatives/appendix_file/577/ntesdpfinalwithcover-1.pdf.
- Technical Education and Skills Development Authority. (2023, October 16). Graduates, employers, very satisfied with tech-voc training. <https://www.tesda.gov.ph/Media/NewsDetail/20283>.
- TESDA (2023). 8 out of 10 Tech-Voc Graduates Got Hired, TESDA Reports. www.tesda.gov.ph on January 6, 2023.
- TVET Journal. (2023, January 23). The benefits of TVET: Why technical and vocational education and training is a smart choice. Retrieved from <https://tvetjournal.com/tvet-systems/benefits-of-tvet/>.
- UNESCO-UNEVOC International Centre (2022). Technical Education and Skills Development Authority Objectives. www.unevoc.unesco.org on March 29, 2022.
- Vandenberg, P., & Laranjo, J. (2020, October). The impact of vocational training on labor market outcomes in the Philippines. <https://www.adb.org/sites/default/files/publication/644566/ewp-621-vocational-training-labor-market-phi.pdf>.
- World Bank. (2021). Technical and vocational education and training for employment and inclusion: Key strategies for success. World Bank Group. <https://www.worldbank.org/>

Nurture vs nature: Comparative study of the culture of Mangyans in education center and Buhid tribe in San Jose, Occidental Mindoro

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Abstract

The Mangyan Education Center served as a community extension initiative of Divine Word College of San Jose, focused on offering the Mangyan people a sense of belonging, educational opportunities, and livelihood support. Conversely, the Buhid tribe represents one of the remaining Indigenous groups in the Philippines that continue to utilize their traditional syllabary. Moreover, this study employed a descriptive-comparative design to describe the profile of the MEC and Buhid tribe, including their culture in terms of valuing cultural heritages, belief systems, and livelihood, and their socio-economic maturity; and to test the significant difference and relationship between the two variables. Eighteen (18) from MEC and fifty (50) from Buhid participated in answering the 32-item researcher-made questionnaire. The findings reveal that the administrators in community extension services (CES) play an important role in achieving the goal of CES; thus, the proposed direction of the MEC can be seen as an effective measure of their socio-economic maturity, proving that their socio-economic standing is directly affected by the culture they have. The statistical result shows that there is a significant difference between the cultures of MEC and Buhid. Moreover, there is a significant relationship among

the demographic profile, culture, and socio-economic maturity of MEC; however, the profile of Buhid shows no significant effect on their socio-economic maturity, but their culture is found to be significant. This recommends that the local tourism office perpetuate the culture and traditions of Indigenous people by proactively making progressive projects that promote and preserve their cultures.

Keywords: Buhid Tribe, Mangyan Education Center (MEC), indigenous people; culture; socio-economic maturity; valuing cultural heritages

Nurture vs nature: Comparative study of the culture of Mangyans in education center and Buhid tribe in San Jose, Occidental Mindoro

1. Introduction

Mangyan was an umbrella term for the tribes residing in the provinces of Occidental Mindoro and Oriental Mindoro, collectively known as Mindoro Island (Kueh, 2022). Mangyan Education Center was a community extension program of Divine Word College of San Jose that aimed to provide Mangyans with a home, education, and livelihood. On the other hand, the Buhid tribe was one of the few Indigenous communities in the Philippines that are still using their syllabary (Clark, 2022). In comparison to the MEC Mangyans, who live in the lowlands and are exposed to the socio-economic, educational, and religious culture of the people, one can conclude or safely presume that the culture of MEC Mangyans differs from the Buhid tribe. In terms of belief systems, Buhid Mangyans, Clark (2022) believes that Manggat and his wife Sayum-ay are the first inhabitants of their ancestral domain, thus attributing their origin to them. They believe Manggat and Sayum-ay named everything in the domain, including the spirits. Meanwhile, one of the Mangyan Education Center's three goals (MEC) was to give Mangyans Christian maturity. Divine Word College of San Jose was a known Catholic school, the opposite of what was taught and passed down in the culture of Buhid Mangyans. Regarding livelihood, "kaingin" or swidden farming has always been the main source of sustenance for the Buhid tribe (The Ties That Bind: The Buhid Mangyan People, 2014). Meanwhile, in MEC, the project heads have provided a plan and source of livelihood for the Mangyans living in that community, like rabbit farming, duck farming, rice production, etc. (Iopam et al., n.d.).

This study aims to determine the difference between the cultures of the MEC and the Buhid tribe and whether the proposed direction of MEC in academic, Christian, and socio-economic maturity (Iopam et al., n.d.) is reflected in the members. The study will focus on the cultural distinction between Mangyans in the Education Center and Indigenous Mangyans, particularly the Buhid tribe. This study aims to provide a clear understanding of how Mangyans can differ if the environment were to be changed and how nurturing a community can significantly affect its natural nature.

Statement of the Problem - The researchers aimed to determine the difference in the culture of the Mangyan Education Center (MEC) Mangyans compared to Indigenous Mangyans, particularly the Buhid tribe of San Jose, Occidental Mindoro. Specifically, the researchers wanted to answer the following questions: (1) What is the demographic profile of the respondents in terms of age, sex, and highest educational attainment? (2) What is the extent of the culture of Mangyans in Education Center and Indigenous Mangyans in terms of valuing cultural heritages, belief systems, and livelihood? (3) What is the level of socio-economic maturity of Mangyans in the Education Center and Indigenous Mangyans? (4) Is there a significant difference between the culture of Mangyan in Community Extension and the Indigenous Mangyan? (5) Is the level of socio-economic maturity of Mangyans significantly affected by the demographic profile and culture of Mangyans?

Significance of the Study - The goal of the study was to determine the culture of Mangyan in Community Extension and the Buhid Tribe. This was to provide a better understanding of the cultural distinction between the two. This study aims to help individuals and institutions know the culture of Mangyan in Community Extension and the Buhid Tribe. The result and findings shall help the following: To the administration of DWCSJ, this study shall help in further improving the quality of life in the Mangyan education center and also by making the participants aware of the issues, goals, and requirements of the community. Moreover, the research results can help the Mangyan Education Center know the difference between Mangyan from Community Extension and the Buhid tribe, and they can apply this knowledge to improve the Education Center further. To educational institutions, this study could solidify its foundation on this kind of research and further develop studies to aid the communities being studied; lastly, to future researchers, this could help them understand the cultural distinction between Mangyans from Community Extensions and the Buhid tribe. This could also be a future reference if they want to

conduct the same study.

Scope and Delimitation of the Study - The main objective of this study was to determine the difference between the culture of Mangyan in Community Extension and the Buhid Tribe. This was limited only to the Mangyan in Community Extension and the Buhid Tribe; only those who were willing were allowed to answer. The culture of Mangyan in Community Extension and the Buhid Tribe was limited only to the following variables: (a) valuing cultural heritages, (b) belief system, and (c) livelihood. This study used a researcher-made questionnaire to gather data from the respondents. Moreover, this study was conducted during the school year 2024-2025.

2. Methodology

Research Design - The study utilized the descriptive-comparative method to provide a statistical analysis of data. This method could explain phenomena that were treated using mathematically based methods. In this study, the descriptive design was used to describe the demographic profile of the respondents in terms of age, sex, and highest educational attainment and to determine the extent of the culture of Mangyans in the Education Center and Indigenous Mangyans in terms of valuing cultural heritages, belief systems, and livelihood and the level of socio-economic maturity of Mangyans in the Education Center and Indigenous Mangyans. Moreover, comparative design was used to determine if there is a significant difference between the culture of Mangyan in Community Extension and the Indigenous Mangyan. Lastly, correlation analysis was used to determine if the socio-economic maturity level of Mangyans was significantly affected by their demographic profile and culture.

Respondents of the Study - The Mangyans from Bato-Ili and Community Extension were the respondents of this study. Moreover, this study used complete enumeration to include all the respondents. Thus, all of the 18 members of the Mangyan Education Center were able to answer the survey. However, out of the 200 estimated number of Buhid in the Bato-Ili Mangyan Community, only 50 were willing and able to answer the survey because of their busy schedules. However, the researchers did their best to cover the needed data.

Research Instrument - This study utilized a 32-item researcher-made questionnaire as the main instrument for gathering the necessary data. The researchers used expert validity to check the content of the instrument and determine its reliability. The experts involved in the process were four faculty members in the Senior High School department and one SVD administrator who is the director of the community extension of DWCSJ-Mangyan Education Center. The comments and suggestions from the experts were incorporated into the final copy of the instrument. Lastly, the adviser of the study also checked the reliability and validity of the questionnaire.

Data Gathering Procedure - The researchers first secured approval from the senior high school coordinator, permitting the researchers to conduct the data-gathering procedure outside the school premises. After securing a letter, the researchers submitted a letter of assistance to the Tourism Office of San Jose, and then they were recommended by the tourism head to the National Commission for Indigenous Peoples, or NCIP, for approval to conduct research in the locale. After the approval of the NCIP, the researchers provided a consent letter for the chairman of the Bato-Ili Buhid community to officially start the data gathering. In the MEC part, a letter was sent to the Office of the President of Divine Word College of San Jose and the Community Extension Director to formally allow the researchers to conduct their research in the locale. One hundred (100) validated questionnaires were printed and distributed among the respondents, and the answers were handed out personally to ensure the correctness and validity of the answers. The data gathering procedure and securing of letters and consent were done in two weeks, and all of the questionnaires were retrieved the same day it was given and were evaluated right after all of the data was gathered.

Statistical Treatment of the Data - This study utilized a researcher-made questionnaire with a four-point Likert scale to evaluate the items under the assigned indicators. Moreover, percentage distribution was used to determine the demographic profile of the respondents. In addition, a weighted mean was used to determine the extent of the culture of Mangyans and their level of socio-economic maturity. To determine the difference between the Mangyans in Community Extension and the Buhid tribe, the researchers used a one-way analysis of variance.

Lastly, to determine if the level of socio-economic maturity is significantly affected by the demographic profile and culture of Mangyan, the researchers used Pearson's r coefficient.

Ethical Considerations - All individuals who were involved in the research studies possessed moral and legal rights, making ethical considerations essential. The researcher ensured that participants were treated with respect throughout the study, safeguarding their privacy and obtaining their consent while also ensuring they felt acknowledged and not distressed. These are some of the following ethical concerns that this research ensured for the responders: firstly, the researchers guaranteed that the data remained untraceable to any individual. Furthermore, participants were informed that their identities were kept confidential and that the findings might be included in a research article for potential publication in a peer-reviewed journal. The researcher then confirmed that the study did not harm any participants and that the data was utilized appropriately. In addition, they ensured that participation in the study was completely voluntary for respondents, who could withdraw at any time. No further data was collected. The consent letter was attached to the first page of the survey, and it outlined the key aspects of the study and what participation involves. The respondents were given written consent, which allowed us to conduct a survey indicating that they understood the potential impact of the study on them.

3. Results and Discussions

The age distribution of the MEC and Buhid is shown in Table 1. In MEC, among the total of 18 respondents, 89% of them ranged from 15-24, followed by the remaining 11% who ranged from 25-34 years old. This reveals that the majority of the inhabitants in the community are 15-24 years old; this is similar to the study of Calda (2008), wherein 85% of the total population of Mangyan ranged from 15-23 years old in the Divine Word College of Calapan (DWCC) Community Engagement Services (CES). However, in the Buhid tribe, leading the list with 28% are ranges from 25-34 years old, followed closely by 20% by ranges from 15-24. In a tie, the ranges 35-44 and 45-54 had 18% respectively; it was then followed by 14% from ranges 55 and above and lastly by 14 and below with only 2%. In the study of Lumbo (2018), the leading respondents, 45%, were also ages between 25 and 39 years old, proving the prominence of this age group in the community.

In sex distribution, MEC has 18 respondents, and 67% of those were found to be male, while the remaining 6, or 33%, were female. Moreover, it also shows the profile of the Buhid in terms of sex, and it was also dominated by males with 84% compared to females with only 16%. This means that there was an imbalance in their ratio; this was proven by the report of the Philippines Statistics Authority (PSA) MIMAROPA Region (2024), wherein they discovered that for every 105 males in indigenous communities, there are only 100 females, meaning that the sex distribution of inhabitants in MEC is also directly affected by Indigenous Mangyans sex distribution. However, patriarchal views can also be the case due to the presence of labor-intensive work in MEC and Buhid. Additionally, because of Spanish colonization, the agricultural participation of women was greatly affected, hence causing the decline in the numbers of these actors (Camaya & Tamayo, 2018). Lastly, for the highest educational attainment, 100% of the inhabitants in MEC were found to be in college or to have finished college; this reflects the proposed direction of MEC in academic maturity (Iopam et al., n.d.).

Table 1

Frequency and Percent Distribution of MECs and Buhids' Profile by Age (in years), Sex & Highest Educational Attainment (n=18 MEC & n=50 Buhid Tribe)

Age	Frequency (MEC)	Percentage (MEC)	Frequency (Buhid)	Percentage (Buhid)
14 & Below	0	0%	1	2%
15-24	16	89%	10	20%
25-34	2	11%	14	28%
35-44	0	0%	9	18%
45-54	0	0%	9	18%
55 & Above	0	0%	7	14%
Total	18	100%	50	100%

Sex				
Male	12	67%	38	84%
Female	6	33%	12	16%
Total	18	100%	50	100%
Highest Educational Attainment				
No Educational Attainment	0	0%	4	8%
Pre-School	0	0%	1	2%
Elementary	0	0%	30	60%
High School	0	0%	11	22%
College	18	100%	4	8%
Total	18	100%	50	100%

Moreover, Capacia et al. (2023) state that MEC was a program of the CES of Divine Word College of San Jose, where the school provides education to Indigenous People. It proves that the established direction was working with the support of the tabulated data presented. However, contrary to that, the number of college students in Buhid was significantly lower than in MEC. The researchers inferred that educational opportunities were lower in rural areas and even more significant in Indigenous Mangyans. This claim was backed up by the study of Cornelio and de Castro (2015), based on the findings that Indigenous people are often not able to finish their basic education, let alone get a college degree. Additionally, many of them just spend most of their time doing labor-intensive work such as farming and do not have the luxury of revisiting their unfinished education. This is directly reflected in the table that shows 60% of the respondents in the community have only attained elementary education, while the rest are distributed among those having no educational attainment (8%), preschool (2%), high school (22%), and college (8%).

Table 2 shows the extent of the culture of MEC in terms of valuing cultural heritages, belief systems, and livelihood. It consisted of 6 questions per sub-variable with a composite mean of 3.59, 3.51, and 3.18, meaning high and moderately high in the verbal description. This means that the consistently high placement shows the overall extent of the culture of MEC in terms of valuing cultural heritages, which can still be seen in their practices. Through a thorough analysis of the data and indicators, evidence of a high extent of valuing cultural heritages can be seen in the given statements.

Table 2

Mean Extent of the Culture of MEC in terms of Valuing Cultural Heritages, Belief Systems & Livelihood

INDICATORS (MEC-Valuing Cultural Heritages)	Weighted Mean	Verbal Description
1. Our culture is engraved in my everyday life.	3.83	High
2. I still practice my culture and tradition often.	3.33	High
3. Preserving cultural heritage is important for our community's identity.	3.89	High
4. It is important for younger people to learn about our cultural heritage.	3.94	High
5. I believe that schools should teach students about cultural heritage.	3.28	High
6. I believe my culture now has been influenced by modern times.	3.28	High
Composite Mean	3.59	High
INDICATORS (MEC-Belief System)		
1. My personal beliefs guide my decisions and actions.	3.28	High
2. My religious or spiritual beliefs affect how I view the world.	3.06	Moderate High
3. I respect other people's beliefs, even if they are different from mine.	3.78	High
4. I talk about my beliefs with people who think differently.	3.56	High
5. My belief is a big part of my identity.	3.72	High
6. I believe in the Supreme Being instead of deities	3.67	High
Composite Mean	3.51	High
INDICATORS (MEC-Livelihood)		
1. My main source of income is highly paid.	2.22	Moderate Low
2. The resources in our community affect our jobs or businesses.	2.78	Moderate High

3. I believe job security is important.	3.56	High
4. I believe my livelihood is inclined to my culture and tradition.	3.17	Moderate High
5. I improve my skills to get better job opportunities.	3.72	High
6. I believe our baskets, textiles, and accessories are still relevant in the market.	3.61	High
Composite Mean	3.18	Moderate High
OVERALL MEAN	3.43	High

Legend: 3.25-4.00 High; 2.50-3.24 Moderate High; 1.75-2.49 Moderate Low; 1.00-1.74 Low

In the valuing cultural heritage, indicator 5 got a weighted mean of (3.28), which falls within the "high" category, but its score is slightly lower than other indicators in the table. This suggests a relatively high level of agreement that schools should teach students about cultural heritage. According to the research of Caoli & Tenorio (2023), the mismatch between mainstream education and the knowledge, skills, and practices of the Mangyan people has led to dissatisfaction with formal schooling among them. To address this, the nationwide adoption of an indigenous education framework must ensure that teaching methods are culturally relevant. It's essential to document how education is delivered to Indigenous peoples (IPs) and identify the challenges faced by Mangyan schools, as this information is crucial for shaping effective policies for IP education. The findings indicate that certain interventions, a focus on balancing academic, linguistic, and cultural priorities, such as access to mainstream language, elder-led teaching, and the creation of safe learning environments, can empower students. However, challenges remain, including disconnection from elementary education providers, a lack of culturally appropriate teaching materials, and a waning interest among Mangyan youth in preserving their culture. The study suggests that educational strategies should reflect the Mangyan way of life and incorporate cultural elements into the curriculum.

Moreover, the mean extent of the culture of MEC in terms of the belief system is 3.51, indicating a "high" level of belief system culture. This shows that the belief system of Mangyans is still very evident in their life; Logdat (2023) states that Mangyans still practice their belief regardless of the community they are in. For the Mangyans, their shared knowledge and legacy of perseverance enable them to endure the most challenging trials they face in life. The Mangyans believe in a singular Supreme Being, Ambuwaw, who is their creator and the creator of the world and who perpetually upholds their existence. The highest weighted mean is 3.78, corresponding to the indicator "I respect other people's beliefs, even if they are different from mine," suggesting that respondents strongly uphold respect for diverse beliefs since education centers practice a respectful and kind approach when introducing or pointing out their beliefs; such behavior reflects back to their students; mutual respect (Calda, 2008). Overall, the data suggests that while all aspects of belief are significant, respect for different beliefs is the most prominent, and the spiritual beliefs' impact on worldview is relatively lower.

Lastly, the extent of the culture of MEC in terms of livelihood yielded a moderately high verbal description with a 3.18 composite mean. This means that there is stability in terms of their livelihood, which was shown in the study of Iopam et al. (n.d.). The project heads of the Community Extension Services have provided a plan and source of livelihood for the Mangyans living in the community, such as rabbit farming, duck farming, rice production, etc. Moreover, a moderately low verbal description was found in item 1 with a 2.22 weighted mean, which indicates that respondents believed that their source of income was low-paying even if it was stable. This is supported by a study of the International Fund for Agricultural Development (IFAD) (2023), proving that unemployment and incidence of poverty are found to be higher in indigenous communities where the main source of income is agriculture, a livelihood that has been the only source of sustenance for poor families.

Table 3 shows the extent of the culture of Buhid in terms of valuing cultural heritages, belief systems, and livelihoods with a composite mean of 3.27, 3.00, & 2.85, respectively, and a verbal description of high and moderate-high. This proves that even though there are some doubts among them, the overall finding suggested that the extent of valuing cultural heritages was still high, and the preservation of their culture is still in practice, wherein moral teachings are frequently transmitted through stories and oral traditions, maintaining ancestral wisdom and cultural identity. These tales impart ethical insights and strengthen cultural values (Mythology

Worldwide, 2024). Also, the Mangyan Heritage Center (n.d.) plays a significant role in coordinating cultural displays and educational activities that showcase the traditions, craftsmanship, and historical background of the Mangyan communities. These efforts are designed to promote a greater understanding and appreciation of Mangyan culture among residents and visitors alike.

Table 3

Mean Extent of the Culture of Buhid in terms of Valuing Cultural Heritages, Belief Systems & Livelihood

INDICATORS (Buhid-Valuing Cultural Heritages)	Weighted Mean	Verbal Description
1. Our culture is engraved in my everyday life.	3.28	High
2. I still practice my culture and tradition often.	3.22	Moderate High
3. Preserving cultural heritage is important for our community's identity.	3.42	High
4. It is important for younger people to learn about our cultural heritage.	3.58	High
5. I believe that schools should teach students about cultural heritage.	3.14	Moderate High
6. I believe my culture now has been influenced by modern times.	2.98	Moderate High
Composite Mean	3.27	High
INDICATORS (Buhid-Belief System)		
1. My personal beliefs guide my decisions and actions.	2.90	Moderate High
2. My religious or spiritual beliefs affect how I view the world.	2.28	Moderate Low
3. I respect other people's beliefs, even if they are different from mine.	3.28	High
4. I talk about my beliefs with people who think differently.	2.92	Moderate High
5. My belief is a big part of my identity.	3.16	Moderate High
6. I believe in the Supreme Being instead of deities	3.48	High
Composite Mean	3.00	Moderate High
INDICATORS (Buhid-Livelihood)		
1. My main source of income is highly paid.	2.24	Moderate Low
2. The resources in our community affect our jobs or businesses.	2.36	Moderate Low
3. I believe job security is important.	3.22	Moderate High
4. I believe my livelihood is inclined to my culture and tradition.	2.82	Moderate High
5. I improve my skills to get better job opportunities.	3.18	Moderate High
6. I believe our baskets, textiles, and accessories are still relevant in the market.	3.28	High
Composite Mean	2.85	Moderate High
OVERALL MEAN	3.04	Moderate High

Legend: 3.25-4.00 High; 2.50-3.24 Moderate High; 1.75-2.49 Moderate Low; 1.00-1.74 Low

The statement "Our culture is engraved in my everyday life" received a mean score of 3.28 and was categorized as high, indicating that culture plays a significant role in respondents' daily lives. However, the statement that I still practice my culture and tradition often had a slightly lower mean of 3.22, which is classified as moderately high, suggesting that while cultural engagement remains present, its active practice may not be as consistent (Kiarie, 2024). The highest-rated statement. It was important for younger people to learn about our cultural heritage (3.58), underscoring a strong belief in passing down cultural knowledge. The belief that schools should teach students about cultural heritage was rated 3.14, moderately high, showing that while there is agreement, some respondents may feel that educational institutions need to improve their role in cultural education. However, cultural practice may be slightly diminishing due to modern influences. To reinforce cultural continuity, educational institutions and community programs should actively promote traditional practices (Kiarie, 2024).

Contrary to the data presented in Table 2, the level of extent of the culture of Buhid in terms of belief system only yielded a composite mean of 3.00, which has a verbal description of moderate-high compared to the 3.51 composite mean of the MEC that has a high verbal description. This means that the extent of the belief system Buhid is affected by some factors. A study linked environmental changes and cultural practices was highlighted in the research titled "Climate change threats to family farmers' sense of place and mental well-being: A case study from the "Western Australian Wheatbelt" by Ellis & Albrecht,(2017). This study emphasizes how shifts in the environment, spurred by modernization and climate change, impact Indigenous farmers' relationships with their land, which in turn affects their mental well-being and cultural practices. These investigations reveal the complex

effects of modernization on indigenous communities, demonstrating both the difficulties encountered and the resilience shown in maintaining cultural identities and traditions.

The lowest mean of 2.28 in item 2, putting it in the moderate low category, and this shows that the religious or spiritual belief of the Buhid does not affect how they view the world, but they still believe that was a big part of their identity. The Mangyans believe in a singular Supreme Being, Ambuwaw, who is their creator and the creator of the world and who perpetually upholds their existence. The divine is perceived through his all-powerfulness, influencing their daily lives and revealing himself in tangible events like a rescue from disasters or illnesses, the prosperity of crops, and various other ways. They think that malevolent spirits wander the territory known as Bukaw in the spiritual realm (Logdat, 2023). The lowest weighted mean, with a 2.28 weighted mean, is "My religious or spiritual beliefs affect how I view the world." While their belief is still practiced, there have been recent findings suggesting that modernization has affected Indigenous communities. It was stated by Kumar et al. (2024) that the introduction of modern technologies and lifestyles can lead to a decline in traditional practices, languages, and rituals. Overall, it gained a moderately high verbal description and a composite mean of 3.00, proving that their belief is still very alive and evident in their community. As supported by The Mangyans of Mindoro, Philippines: History, Culture, and Traditions [Philippine Indigenous People] (2022), in many Mangyan groups, planting the first rice seeds was really important because rice was a big part of their food, work, and beliefs. They perform special ceremonies to make sure they have a good harvest. That's why they have rituals for every step of growing rice. The first planting ceremony was called kalag paray, and it included the rituals for planting and harvesting the rice. When it's time to harvest, they have special activities like tying the rice stalks together and doing a ceremony after the harvest. This highly suggests the existence of culture in terms of belief systems is still very much in practice.

In terms of livelihood, the composite mean of 2.85 shows that there is an external factor affecting their way of living. Farming, or more particularly, swidden farming, became the most prominent main source of income in the community at one point in their life. As stated in the study of Hernandez et al. (2024), however, its illegalization under the Revised Forestry Code of the Philippines, Presidential Decree No. 705 (1975), led the Mangyans to pursue a normal way of farming. This can also be reflected in the 2.24 weighted mean with a moderately low verbal description under the first indicator, showing that the source of their income was low-paying. The study of IFAD (2023) further proves the need for change in the agricultural sector, which yields an inadequate amount of money that is not enough for self-sustenance. To add to this, a study by Costa (2023) says that in 2022, farmworkers or people who are on the agricultural side of the industry earn 40% less than those who are not working in their sector. However, in comparison to MEC, the Buhids believe that the resources in the community do affect their jobs or source of income. With a 2.36 weighted mean and a moderately low description, it was evident in their sources of income that it might not provide financial stability, but it does provide security for them. Thus, the Mangyans of Mindoro, Philippines - History, Culture, and Traditions [Philippine Indigenous People] (2022) stated that Mangyans seek permission from the spirits or offer gifts when passing through their domains to avoid inciting their wrath, showing their beliefs and respect for their culture.

Table 4

Mean Level of Socio-economic Maturity of MEC

INDICATORS (MEC-Valuing Cultural Heritages)	Weighted Mean	Verbal Description
1. I am confident that I can manage my budget.	3.39	High
2. I keep track of my monthly expenses.	2.83	Moderate High
3. I plan to settle into a stable job in the future.	3.61	High
4. I rely more on what the community has to offer rather than on my own.	2.61	Moderate High
5. I have savings in case of sudden expenditure (e.g., medicine, checkup).	2.94	Moderate High
6. I believe education is important to have a good future.	3.89	High
7. I am willing to take a financial risk (e.g., investment, business) to improve my socio-economic status.	3.61	High

8. It's important to take part in social issues that can dictate my future.	2.78	Moderate High
9. I believe having a long-term investment (e.g. house) is good.	3.78	High
10. I am socio-economically mature.	3.11	Moderate High
Composite Mean	3.26	High

Legend: 3.25-4.00 High; 2.50-3.24 Moderate High; 1.75-2.49 Moderate Low; 1.00-1.74 Low

Table 4 presents the mean level of socio-economic maturity of MEC. The composite mean of 3.26, meaning high level, shows a contrary result to the Buhid tribe, as they have shown moderately high socio-economic maturity as indicated in Table 5. It was discussed in the context of livelihood that although their community offers a wide array of opportunities, they still believed that the income is low. Hence, socio-economic maturity can be inferred from their answers because of the evident need for change. In other words, MEC inhabitants may not be socioeconomically stable. However, their socio-economic awareness and hope for a better working environment and a self-sufficient salary say otherwise. This can be supported by Lusardi & Mitchell (2014), wherein studies indicate that education significantly contributes to improving people's financial literacy, a fundamental aspect of socio-economic maturity. Research demonstrates that people with higher education levels tend to handle their finances more efficiently, save for the long term, and make wise investment choices.

The strong agreement among indigenous participants, reflected in a notable average of 3.89 (highest weighted mean) on the statement "I believe education is important to have a good future," closely corresponds with the core principles of the Philippine Department of Education's (DepEd) Order No. 32, s. 2015, which established the Indigenous Peoples Education (IPEd) Curriculum Framework. This higher average reflects a profound optimism that the IPEd framework will effectively integrate Indigenous Knowledge Systems and Practices (IKSPs) into education, paving the way for a "good future" that honors cultural heritage and fosters empowerment. Participants likely see this framework as a crucial step in bridging the gap between mainstream education and indigenous knowledge. This broad agreement demonstrates not only a belief in the transformative power of education but also a desire for its actual implementation, ensuring that the dedication to culturally relevant education leads to genuine opportunities and a future marked by Indigenous self-determination and cultural continuity.

In Supan & Mendoza's (2023) study, the power of education can lead Indigenous people to social and economic empowerment, giving them the power to lead themselves to a brighter future. However, not all Indigenous people can obtain the knowledge because of a lack of sources and discrimination that leads an individual to experience unfair treatment, economic disadvantage, harassment, etc. Based on the Expert Mechanism on the Rights of Indigenous Peoples, quality education for Indigenous Peoples refers to "education that is well resourced, culturally sensitive, respectful of heritage, and that takes into account historical events, cultural stability, and integrity; encompasses human rights, community, and individual development." Educational programs and institutions were often applied to 'assimilate' Indigenous Peoples into modern civilization, abandoning their culture, languages, identity, and rights. Indigenous Peoples were rarely included or consulted in the development of policies and initiatives.

Table 5

Mean Level of Socio-economic Maturity of Buhid

INDICATORS (MEC-Valuing Cultural Heritages)	Weighted Mean	Verbal Description
1. I am confident that I can manage my budget.	2.74	Moderate High
2. I keep track of my monthly expenses.	2.68	Moderate High
3. I plan to settle into a stable job in the future.	3.08	Moderate High
4. I rely more on what the community has to offer rather than on my own.	2.18	Moderate High
5. I have savings in case of sudden expenditure (e.g., medicine, checkup).	2.52	Moderate High
6. I believe education is important to have a good future.	3.68	High
7. I am willing to take a financial risk (e.g., investment, business) to improve my socio-economic status.	3.14	Moderate High

8. It's important to take part in social issues that can dictate my future.	3.16	Moderate High
9. I believe having a long-term investment (e.g., a house) is good.	3.44	High
10. I am socio-economically mature.	2.80	Moderate High
Composite Mean	2.94	Moderate High

Legend: 3.25-4.00 High; 2.50-3.24 Moderate High; 1.75-2.49 Moderate Low; 1.00-1.74 Low

According to the United Nations (n.d.), the indigenous youth are still struggling with whether or not they'll choose to remain and preserve their culture or pursue education. Table 5 shows the mean level of socio-economic maturity of the Buhid tribe with a composite mean of 2.94 and a moderately high description. Regardless of the reservation, it still gained a moderately high result, and despite that, it still shows that they think that education is important. On the other hand, Clark (2022) states that Buhid Mangyans are self-sufficient when it comes to their needs because of their livelihoods, like farming or kaingin. As stated by the United Nations (n.d.), various Buhid articles show concerning statistics regarding issues faced by indigenous peoples, including poverty levels, health disparities, employment opportunities, and many others.

The socio-economic maturity of MEC has shown high results, with a 3.26 composite mean. Through this, the proposed direction of the MEC can be seen as an effective measure wherein socio-economic prosperity was also presented; in partnership with that, several means of living were given to MEC inhabitants for them to participate even at a minimal level in the economy. The results yielded from the findings can further solidify the goal of Community Extension Administrators (Iopam et al., n.d.). This finding can lead to newer studies assessing Indigenous communities and community extension services like MEC; it was said in the study of Ramirez-Yee (2024) that despite advancements in education over the years, gaps in educational achievement remain linked to students' social backgrounds. Research examining educational inequality in the Philippines from 1950 to 2015 revealed that students from less privileged circumstances are more unlikely to finish secondary and higher education, hindering their socio-economic progress. Furthermore, it can also be inferred from this that it does not mean that the Buhid tribe is incompetent in terms of socio-economic maturity; as to why the findings only gained a moderately high description with 2.94, one can conclude from this that through interventions of external entities such as Community Extension Services, the level of socio-economic maturity can improve or change.

Table 6

P-value for Hypothesis Testing of Significant Differences

Path	F-value	P-value	T-value	df	Critical value	Interpretation
MEC-Buhid	8.00	0.008	0.052	66	1.994	Significant

Legend: p-value<0.05 Significant

Table 6 presents the paths and p-value of the statistical treatment to determine whether there is a difference between the cultures of MEC and Buhid. The treatment yielded a p-value of 0.008 (significant at $p < 0.05$); therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. The findings revealed that there is a significant difference between the cultures of MEC and Buhid. This suggests that respondents acknowledge external influences but still maintain a strong cultural foundation. The findings suggest that the Buhid community still values and upholds its cultural heritage, with a strong emphasis on preservation and education as reflected in the composite mean. However, cultural practices may be slightly diminishing due to modern influences. To reinforce cultural continuity, educational institutions and community programs should actively promote traditional practices (Garcia & Torres, 2019). However, MEC left no reservation and has yielded a high verbal description. Both are plausible, but MEC's reservation is backed up by a study by Kumar et al. (2024), indicating that the introduction of modern technologies and lifestyles can lead to a decline in traditional practices, languages, and rituals.

In the belief system, Buhids believe in a singular Supreme Being, Ambuwaw, who is their creator and the creator of the world and who perpetually upholds their existence. The divine is perceived through his all-

powerfulness, influencing their daily lives and revealing himself in tangible events like a rescue from disasters or illnesses, the prosperity of crops, and various other ways. They think that malevolent spirits wander the territory known as Bukaw in the spiritual realm (Logdat, 2023). However, MEC, through the intervention of Catholic entities, the researchers can safely presume the influence of Catholicism among them. As stated by the proposed direction of MEC, which are academic maturity, socio-economic maturity, and Christian maturity (Iopam et al., n.d.), the belief system between them and Buhid might differ due to external influences and practices.

Lastly, the livelihoods of MEC and Buhid share the same path in agriculture; however, they differ in the way of gaining income. Farming, or more particularly, swidden farming, has become the most prominent main source of income in the community, as stated in the study by Hernandez et al. (2024). However, its illegalization under the Revised Forestry Code of the Philippines, Presidential Decree No. 705 (1975), led the Buhids to pursue a normal way of farming. In terms of MEC, due to the location of their community and intervention of external entities, they have been practicing different means of income-generating labor wherein rabbit farming, duck farming, rice production, etc., are utilized as a form of sustenance for them (Iopam et al., n.d.).

As reflected in Table 7, the paths consisting of socio-economic maturity concerning the demographic profile and culture of MEC show a positive conclusion. Additionally, a p-value of 0.001 (highly significant at $p < 0.001$) and 0.009 (significant at $p < 0.01$) proves that the null hypothesis is rejected. This means that the socio-economic maturity is significantly affected by the demographic profile and culture of Mangyans. Moreover, Kumar and Agrawal (2017) found that socio-economic maturity correlates with educational background, as education serves as a critical tool for social advancement, enabling individuals from diverse backgrounds to improve their socio-economic status.

Table 7

Correlation Coefficients and p-values for Hypothesis Testing of Significant Relationships

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
(MEC) Demographic Profile→ Socio-economic Maturity	0.034	0.135	1.994	0.253	0.001	Highly Significant
(MEC) Culture of Mangyans→ Socio-economic Maturity	0.555	0.186	1.994	1.071	0.009	Significant
(Buhid) Demographic Profile→ Socio-economic Maturity	0.065	0.155	1.994	0.419	0.677	Not Significant
(Buhid) Culture of Mangyans→ Socio-economic Maturity	0.530	0.102	1.994	1.984	0.001	Highly Significant

Legend: p-value<0.05 Significant; p-value<.01 Highly Significant

In addition, the result provides opportunities to overcome socio-economic barriers and achieve upward mobility. Through CES, Indigenous Mangyans were given a chance to pursue their education through scholarships, thus making it possible for them to be socio-economically mature regardless of their socio-economic status. In terms of the culture, one of the most prominent aspects of MEC is the livelihood program, which provides the Mangyans a means to make for themselves while proactively participating in the trade and market of society. The project heads provided a plan and source of livelihood for the Mangyans living in that community, like rabbit farming, duck farming, rice production, etc. (Iopam et al., n.d.).

As shown above, the paths consisting of socio-economic maturity concerning the demographic profile and culture of MEC show both negative and positive conclusions. A p-value of 0.001 (highly significant at $p < 0.001$) proves that the null hypothesis is rejected. However, the demographic profile ($p = 0.677$) does not significantly affect the socio-economic maturity. Therefore, findings show that the socio-economic maturity of the Buhid tribe is significantly affected by the culture of the Mangyans and not their demographic profile. One of the reasons behind the insignificance of the demographic profile is the presence of educational hindrances, such as the mismatch of educational attainment towards their age; for this reason, the demographic profile has been deemed as a non-affecting factor in their socio-economic maturity. As stated by Cornelio and de Castro's (2015) study, indigenous people are often not able to finish their basic education, let alone get a college degree, which could

also be the hindering factor on why the result between socio-economic maturity and demographic profile has shown inconsistencies, therefore, resulting in no significance, making the researchers fail to reject the null hypothesis.

4. Conclusions

Based on the findings of this study, the conclusions were presented: The majority of inhabitants in MEC are aged 15-24, mostly male, and their highest educational attainment is college. Meanwhile, the majority of the respondents in the Buhid tribe are aged 25-34, mostly male, and their highest educational attainment is elementary. The Mangyans believe in a singular Supreme Being, Ambuwaw, who is their creator and the creator of the world and who perpetually upholds their existence. The results yielded from the findings can further solidify the goal of community extension administrators. There is a significant difference between the cultures of MEC and Buhid in terms of valuing cultural heritages, belief systems, and livelihoods. In addition, it was proven that the socio-economic maturity of MEC is significantly affected by the demographic profile and its culture. 'However, community extension administrators have socio-economic maturity in terms of demographic profile, but there is a highly significant effect on its socio-economic maturity in terms of culture'.

Recommendations - The following recommendations are presented to address the problems found in the study. Firstly, the researchers suggest that the Local Government Unit (LGU) may devise a plan that can uplift the lives of the Indigenous people. Secondly, the Department of Education (DepEd) may provide alternative means for the Indigenous people to gain easier access to proper schooling. In addition to that, school administrators may further improve their projects to raise the status of the lives of Indigenous people. Moreover, the tourism office may perpetuate the culture and traditions of Indigenous people by proactively making progressive projects that promote and preserve their cultures. Additionally, the Municipal Agriculture Office (MAO) may help Indigenous farmers improve their agricultural state. Lastly, future researchers may explore other variables that could help in alleviating the economic suffering of the indigenous people.

5. References

- Amnesty International. (2024a, September 30). Indigenous Peoples - Amnesty International. <https://www.amnesty.org/en/what-we-do/indigenous-peoples/>
- Calda, D. S. V. (2008). The status of Mangyan students' education in Divine Word College of Calapan: An analysis. *Studocu*. <https://www.studocu.com/ph/document/brent-international-school-manila/arts-in-history-ab-history/the-status-of-mangyan>
- Camaya, Y.I. and Tamayo, G.L. (2018) Indigenous Peoples and Gender Roles: The Changing Traditional Roles of Women of the Kalanguya Tribe in Capintalan, Carranglan in the Philippines. *Open Journal of Social Sciences*, 6, 80-94. <https://doi.org/10.4236/jss.2018.62008>
- Capacia, J. S., Limos-Galay, J. A., & Tampol, R. A. (2023). Challenges of the Divine Word College of San Jose Mangyan Education Center (MEC) during the new normal. *International Journal of Research*, 11(1), 75-82. DOI: 10.5861/ijrsm.2023.1006
- Caoli, J.M., and Tenorio, J.A. (2023). Sustaining Indigenous Culture in Mangyan Schools. *AcademiaLasalliana Journal of Education and Humanities*, 4(2), 149-159. DOI:10.55902/ECPD1268
- Clark, J. (2022, May 15). Buhid Mangyan cosmology and beliefs. The Aswang Project <https://www.aswangproject.com/buhid-mangyan/>
- Cornelio, J. S., & de Castro, D. F. T. (2015). The State of Indigenous Education in the Philippines Today. *Indigenous Culture, Education and Globalization*, 159-179. doi:10.1007/978-3-662-48159-2_9
- Costa, D. (2023). The farmworker wage gap. Economic Policy Institute. <https://www.epi.org/blog/the-farmworker-wage-gap-farmworkers-earned-40-less-than-comparable-nonagricultural-workers-in-2022/>
- Department of Education (DepEd). (2015). DepEd Order No. 32, s. 2015: Adopting the Indigenous Peoples Education Curriculum Framework. Republic of the Philippines. <https://www.deped.gov.ph/2015/07/29/do-32-s-2015-adopting-the-indigenous-peoples-education->

- curriculum-framework/
- Ellis, N. R., & Albrecht, G. A. (2017). Climate change threats to family farmers' sense of place and mental wellbeing: A case study from the Western Australian Wheatbelt. *Social Science & Medicine*, 175, 161-168. <https://doi.org/10.1016/j.socscimed.2017.01.009>
- Hernandez, J.L., Briñosa, M.C., Zapata, M.C., Izon, M.V., & Briñosa, D.E. (2024). Bridging the Gap: A Comprehensive Needs Assessment on the Numeracy and Financial Literacy of Mangyans in Southern Luzon, Philippines. *Ignatian International Journal for Multidisciplinary Research*, 2 (4), 83–93. <https://doi.org/10.17613/yrx2-j136.10908295>
- International Fund for Agricultural Development. (2023). Philippines. IFAD.org. <https://www.ifad.org/en/w/countries/philippines#:~:text=Most%20of%20them%20depend%20on,in%20upland%20and%20coastal>
- Iopam, V. Diaz, L. C. & Javines, F. (n.d.). Divine Word College of San Jose. <https://www.dwcsj.edu.ph/>
- Kiarie, E. (2024). Cultural Heritage Preservation in the Face of Globalization. *International Journal of Humanity and Social Sciences*, 3(3). DOI: 10.47941/ijhss.2081
- Kueh, J. (2022). Mangyan Bamboo Collection from Mindoro, Philippines, Circa 1900-1939, at the Library of Congress. <https://guides.loc.gov/mangyan-bamboo-collection>
- Kumar, A., Raj, A., & Kaushal, N. (2024). Impacts of Modernization on the Traditional Life of the Gaddi Tribe. *International Journal of Research and Review*. 5(8), 3658-3663. <https://ijrpr.com/uploads/V5ISSUE8/IJRPR32537.pdf>
- Kumar, P., & Agrawal, B. K. (2017). Educational attainment & socio-economic status: A literature review. *International Journal of Educational Research*, 6(5), 1174-1495531471. <https://oaji.net/articles/2017/1174-1495531471.pdf>
- Logdat, A. (2023). Gods, Spirits, and Rituals: Amplifying Mangyans' Indigenous Wisdom and Resilience in the Age of Pandemic and Ecological Catastrophes. *World Academy of Science, Engineering, and Technology*. 17. 253-256.
- Lumbo, S.G. (2018). Traditional knowledge in weathering effects of climate variability on upland farming among Buhid Farmers in Occidental Mindoro, Philippines. *Int. J. Agr. Syst.* 6(2): 164-171 A
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. In O. S. Mitchell & S. Utkus (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 17-39). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199947331.003.0002>
- Mangyan Heritage Center. (n.d.). Project. <https://mangyanheritage.odoo.com/mangyan-project>
- Mnl.op Inc. (2019). Mangyans' life and culture. *MNL.OP INC.* <https://mnlop.com.ph/2019/09/11/mangyans-life-and-culture/>
- Mythology Worldwide. (2024, December 18). Moral Myths in Indigenous Cultures: Wisdom from the Past. Retrieved from <https://mythologyworldwide.com/moral-myths-in-indigenous-cultures-wisdom-from-the-past/>
- Philippine Statistics Authority. (2024). Demographic characteristics of indigenous peoples in the MIMAROPA region (2020 census of population and housing). Philippine Statistics Authority MIMAROPA Region. <https://rssomimaropa.psa.gov.ph/content/demographic-characteristics-indigenous-peoples-mimaropa-region-2020-census-population-and>
- Ramirez Yee, K.M. (2024). At all costs: Educational expansion and persistent inequality in the Philippines. *High Educ* 87, 1809–1827. <https://doi.org/10.1007/s10734-023-01092-y>
- Presidential Decree No. 705. (May 19, 1975). *The Lawphil Project*. https://lawphil.net/statutes/presdecs/pd1975/pd_705_1975.html
- Supan, N. P. G., & Mendoza, N. C. R. C. (2023). Racism in the Academe: An Ethnographic Research among Aeta (Indigenous) Students of a State University in the Philippines. *New Trends in Qualitative Research*, 16, e768. <https://doi.org/10.36367/ntqr.16.2023.e768>
- The Mangyans of Mindoro, Philippines: history, culture, and traditions [Philippine indigenous people]. *Yodisphere*. (2022). <https://www.yodisphere.com/2022/02/Mangyan-Mindoro-Philippines.html>

The Ties That Bind: The Buhid Mangyan People. (2014). The ties that bind: the Buhid Mangyan people.

<https://newcapp.files.wordpress.com/2014/02/buhidmangyan1.pdf>

United Nations. (n.d.). Indigenous Children and Youth | Division for Inclusive Social Development (DISD).

United Nations. <https://social.desa.un.org/issues/indigenous-peoples/indigenous-children-and-youth>

Service quality, food quality, and customer loyalty in the fast-food industry in San Jose, Occidental Mindoro

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Abstract

Customer experience became crucial to different businesses; it drove satisfaction that led to customer loyalty. This study aimed to determine the level of service quality and the current status of food quality in different fast-food establishments (McDonald's, Mang Inasal, Bonchon, and Chowking) in San Jose, Occidental Mindoro. It examined whether service and food quality significantly affected customer loyalty. This quantitative approach employed a descriptive correlational design. The data were gathered from a random sample of 338 customers from different fast-food establishments, using a 4-point Likert scale and adapted questionnaires. The findings revealed that workers in the fast food sector deliver outstanding customer service due to their readiness to assist and their skills and knowledge that enable them to serve customers efficiently. Furthermore, when it comes to food quality in the fast food sector, survey participants favor freshly prepared meals because they find them more enjoyable. Since it improves the overall dining experience, the participants mentioned that they prefer their meals to be flavorful. Moreover, because they had a good experience, the participants are likely to revisit this fast food restaurant. In addition, service quality also has a bigger effect on customer loyalty than food quality. This study recommends that the fast-food industry maintain high standards of food quality to earn customer loyalty and stay ahead in a competitive market. Lastly, future researchers may analyze how marketing strategies of the fast food industry, such as influencer partnerships and social advertising, affect the insights and loyalty of its customers.

Keywords: customer loyalty, service quality, food quality, communication skills, fast food industry

Service quality, food quality, and customer loyalty in the fast-food industry in San Jose, Occidental Mindoro

1. Introduction

Understanding the dynamic world of fast-food businesses is one of the most in-demand sectors in the market because of its affordability and convenience (Ahamed et al., 2024). Customer loyalty has become a crucial focus for food businesses striving to maintain their market position. As ABM students familiar with business and also consumers, the researchers recognized that preferences change and competition widened; the service quality and food quality in the food industry were clearly pivotal factors that shaped customer loyalty. Fast food establishments were recognized for their convenience and speed and were commonly seen as options for customers making choices based on sudden cravings. Understanding these factors that could foster customer loyalty was essential for food businesses to ensure positive word-of-mouth and repeat purchases to maintain market presence. A high level of food quality was a key marketing strategy that provided customer satisfaction and retention, ultimately resulting in a positive purchasing experience (Zhong & Moon, 2020). According to the study by Sochenda (2021), food quality encompassed various key features and aspects, including freshness, wholesomeness, texture, color, nutritional value, flavor, fragrance, presentation, taste, menu diversity, healthiness, and freshness. Additionally, food quality emerged as the most significant component among these variables.

The business of food quality and its effect on customer satisfaction and behavioral intent in restaurants implied six food quality attributes: presentation, variety, healthy options, taste, freshness, and temperature. Conversely, food quality was often regarded as one of the significant factors influencing customer satisfaction and loyalty. Service quality is also vital in developing long-term relationships between consumers and establishments. Therefore, clear approaches to delivering service were essential for attaining quality service. This included the procedures, frameworks, communication channels, and training programs involved in the quality process. Another important factor in maintaining service delivery standards was monitoring and controlling employee performance. Services are intangible, and their quality was evaluated based on customers' viewpoints. Hence, employees had to approach customers in a manner that met their expectations. Effective management should provide precisely what the customer expects. This meant that whatever the customer anticipated from the service had to be provided accordingly (Vu, 2021). Customer loyalty itself was a multifaceted concept that transcended mere repeat purchases. It embodied a deeper emotional connection that customers developed with a brand, influenced by their overall experiences. In the fast food industry, where switching costs were low and alternatives abundant, cultivating loyalty was essential for sustained success. According to Ismail and Yunan (2016), customer loyalty is connected to customers' willingness to make repeat purchases, supported by a psychological bond and favorable attitudes toward a business's offerings.

The connection between service quality and food quality widened the effects of customer loyalty toward a business. Both service quality and food quality contributed to customer loyalty, but achieving this consistently and with great quality had a positive impact on the food business. Based on the researchers' experience, if a customer did not meet their expectations for food quality, it might still be acceptable if the food establishment offered exceptional service. In contrast, poor service could lead to customer dissatisfaction, even if the food's taste or presentation was remarkable. Many people say that we first eat with our eyes, but the quality of a restaurant's service could be a significant weakness for many food businesses. This effect highlighted the importance of a holistic approach to customer experience, where both service quality and food quality were seen as necessary factors in building customer loyalty and fostering positive reviews and good reputations. The relationship among service quality, food quality, and customer loyalty had complex categories and was an essential part of a food business. As competition became more challenging and customer expectations changed, understanding how these factors interacted was crucial for food businesses seeking to thrive in the evolving market environment and demand.

The fast food industry continued to evolve based on changes in consumer behaviors, wants, and needs. Through a thorough examination of these three factors, this research aimed to provide a sufficient understanding of how they drove customer loyalty, offering information to enhance and ensure customer experiences in different fast food establishments. In addition, this study examined how these two factors affected, interacted with, and influenced customer loyalty, seeking to provide insights that could contribute to strategic decision-making for fast food owners. It aimed to identify which aspects of service quality affected customer loyalty, and how food quality contributed to it. Additionally, this research investigated whether service quality and food quality influenced customer loyalty, thereby providing a comprehensive understanding. The data obtained from this research was beneficial to many food businesses, specifically fast food companies. By identifying factors of customer loyalty, fast food establishments improved their strategies to enhance customer loyalty and foster successful food businesses. Furthermore, the data gathered for this study contributed to food businesses in the fast food industry in meeting customers' wants, needs, and expectations.

Statement of the Problem - This study aimed to determine the service quality, food quality, and customer loyalty of fast food industries in San Jose, Occidental Mindoro. Specifically, it seeks to answer the following questions: (1) What is the level of service quality in the fast-food industry in terms of communication skills and employee expertise? (2) What is the status of food quality in the fast food industry in terms of the physical appearance of the food and value of the food? (3) What is the level of customer loyalty in the fast food industry in San Jose, Occidental Mindoro? (4) Is the level of customer loyalty significantly affected by service quality and food quality?

Significance of the Study - This study examined the relationship between service quality, food quality, and customer loyalty in the fast food industry in San Jose, Occidental Mindoro. The insights and data gathered from this study were helpful to the following individuals: to fast food establishments because satisfied customers led to repeat buyers and potentially fostered their loyalty. Consequently, this increased the profits of the fast food chain, providing the financial foundation for the establishment to expand. To fast food establishment owners because it enhanced their knowledge and understanding of customer perceptions regarding the food and services offered, enabling them to improve and provide higher quality food and services. Moreover, to fast food establishment employees as they were trained to deliver enhanced service and food quality to customers. They learned to interact more effectively with customers and understood their needs and preferences. Also to customers based on the enhancements the establishments made to improve the service and food quality they offered. Customers experienced a more reliable, safer, hygienic, and overall better experience at certain fast food restaurants. Furthermore, to aspiring business owners who planned to own food businesses, as it helped them expand their knowledge about customers' preferences and expectations regarding service and food quality and how to gain customer loyalty. Additionally, to the community by boosting the local food economy, as customer loyalty led to increased sales and revenue. This also resulted in more job opportunities, helping to grow the local community. Lastly, to future researchers who sought to study service quality and food quality and their effects on customer loyalty in food businesses within a specific area. The data collected could be used for comparative analyses between this study and future research. New investigations could gather additional information regarding the study, enhancing their knowledge. This study served as a foundation for future researchers whose topics aligned with the business field, particularly in food businesses.

Scope and Delimitation of the Study - Data collection was conducted over a specific period, from September 2024 to February 2025. Fast food differs from other food businesses concerning service standards, food preparation, and customer expectations. This study aimed to provide insights into the effect of service quality and food quality on customer loyalty in fast-food restaurants in San Jose, Occidental Mindoro. The respondents of this study were customers of fast-food restaurants; it did not include customers from other food businesses and those who do not buy from these fast-food restaurants. This study did not cover other food businesses such as carinderia (local eateries) since it could lead to an excessively vast study. Moreover, it is limited to fast-food restaurants in San Jose, Occidental Mindoro, affecting the generalizability of the results. This study also did not cover Jollibee, as they have refused to participate. The variables considered were service quality, which had sub-variables of

communication skills and employee expertise; for food quality, the sub-variables were the physical appearance of the food and value of the food, and customer loyalty. This study did not consider other variables such as price, promotions, and location. In this study, the researcher did not consider gender, age, employment, and income level as variables related to the dependent variable. However, future researchers may explore other variables.

2. Methodology

Research Design - The researchers used a descriptive correlational design to determine the level of service quality, food quality, and customer loyalty in the fast-food industry in San Jose, Occidental Mindoro. They aimed to provide reliable evidence on how these variables interacted and influenced customer loyalty, specifically in fast-food establishments. This allowed the exploration of relationships among the variables using correlational design.

Respondents of the Study - The participants of this research study were 338 out of 2200 daily diners or customers of the four (4) fast-food restaurants in the town of San Jose, Occidental Mindoro. Simple random sampling was used on the subjects within the dining observing time. Through the probability sampling technique, the researchers obtain information from the customers who go to these fast food outlets more often. The sample size was computed using Slovin's formula with a 5% margin of error and 95% confidence level; such findings of the study enabled painting of a better image of the scenario about the customers in the quick service restaurants in San Jose, which were beneficial for these restaurants in strategizing on how to enhance satisfaction and return patronage of customers. The information about the number of daily customers came from the managers of different fast foods that were included in the study.

Research Instrument - An adapted questionnaire is the research instrument that the researchers utilized for gathering data. The questions were composed of three (3) parts; the first part of the adapted questionnaire by Zhong and Moon (2020), Althubiti (2016), & Dhar (2014b) includes twelve (12) questions aimed at assessing the current state or status of service quality as perceived by the respondents. The 2nd part was adapted by Rilya et al. (2019), Kaewmahaphinyo et al. (2020), & Konuk (2019) and contains twelve (12) questions aimed at evaluating the level of food quality that the respondents received. The last part was adapted by Zhong and Moon (2020), Namin (2016), and Yiming et al. (2024) with ten (10) items in the survey questions. The adapted questionnaires were evaluated by respondents utilizing a 4-point Likert scale to indicate their level of agreement. In order to assess the validity and reliability of the adapted questionnaire, the researchers consulted experts at DWCSJ to pinpoint weaknesses and areas where the instrument could be enhanced. The recommendations and insights provided by the research adviser and experts were incorporated to refine the instrument.

Data Gathering Procedure - Prior to conducting the research, the researchers sent a request letter to the managers of fast-food establishments in San Jose, Occidental Mindoro, which was signed by both the research adviser and the academic coordinator. The purpose of the request letter was to seek permission to carry out the study and to obtain information regarding the daily number of customers. Once the managers responded and granted approval for the request, the researchers personally distributed and collected the survey questionnaires from the customers. It took thirteen (13) days to gather all data from the customers of 4 fast-food establishments. After gathering all the data needed, the researchers entered the responses into Excel.

Statistical Treatment of the Data - The information gathered from the questionnaire was carefully analyzed, employing a range of statistical methods. This study applied a weighted mean computation to assess the levels of service quality, food quality, and customer loyalty. Additionally, the researchers utilized Pearson's correlation and regression analysis to explore the relationships among the variables. The results were subjected to statistical treatment, yielding findings that are generalizable to the overall population from which the sample was drawn.

Ethical Considerations - Before initiating the study, the researchers made sure that the owners or managers of the fast food establishment were thoroughly briefed on the nature, goals, purposes, risks, and advantages of the research. Additionally, they conveyed that the identities of participants would remain anonymous and that the findings might be published in academic journals, potentially in peer-reviewed formats. The researchers adhered

to principles of respect and fairness in their treatment of participants. They ensured that no one's privacy was compromised without explicit consent and guaranteed that participation was wholly voluntary, allowing respondents the option to withdraw at any time. The information collected was accurate and reported with honesty. Researchers presented the results candidly, without distortion or bias, ensuring that only factual information was shared. Proper credit was attributed to all authors of the sources used, following correct citation practices. The entire research process was carried out with fairness and transparency. These ethical considerations aim to safeguard the rights of the participants and preserve the integrity of the study. The key ethical principles included informed consent, clear communication, confidentiality, fairness in interactions with participants, honesty in data collection, and proper source attribution, all of which contribute to the ethical execution of the research.

3. Results and Discussions

Table 1

Mean Level of Service Quality Fast-Food industry in Sam Jose Occidental Mindoro in terms of Communication skills & Employee expertise

INDICATORS (Communication skills)	Weighted Mean	Verbal Description
1. The employees always assist me whenever I need their help.	3.61	High Level
2. The employees can easily solve my problem.	3.46	High Level
3. The employees provide an immediate answer to my questions.	3.57	High Level
4. The employees are friendly	3.60	High Level
5. The employees are helpful	3.58	High Level
6. The employees are knowledgeable and skilled in their jobs	3.59	High Level
Composite Mean	3.57	High Level
INDICATORS (Employees expertise)	Weighted Mean	Verbal Description
1. The employees are capable of making me feel at ease and comfortable.	3.54	High Level
2. The employees take the initiative to ask or tell me related information about my orders.	3.54	High Level
3. The employees can manage to deal with my needs.	3.49	High Level
4. The employee is proficient.	3.47	High Level
5. The employees provide an outstanding service	3.49	High Level
6. The employees are knowledgeable and skilled in their jobs	3.59	High Level
Composite Mean	3.52	High Level

Legend: 3.26 – 4.00 High level; 2.50 – 3.25 Moderate level; 1.75 – 2.49 Low level; 1.00 – 1.74 Very low level

Table 1 shows the mean level of service quality in the fast food industry in terms of employee communication skills and employee expertise, which got a composite mean of 3.57 and 3.52, respectively. This shows that the respondents strongly agree with the quality of service offered by different fast-food industries in San Jose, Occidental Mindoro. Additionally, it revealed that employees' communication skills are one of the factors that they observe for satisfaction to the service provider of every fast food in San Jose Occidental Mindoro; consequently, communication skills have a critical contribution to meeting customer expectations and fostering loyalty. This aligns with the study of Tanković et al. (2023), who stated that communication is one of the most essential abilities in the capacity to communicate one's thoughts and emotions to others in a way that they can understand appropriately, as well as the ability to observe, listen, and comprehend the messages of others. Moreover, in terms of employee expertise, a composite mean of 3.52 with a verbal description of high level means that the respondents observed employees' professionalism and good practice in handling their service. It shows that employees' expertise is a crucial tactic for developing a good service for customers.

Moreover, the findings showed that employees' expertise was considered at a high level, meaning it meets customers' preferences and expectations in terms of the expertise of employees who were observed. This was supported by the findings of Villanueva et al. (2023) that service quality had a significant relationship with customer satisfaction and loyalty. In addition, customer satisfaction was raised by staff members who were well-trained, knowledgeable, and had excellent interpersonal skills since they could offer prompt, customized service (Kumolu-Johnson, 2024). Knowledge allows people to execute and finish tasks to achieve the best possible results.

Table 2

Mean Extent of Food Quality in Fast-Food Industry in San Jose Occidental Mindoro in terms of Physical Appearance of the Food & Value of the Food

INDICATORS (Physical Appearance of the food)	Weighted Mean	Verbal Description
1. I want my food to be plated nicely.	3.67	High Extent
2. I prefer my food to have a large portion.	3.57	High Extent
3. I want my food to smell nice.	3.76	High Extent
4. I prefer my food to be served visually appetizing	3.74	High Extent
5. I prefer my food to be served at a good temperature.	3.76	High Extent
6. I prefer my food to be served fresh.	3.80	High Extent
Composite Mean	3.72	High Extent
INDICATORS (Value of the Food)	Weighted Mean	Verbal Description
1. I prefer my food to be tasty.	3.82	High Extent
2. The food is being served according to my expectations.	3.56	High Extent
3. The food was valuable for its cost.	3.62	High Extent
4. The price of the food is reasonable.	3.62	High Extent
5. The quality of food in fast food is generally high.	3.54	High Extent
6. The fast food serves high-quality food for me.	3.55	High Extent
Composite Mean	3.62	High Extent

Legend: 3.26–4.00 High Extent; 2.51–3.25 Moderate Extent; 1.76–2.50; Low extent, 1.00 – 1.75; Very Low Extent

Table 2 presents the mean extent of food quality in the fast-food industry as assessed by the customers in terms of the physical appearance of the food and value of the food, garnering a composite mean of 3.72 and 3.62, respectively, and a verbal description of both high extent. In connection to the physical appearance of the food, this study reveals that the respondents are pleased with the food quality of different fast-food industries in San Jose, Occidental Mindoro. In addition, the result shows that the customers who dined at fast-food restaurants were satisfied with the quality of food the restaurants served, especially in terms of their appearance. This aligns with the study of Okamoto et al. (2022), which states that food plated nicely can increase appetite. It implies that food that is appealing to the eye impacts a customer's desire to eat. Moreover, the table above shows the mean extent of food quality in the fast-food industry in terms of the value of the food, with a composite mean of 3.62. This reveals that the respondents strongly agree with the quality of food the different fast-food industries in San Jose Occidental Mindoro serve. The high extent of verbal description indicates that most of the customers who dined at the fast-food restaurants were satisfied with the quality of food they served in terms of the value of the food. Similarly, the study by Sunaryo (2019) stated that food quality is a fundamental component that can greatly affect customer satisfaction.

Table 3

Mean Level of Customer Loyalty

INDICATORS	Weighted Mean	Verbal Description
1. I will visit this fast food place again.	3.68	High Level
2. I can recommend this fast food to others.	3.60	High Level
3. I can give a good review of this fast food to others.	3.59	High Level
4. I can share my dining experiences with my friends and acquaintances.	3.61	High Level
5. I prefer this fast food restaurant to other food establishments.	3.36	High Level
6. I left a great review for this fast food place due to my loyalty.	3.43	High Level
7. I will discuss recommendations to resolve the shortcomings of this fast-food restaurant.	3.44	High Level
8. I like the location of the fast food.	3.64	High Level
9. I prefer if the fast food offers discounts and promos.	3.66	High Level
10. I've been liking this fast food for quite some time now.	3.58	High Level
Composite Mean	3.56	High Level

Legend: 3.26 – 4.00 High level, 2.50 – 3.25 Moderate level, 1.75 – 2.49 Low level, 1.00 – 1.74 Very low level

Table 3 reflects the mean level of customer loyalty among respondents in the fast food industry in San Jose, Occidental Mindoro, with a composite mean of 3.56. This explains that most customers are satisfied with the quality of the fast food industry and are likely to continue supporting it by dining there frequently. This was supported by the study of Ibojo and Asabi (2015), who stated that a business depends on the satisfaction of its

customers. He explained that when customers are satisfied with the products or services a business provides, customers are more likely to remain loyal to a certain business.

Table 4

Correlation Coefficients and p-values for Hypothesis Testing (H0)

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
Service Quality→ Customer Loyalty	0.649	0.421	1.968	15.634	0.001	Highly Significant
Food Quality→ Customer Loyalty	0.599	0.359	1.968	13.714	0.001	Highly Significant

Legend: p-value<0.05 Significant

Table 4 presents the result of the statistical analysis, which shows that service quality and food quality have a highly significant relationship with customer loyalty. This is supported by the correlation coefficients of 0.649 and 0.599, which indicated a moderately positive correlation among the variables. This implies that service quality and food quality are directly correlated with customer loyalty, meaning when one increases, the other increases. The effect sizes 0.421 and 0.359 further underscored the significance of the relationship. The t-values of 15.634 and 13.714 are greater than the critical value of 1.968, and the p-value of 0.001 is less than 0.05. indicates that the result is statistically significant and is highly unlikely to occur by chance. Thus, the findings led to the rejection of the null hypothesis.

In addition to Table 4, these findings indicate that there is a highly significant relationship between customer loyalty and service quality, proving that as the service quality improved, customer loyalty tended to increase. Customers who are satisfied with the service have a higher chance of returning and becoming loyal customers. This is supported by the study of Du and Tang (2014), which stated that improved service quality is one of the effective ways to improve customer loyalty to the business. Similarly, according to Chen (2016), the quality of services plays a significant role in making or creating a business in a specific industry. It emphasized the need for most businesses to increase efforts to improve their services to meet customer needs. The findings of the study also indicate that there is a highly significant relationship between customer loyalty and food quality. This shows that higher food quality contributed to increasing customer loyalty. This aligns with the study by Kusuma et al. (2014), which suggested that the quality of the product influenced customer loyalty. Additionally, customers evaluated food quality based on their expectations and experience with the food (Abdullah et al., 2018). When the product is high quality, customers are more likely to be loyal to the brand and business; therefore, improved product quality encourages customers to return for more purchases and eventually form loyalty (Lone & Bhat, 2022). Furthermore, Majid et al. (2018) revealed that improving food quality and service quality increases the level of customer loyalty. They stated that customer loyalty is significantly affected by food quality and service quality. Thus, the findings of the analysis proved that there is a highly significant relationship among the variables; the data reveals that there is a highly significant relationship between customer loyalty to service quality and food quality.

4. Conclusions

Based on the study's important findings, the following conclusions were made: Employees in the fast food industry provide excellent customer service because they are always willing to help and have the necessary knowledge and abilities to serve customers more effectively. Additionally, regarding the quality of food in the fast food industry, respondents prefer eating freshly prepared meals since they find it to be more pleasurable. Because it enhances the dining experience, the respondents said they preferred their meals to be tasty. Additionally, because they had a positive experience, the respondents are probably going to return to this fast food establishment. Finally, the findings showed a strong correlation between food and service quality and consumer loyalty. Finally, the findings showed a strong correlation between food and service quality and consumer loyalty. Additionally, it produced the following findings: respondents place a slightly higher value on service quality than food quality,

and food quality influences positive customer experiences, which can result in customer loyalty. Service quality also has a bigger effect on customer loyalty than food quality. Additionally, a higher-quality meal can boost patronage among customers.

Recommendations - The recommendations were presented based on the conclusions derived from the significant findings of the study: In terms of the level of service quality in the fast food industry in San Jose Occidental Mindoro, the researcher suggests that fast food industries may consider implementing training programs such as workshops that focus on problem-solving, efficiency, and competency in customer service. Fast food industries may consider assigning tasks to employees that align with their loyalty. Status of food quality in fast food industries in San Jose, Occidental Mindoro: They may consider sourcing locally to improve the taste and quality of the food they serve to their customers. Fast food industries may conduct portion size analysis to ensure that they give their customers serving sizes that align with their expectations. Moreover, fast food industries may introduce loyalty programs such as discounts, promos, and rewards. Additionally, service quality and food quality significantly affect customer loyalty; the researcher suggests that fast-food industries may enhance their service efficiency and food quality by providing continuous training and regularly collecting customer feedback. Fast food may maintain high standards of food quality to earn customer loyalty and stay ahead in a competitive market. Lastly, future researchers may analyze how marketing strategies of the fast food industry, such as influencer partnerships and social advertising, affect the insights and loyalty of its customers.

5. References

- Abdullah, D., Hamir, N., Nor, N. M., Krishnaswamy, J., & Rostum, A. M. M. (2018). Food quality, service quality, price fairness, and restaurant re-patronage intention: The mediating role of customer satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 8(17), 211-226. DOI: 10.6007/IJARBS/v8-i17/5226
- Ahamed, S., Tabassum, N., Moniruzzaman, M., Hasan, M. M., & Hasif, M. a. M. (2024). Consumer preferences of fast-food items in Mymensingh, Bangladesh. *Archives of Agriculture and Environmental Science*, 9(1), 69–75. <https://doi.org/10.26832/24566632.2024.0901011>
- Althubiti, M. M. (2016, December 1). The effect of cultural background on perceived service quality and guest's satisfaction for hotel guests among Muslim pilgrims. <https://ttu-ir.tdl.org/items/a7ac603f-4e1f-4122-bc6b-107f0cd7849e>
- Chen, J. L. (2016). The relationship among service quality, relationship quality, and customer loyalty for chain restaurant industry. *International Journal of Marketing Studies*, 8(3), 3342. doi:10.5539/ijms.v8n3p33
- Dhar, R. L. (2014b). Service quality and the training of employees: The mediating role of organizational commitment. *Tourism Management*, 46, 419–430. <https://doi.org/10.1016/j.tourman.2014.08.001>
- Du, Y., & Tang, Y. (2014). A literature review on the relationship between service quality and customer loyalty. *Business and Management Research*, 3(3), 27-33. <https://doi.org/10.5430/bmr.v3n3p27>
- Ibojo, B. O., & Asabi, O. M. (2015). Impact of customer satisfaction on customer loyalty: A case study of a reputable bank in Oyo, Oyo State, Nigeria. *International Journal of Managerial Studies and Research*, 3(2), 59-69. <https://www.arcjournals.org/pdfs/ijmsr/v3-i2/6.pdf>
- Ismail, A., & Yunan, Y. S. M. (2016). Service quality as a predictor of customer satisfaction and customer loyalty. *Logforum*, 12(4), 269-283. <https://doi.org/10.17270/j.log.2016.4.7>
- Kumolu-Johnson, B. (2024). Improving service quality in the fast food service industry. *Journal of Service Science and Management*, 17(01), 55–74. <https://doi.org/10.4236/jssm.2024.171002>
- Kusuma, N. P., Suyadi, I., & Abdillah, Y. (2014). Analyzing The Effect Of Product Quality On Customer Satisfaction And Customer Loyalty In Indonesian SMEs. *Jurnal Administrasi Bisnis (JAB)*, 14(1). <https://media.neliti.com/media/publications/84269-EN-analyzing-the-effect-of-product-quality.pdf> EN-analyzing-the-effect-of-product-quality.pdf
- Lone, R. A., & Bhat, M. A. (2022). Product quality and customer loyalty: A review of the literature. *International Journal of Management IT and Engineering*, 12(3), 8-27.

- https://www.researchgate.net/publication/365449743_Product_Quality_and_Customer_Loyalty_A_Review_of_literature
- Majid, M. A. A., Samsudin, A., Noorkhizan, M. H. I., Zaki, M. I. M., & Bakar, A. M. F. A. (2018). Service quality, food quality, image, and customer loyalty: An empirical study at a hotel restaurant. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 1432-1446. <https://doi.org/10.6007/IJARBSS/v8-i10/5310>
- Namin, A. (2016). Revisiting image-ers' perception of service quality in fast food restaurants. *Journal of Retailing and Consumer Services*, 34, 70–81. <https://doi.org/10.1016/j.jretconser.2016.09.008>
- Okamoto, K., Tanaka, S., Suzuki, Y., Shigematsu, T., Kunieda, K., Hojo, K., Shimizu, A., Ohno, T., & Fujishima, I. (2022). Food appearance affects reward-related brain activity in healthy adults: a functional magnetic resonance imaging study. *International Journal of Food Sciences and Nutrition*, 73(8), 1116–1123. <https://doi.org/10.1080/09637486.2022.2137784>
- Rilya, R. R., Mandey, S. L., & Wenas, R. S. (2019). Analysis of the Effect of Brand Image, Product Quality, and Social Media on Consumer Purchase Intentions of Kokumi's Contemporary Drinks in Manado City. *International Journal on Economics, Finance and Sustainable Development*, 93–107. <https://doi.org/10.31149/ijefsd.v3i8.2117>
- Sochenda, S. (2021). Modeling of customer satisfaction and customer loyalty in the fast food industry. *Sochenda International Journal of Economics, Business and Accounting Research (IJEBAR)*. <https://doi.org/10.29040/ijebar.v5i4.3984>
- Sunaryo, I. (2019). Effects of food quality, service quality, price, environment, and location towards customer loyalty of Indonesia's Local Fast Food Industry. *J Ti Undip Jurnal Teknik Industri*, 14(3), 119. <https://doi.org/10.14710/jati.14.3.119-128>
- Tanković, A. Č., Vitezić, V., & Kraljić, V. (2023). Employee communication and soft skills influencing tourists' satisfaction. *European Journal of Tourism Research*, 34, 3410. <https://doi.org/10.54055/ejtr.v34i.2967>
- Villanueva, M. C. C., Alejandro, A. F., & Ga-An, M. L. L. P. (2023). Measuring the Service Quality, Customer Satisfaction, and Customer Loyalty of Selected Fast-Food Restaurants during the COVID-19 Pandemic. *Open Journal of Business and Management*, 11(03), 1181–1207. <https://doi.org/10.4236/ojbm.2023.113066>
- Vu, T. (2021). Service Quality and Its Impact on Customer Satisfaction. doi.10.6084/m9.figshare.17089454.
- Yiming, L., Ruanggoon, J., & Koohathongsumrit, N. (2024, June 1). Effect of service quality on customer loyalty in the Fast-Food Industry: A Perspective from University Students in Hangzhou City, Zhejiang Province, China. <https://wjst.wu.ac.th/index.php/stssp/article/view/25839>
- Zhong, Y., & Moon, H. C. (2020). What drives customer satisfaction, loyalty, and happiness in fast-food restaurants in China? Perceived price, service quality, food quality, physical environment quality, and the moderating role of gender. *Foods*, 9(4), 460. <https://doi.org/10.3390/foods9040460>

Effect of decision factors and visual merchandising on customer purchase decisions on flash sales in online selling platforms

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Abstract

The study aimed to determine the effect of decision factors and visual merchandising on customer purchase decisions during flash sales on online selling platforms. Knowing how these elements work together allows merchants to strategically use the data to optimize the efficacy of flash deals. A by the researchers. The data was collected from 200 randomly selected senior high school students in Divine Word College of San Jose, and a descriptive-correlational research design was utilized using a printed adapted questionnaire with a 4-point Likert scale. The weighted mean was used to determine the level of decision factors, visual merchandising, and customer purchase decisions. Pearson's r was used to ascertain the relationship between decision factors and visual merchandising to customer purchase decisions. The findings revealed that the respondents demonstrate favorable impressions of flash sales in online selling platforms when making purchase decisions. This reveals that customers are likely to purchase products during flash sales in online selling platforms after considering various factors that make up decision factors, such as product reviews, platform visuals, and ease of navigation. The statistical result revealed a significant relationship between decision factors and visual merchandising to customer purchase decisions. Furthermore, it has also been found that visual

merchandising is the most significant variable that affects customer purchase decisions. To sum up, the findings recommend that online platforms optimize the elements that comprise decision factors and visual merchandising to aid customer purchase decisions on flash sales.

Keywords: flash sales, decision factors, visual merchandising, customer purchase decisions, online selling platforms

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1. Introduction

Online shopping has become a part of the industry since the new internet age started. However, the COVID-19 pandemic became a factor in the rapidly increasing number of online shoppers. As of 2021, the Philippines contributed ₱1,373,520,000,000 in e-commerce sales, and it is predicted to reach a 17% growth of ₱972,910,000,000 by 2025 (International Trade Administration, 2024). Shopee is the leading online shopping platform in the Philippines, followed by Lazada (Balita, 2024). More and more people depend on online selling platforms to purchase their needs and desires with each passing time. Thus, many e-commerce platforms developed different strategies to appeal to customers and increase profitability. One of these strategies is the concept of flash sales. Flash sales are time- and quantity-limited offers held on online selling platforms where the products and services presented are heavily discounted.

As the researchers have experienced, flash sales are powerful marketing tools that enable consumers to purchase the available products and services quickly. The time pressure and the scarcity of supply make it engaging to buy with the plethora of available products, and the hard-to-predict price decreases contribute to the perception of scarcity. With the convenience of online shopping, there is no doubt that many select this over shopping physically. However, the researchers also encountered issues with online shopping since the product quality cannot be physically examined, fearing the possibility of receiving faulty products. Hence, this only leaves them to depend on product reviews to weigh their decisions. Such reviews include images, videos, and constructive product descriptions. Moreover, it has been found that the age group between 16 and 24 years shops online approximately 3 to 6 times a week (Balita, 2021; B and L., 2023). The rapid digitalization of our world has reshaped consumer behavior; therefore, businesses must grasp and assess these factors for their business to keep up with evolution (Mishra et al., 2023).

There are multiple studies done on consumer behavior with the ever-growing competition in the online market, and understanding this is crucial for the success of an online business. The survey of Kumar (2016) about the factors influencing customer buying behavior stated five factors that affect customer buying behavior. These are brand loyalty, visual merchandising, decision factors, product attributes, and discounts. According to them, understanding these factors can aid in elevating business marketing strategies. They further recommended that discounts and visual merchandising influence customers' buying behavior. On the other hand, Vongurai (2021) conducted a study about the factors that affect consumer attitudes and purchase intentions of flash sales on online shopping platforms, which was conducted on Thai flash sale consumers through Shopee and Lazada in Bangkok, Thailand. This study yielded results stating that attitudes towards flash sales, subjective norms, and perceived behavioral control are related to the intention to purchase during flash sales.

Many studies have explored consumers' buying behavior on online platforms; however, there is still a lack of information and empirical evidence regarding the integration of multiple variables on various online selling platforms. With this in mind, the researchers aimed to explore the decision factors and visual merchandising and employ these variables in consumers' purchase decisions on flash sales on online platforms. The study aimed to determine the effect of decision factors and visual merchandising on the purchase; merchandising can strategically utilize the information to amplify the effectiveness of flash sales merchandising.

Statement of the Problem - This study intended to determine the effect of decision factors and visual merchandising on customer purchase decisions on flash sales in online selling platforms. More specifically, this study sought to answer the following questions: (1) What is the level of decision factors on flash sales in online selling platforms? (2) What is the level of visual merchandising on flash sales in online selling platforms? (3) What

is the level of customer purchase decisions on flash sales in online selling platforms? (4) Is the level of customer purchase decisions significantly affected by decision factors and visual merchandising?

Significance of the Study - The results of this study would be of great benefit to the general public, more specifically: online sellers can benefit from understanding customer behavior in terms of discounts and merchandising by allowing them to effectively market their marketing tactics for profitability in a highly viable market online; online shopping enthusiasts can benefit from the study in terms of improving their understanding of the advertising techniques made to influence the choices they make, as well as help them formulate more informed decisions in purchasing items during flash sale deals; business professionals can acquire knowledge from the study on how to improve and boost promotions in their business while increasing customer engagement and acquiring sales; students especially those in business and marketing strands can benefit from this study by aiding their understanding of how strategies can impact the sales of a business, enhancing their learning experience; parents can gain more profound knowledge of how discounts and flash sale deals work, make informed selections, and avoid impulsive purchasing habits caused by promotions; and to future researchers, this study can fill the gaps of knowledge by understanding the impact of the strategies of online businesses and customer purchase decision factors on flash sale deals or related research, further aiding them to find related literature to their studies.

Scope and Delimitation of the Study - The study generally aimed to determine the effects and the level of discount, decision factors, and visual merchandising on customer purchase decisions on flash sale deals on online selling platforms like Lazada, Shopee, and TikTok Shop. The respondents were students who do online shopping and have experienced purchasing during flash sales in the Senior High School department of DWCSJ for the academic year 2024-2025. A quantitative approach was utilized to ascertain the link among the said variables.

2. Methodology

Research Design - The researchers employed a descriptive-correlational research design in this study. This enabled them to determine the level of decision factors, visual merchandising, and customer purchase decisions on flash sales in online selling platforms. In addition, correlational research was used to determine the relationship among the identified variables. Quantitative methods were utilized to calculate the extent of the independent and dependent variables.

Respondents of the Study - This study's respondents were senior high school students from Divine Word College of San Jose. Using Slovin's formula computation, out of 421 students enrolled in ABM, HUMSS, and STEM strands, the sample size was 200, using a 5% margin of error and a 95% confidence level. Respondents were randomly selected to avoid biases. There were 34 students from ABM, 40 from HUMSS, and 126 from STEM, for a total of 200 students.

Research Instrument - The researchers used adapted questionnaires. To check the validity and reliability of the adapted questionnaires, the researchers sought help from the experts in the field of research in the senior high school department. Moreover, the first part of the questionnaire included screening questions about whether participants have experienced online shopping and purchasing items during flash sales on online selling platforms. This ensured that the data collected from the participants were significant to the study. For the second part, there were three (3) parts, consisting of six (6) items for parts 1 and 2 and 10 items for part 3. The three parts were used to determine the level of decision factors on flash sales in online selling platforms, which was adapted from Kumar (2016), and to determine the level of visual merchandising and customer purchase decisions on flash sales in online selling platforms; the instrument was adapted by Nagvadia (2023). A 4-point Likert scale was employed to get the responses of the students. The corresponding levels for this type of scale were the following: 1 for very unlikely, 2 for unlikely, 3 for likely, and 4 for very likely. The participants used this to rate the likelihood of their answers to each question.

Data Gathering Procedure - The researchers first sought permission and approval from the senior high school academic coordinator to distribute questionnaires to the students. Once the consent was granted, the researchers

administered the adapted instruments to the respondents. They informed them about the necessary information about the present undertaking, such as the nature of the study and the instructions. There was one hour to answer the questionnaires. During that time, the researchers were open to queries and assistance. Ten (10) days was the duration of the data-gathering phase. The collected data were subjected to statistical treatment and were consulted by the researchers' research adviser for further analysis.

Statistical Treatment of the Data - The necessary statistical tools were used to treat the gathered data. The weighted mean under descriptive statistics was used to determine the level of decision factors, visual merchandising, and customer purchase decisions in flash sales. Pearson's r was implemented to determine the relationship between the dependent and independent variables. Moreover, the following descriptions were employed for the 4-point Likert scale: 3.26-4.00 for very high level, 2.51-3.25 for high level, 1.76-2.50 for low level, and 1.00-1.75 for very low level.

Ethical Considerations - The researchers abided by the ethical considerations regarding the collection of data and the general conduct of the study. Following these rules is crucial to ensure the welfare of the participants and the objectivity, credibility, and integrity of the survey. The ethics considered are informed consent, voluntary participation, confidentiality, anonymity, and transparency. Upon data collection, the researchers read aloud the necessary information on the nature of the study, as well as the rights of the participants. The participants were given the choice of participation. The data of those who participated was held confidential by the researchers. Filling out certain information, such as their name, was optional for anonymity. Thereafter, transparency was exercised throughout the research process. Biases were minimized as much as possible, ensuring that honesty and integrity prevailed. Ethical concerns were addressed immediately, and method modifications were made if necessary.

3. Results and Discussions

Table 1

Mean Level of Decision Factors on Flash Sales in Online Selling Platforms

INDICATORS	Weighted Mean	Verbal Description
I need to get the best price for the product(s) I buy.	3.74	Very High Level
I compare the prices of at least a few brands before I choose one.	3.59	Very High Level
I would shop at only one online store to find low prices.	2.70	High Level
I usually buy the best overall quality.	3.69	Very High Level
I always buy the best products.	3.64	Very High Level
I often feel confused because there are so many products to choose from.	3.46	Very High Level
Composite Mean	3.47	Very High Extent

Legend: 3.26 – 4.00 Very High Level, 2.51 – 3.25 High Level, 1.76 – 2.50 Low Level, 1.00 – 1.75 Very Low Level

Table 1 presents the level of decision factors on flash sales in online platforms with a composite mean of 3.47, which can be interpreted as very high. This means that the respondents place great importance on decision factors in making purchases during flash sales, such as price, product quality, and convenience. Shopping online is riskier than purchasing in person; therefore, consumers ensure that they receive quality products by thoroughly examining the provided information and prices before buying. Additionally, seamless transactions and swift deliveries are crucial for customers' convenience. This is inclined to agree with Margarita et al.'s (2023) study where perceived risk, online shopping features, price, convenience, customer loyalty programs, and accessibility are the decision components that consumers consider. Moreover, the indicator "*It is important for me to get the best price for the product(s) I buy*" gathered the highest mean score of 3.74 and a very high level verbal description. This discloses that a product's price is integral when making purchases. Given that the respondents of the study are students who are still financially dependent, they make efforts to look for products that suit their financial capabilities when purchasing during flash sales. This result supports the claim of Merta & Gintarė (2022) that price is the most significant factor influencing consumer purchasing decisions online, among other factors such as trust, promotion, easiness, service quality, and product price. In the same light, the study by Bucko et al. (2018) also concluded that

product price is the first thing that consumers, specifically students, look into.

Conversely, 2.70 is the lowest mean score from the indicator “*I would shop at only one online store to find low prices,*” which has a verbal high-level description. Even though it is interpreted as very high, it implies that the respondents may compare prices in different platforms rather than explore for lower prices in one online store. Affordable products are essential for students, especially with their limited budgets. Hence, they strive to search across multiple platforms to compare prices. This finding agrees with the result of a survey by Gelder (2024) in which 83% of the respondents compare prices to a few online selling platforms before deciding to purchase.

Illustrated in table 2 is the mean level of visual merchandising on flash sales in online selling platforms with a composite mean of 3.39, suggesting a very high level of agreement of the respondents to visual merchandising elements being one of the factors when making online purchases during flash sales, such as layout, platform design, platform colors, font style and size, product presentation and information, and ease of navigation. This emphasizes that visual merchandising is crucial for every online selling platform. The finding supports the claim of Alam (2018) that website construction and product quality collectively influence customer purchase decisions. Additionally, visual merchandising enables business owners to communicate with customers and potential buyers, increasing sales by enticing, engaging, and driving customers to interact (Gunadi, 2024).

Table 2

Mean Level of Visual Merchandising on Flash Sales in Online Selling Platforms

INDICATORS	Weighted Mean	Verbal Description
I understand logically displayed product information on flash sales on online platforms.	3.32	Very High Level
The layout of flash sales in online selling platforms helps me browse and select the right product(s) while shopping online.	3.42	Very High Level
Various colors on flash sales in online selling platform layouts help me to identify the product(s) and related details.	3.34	Very High Level
I purchase from flash sales on online platforms with visible fonts.	3.26	Very High Level
I purchase from flash sales on online selling platforms with a proper presentation or demonstration of the product(s).	3.52	Very High Level
I prefer to purchase from flash sales on online selling platforms where easy navigation is possible.	3.47	Very High Level
Composite Mean	3.39	Very High Level

Legend: 3.26 – 4.00 Very High Level, 2.51 – 3.25 High Level, 1.76 – 2.50 Low Level, 1.00 – 1.75 Very Low Level

Furthermore, the indicator that got the highest mean score of 3.52 is the indicator “I tend to purchase from flash sales in online selling platforms where there is proper presentation or demonstration of product(s).” At the same time, videos have the lowest mean score of 3.26 from the indicator “I tend to purchase from flash sales in online selling platforms where there are visible fonts,” with a verbal description of a very high level. This implies that the respondents agreed with the given statement despite having the lowest mean score. It emphasizes that the readability of the fonts in an online selling platform plays a critical role in shaping the respondents’ willingness to buy during flash sales. The study of Sivakumar et al. (2023) also aligns with this, emphasizing that readability and easy navigation are vital aspects of OVM.

Table 3

Mean Level of Customer Purchase Decisions on Flash Sales in Online Selling Platforms

INDICATORS	Weighted Mean	Verbal Description
My prior knowledge about online selling platforms helps me purchase a product during flash sales.	3.50	Very High Level
My prior online purchase experience reduces uncertainties and increases my purchase intention during flash sales on online selling platforms.	3.34	Very High Level
I am more likely to purchase a product during flash sales on online selling platforms if quality products are available and positive reviews are available.	3.61	Very High Level
My trust in an online selling platform will enhance my chances of buying a product during flash sales.	3.27	Very High Level

The availability of different online shopping attributes will enhance my chances of buying a product during flash sales on online selling platforms.	3.41	Very High Level
The online shopping platform's visual merchandising increases my chances of buying a product during flash sales.	3.37	Very High Level
I am more likely to purchase during flash sales on online platforms if purchasing is easy.	3.47	Very High Level
My perceived usefulness of online shopping platforms will enhance my chances of buying a product during flash sales on online selling platforms.	3.43	Very High Level
My perceived risk of online shopping platforms will reduce my chances of buying a product during flash sales.	3.32	Very High Level
I strongly recommend to others to purchase during flash sales on online platforms.	3.41	Very High Level
Composite Mean	3.41	Very High Level

Legend: 3.26 – 4.00 Very High Level, 2.51 – 3.25 High Level, 1.76 – 2.50 Low Level, 1.00 – 1.75 Very Low Level

The mean level of customer purchase decisions on flash sales in online selling platforms is presented in Table 3, which has a composite mean of 3.41 and a verbal interpretation of a very high level. This reveals that customers are likely to purchase products during flash sales on online selling platforms after taking into account various elements that make up decision factors, such as product reviews, platform visuals, ease of navigation, perceived risks and usefulness, availability of quality products, and prior purchasing experiences and knowledge. This is similar to the claim of Dsilva and N (2021), where factors such as discounts, value promotions, website security, and reputation drive decision-making during flash sales. Moreover, the perceived supply scarcity and perishability of the time limit during flash sales push customers to make abrupt purchases based on their findings.

Based on the table, the indicator “I am more likely to purchase a product during flash sales in online selling platforms if there is an availability of quality products and positive reviews” has the highest mean score of 3.61. It has a verbal interpretation of a very high level, which discloses that the availability of quality products and positive reviews greatly influences their likelihood of purchasing during flash sales. While flash sales create a sense of urgency for customers, this finding proves that product credibility and reputation are crucial details to pay heed to. This finding is supported by the claim of Darpito (2022) that flash sales positively influence purchase decisions, which are moderated by product knowledge. Numerous product reviews during flash sales are often laid for consumers to use as a basis for their choices (Zhu et al., 2023). As stated in Sari and Othman’s (2024) study, customer reviews and ratings play a significant part in forming customers’ perspectives on the products being offered and serve as a basis for consumers' buying decisions in Lazada. Product reviews have also been deemed significant in making purchases online, along with free shipping promos (Alexander et al., 2024). In the same light, Pasaribu et al. (2023) highlight that product ratings and customer lifestyle significantly influence their purchase decisions on the TikTok shop. However, they also stated that flash sales and product endorsements do not significantly correlate to customer buying decisions.

On the other hand, the indicator “My trust in an online selling platform will enhance my chances of buying a product during flash sales” earned the lowest mean score of 3.27, with a verbal interpretation of a very high level. Although it had the lowest mean score, it still does not change the fact that the respondents recognize that their trust in an online selling platform can significantly influence the probability of them making purchases during flash sales. Yet, it also suggests that the respondents prioritized it less than the other indicators. The studies of Batubara et al. (2021) and Christiarini et al. (2024) support this finding. According to them, consumer trust positively and significantly affects purchase decisions. On the contrary, the study of Djan and Adawiyyah (2020) stated that trust does not influence customer purchase decisions.

Table 4*Correlation Coefficient and P-values for Hypothesis Testing*

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
Decision Factors Customer Purchase Decisions	0.456	0.208	1976	7.210	0.001	Highly Significant
Visual Merchandising → Customer Purchase Decisions	0.534	0.285	1.976	8.886	0.001	Highly Significant

Legend: p-value<0.01 Highly Significant, Significant; p-value<0.05 Significant

The correlation coefficient and p-values of the relationship of decision factors and visual merchandising to customer purchase decisions are depicted in Table 4. The results state that decision factors and visual merchandising are significantly related to customer purchase decisions. Therefore, the null hypothesis is rejected. The first variable, decision factors, has a strong, moderate, positive significance to customer purchase decisions with a correlation coefficient of 0.456, an effect size of 0.208, and a p-value of 0.000. This underscores that decision factors influence customer purchase decisions during flash sales. Even with the sense of urgency that flash sales instill, it is still vital to enhance customers' substantial decision factors; the better they do, the better its impact is on customer purchase decisions. In accordance with various studies, there are multiple aspects that make up decision factors such as psychological psychologicalconvenience, which affect customer purchase decisions (Agyekum et al., 2015; Margarita et al., 2023; Putri et al., 2022; Firdaus et al., 2019; Liu, 2024; Merta et al., 2022; Cerny & Hanak, 2024; Chelvarayan et al., 2021).

Moreover, visual merchandising had a correlation coefficient of 0.534, an effect size of 0.285, and a p-value of 0.000, implying a strong, moderate, positive significance between the two variables. This highlights that an online shopping platform's overall visual is crucial for customers to make purchase decisions during flash sales. It also suggests that as visual merchandising improves, the more likely a customer is to purchase. The study of Noor et al. (2022) ties in with this finding, claiming that an online shopping platform's website is a key factor that enables students to make purchases. Similarly, Pandey and 'sParmar's (2019b) study showed that website design is one factor influencing consumer buying behavior. This was also comparable to the study of Kumar (2016), where it was recommended that visual merchandising can influence customer buying behavior.

4. Conclusions

The significant findings led to several conclusions: The respondents carefully consider decision factors such as price, product information, and convenience before making purchases during flash sales. Visual merchandising plays an integral part in shaping the respondents' views and engagement during flash sales on online selling platforms. When making purchase decisions, the respondents demonstrate favorable impressions of flash sales on online selling platforms. The level of customer purchase decision is significantly affected by decision factors and visual merchandising. It also led to the following conclusions: decision factors are a significant variable that affects customer purchase decisions, and visual merchandising is the most important variable that affects customer purchase decisions, with the respondents greatly considering the visual merchandising of an online selling platform during flash sales.

Recommendation - Recommendations are generated in connection to the significant findings. Online selling platform owners and sellers may optimize different customer retention strategies in terms of prices, such as competitive pricing strategies, offering bundle deals, and customer loyalty programs. Moreover, online selling platform owners and sellers may employ different techniques that could increase customer retention and loyalty and improve their services to foster trust with the customers. This could encourage them to buy during flash sales. In terms of their sites' physical appearance, online selling platform owners may make efforts to ensure that the texts on their sites are readable, as well as enhance their platforms' features that cater to the decision factors and visual merchandising to better aid in the customers' decision-making process. Specifically, online selling platform

owners may elevate their platforms' appearance (in terms of color, font readability, layout, and easy navigation) and the overall presentation of their products and ensure the availability of quality products with reasonable prices to increase the likelihood of customers purchasing during flash sales. Lastly, future researchers are recommended to explore other variables connected to customer purchase decisions on flash sales. Some of these variables may include brand loyalty and product attributes.

5. References

- Agyekum, C. K., Haifeng, H., & Agyeiwaa, A. (2015). Consumer perception of product quality. *Microeconomics and Macroeconomics*, 3(2), 25–29. <https://doi.org/10.5923/j.m2economics.20150302.01>
- Alam, M. M. T. (2018). Factors influencing the attitude of university students' toward online shopping: Evidence from some selected universities of Chittagong. *International Journal of Business and Management*, 13(12), 158. <https://doi.org/10.5539/ijbm.v13n12p158>
- Alexander, N., Rini, Y. P., & Yoyo, T. (2024). The effect of cash on delivery and free shipping promos on customer reviews with purchase decisions as an intervening variable on the Shopee marketplace site in the Tangerang City area. *Primanomics Jurnal Ekonomi & Bisnis*, 22(3), 219–229. <https://doi.org/10.31253/pe.v22i3.3211>
- Balita, C. (2024, September 4). E-commerce in the Philippines. Statista. Retrieved September 16, 2024, from <https://www.statista.com/topics/6539/e-commerce-in-the-philippines/#topicOverview>
- Batubara, B. S., Rini, E. S., & Lubis, A. N. (2021). Effect of consumer trust, tagline, flash sale, and ease of use on purchasing decisions. *International Journal of Research and Review*, 8(2), 107–112. https://www.ijrrjournal.com/IJRR_Vol.8_Issue.2_Feb2021/IJRR018.pdf
- B., K., & L., B. (2023, July 11). Who are the Philippines' online shoppers? Janio. Retrieved September 29, 2024, from <https://www.janio.asia/resources/articles/who-are-philippines-online-shoppers#:~:text=eCommerce%20lude%3A,of%20all%20the%20age%20groups>
- Bucko, J., Kakalejčík, L., & Ferencová, M. (2018). Online shopping: Factors that affect consumer purchasing behaviour. *Cogent Business & Management*, 5(1), 1535751. <https://doi.org/10.1080/23311975.2018.1535751>
- Cerny, M., & Hanak, R. (2024). Online purchasing decisions affected by social factors and functionality. *Journal of Internet and e-Business Studies*, 1–14. <https://doi.org/10.5171/2024.143395>
- Chelvarayan, A., Jie, C. S., & Fern, Y. S. (2021). Factors affecting students' perception of online shopping. *International Journal of Entrepreneurship Business and Creative Economy*, 1(1), 13–24. <https://doi.org/10.31098/ijebce.v1i1.424>
- Christiarini, R., Larissa, J., & Yaacob, T. Z. (2024). Exploring Consumer purchase intention in e-Commerce Flash Sale: Can satisfaction and trust enhance the behavior? *International Journal of Academic Research in Business and Social Sciences*, 14(12), 2211–2224. <https://doi.org/10.6007/ijarbs/v14-i12/24183>
- Darpito, S. H. (2022). The effect of flash sale on purchase decision moderated by product knowledge. *International Journal of Business Ecosystem and Strategy* (2687-2293), 4(1), 37–41. <https://doi.org/10.36096/ijbes.v4i1.301>
- Djan, I., & Adawiyyah, S. R. (2020). The effect of convenience and trust to purchase decision and its impact to customer satisfaction. *International Journal of Business and Economics Research*, 9(4), 269–275. <https://doi.org/10.11648/j.ijber.20200904.23>
- Dsilva, H., & N, E. (2021). Impulsive buying during flash sales on ECommerce sites and the ramification of flash sales on shopping. *Ushus - Journal of Business Management*, 20(4), 29. <https://doi.org/10.12725/ujbm.57.3>
- Firdaus, F., Sukesi, S., Fitriani, W., Indrasari, M., & Sugiyanto, S. (2019). Key determinants of online product purchase decisions for students in Surabaya City (Case study at FEB Students, Dr. Soetomo University). *In Proceedings of the 1st Asian Conference on Humanities, Industry, and Technology for Society. European Union Digital Library*. <https://doi.org/10.4108/eai.30-7-2019.2287564>

- Gelder, K. V. (2024, November 9). Price comparison Habits Before buying Online Worldwide 2022. Statista. Retrieved March 4, 2025, from <https://www.statista.com/statistics/1239795/price-comparison-online-shopping-habits/>
- Gunadi, H. (2024). A study of the impact of digital visual merchandising on customer purchasing behavior in TikTok live sessions. *East Asian Journal of Multidisciplinary Research*, 3(9). <https://journal.formosapublisher.org/index.php/eajmr/article/view/10946>
- International Trade Administration. (2024, January 24). Philippines - eCommerce. <https://www.trade.gov/country-commercial-guides/philippines-e-commerce>
- Kumar, A. A. (2016). Factors influencing customers buying behavior. *Journal of Marketing and Consumer Research*, 27, 31. <https://core.ac.uk/download/pdf/234694193.pdf>
- Liu, Z. (2024). Analysis of key economic factors in consumer behavior and purchase decisions in online markets. *Advances in Economics Management and Political Sciences*, 77(1), 26–32. <https://doi.org/10.54254/2754-1169/77/20241776>
- Margarita, I., & Gintarè, G. (2023). Factors influencing customers' decision to buy in online stores. *Journal of Entrepreneurship and Sustainability Issues*, 11(2). <https://doi.org/10.9770/jesi.2023.11.2>
- Merta, I. P. G. B., Trinanasari, N., & Bagia, I. W. (2022). Influential factors of online shopping decision. *International Journal of Social Science and Business*, 6(2), 246–252. <https://doi.org/10.23887/ijssb.v6i2.44077>
- Mishra, A. K., Anand, B., Chakravarty, H., Athalye, S. G., & Varalaxmi, P. (2023). Understanding Consumer behaviour in the Digital Age: A study of Online shopping habits. *Shodha Prabha (UGC CARE Journal)*, 48(3), 84–93. https://www.researchgate.net/publication/376140521_UNDERSTANDING_CONSUMER_BEHAVIOUR_IN_THE_DIGITAL_AGE_A_STUDY_OF_ONLINE_SHOPPING_HABITS
- Nagvadia, J. J. (2023). Factors influencing consumer's online buying behavior: An empirical study [PhD Thesis, Gujarat Technological University].
- Noor, N. M., Thanakodi, S., Fadzlah, A. F. A., Wahab, N. A., Talib, M. L., & Manimaran, K. (2022). Factors influencing online purchasing behaviour: A case study on Malaysian university students. *AIP Conference Proceedings*. <https://doi.org/10.1063/5.0119848>
- Pandey, A., & Parmar, J. (2019b). Factors affecting consumer's online shopping buying behavior. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3308689>
- Pasaribu, N. S., Simanjorang, E. F. S., & Siregar, M. (2023). Analysis of the Effect of Flash Sales, Lifestyle, Rating Product, and Influencer Endorse on Consumer Purchase Decisions in the Tiktokshop Application. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 6(3), 3307-3324.
- Putri, D. L., Nurmansyah, N., Aznuryandi, A., Sunarsi, D., & Arianto, N. (2022). Factors that influence on online purchase decisions. *Kontigensi Jurnal Ilmiah Manajemen*, 10(2), 312–319. <https://doi.org/10.56457/jimk.v10i2.292>
- Sari, R. S., & Othman, L. (2024). The influence of online customer reviews and online customer ratings on purchasing decisions on the Lazada marketplace (Study of FISIP students, University of Riau using the Lazada application). *Journal of Accounting Management Business and International Research*, 3(2), 137–155. <https://doi.org/10.57235/jambuair.v3i2.2284>
- Sivakumar, A., Jayasingh, S., & Johnson, E. (2023). Online Visual Merchandising Cues Impacting Consumer pleasure and Arousal: An Empirical study. In *Advances in economics, business and management research/Advances in Economics, Business and Management Research* (pp. 12–21). https://doi.org/10.2991/978-94-6463-162-3_3
- Vongurai, R. (2021). Factors influencing consumer attitudes and purchase intentions of flash sale through online shopping platforms. *Journal of Humanities and Social Sciences Nakhon Phanom University*, 11(1). <https://so03.tci-thaijo.org/index.php/npuj/article/view/243039/168554>
- Zhu, P., Miao, C., Wang, Z., & Li, X. (2023). Informational cascade, regulatory focus and purchase intention in online flash shopping. *Electronic Commerce Research and Applications*, 62. <https://doi.org/10.1016/j.elerap.2023.101343>

Working environment, leadership style, and performance of employees in the fast-food industry in San Jose, Occidental Mindoro

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Abstract

As the fast-food industry in San Jose, Occidental Mindoro, continues to evolve, the performance of employees continues to be affected by their working environment and the leadership style they receive. Therefore, this study determined the effect of working environment and leadership style on the performance of the employees in San Jose, Occidental Mindoro. This study utilized a descriptive-correlational design, and the data were gathered from 103 employees of the 4 fast-food industries in SJOM, covering McDonald's, Chowking, Mang Inasal, and Bonchon. The study used a 10-item researcher-made questionnaire and a 25-item adapted questionnaire using a 4-point Likert scale. The findings revealed that the level of working environment of the respondents in terms of modern working environment and traditional working environment was at a high level of agreement, acknowledging their hierarchy-driven work culture and fast-paced workplace. Furthermore, the leadership style in terms of democratic style, transformational style, and transactional style was also at a high level of extent. Thus, the respondents were satisfied with the job-related training their workplace offers. Therefore, the results revealed that the employees' performance in the fast-food industry is significantly affected by their working environment and leadership style. The researchers recommend that the head department support the team's growth by offering regular feedback, and the employees may engage with each other to have unity in their workplace. Future researchers may explore other food industries to

determine what working environment and leadership style are used.

Keywords: working environment, leadership style, democratic style, performance of employees, fast-food industry

Working environment, leadership style, and performance of employees in the fast-food industry in San Jose, Occidental Mindoro

1. Introduction

The fast-food industry in San Jose, Occidental Mindoro, continues to evolve. According to Priscilla et al. (2023), an organization can achieve good performance when some factors, like leadership and work environment, that influence employee performance are implemented well. A work environment refers to the factors that include where employees work and significantly impact how healthy employees perform. A comfortable workplace provides physical comfort and promotes social and psychological well-being. This is significant because workers are more likely to be motivated to perform well when they feel valued and at ease (Dullah et al., 2023). Positivity and peace must be established to ensure the employees do well in this kind of working environment. Positiveness and peacefulness must be established to adapt to this working environment. Herrity (2024) states that a positive working environment includes respect, understanding between coworkers, and compassion. These opinions help employees feel heard and valued at their workplace and nurture teamwork between them.

The tools and resources that an individual or group uses while working and the procedures and arrangements used comprise the work environment. Creating a healthy work environment, both physically and non-physically, is one of the crucial aspects that the firm needs to focus on to fulfill its goals (Kawiana et al., 2023). The increased productivity, job satisfaction, and general performance from a favorable work environment significantly impact an organization's success. Since there have been a few recent studies looking into leadership styles across various industries worldwide, this study specifically looked into the fast-food restaurant industry in the hospitality sector. This industry has dynamism and flexibility because it strongly focuses on guest happiness and loyalty. As a result, it became necessary to learn more about the factors that could affect employee productivity (Alusa, 2021).

Leadership style is the method that leaders use to manage, inspire, and guide their employees. It includes critical thinking and actions that affect how leaders deal with their workers, advance company objectives, and make decisions. There are various leadership styles, and each can affect the dynamics, output, and culture of a group or organization (Bwalya, 2023). The democratic leadership style, transformational leadership style, and transactional leadership style will be included in this study. By observing these leadership styles in the fast-food industry in San Jose, Occidental Mindoro, the researchers will know how the style the leaders use will affect their workers' performance and what impact it will have on their company. The purpose of using these leadership styles in the fast-food industry is to maintain efficiency in a fast-growing environment and to guide employees toward achieving outstanding performance in the workplace. A leadership style that is easy to understand helps define objectives, oversee service quality, and foster a healthy work environment. It also plays a critical role in reducing employee turnover and improving the overall satisfaction and productivity of the employees. As stated by Cherry (2023), the study of Lewin's leadership styles (1939) found that democratic leadership is typically the most effective. Democratic leaders participate in the group and let members participate too; they also offer guidance to group members, which has a good impact on the firm.

Leadership plays an effective role in embedding, building, and developing cultures to manage cultural change and develop employee performance in the competitive market. As the world becomes more modern, the demand for customers in the fast-food industry has increased, and working conditions for employees are crucial (Basnet & Tiwari, 2022). In addition, leadership influences organizational culture, employee behavior, and how initiatives are implemented across the organization's departments. In order to manage cultural change and improve employee performance in a competitive market, leadership is crucial in establishing, fostering, and growing cultures. As the world becomes more modern, the demand for customers in the fast-food industry has increased, and working conditions for an employee are crucial (Basnet & Tiwari, 2022).

This research aimed to determine the connection between the variables of this study and how the working environment and leadership style affect the performance of employees in the fast-food industry in San Jose, Occidental Mindoro.

Statement of the Problem - The researchers aimed to investigate the effect of the working environment and leadership style on the performance of employees in the fast-food industry in San Jose, Occidental Mindoro. Specifically, the researchers sought to answer the following questions: (1) What is the level of the working environment of employees in the fast-food industry in terms of traditional working environment and modern working environment? (2) What is the extent of leadership style in the fast-food industry in terms of democratic style, transformational style, and transactional style? (3) What is the level of performance of employees in the fast-food industry? (4) Is the level of performance of employees significantly affected by the working environment and leadership style?

Significance of the Study - Throughout this study, the following individuals were thought to benefit fully from the results, according to the researchers: To the employees, this will enable them to know if their working environment and leadership style applied in their workplace impact their performance. Furthermore, the owners will be able to know if the working environment and the leadership style they use impact their employees' performance. Moreover, the customers will be able to observe and compare the performance of the employees among the different fast-food industries involved in this study. Lastly, this study would benefit future researchers by making them comprehend the impact of the work environment and leadership style on the performance of employees in the fast-food industry. It will also make it easier for them to find related literature for their research study, adding to their knowledge.

Scope and Delimitation of the Study - This study aimed to determine the impact of the working environment, leadership styles, and employees' work performance in the fast-food industry. This study focuses on the working environment, especially the performance of employees in fast food restaurants in San Jose, Occidental Mindoro. The respondents of this research study were the employees of the fast-food industry in San Jose, Occidental Mindoro. Only those working in fast food restaurants are the study's respondents. The researchers used quantitative methods, including surveys given to fast-food restaurant employees in San Jose, Occidental Mindoro. All the opinions and answers of the employees will serve as an important basis for the study to be done by the researchers. The surveys collect information on how satisfied and engaged the employees are with their roles. In the fast-food industry, where turnover rates can be high, understanding what drives employee satisfaction can lead to better retention strategies and a more stable workforce. The study covers the months of September 2024 to February 2025. By the given allotted time, the researchers are expected to perform and find answers while conducting this study. Moreover, it focuses only on determining the effects of the working environment and leadership style on the performance of employees. The given specifications led the researchers to solve the necessary sampling and methodology that would create outcomes for the study. It would also limit the study results that can be measured as a basis for the questionnaire provided.

2. Methodology

Research Design - Using a descriptive correlational research design, this study aimed to determine the level of working environment and leadership style that affects the performance of employees in the fast-food industry in San Jose, Occidental Mindoro. Moreover, correlational design was used to determine if the employees' performance level was significantly affected by the working environment and leadership style. The data was collected using structured questionnaires that measured employees' performance based on their perceptions of their work environment and leadership experience.

Respondents of the Study - This study's respondents were employees of fast-food restaurants in San Jose, Occidental Mindoro. It focused on those currently employed in these establishments. The researchers used complete enumeration to include all respondents. The total number of respondents was 103, which included the

following fast-food industry employees: 32 from McDonald's, 29 from Mang-Inasal, 27 from Chowking, and 15 from Bonchon.

Research Instrument - This study utilized researcher-made and adapted instruments from Alkhasawneh (2019), Ferozi & Chang (2021), Schermerhorn et al. (1999), and Xiaoxia et al. (2006). The researchers used expert validity, using the expert's opinion to check the content of the questionnaires. Thus, further discussion was suggested to improve the questionnaires. The questionnaires were modified, combining studies that attest to the previous objectives. The questionnaire was composed of three (3) parts. There were two (2) sub-variables in part 1 and three (3) sub-variables in part 2. It is systematically prepared and grouped through different constructs in the study. The respondents shall rate each item in terms of the following level of possibility: [4] very likely, [3] likely, [2] unlikely, [1] very unlikely. The results of the questionnaire are solved and have undergone statistical treatment. Additionally, in assessing the reliability of the questionnaire on five conveniently selected managerial-level participants, the original authors conducted a pilot study. Based on their findings, Cronbach's alpha score was 0.806 from Alkhasawneh's study. (2019) shows the acceptability of the instrument. Thus, the adapted instrument was ready to administer to the final set of respondents.

Data Gathering Procedure - To execute the study, the researchers made a letter that the research adviser signed. It was distributed to the specific fast-food restaurants in San Jose, Occidental Mindoro, requesting approval to conduct interviews to gather necessary data. Upon approval of the request, the researcher administered the questionnaire, ensuring the data's accuracy and confidentiality. The instruments used in gathering the data were in printed form, and the respondents manually wrote the answers. The researchers assisted the respondents in answering the questions. The results were obtained 21 days after the questionnaires were given to them.

Statistical Treatment of the Data - The relevant data gathered in this study were tallied and appropriately recorded using Microsoft Excel. The researchers used the weighted mean to determine the level of performance in terms of various sub-indicators in the variable. Moreover, Pearson's correlations were used to determine if there is a significant relationship between the three variables (working environment and leadership style) and the dependent variable of performance. With this, the results reduced the answers and were statistically interpreted, providing specific results for the sample and population.

Ethical Considerations - Informed consent is one essential ethical consideration that the researchers used in this study. The researchers provided participants with clear and comprehensive information about the research study. This contains its purpose, the possible risks that may appear during data gathering, and the benefits they may provide. Understanding what is expected of them, participants should willingly agree to participate. Also, respect for participants' privacy is another critical detail. To ensure that their personal information remains safe, researchers took ethical measures to secure the confidentiality of participants. This is especially important in careful research areas, such as health or criminal behavior, where disclosing participants' identities could have significant results. Researchers expected and mitigated potential danger to participants, both physical and psychological. The fundamentals of reducing harm are central to ethical research. The researchers are open about the methods they used in the study and the results they obtained. Being honest in gathering and processing the data provides credibility to the study. Researchers should address the matter without delay if an unexpected ethical issue appears, and if necessary, they should revise the process of making the research or the research itself to establish ethical standards in the study and continuously apply integrity in the making of the research.

3. Results and Discussions

Table 1 presents employees' mean level of working environment in terms of the traditional and modern working environments. The composite mean of 3.84 for both indicators was very high in agreement in the fast-food industry. This means the respondents are led in a workplace with a hierarchy-driven work culture and structured settings. This agrees with the study of Marzo (2022); this environment can bring a strong sense of community and smooth cooperation, but it may also lead to more extended changes and less flexibility. Moreover,

the composite mean indicates that the respondents' working environment uses technologies, and the respondents' workplace is important to their well-being. This relates to the study of Abisheva and Pertiwi (2020), which is changing and accurate. This is defined as indicating a genuine desire to support the advancement of other people by merging individual motivation with the goals of a workplace. The definition of a modern workplace is constantly changing to meet the changing needs of both employees and businesses.

Table 1

Mean Level of Working Environment of Employees in Terms of the Traditional Working Environment & Modern Working Environment

INDICATORS (TRADITIONAL WORKING ENVIRONMENT)	Weighted Mean	Verbal Description
1. My workplace provides personal and professional growth opportunities.	3.87	Very High Level
2. My workload is manageable in a less technologically advanced workplace.	3.81	Very High Level
3. I feel valued in a hierarchy-driven work culture.	3.86	Very High Level
4. I am satisfied with my workplace for how they rely on face-to-face communication for work.	3.84	Very High Level
5. I am satisfied with the stability and structure of traditional workplace settings.	3.78	Very High Level
COMPOSITE MEAN	3.84	Very High Level
INDICATORS (MODERN WORKING ENVIRONMENT)		
1. I am satisfied with the flexibility of my current job.	3.88	Very High Level
2. Digital tools and technologies enhance my productivity at work.	3.84	Very High Level
3. My workplace promotes equity and inclusivity effectively.	3.84	Very High Level
4. My workload is manageable in this modern and fast-paced environment.	3.84	Very High Level
5. My workplace supports my work-life balance well.	3.82	Very High Level
COMPOSITE MEAN	3.84	Very High Level

Legend: 3.26–4.00 Very High Level, 2.51–3.25 High Level, 1.76–2.50 Low Level, 1.00–1.75 Very Low Level

The highest mean score collected is 3.87, with a verbal description of a very high level in the traditional working environment. This reveals that the respondents feel that their workplace provides them with personal and professional growth opportunities. Additionally, having their workstation may help employees improve their development opportunities. This supports the study of Campbell (2023), which states that in a traditional office, each employee typically has their own workspace, often having a desk and a cubicle or a private office. However, the mean score of 3.78 is considered the lowest among the five indicators presented; this shows that the respondents are satisfied with the stability and structure of a traditional workplace setting. Thus, the workplace matters in the behavior and performance of the respondents. This relates to the study of Campbell (2023), which states that the layout of a traditional working environment tends to have a more formal and private atmosphere, with physical barriers between employees.

Moreover, in terms of the modern working environment, the composite mean of 3.84 with a verbal description of "very high level indicates that the working environment of the respondents uses technologies and the workplace gives importance to their well-being. The definition of a modern workplace is constantly changing to meet the changing needs of employees and businesses. The highest mean score recorded is 3.88, with a verbal description of a very high level. This means that the respondents are content with their workplace's adaptability, flexibility, and inclusivity since they are considered. This is inclined to Namiq (2018). By obtaining diversity inside a workplace, the organization is more likely to go regarding improvement and progress since it leads to several ideas with it, witnessing the problems from a variety of perspectives, which will proceed in constant invention and market growth. The lowest mean score recorded is 3.82, with a verbal description of a very high level. It highlights that the workplace supports the work-life balance of the respondents. This means that the modern workplace highlights the well-being of employees by encouraging a healthy work-life balance.

Table 3 presents the mean extent of leadership style in terms of the democratic, transformational, and transactional leadership styles with a composite mean of 3.82, 3.83, and 3.81, respectively, with a very high extent

of verbal description. This indicates that the respondent's department heads' leadership involves them in solving the problems in their workplace, and their department heads are there to remind them to know their priorities. This is connected to Aisha's (2022) study, which states that employee performance will increase if a democratic leadership style is used. This supports the study of Laoyan (2025); democratic leadership is also often referred to as participative leadership. This way of leadership means coordinating for multiple people to engage in the decision-making process. The verbal description of a very high extent represents the highest mean score of 3.84. This shows that the department head of the respondents always tries to involve them in deciding what to do with something and how to do it, and their head allows them to set priorities with guidance. This agrees with Fakhri et al. (2020), who describe democratic leadership as performing three functions: assigning responsibility among the members, strengthening individual capabilities, and supporting the group's decision-making process. In addition, since the democratic approach is acknowledged by many as the style of leadership that works best for employees, leaders are now encouraged to embrace the democratic leadership style and involve their workers in the decision-making process (Aisha, 2022).

Furthermore, the extent of the employee's involvement in the transformational leadership style implies that the department head has high expectations from them yet motivates them and values their feelings. This finding agrees with Korejan & Shahbazi's (2016) study that transformational leaders acquire their abilities to encourage the ideals of others and shift individuals to a higher level of performance. The verbal description of a very high extent represents the highest mean score of 3.87. This shows that the department heads of the respondents are motivating them to be team players and work together to achieve their goal. In other words, whatever characteristics of transformational leadership are visible, members will be more motivated to enhance the organization's performance because transformational leaders motivate people. When leaders have good personalities, pay attention to individual distinctions and high-level needs of people, and give mental stimulation, they increase members' participation and their tendency to make a better effort to succeed and create high performance in the organization (Korejan & Shahbazi, 2016). In addition, the lowest mean score of 3.81 shows that their leader leads them by having a high expectation for the respondents. Because of that, the department head expects them to do well in their work and perform well. According to the study of Long et al. (2024), transformational leaders do more alongside colleagues and followers than set up easy trades or agreements. They act in methods to accomplish superior results by retaining one or more of the four core components of transformational leadership. The components of transformational leadership evolved as refinements have been made in the approach and measurement of leadership to some extent.

Table 3

Mean Extent of Leadership Style in terms of the Democratic Leadership Style, Transformational Leadership Style, and Transactional Leadership Style

INDICATORS (DEMOCRATIC LEADERSHIP STYLE)	Weighted Mean	Verbal Description
1. Our department head always tries to involve us in deciding what to do and how to do it.	3.84	Very High Extent
2. Our department head inputs our suggestions into upcoming plans, projects, and events.	3.80	Very High Extent
3. Our department head calls a meeting to get our advice to create a strategy to keep a project or process going when things go wrong.	3.81	Very High Extent
4. Our department head allows me to participate in the decision-making process.	3.82	Very High Extent
5. Our department head allows me to set priorities with their guidance.	3.84	Very High Extent
COMPOSITE MEAN	3.82	Very High Extent

INDICATORS (TRANSFORMATIONAL LEADERSHIP STYLE)		
1. Our department head is always looking for new opportunities for the future of our workplace.	3.84	Very High Extent
2. Our department leader guides us through action rather than just instructing us.'	3.83	Very High Extent
3. Our department head motivates us to be team players and work together to achieve goals.	3.87	Very High Extent
4. Our department head has high expectations of his employees.	3.81	Very High Extent
5. Our department head shows respect for my personal feelings.	3.82	Very High Extent
COMPOSITE MEAN	3.83	Very High Extent
INDICATORS (TRANSACTIONAL LEADERSHIP STYLE)		
1. Our department head has a primary mission of maintaining stability.	3.83	Very High Extent
2. Our department head is concerned that I am rewarded fairly for my job.	3.78	Very High Extent
3. Our department head spends tolerable energy handling separate but related goals.	3.82	Very High Extent
4. Our department head engages with me at an equal level of honesty.	3.80	Very High Extent
5. Our department heads choose to think short-range (of what is realistic).	3.81	Very High Extent
COMPOSITE MEAN	3.81	Very High Extent

Legend: 3.26–4.00 Very High Extent, 2.51–3.25 High Extent, 1.76–2.50 Low Extent, 1.00–1.75 Very Low Extent

Lastly, regarding the transactional leadership style, the composite mean of 3.81 indicates a high extent. Transactional leadership, as stated by Devie et al. (2015), is a changing process between the leaders and the subordinates. Leaders with a transactional leadership style point on the importance of exchanging processes between the subordinates' and the ordinates' (leaders) needs. This result shows that the respondents have a very high extent of agreement that the encountered leadership style of the respondent, which is the transactional leadership style, affects their performance. This is connected to the study of Dong (2023), which found that the use of a transactional leadership style emphasizes the importance of understanding the effect of transactional leaders and the factors affecting their behavior to drive high performance in organizations. With their high performance, they can create and focus on a specific goal to help them engage with their employees. In addition, the transactional leaders and employees' relationship tends to be more transactional because the leaders focus on gaining advantages and accomplishing objectives. For this reason, transactional leaders may increase employee engagement and organizational effectiveness through mutual trust, respect, and shared interests (Dong, 2023). Seeing the five statement indicators, a weighted mean between 3.78 and 3.83 is recorded. Wherein the respondents agreed to the high extent that their department head has a primary mission of continuing stability (3.83), the head of their department spends tolerable energy in handling separate but related goals (3.82), their department head's choice is to think "what is realistic?" (3.81), the head of their department engages with them at an equal level of honesty (3.80), and their department head is concerned if they are rewarded fairly for their job (3.78). Therefore, it is determined that 3.83 is the highest mean recorded and 3.78 is the lowest. In addition, Devie et al. (2015) state that transactional leaders can motivate their subordinates to behave in positive ways that align with the leader's objectives to get the rewards. Besides that, transactional leaders can help subordinates get closer to their obligations. Thus, the leaders can predict the subordinates' level of performance.

Table 6

Mean Level of Employees' Performance

INDICATORS	Weighted Mean	Verbal Description
1. I am contented with my opportunities for career development.	3.80	Very High Level
2. I am satisfied with the job-related training my workplace offers.	3.84	Very High Level
3. I am satisfied that I have the opportunity to apply my abilities and skills.	3.82	Very High Level
4. My workplace benefits are aligned with values I consider crucial in life.	3.75	Very High Level
5. My leader shows that employees are important to its success.	3.84	Very High Level

6. My coworkers and I have a good working relationship.	3.82	Very High Level
7. I can rely on my coworkers to help when needed.	3.77	Very High Level
8. My coworkers accept opinions different from their own.	3.76	Very High Level
9. I acknowledge how my role at my workplace correlates to its success.	3.84	Very High Level
10. My workplace's objectives and approaches are taking me on the right path.	3.81	Very High Level
COMPOSITE MEAN	3.80	Very High Level

Legend: 3.26–4.00 Very High Level, 2.51–3.25 High Level, 1.76–2.50 Low Level, 1.00–1.75 Very Low Level

A composite mean of 3.80 is shown in Table 6, which indicates that the respondents have a very high level of agreement about their performance in fast-food establishments. Through this, the respondents are satisfied and contented in their jobs due to their workplace opportunities. They are also supported by their department head and coworkers when they need help. This result agrees with Abun et al. (2021); many different aspects can impact someone's performance since there is no one method we can use in every situation to handle one's performance at work. Work relationships, work environment, abilities, satisfaction, and motivation are some components that might affect a worker's performance. Among the 10 indicators, the highest mean score was 3.84. This shows that the respondents are satisfied with the job-related training their workplace gives, and their department head acknowledges how the respondents' role at their workplace correlates to their success. This is related to the study of Febrianti et al. (2020): a company's straightforward program about career development influences people's motivation. In career development, some programs aim to prepare a person for growth with a planned journey in their career. It can be said that career development is an operation that readies people to make progress for themselves by a determined career path. When career development is easy to understand and apply, we anticipate that the performance of employees will significantly increase because of it. The verbal description of a very high level represents the lowest mean score of 3.75. This means their workplace benefits are connected with the values they reflect on crucially in life. Therefore, their relationship with their workplace and their co-workers' practices are aligned with their values, which helps them continue having those values. The relationship of the fast-food industry and how it connects to employee motivation is now crucial for business stakeholders and the employees themselves. Enhancing the satisfaction and motivation of workers in San Jose, Occidental Mindoro, and ensuring a consistent and proficient workforce for the fast-food restaurants benefits everyone who takes care of and is involved in this problem. (Centeno et al., 2024).

Table 7 shows the correlation coefficients and p-values for hypothesis testing. The results from the table conclude that the working environment and leadership style have a direct and significant relationship with the performance of the employees. This is according to the correlation coefficients of 0.669 and 0.854, which indicate a high positive correlation between the three variables. This shows that as the working environment and leadership style improve, the performance of employees improves as well, with an effect size of 0.448, or 44.8%, and 0.729, or 72.9%. Furthermore, the results of the t-value, which are 9.049 and 16.487, are higher than the critical value of 1.984. These are supported by the P-value of 0.001, which is less than 0.05. Therefore, this leads to the rejection of the null hypothesis.

Thus, the level of performance is significantly affected by the working environment and leadership style, similarly to the study of Muchtar (2016). In this great working environment, employees are discussed as making it ideal, healthy, secure, and comfortable. Thus, the decision and the creation of a good working environment will determine success in acquiring organizational goals. Moreover, the employees' working environment affects their performance because they adapt and blend in their workplace over time. This is also aligned with the study of Prayogi and Lesmana (2021). Communication among leaders and workers should be maintained well to achieve the company's objectives. A leader's leadership style significantly impacts the company since a leader must be able to operate and motivate employees to work better. This means the leaders and their employees should be kept up.

Their leader has a significant role in the workplace because they handle and manage their employees to motivate them to work harder.

Table 7

Correlation Coefficients and p-values for Hypothesis Testing

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
Working Environment→ Performance of Employees	0.669	0.448	1.984	9.049	0.001	Highly Significant
Leadership Style→ Performance of Employees	0.854	0.729	1.984	16.487	0.001	Highly Significant

Legend: p-value<0.01 Highly Significant; p-value<0.05 Significant

4. Conclusions

Based on the findings of the study, the following conclusions were drawn. Regarding the working environment, the respondents stated that it provides personal and professional growth opportunities, and they were satisfied with the flexibility in their current job. When it comes to the extent of leadership style in terms of their department head, they always try to involve them in deciding what to do and how to do something, and they are allowed to set priorities with their guidance; their coworkers, including the respondents, are motivated by them to be a team player and work together as a group to achieve a goal; they also have a primary mission of continuing stability. The respondents were satisfied with the job-related training their workplace offers; they strongly agree that their leader shows that they are guidance to the organization's success, and they acknowledge how their role at their workplace correlates to the organization's success. Based on the respondents, they are in a working environment that uses a hierarchy-driven work culture yet still gives importance to their well-being. Their department head involves them in solving the problems in their workplace, motivates them, and handles separate but related goals, which affects their performance.

Recommendations - Based on the findings and conclusions of this study, the following recommendations were presented. The department head of fast food establishments may create a supportive and positive workplace by promoting open communication, celebrating their team's achievements, and providing opportunities for growth and development. The fast food managers may celebrate their team's achievements, providing them opportunities for growth and development. Moreover, the department head may be relied on by the employees when they are in need of help and assistance, lead with empathy and approachability, build trust and teamwork while supporting their employees, and motivate them during their progress of growth. Furthermore, the head of the department may support the team's growth by offering regular feedback, celebrating their successes, and setting clear expectations to help them reach their full potential. Additionally, employees may engage with each other to have unity in the workplace, and they may acknowledge the opinions of one another to enhance understanding. Lastly, future researchers may explore other food industries and discover what kind of working environment and leadership style they use in connection with the performance of their employees.

5. References

- Abun, D. (2021). Employees' self-efficacy and work performance are mediated by the work environment. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3958247
- Aisha, A.B. (2022). Effect of democratic leadership on employees' performance in tax appeal tribunal. *World Journal of Management and Business Studies*, 2(2), 290–301.
- Alkhasawneh, R. A. (2019). Measuring manager leadership styles and employees job satisfaction in Eastern Province, KSA – General Study.

- Alusa, C. A. (2021). Impact of management leadership styles on the employees performance in fast food restaurants in Thika town, Kiambu county, Kenya.
- Basnet, S., & Tiwari, B. (2022). Impact of leadership styles on employee performance and satisfaction in the fast-food industry in Sweden.
- Bwalya, A. (2023). Leadership styles. *Global Scientific Journals*, 11(8), 181–194.
- Campbell, M. (2023). Traditional vs modern work environment: Finding the right fit
<https://www.growthtactics.net/traditional-vs-modern-work-environment/>
- Centeno, S. B., Giray, M. C., Gonzales, L. J., Oficial, M. M., Palacio, K. J. Tan, E. J. & Limos-Galay, J.A. (2024). Career development and employees' motivation in the fast-food industry in San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 12(3) DOI: 10.5861/ijrsm.2024.1057
- Cherry, K. (2023). How to lead: 6 leadership styles and frameworks. <https://www.verywellmind.com/leadership-styles-2795312>
- Devie, Samuel, H., & Siagian, H. (2015). The different impact between transformational leadership and transactional leadership on competitive advantage.
https://repository.petra.ac.id/17959/1/Publikasi1_14033_2865.pdf
- Dong, B. (2023). A systematic review of the transactional leadership literature and future outlook.
<https://drpress.org/ojs/index.php/ajmss/article/view/7972>
- Dullah, M., Lingiani, L., & Suwardi, L. A. (2023, December 20). Work environment analysis to improve employee performance. <https://journal.assyfa.com/index.php/rjme/article/view/328>
- Fakhri, M., Syarifuddin, S., Winarno, A., Nurnida, I., & Hanum, S. (2020). Democratic leadership practice to construct clan organizational culture in family companies. *Journal of Asian Finance, Economics and Business*, 8(1), 803-811. doi:10.13106/jafeb.2021.vol8.no1.803
- Febrianti, N. T., Suharto, S. E., & Wachyudi (2020). The effect of career development and motivation on employee performance through job satisfaction in Pt Jabar Jaya Perkasa. *International Journal of Business and Social Science Research*, 1 (2).
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3738191
- Ferozi, S., & Chang, Y. (2021). Transformational leadership and its impact on employee performance: focus on public employees in Afghanistan. <https://rtsa.ro/tras/index.php/tras/article/download/663/653h>
- Herrity, J. (2024). Positive working environment: definition and characteristics. <https://www.indeed.com/career-advice/career-development/positive-working-environment#:~:text=A%20positive%20working%20environment%20encompasses,and%20valued%20at%20your%20workplace>
- Kawiana, I. G. P., Arifin, M. S., Tulasi, D., Wibowo, T. S., & Setyawasih, R. (2023). The effect of work environment, work stress, and work motivation on employee performance in freight forwarding and logistics company. <https://journal.lembagakita.org/index.php/jemsi/article/view/1290>
- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory.
<https://www.ajol.info/index.php/jfas/article/view/142517>
- Laoyan, S. (2025). Democratic leadership style: What you need to know.
<https://asana.com/resources/democratic-leadership-style>
- Long, C. S., Yusof, W. M., Kowang, T. O., & Heng, L.H. (2014). The impact of transformational leadership style on job satisfaction. *World Applied Sciences Journal*, 29(1):117-124. DOI: 10.5829/idosi.wasj.2014.29.01.1521
- Marzo, (2024). Remote work vs traditional work: Benefits and challenges to consider.
<https://costabravahub.com/remote-work-vs-tradition-work/>
- Muchtar, (2016). The influence of motivation and work environment on the performance of employees.
<https://ejournal.unitomo.ac.id/index.php/feb/article/view/80>
- Namiq, F. A. (2018). Most effective management style for the modern workplace.
<https://ojs.lib.unideb.hu/IJEMS/article/view/5062/4793>
- Prayogi, M. A., & Lesmana, M. T. (2021). The influence of leadership style and motivation on the performance

of employees. <https://www.atlantispress.com/proceedings/ciiber-19/125951503>

Priscilla, Y., Waisaka, W., & Asri, D. (2023). The effect of leadership, motivation, work discipline and work environment on employee performance at fast food restaurants in Batam. *Asian Journal of Management, Entrepreneurship and Social Science*, 3(4).

<https://www.ajmesc.com/index.php/ajmesc/article/view/428>

Schermerhorn, J. R., Hunt, J. G., & Osborn, R. N. (1999). Managing organizational behaviour.

[https://academiawales.gov.wales/api/storage/3a6c96b1-2bca-44e3-b4d5-](https://academiawales.gov.wales/api/storage/3a6c96b1-2bca-44e3-b4d5-4627fb224dab/Diagnostic%20tool%20%20Transactional%20vs%20Transformational.pdf?fbclid=IwZXh0bgNhZW0CMTEAAR349G4vjOlJShHhA42mU0_uy67kyvG6yGBg94JFIYebjhqq1L4YN_z8g_aem_g7m28fm8rtjONeudVeARhg)

[4627fb224dab/Diagnostic%20tool%20%20Transactional%20vs%20Transformational.pdf?fbclid=IwZXh0bgNhZW0CMTEAAR349G4vjOlJShHhA42mU0_uy67kyvG6yGBg94JFIYebjhqq1L4YN_z8g_aem_g7m28fm8rtjONeudVeARhg](https://academiawales.gov.wales/api/storage/3a6c96b1-2bca-44e3-b4d5-4627fb224dab/Diagnostic%20tool%20%20Transactional%20vs%20Transformational.pdf?fbclid=IwZXh0bgNhZW0CMTEAAR349G4vjOlJShHhA42mU0_uy67kyvG6yGBg94JFIYebjhqq1L4YN_z8g_aem_g7m28fm8rtjONeudVeARhg)

Pricing strategy and purchase behavior of senior high school students in food stalls in Divine Word College of San Jose

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Abstract

This study determined the influence of price strategies on the buying behavior of senior high school students in Divine Word College of San Jose (DWCSJ). The study sought to explore three pricing strategies usually used by business organizations, which include cost-based, value-based, and competitive pricing, and to find how these are engaged in the buying decisions of the students. This study utilized a descriptive-correlational research design and used an adapted questionnaire to gather data from 200 randomly selected students. The results indicate that cost-based pricing significantly influences students' food stall choices. They appreciate fair pricing that reflects the actual cost of ingredients and preparation, making them feel they're getting good value for their money. Moreover, other aspects like taste, convenience, and promotions likely influence their decisions, too. Cost-based pricing has been recognized as an effective strategy, particularly in competitive markets where consumers are mindful of their spending. These findings reveal that students are sensitive to price changes and are particularly drawn to food stalls that provide discounts when ingredient costs decrease. Thus, students are very concerned about affordability and are more likely to purchase when they believe they are receiving a good deal. Thus, there is a highly significant relationship between pricing strategy and the purchasing behavior of students, which indicates that pricing strategy effectively influences their purchasing behavior. This study recommends that food stall owners may focus

on the quality of the product that meets the demand of their consumers.

Keywords: pricing strategy, purchase behavior, cost-based pricing, affordability, food stalls

Pricing strategy and purchase behavior of senior high school students in food stalls in Divine Word College of San Jose

1. Introduction

Businesses throughout the country adjusted to the new economic challenges brought about by rising inflation. In particular, food stalls gained popularity among vendors and patrons because they provided quick service at a reasonable price. Food stall vendors face significant pricing challenges due to fluctuating ingredient costs driven by economic factors like inflation. On top of that, inconsistent electricity prices add another layer of difficulty, impacting daily operations and overall expenses. These uncertainties make it hard for owners to adjust prices in a way that balances product demand, affordability, and profitability without compromising quality. Vendors must also find creative ways to stand out from competitors, attract more customers, and build lasting loyalty, based on Siddique's study (2020). In 2024, Divine Word College of San Jose (DWCSJ) took a significant step by renovating its canteen, opening the doors to local food vendors who set up stalls and served students directly on campus. This transformation brought a wider range of food options, giving students more choices while also impacting their spending habits and decisions about what to buy. Food stalls were known for their convenience and affordability, making them a go-to choice for students on a budget. They offered everything from small snacks to full meals in an inviting, often lively setting right on school grounds. Students enjoyed this accessibility; many relied on these stalls for daily meals. According to Wang (2024), food stalls made it easy for students to pick meals that fit both their tastes and their budgets, while the study of Janssen et al. (2018) noted that food stalls tended to be more affordable than home-cooked food. Parents often provided students with money specifically for these meals, which kept these stalls popular on campus, as illustrated by Siddique (2020).

Still, while food stalls offered budget-friendly meals, students' limited funds meant they were always price-conscious, carefully choosing where and how to spend. This study explored how food stalls at Divine Word College of San Jose used pricing strategies to attract students and how those prices shaped students' choices. Understanding the balance between affordability and student spending habits was central to helping food stalls make better pricing decisions. This research examined which strategies resonated most with students by analyzing pricing approaches, such as cost-based, value-based, and competitive pricing. Surveys and spending analyses revealed patterns in what students were willing to pay and why. The goal was to gather insights that reflected students' attitudes toward price and what drew them to specific food stalls.

Ultimately, the findings shed light on how different pricing strategies influenced students' buying behavior. Food stall owners gained practical insights on aligning their prices with student needs, helping them build loyalty and thrive even as the economy shifted. This study sought to unlock the potential of innovative pricing, enabling DWCSJ's food stalls to attract more students and meet their needs in a way that satisfied both students and vendors. This study aimed to determine the effect of pricing strategies on the purchasing behavior of students at Divine Word College of San Jose. It identified students' spending habits, particularly in their food purchases—whether meals or simple snacks—and how these habits were affected by the common pricing strategies they encountered.

Statement of the Problem - This study aimed to determine the effect of pricing strategies used by food stalls in Divine Word College of San Jose on the purchase behavior of senior high school students in Divine Word College of San Jose. Specifically, it sought to answer the following questions: (1) What is the extent of the pricing strategy of food stalls in terms of cost-based price strategy, value-based price strategy, and competitive-based price strategy? (2) What is the level of purchase behavior of senior high school students? (3) Is there a significant relationship between the extent of pricing strategy and the level of purchase behavior of senior high school students?

Significance of the Study - This study explores the impact of various price strategies employed by food stalls on the purchasing behavior of senior high school students in DWCSJ. The significance of this study is that it will

help address the gaps in the following individuals: The business owners of the food stalls will know more about the pricing strategies that work best for students' purchasing habits: competitive, value, or cost-based pricing. They can also use this information to create a more strategic pricing plan to increase customer satisfaction. In addition, food stall owners can differentiate the pricing approach, leading to more convenient choices for their price. The School. This study will also benefit the school business sector as it has identified several key pricing strategies that affect consumer behavior. By understanding these determinants, the school can determine appropriate pricing strategies to ensure the stalls' economic development and diversification. This, in turn, will provide a thriving and sustainable business environment within the school—the students.

Students will also directly benefit from this study since it will give them knowledge and insights into how various pricing methods influence their purchasing behavior. Comprehending these relationships can enable students to make better-informed purchasing selections. This allows them to choose according to their budget. Parents and guardians can use this study to learn the different pricing methods that can influence their children's purchasing behavior. Moreover, the findings will provide valuable insight into these pricing methods, informing them how these affect their children and aspiring businessmen. This becomes important research for aspiring entrepreneurs in food stalls, as it will give them illuminating details related to successful pricing strategies and customer purchasing habits. It is, therefore, very important that new business owners within the food stall business understand these factors since they have an immediate effect on their ability to attract and retain customers, maximize profits, and keep their companies competitive within a competitive marketplace. Future researchers will provide a starting point for studying pricing-related topics and give them insight into this particular sector. Additionally, this will enable them to view, review, and even use the earlier work as a reference for their work.

Scope and Delimitation of the Study - This research was focused on determining the effect of the pricing strategies of food stalls on the purchase behavior of senior high school students in Divine Word College of San Jose. Specifically, it aimed to determine the level of purchase behavior; the extent of price strategies in terms of cost-based strategy, value-based strategy, and competitive-based strategy; and lastly, the relationship between the purchase behavior and price strategies. The provided specifications guided the researchers in formulating the study's appropriate sampling and quantitative methodology to produce results. This study is limited only to the Grade 11 and 12 students of the Divine Word College of San Jose for the school year 2024-2025. The research was done from September 2024 until February 2025. The researchers only studied food stalls inside the Divine Word College of San Jose. The researchers limited the participants to ensure the study was focused and manageable. By restricting the participants, the researchers could further study the effects of the price strategies and purchase behavior. This study sought to answer issues about how competitive pricing influences product purchases, how customers perceive food stalls' value-based pricing concepts, and how cost-based pricing affects purchase decisions. This study also shows how price strategies affect customer behavior differently, particularly regarding the product's perceived value and purchase intention.

2. Methodology

Research Design - This study used a descriptive-correlational design. Descriptive research was used to determine the level of pricing strategies and purchase behavior of senior high school students, while a correlational design was used to determine the relationship between the two variables.

Respondents of the Study - This study's respondents were the senior high school students at Divine Word College of San Jose. To determine the sample size, the researchers used Slovin's formula with a 5% margin of error and 95% confidence level. Thus, out of the 421 population, the sample size was 200, and they were randomly chosen.

Research Instrument - In this study, the researchers primarily relied on surveys to gather data. The researchers used adapted questionnaires by Siddique (2020), Frederick & Bhat (2022), and Abatayo et al. (2022). The items focus on understanding how various pricing strategies—like cost-based, value-based, and competitive pricing—

affect purchasing behavior. The response to five key topics has been collectively measured using a 4-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (4), with higher scores indicating more agreement or satisfaction. The experts in the field of research in the senior high school department validated the adapted questionnaires. In addition, the original authors of the adapted questionnaires employed confirmatory factor analysis (CFA) to assess the instrument's reliability. They measured the internal consistency using Cronbach Alpha, resulting in 0.70, indicating instrument acceptability. This implies that the adapted instrument is acceptable and ready to be administered to the final respondents.

Data Gathering Procedure - Before collecting data, the researchers wrote a letter to the basic education principal and senior high school academic coordinator at Divine Word College of San Jose, requesting permission to conduct the study with senior high students. After receiving a response from the basic education principal and the senior high school coordinator, the researchers distributed a printed copy of the adapted questionnaire to the study's sample population. Moreover, the researchers collected the printed questionnaires from the respondents after the time was allocated for answering. The researchers took exactly 2 weeks to gather all the necessary data from the respondents. When the respondents completed the survey, the data was carefully recorded and tabulated in Microsoft Excel.

Statistical Treatment of the Data - The information obtained from the survey questionnaire was carefully examined for analysis. To determine the extent of the pricing strategy and level of behavior, the researchers calculated the weighted and composite mean of the presented items in the questionnaires. Moreover, to determine whether there is a significant relationship between pricing strategy and purchase behavior, the researchers used Pearson's r correlation and regression analysis.

Ethical Considerations - Throughout the process of gathering data, all information was kept private, and only the researchers had access to the respondents' answers. The respondents were also treated with consistent care and fairness, and the researchers remained unbiased. Any information stated by the researchers was genuine and based on factual evidence. The integrity and safety of the respondents remained the priority of the researchers until the end of the study. Ethical considerations were strictly adhered to in order to conduct honest research, starting with obtaining consent from the head office, securing permission from the respondents, establishing proper communication between the researchers and the respondents, and ensuring that each participant was protected and treated fairly.

3. Results and Discussions

Table 1 indicates the extent of the pricing strategy employed by the food stalls in DWCSJ in terms of cost-based, value-based, and competitive-based pricing strategies. The composite mean reveals high extents of 3.24, 3.45, and 3.29, respectively. This indicates that cost-based pricing plays a significant role in students' food stall choices, but it isn't the only factor they consider. Students appreciate fair pricing that reflects the cost of ingredients and preparation, making them feel they're getting good value for their money. However, other aspects like taste, convenience, and promotions also influence their decisions. Cost-based pricing has been recognized as an effective strategy, particularly in competitive markets where consumers are mindful of spending. Amaral and Guerreiro (2019) found that businesses benefit from adopting cost-based pricing as it ensures affordability while allowing for adjustments when ingredient costs fluctuate. Moreover, Stahl et al. (2018) highlight that price transparency is essential to cost-based pricing, builds trust, and strengthens customer loyalty.

Among the indicators in the cost-based strategy, the highest-rated statement was, “Promotional discounts, such as reduced prices due to lower ingredient costs, make me more likely to purchase from food stalls using cost-based pricing,” with a mean of 3.37 (very high extent). This research implies that students are sensitive to price changes and are particularly drawn to food stalls that provide discounts when ingredient costs decrease. Thus, students are very concerned about affordability and are more likely to purchase when they believe they are receiving a good deal. This aligns with Familmaleki et al. (2015), who noted that price-sensitive consumers tend

to respond positively to temporary discounts, especially when they understand the reasoning behind the price reduction. Additionally, Khairawati (2019) argues that offering discounts boosts sales and enhances perceived value, encouraging customer loyalty. For food stalls, running special promotions or lowering prices during periods of cheaper ingredient costs can be a smart move to attract budget-conscious customers.

On the other hand, the lowest-rated indicator was “I prefer to choose food stalls based on their competitive pricing,” with a mean of 2.92. Although competitive pricing is still valued, students aren’t solely focused on finding the cheapest option. Instead, they seem to prioritize fairness and transparency in wanting to know that what they’re paying reflects the actual cost of the food. This aligns with Abidin et al. (2023), who suggest that while cost-based pricing ensures affordability, it should be complemented with other strategies. Consumers may be drawn to reasonable prices but also weigh factors like product quality, perceived value, and overall experience when making decisions. Food stalls that balance offering fair prices and delivering good quality stand a better chance of building long-term customer loyalty. Cost-based pricing is a key factor for students when choosing food stalls, but it’s not the only thing that matters. They appreciate transparency and affordability, and they’re particularly drawn to discounts and special promotions that reflect changes in ingredient costs. This shows that students value fairness in pricing and are willing to support businesses that pass on savings to them. However, competitive pricing alone isn’t enough. Students also look at food quality, convenience, and overall experience. To stay competitive, food stalls could adopt a hybrid pricing approach, combining cost-based strategies with elements of value-based pricing. This way, they’re offering affordable food and ensuring customers feel they’re getting great value for their money. In the long run, balancing cost-based pricing with a focus on quality and customer satisfaction can help food stalls build stronger relationships, foster loyalty, and stay adaptable in an ever-changing market.

Table 1

Mean Extent of Pricing Strategy of Food Stalls in Terms of Cost-based, Value-based, and Competitive-based Strategy

INDICATORS (Cost-based)	Weighted Mean	Verbal Description
1. I am more likely to purchase food from stalls that price their products based on the cost of ingredients and preparation.	3.31	Very High Extent
2. I prefer to choose food stalls based on their competitive pricing.	2.92	High Extent
3. Food stalls transparently price their products based on ingredient costs, and preparation offers better value for my money.	3.25	High Extent
4. I visit food stalls more frequently when their pricing reflects the cost of ingredients and preparation.	3.33	Very High Extent
5. Promotional discounts, such as reduced prices due to lower ingredient costs, make me more likely to purchase from food stalls using cost-based pricing.	3.37	Very High Extent
6. My financial constraints lead me to prefer food stalls where pricing is directly tied to the cost of ingredients and preparation, ensuring affordability.	3.29	Very High Extent
COMPOSITE MEAN	3.24	High Extent
INDICATORS (Value-based)		
1. I am more likely to purchase from a food stall if the price is fair for the portion size.	3.52	Very High Extent
2. I choose food stalls where I get good value for my money.	3.54	Very High Extent
3. I consider price as one of the main factors when deciding where to eat.	3.55	Very High Extent
4. I am willing to pay more at a food stall if the food quality is superior.	3.38	Very High Extent
5. I am more likely to return to a food stall if the price accurately reflects the quality of the food.	3.37	Very High Extent
6. I prefer food stalls offering better value for money than nearby options.	3.38	Very High Extent
COMPOSITE MEAN	3.45	Very High Extent

INDICATORS (Competitive-based)		
1. I prefer purchasing from food stalls that offer lower prices than nearby competitors.	3.39	Very High Extent
2. I compare prices across different food stalls when deciding where to buy food.	3.33	Very High Extent
3. I am likelier to choose a food stall that matches the prices of similar stalls nearby.	3.26	Very High Extent
4. I feel more satisfied when I purchase from a food stall with prices lower than other options.	3.37	Very High Extent
5. I am willing to compromise on quality if a food stall offers the lowest price among competitors.	3.15	High Extent
6. Seeing competitive pricing at a food stall increases my likelihood of choosing it over others.	3.26	High Extent
COMPOSITE MEAN	3.29	Very High Extent

Legend: 3.26–4.00 Very High Extent, 2.51–3.25 High Extent, 1.76–2.50 Low Extent, 1.00–1.75 Very Low Extent

Moreover, in terms of value-based pricing strategies and consumer response, findings reflect a very high extent, showing that students place great importance on getting their money's worth when choosing where to eat. This means they aren't just after the cheapest options—they're looking for a balance between price, portion size, and food quality. The results suggest that students carefully assess whether the price matches what they get in return, favoring food stalls that offer fair pricing, generous portions, and high-quality food. This aligns with findings by Steinbrenner and Turínková (2021), who emphasize that customers are willing to pay more when they perceive greater value, whether from portion sizes, taste, or overall satisfaction. In other words, food stalls focusing on value creation—not just keeping prices low—stand out in students' eyes.

The highest-rated indicator, "I consider price as one of the main factors when deciding where to eat," with a mean of 3.55, to a very high extent, shows that while students value quality, price still plays a central role in their decision-making process. Affordability is key, but students aren't necessarily looking for the lowest prices—they want to feel that what they're paying is worth it. This finding aligns with research by De Toni et al. (2021), who found that price evaluation is essential for consumer decision-making, especially among younger demographics. Students are likely comparing food stalls on cost and the balance between price and quality, seeking the best deal for their budget. Interestingly, the lowest-rated indicator, "I am more likely to return to a food stall if I feel the price accurately reflects the food quality," with a mean of 3.37, suggests that while students value fair pricing, loyalty is built on more than just perceived value. Price reflection alone isn't enough to guarantee repeat visits—other factors like taste, consistency, convenience, and customer service likely play a role in driving customer loyalty. This supports the idea proposed by Pippo (2018), who found that while value-based pricing can attract customers, long-term loyalty is often driven by additional factors like brand experience and innovation. In this case, students may appreciate fair pricing, but what keeps them coming back might be memorable flavors, friendly service, or even the stall's atmosphere. The findings clearly show that value-based pricing resonates deeply with students. They're not just looking for cheap eats—they want food that justifies its price. Factors like portion size, quality, and fairness are top of mind when deciding where to eat, and they're even willing to pay more if the food is noticeably better.

Lastly, regarding a competitive-based pricing strategy, the composite mean of 3.29 indicates that price influences students' decisions when choosing where to purchase food. They compare prices and choose those offering competitive prices. Whereas students are budget-conscious, they do not always choose the lowest price; they also look at quality. This corresponds with Khairawati (2019), who describes how although price is a key consideration in buying, individuals also consider value and quality before they decide. Out of the indicators, the best-rated statement is as follows.

Table 2*Mean Level of Purchasing Behavior of the Students*

INDICATORS	Weighted Mean	Verbal Description
1. I frequently purchase food from stalls on campus.	3.23	High Level
2. I am more likely to buy food from stalls if the prices are affordable.	3.54	Very High Level
3. I chose food stalls based on convenience rather than quality.	3.02	High Level
4. I am influenced by the promotions or discounts offered at food stalls.	3.23	High Level
5. I buy food based on my cravings rather than planning my meals.	3.41	Very High Level
6. I tend to stick to a specific budget when purchasing food from food stalls.	3.22	High Level
7. Food stalls offering sustainable practices provide high-quality meals worth the price.	3.35	Very High Level
8. I feel good when I purchase food from sustainable food stalls.	3.39	Very High Level
9. I am willing to pay more for food from eco-friendly food stalls.	3.32	Very High Level
10. I feel good when I purchase food from stalls that satisfy my cravings.	3.49	Very High Level
COMPOSITE MEAN	3.32	Very High Level

Legend: 3.26–4.00 Very High; 2.51–3.25 High; 1.76–2.50 Low; 1.00–1.75 Very Low

Table 2 shows the purchase behavior of students when it comes to their purchasing habits. The composite mean of 3.32 is categorized as very high, indicating that many students exhibit high purchasing behavior regarding campus food stalls. This shows that several factors, such as affordability, cravings, and sustainability, greatly impact their food-buying decisions. Students show an engaged and deliberate approach to their purchasing decisions, carefully balancing quality, cost, and ethical considerations. These findings align with Aguilar et al. (2024), who emphasize that businesses must continuously adapt their pricing strategies to meet customer expectations, particularly in dynamic and price-sensitive markets like campus food stalls. Similarly, Nagle et al. (2016) argue for adaptable and structured pricing strategies that cater to diverse consumer needs, further supporting the importance of understanding purchasing behavior in such contexts.

The highest mean of 3.54 in Table 2 underscores the critical role of affordability in attracting student customers to campus food stalls. While price is important, students also consider value and quality, which suggests the need for far-reaching pricing strategies. This finding is consistent with Penalar's (n.d.) statement that food vendors should be cost-oriented to capture price-sensitive consumers such as students. Emphasis on price sensitivity is in keeping with Bonnici & Channon (2015), whose study affirmed that cost-based pricing is an essential approach in markets with very price-sensitive consumers. Moreover, the lowest mean of 3.02 suggests that convenience is a factor, but students regard it less than the price and quality of food. Students are not more inclined towards deliberate purchase, valuing, and experience in general over convenience. This is also similar to Abidin et al. (2023), who posited that hybrid price strategies that integrate perceived customer value and cost-effectiveness will likely have a stronger effect on consumers. These results show that the identified variables influencing students' buying behavior are price and quality, which are more influential than convenience. The findings show that many students want value for their money when choosing foods and are most likely to emphasize sustainability, size, and quality. If food meets these criteria, people are willing to pay more for it rather than just choosing the cheapest option. The study does note, though, that the low prices alone do not guarantee loyalty. To hold customers, food vendors must offer a comprehensive experience — a full meal at a fair price, good food, first-class service, and an inviting ambiance. In food stalls, a value-based and cost-based dynamic strategy can be applied to provide fair prices, which can be valued regarding sustainability, quality, and portion size. In a market where students cherish every peso they spend, this strategy helps food vendors thrive, build strong relationships, and reward repeat business.

The correlation test in Table 3 shows a positive and highly significant correlation between price strategies and students' buying behavior. Therefore, the null hypothesis has been rejected; this means that there is a substantial relationship between the pricing strategy in terms of cost strategy, value strategy, and competition strategy and the students' buying behavior because their p-values are below 0.01. Amaral and Guerreiro (2019) further note that

cost-plus pricing is widely employed by firms willing to become profitable and more so by small firms. While cost-plus pricing guarantees cost recovery, its success relies on competitive positioning and consumers' perception of fairness. Moreover, Abidin et al. (2023) found that hybrid pricing, in which cost consideration is blended with perceived value, will likely optimize customer responsiveness. In addition, Bloementhal (2024) finds that value-based pricing aligns with customers' value perceptions, enabling companies to attain the highest profitability and satisfy demand. Steinbrenner & Turínková ínková (2021) believe that price success relies on product benefit and brand benefit presented, with greater consonance concerning price and perceived quality. The correlation coefficient of 0.695 of price strategy and purchasing behavior validates the central role of price in determining student purchasing behavior. The finding is consistent with previous research that calls firms rigid in their price strategy, considering cost and consumer preference. Aguilar et al. (2024) also note that pricing strategy should constantly evolve to retain customers and business sustainability. Even more in the case of school food vendors within schools, Penalar (n.d.) advocates for prices that can attain profitability and affordability equilibria in a way that makes them appealing to price-sensitive student customers. In general, studies affirm that strategic pricing significantly impacts purchasing behavior among senior high school students. A cumulative approach with considerations of cost elements, perceived value, and competition in the industry must come into action while maximizing sales and sustaining business fortunes.

Table 3

Correlation Coefficients and p-values for Hypothesis Testing

Variables	Correlation Coefficient	Effect Size (r^2)	Critical value	t-value	P-value	Interpretation
Cost-Based Pricing Strategy→ Purchase Behavior	0.554	0.307	1.976	9.364	0.001	Highly Significant
Value-Based Pricing Strategy→ Purchase Behavior	0.604	0.364	1.976	10.657	0.001	Highly Significant
Competitive-Based Pricing Strategy→ Purchase Behavior	0.578	0.334	1.976	9.966	0.001	Highly Significant
Pricing Strategies→ Purchase Behavior	0.695	0.483	1.976	13.045	0.001	Highly Significant

Legend: p-value<0.01 Highly Significant Significant ; p-value<0.05 Significant

4. Conclusions

The researchers presented the conclusions generated from the statistical analysis of data: The respondents are more likely to purchase from food stalls with promotional discounts because it costs less; the respondents are more likely to buy from food stalls with better food quality and good value for money; and the respondents preferred lower-priced food stalls than nearby competitors with higher prices. The respondents are more likely to buy food from stalls that are budget-friendly to the customers. There is a highly significant relationship between pricing strategy and the purchasing behavior of senior high school students at Divine Word College of San Jose. This indicates that pricing strategy can effectively influence purchasing behavior.

Recommendations - The recommendations were presented based on this study's significant findings and conclusions. The business owners may get their ingredients locally to provide a cheaper cost on goods and delivery that will result in more affordable products; the business owners must maintain high-quality products to establish customer loyalty; and the business owners may find cheaper but higher-quality ingredients than their competitors to reduce the price and appeal more affordably to the consumers. The business owners may place their food stall nearest to their target market; it will provide accessibility and convenience to them. Future researchers may add more variables to pricing strategies to explore their significance in terms of the purchasing behavior of the respondents.

5. References

- Abatayo, S. N., Anda, P., Rico, L. D., & Tibayan, A.-L. (2022, July 21). The perception of selected students from De La Salle University-Dasmariñas on the pricing strategy in quick service restaurants. *International Journal of Thesis Projects and Dissertations (IJTPD)*, Research Publish Journals. <https://doi.org/10.5281/zenodo.6881297>
- Abidin, F. Z., Jamaluddin, A., Tangamani, V., Nadia, S. A., & Sapari, A. (2023) Pricing Strategies: Determining the Best Strategy to Create Competitive Advantage. 10.6007/IJARBS/v13-i6/17593
- Aguilar, K., Articon, P., Garcia, M., Lozano, L., Miala, J., Norayda, D., & Dimaculangan, M. (2024). Pricing strategies and business performance among selected SMEs in Santa Cruz, Laguna. *IRE Journals*, 7(2), 1–10. <https://www.irejournals.com/formatedpaper/1705764.pdf>
- Amaral, C., & Guerreiro, R. (2019). Pricing strategies in emerging markets: A comprehensive study. *Journal of Emerging Market Studies*, 8(2), 134–150. DOI: 10.1108/JBIM-12-2018-0373
- Bloementhal, A. (2024). The psychological impact of pricing on consumer behavior. *Behavioral Economics Review*, 6(1), 24–39.
- Bonnici, S. T. & Channon, D. F. (2015). Pricing Strategy. Wiley Encyclopedia of Management. Online Library. <https://doi.org/10.1002/9781118785317.weom120162>
- De Toni, D., Reche, R. A., & Milan, G. S. (2022). Effects of market orientation, innovation strategies, and value-based pricing on market performance. *International Journal of Productivity and Performance Management*, 71(8), 3556–3580. <https://doi.org/10.1108/IJPPM-08-2020-0414>
- Familmaleki, M., Aghighi, A., & Hamidi, K. (2015). Analyzing the Influence of Sales Promotion on Customer Purchasing Behavior. *International Journal of Economics and Management Sciences* (ISSN: 2162-6359). 4:4, pp. 1-6. doi: 10.4172/2162-6359.1000243.
- Frederick, D. P., & Bhat, G. (2022). Customer Perception towards Online Food Delivery Services—Development of Conceptual Model. *International Journal of Case Studies in Business, IT, and Education (IJCSBE)*, 6(1), 470-505
- Janssen, H.G., Davies, I.G., Richardson, L.D. & Stevenson, L. (2018). Determinants of takeaway and fast food consumption: A narrative review. *Nutr Res Rev*. 31(1):16–34. <https://doi.org/10.1017/S0954422417000178>.
- Khairawati, S. (2019). Effect of customer loyalty program on customer satisfaction and its impact on customer loyalty. *International Journal of Research in Business and Social Science* (2147-4478), 9(1), 15–23. DOI: 10.20525/jobs.v9i1.603
- Nagle, T. T., Hogan, J. E., & Zale, J. (2016). The strategy and tactics of pricing: A guide to growing more profitably (5th ed.). *Routledge*.
- Penaflo, M. (n.d.). Pricing strategies used in restaurants to help them reach their target profit (Bachelor's thesis). Theseus. https://www.theseus.fi/bitstream/handle/10024/801355/Penaflo_Marivic.pdf
- Pippo, A. (2018). Innovative pricing strategies in the digital economy. *European Journal of Marketing Strategy*, 19(2), 112–128.
- Siddique, S. A. (2020). Impact of pricing strategies on consumer buying behavior concerning organized retail in Ranchi, India. *International Journal for Research in Engineering Application and Management*, 5(12), 270-274. DOI: 10.35291/2454-9150.2020.0206
- Ståhl, J.-E., Windmark, C., & Kianian, B. (2018). Cost-based pricing for learning organizations: A model presentation and demonstration. *Procedia Manufacturing*, 25, 239–246. <https://doi.org/10.1016/j.promfg.2018.06.079>
- Steinbrenner, F., & Turčínková, J. (2021). The value-based pricing determination matrix for method selection. *Central European Business Review*, 10(4), 1–14. <https://doi.org/10.18267/j.cebr.267>
- Wang, Z. (2024). To what extent can the prisoners dilemma in game theory be used in pricing strategy? *Advances in Operation Research and Production Management*, EWA Publishing.

Leadership styles and teachers' performance in Magsaysay, Occidental Mindoro elementary schools

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Abstract

This study utilized an exploratory sequential mixed method to explore leadership styles and teachers' performance in Magsaysay Elementary Schools. There were 144 randomly selected teachers from the 26 schools headed by principals and head teachers for the academic year 2023-2024. The qualitative data from the interview underwent thematic analysis, while the quantitative data employed statistical treatments such as weighted means, Partial Least Squares Structural Equation Modelling (PLS-SEM), and WarpPLS version 7.0. Based on the interview results, seven leadership styles —autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational—were extracted as the main themes from the narratives. This study found that school heads employ a high extent of leadership styles and teachers exhibit a high level of performance. This indicates that the principals and head teachers showed commendable leadership. The high ratings in leadership reflect that school heads successfully responded to the needs of their teachers and pupils. This can lead to improved pupils' outcomes and increased community support for the schools. Furthermore, only autocratic leadership was found when leadership styles were linked to the teachers' performance, with no direct connection. Based on the findings, the study concluded that various leadership styles and teachers excel at multiple aspects of their roles. Therefore, it is recommended that school heads evaluate the practical application of each leadership style and that teachers continue with their comprehensive professional development program to enhance their best teaching practices. Also, educational authorities may consider the proposed development plan to upgrade their leadership styles and teachers' performance.

Keywords: leadership styles, teachers' performance, Individual Performance Commitment and Review Form (IPCRF), bureaucratic leadership, school heads

Leadership styles and teachers' performance in Magsaysay, Occidental Mindoro elementary schools

1. Introduction

The Department of Education claims that the country's school leaders now have professional standards by releasing two historic education regulations that have clarified the duties of supervisors and school heads in enhancing teacher quality. These include the issuance of DepEd Order No. 24, s. 2020, or the National Adoption and Implementation of the Philippine Professional Standards for School Heads (PPSSH), and DepEd Order No. 25, s. 2020, or the National Adoption and Implementation of the Philippine Professional Standards for Supervisors (PPSS). As RA 9155, "Governance of Basic Education Act," states, "There shall be a school head for all public elementary and public high schools or a cluster thereof. The establishment of integrated schools from existing public elementary and public high schools shall be encouraged." The head of the school, who may have an assistant head to help, will serve as both the administrative manager and the instructional leader. The school head will create a team with the teachers and learning facilitators to deliver high-quality educational initiatives, programs, and services. School heads have authority, responsibility, and accountability to maximize organizational performance and school effectiveness. They accomplish this by directing the school, supervising its systems and procedures, encouraging high-quality teaching and learning, nurturing themselves and others, and involving stakeholders in initiatives to enhance school communities (DepEd Memo no. 24 s. 2020).

DepEd Memo no. 24 s. 2020, known as the National Adoption and Implementation of the Philippine Standards for School Heads, also mentioned that their knowledge, abilities, and attitudes enable them to offer technical support on curriculum, practice, and output instruction. They should also foster a learner-centered environment that guarantees that everyone has access to high-quality, excellent, timely, and liberating education. Their dedication lies in offering leadership in education to enhance teacher competency and student results. Section 17 of the Primary Education Act of 1951 also states that school administrators should fulfill their obligations to the school by conducting their tasks in a way that is consistent with the school's philosophies, aims, and objectives. Take responsibility for the smooth and productive operation of the school. Create and preserve a favorable school climate that supports and upholds academic independence, efficient teaching and learning, and a positive, forward-thinking connection between the staff and pupils. Provide non-teaching professionals and non-academic staff with sufficient reports regarding their performance compared to expectations and guidance on how to enhance it. They should also respect due procedure, equity, timeliness, confidentiality, constructiveness, and coherence in disciplining their staff members and teachers. However, as stated by Zee et al. (2023), in building a strong principal-teacher connection, it is essential to guarantee pupils' success and foster a healthy school climate to produce a learning environment that supports professional growth, encourages social and emotional learning, and eventually improves student results.

The researcher got the motivation to conduct this study to shed light on how the leadership styles of school heads play a significant role in the teachers' performance because there are educational institutions that experience a lack of motivation and job satisfaction on the part of teachers, as reflected in their performance last school year. Given that most of the elementary teachers in the Magsaysay district received an outstanding rating in IPCRF. 27% of the teacher population received a very satisfactory rating in SY 2022-2023. Despite the teacher's unwavering commitment to professional growth and pupils' success, they received a "very satisfactory" rating in the IPCRF instead of the hoped-for "outstanding" mark. While this rating reflects solid performance, it also reveals some challenges in areas like innovative teaching methods and effective management by school heads.

Statement of the Problem - The researcher. Aimed to determine the school heads' leadership styles and their relation to the teachers' performance in Magsaysay elementary schools. Specifically, the researchers wanted to answer the following questions: (1) What are the leadership styles of the school heads in Magsaysay elementary

schools? (2) What is the level of school heads' leadership styles in Magsaysay elementary schools in terms of autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational? (3) What is the level of teachers' performance in Magsaysay elementary schools regarding lesson plan preparations, assessing pupils, involvement in extracurricular activities, and IPCRF rating? (4) Is there a significant relationship between the level of school heads' leadership styles and the teachers' performance? (5) What development plan can be proposed to the respondents and their school to enhance teacher performance through effective leadership styles?

Significance of the Study - The study aimed to determine the leadership styles and teachers' performance in elementary schools in Magsaysay, Occidental Mindoro. This study also aims to assist teachers with classroom management, ensuring that teachers feel supported as they create a positive learning environment which will collectively contribute to reaching their full potential, help school heads apply different leadership styles to implement solutions that can improve learning environments and address the shortcomings of the schools, serve as an instrument to enhance pupils' learning for better growth and development wherein they can benefit from this study once their teachers' performance improves, enable parents to advocate confidently for their child's educational needs, ensuring that their voice is heard and valued in the learning process and strengthen the community around each child and enhance their overall educational experience. Also, it has the potential to foster the creation of evidence-based policies and practices that can benefit the academic sector, education stakeholders, and policymakers within the municipality, thereby contributing to the community's overall growth and development and guiding policymakers of DepEd Occidental Mindoro on how to improve the working conditions of teachers and managerial practices of school heads. Moreover, they may create a scheme and devise a system to maintain a healthy relationship between teachers and school heads. This will allow them to craft short- to long-range plans. Future researchers can use this as a basis for the conduct of further or similar studies.

Scope and Delimitation of the Study - This study examined teachers' leadership styles and performance from 26 elementary schools in Magsaysay, Occidental Mindoro. It focused specifically on seven leadership styles: autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational. Teachers' performance was assessed based on their lesson plan preparations, pupil evaluations, participation in extracurricular activities, and IPCRF (Individual Performance Commitment and Review Form) ratings. The study encompassed the school year 2023-2024.

2. Methodology

Research Design - This study employed an exploratory sequential mixed method to examine the relationship between the independent and dependent variables to obtain the necessary data. The exploratory sequential mixed-method design is a research approach that initially collects and analyzes qualitative data, followed by collecting and analyzing quantitative data. Researchers gather and interpret this information to inform the subsequent quantitative phase of the project. This initial qualitative stage is crucial for designing a tailored survey, selecting appropriate existing measures for the next phase, creating interventions, or developing a website or app. This research design was chosen because it effectively identified leadership styles and teachers' performance in elementary schools in Magsaysay, Occidental Mindoro.

Respondents of the Study - The study's respondents were 144 teachers from the 26 elementary schools in Magsaysay, Occidental Mindoro. They were randomly selected and asked to assess their school heads' leadership styles and performance. Out of 228 teachers from Magsaysay elementary schools, only 144 served as respondents. This was computed through the Raosoft Sample Size Calculator with a 5% margin of error and 95% confidence level.

Research Instrument - The first instrument used in this study was the interview guide. An interview was conducted with 15 randomly selected elementary teachers in the Magsaysay district who were asked to determine the leadership styles of their school heads. In the quantitative phase, an adapted questionnaire with modifications for the leadership styles and a researcher-made questionnaire on the teachers' performance served as the secondary

instrument. The questionnaire consisted of two parts. The first part was the level of leadership styles of their school heads: autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational. The second part included the teachers' performance based on their lesson plan preparations, assessing students' involvement in extracurricular activities, and individual performance commitment and review form (IPCRF) ratings.

Autocratic leadership was adapted from Bwalya (2023) with four adapted statements. Two statements were added to complete the six items. Bureaucratic leadership was adapted from Normakoh (2019) with four adapted statements. Two statements were added to complete the six items. Delegative leadership was adapted from Bwalya (2023) with three adapted statements and Cadimas et al. (2024) with three adapted statements. Democratic leadership was also adapted from Aunga & Masare (2017) with one adapted statement and from Bwalya (2023) with one adapted statement. Four statements were added to complete the six. Instructional leadership was adapted from Pettiegrew (n.d.) with three adapted statements. Three statements were added to complete the six. Servant leadership was adapted from two research questionnaires. The first was from Cadimas et al. (2024) with one adapted statement. The second was from the Servant Leadership Questionnaire with three adapted statements. Two were added to complete the six statements. Transformational leadership was adapted from two research questionnaires. The first was from Cadimas et al. (2024) with one adapted statement. The second was from the Transformational Leadership Survey, with three adapted statements. Two statements were added to complete the six items.

To ensure the validity of the instrument created and adapted by the researcher, a team of three graduate school professors from Divine Word College of San Jose brought together their expertise and insights, ensuring the clarity and appropriateness of the statements. The professors' feedback and recommendations were incorporated into the draft of the questionnaire to enhance its potential for generating valuable data for the research. The adapted questionnaire on the level of school heads' leadership styles, which consisted of 42 items, and teachers' performance, which consisted of 18 items, were tested for their reliability using 30 respondents. Since the questionnaire was administered once, the split-half reliability technique, applying the Spearman-Brown formula, was used. The coefficients of reliability based on equal length recorded the following results.

Table 1

Reliability Analysis of the Level of Leadership Styles and Teachers' Performance

Variables (Leadership Styles)	Number of Items	Reliability Coefficients*	Interpretation
Autocratic Leadership	6	0.917	High Reliability
Bureaucratic Leadership	6	0.973	Very High Reliability
Delegative Leadership	6	0.918	Very High Reliability
Democratic Leadership	6	0.975	Very High Reliability
Instructional Leadership	6	0.918	Very High Reliability
Servant Leadership	6	0.980	Very High Reliability
Transformational Leadership	6	0.722	High Reliability
Teachers' Performance			
Lesson Plan Preparations	6	0.903	High Reliability
Assessing Pupils	6	0.885	High Reliability
Involvement in Extracurricular Activities	6	0.920	Very High Reliability

*Based on coefficients of equal length

The results revealed a generally very high level of reliability, as shown in the significant coefficients that ranged from 0.722 to 0.980. The results proved that the questionnaire could be administered to the final set of teacher respondents.

Data Gathering Procedure - The researcher used one question and gathered responses through personal interviews for the qualitative phase. The question was, "What is the leadership style of your school head?" The qualitative data were generated from teacher-respondents' interviews and underwent thematic analysis. Recording, transcription, tabulation, and coding were done to extract the themes. The initial, developing, and final thematic maps were illustrated to identify the final themes. Letters of request to conduct the study were forwarded to the

Office of the OIC-Schools Division Superintendent, Dr. Loida O. Adornado, and Public Schools District Supervisor Joel P. Bercasio. Upon approval, permission from the school heads in Magsaysay District was secured before the actual gathering of data. To gather data, the researcher personally administered the survey questionnaire checklist. The respondents were oriented to the significance of the survey. Responses were elicited from them. They were also informed about withholding their anonymity. The researcher also gathered the IPCRF ratings of teachers in the Magsaysay District for SY 2023-2024 to determine their performance. The data-gathering procedure, securing letters, and consent were done in two weeks, and all of the questionnaires were retrieved the same day they were given and evaluated right after all of the data was gathered.

Statistical Treatment of the Data - The qualitative data generated through the interviews of the teacher-respondents underwent thematic analysis. Recording, transcription, tabulation, and coding were done to extract the themes. The initial, developing, and final thematic maps were illustrated to identify the final themes. The quantitative data to answer the descriptive problems have been processed by the statistical software SPSS version 26. For the inferential problems and to test the hypotheses, Partial Least Squares-Structural Equation Modeling (PLS-SEM) was used, and results were generated by WarpPLS version 7.0. The level of leadership styles and teachers' performance was answered through a survey questionnaire. The following limits are applied in leadership styles: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low. While in the teachers' performance, the following limits are applied: 4.50-5.00 – Excellent; 3.50-4.49 – Very Good; 2.50-3.49 – Good; 1.50-2.49 – Fair; 1.00-1.49 – Poor.

Ethical Considerations - The researcher listed the sources used as references in this study. The American Psychological Association (APA) citation was used to acknowledge the ideas of researchers and authors. This study only aimed to contribute to innovations in education and did not cause harm to anyone involved in this study. The researcher asked permission from the school district supervisor and school heads/principals of their respective schools in the Magsaysay District to gather data for the study. Trust in the teacher-respondents was given, considering their complete understanding of the objectives and how the research process works. The research instrument was also explained thoroughly to them. During the administration of the instrument, the survey questionnaire was distributed personally at a specified time. The confidentiality of the respondents' data was assured. It was guaranteed that all the data and results gathered would be exclusively used for the study.

3. Results and Discussions

The final thematic map for leadership styles is an updated version that reflects the analysis and refinement of the initial thematic diagram. It presents the seven final themes derived from the study of leadership styles. These final themes, namely autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational leadership styles, represent the leadership styles practiced in their respective schools. The final thematic map summarizes the analysis and provides a clear visual representation of the leadership styles. Team (2024) emphasized that a leader's behavioral approach to directing, inspiring, and influencing subordinates is called their leadership style. The level of leadership styles in the Magsaysay district was rated high, with an overall mean of 4.39. This indicates that the principals and head teachers showed commendable leadership. The high ratings in leadership reflect that school heads successfully responded to the needs of their teachers and pupils. This can lead to improved pupils' outcomes and increased community support for the schools.

Table 2 shows the mean level of school heads' leadership styles in Magsaysay elementary schools regarding autocratic and bureaucratic leadership styles. It was measured numerically using the weighted mean with recorded composite values of 4.28 and 4.45, respectively, which denote high levels. This means that in terms of autocratic style, the school head has an effective leadership style that has created a disciplined and structured school environment. It may result in clear guidelines or expectations for the teachers, but it can also limit opportunities for collaborative decision-making and teacher autonomy. Therefore, though high accountability and attainment of organizational objectives through the autocratic approach may be vital, it needs to be balanced with elements of participative leadership, which can create engagement and empowerment among the teachers for long-term success

and job satisfaction. As shown in the table, all six indicators were assessed at a high level, ranging from 3.99 to 4.40. The high ratings suggest that the school head maintains a centralized control approach. This can lead to uniformity in decision-making and clarity in organizational objectives. However, it may also stifle creativity and initiative among staff who may not feel empowered to share ideas or advocate for change. As supported by Legacee (2024), the adoption of an autocratic leadership style can achieve compliance, quick decision-making (Abdullah & Wahan, 2023) to benefit teachers and pupils, establish clear and specific goals (Sugars, 2024), and boost team performance (Towler, 20221). Also, easier communication (Mamchii, 2024), trust (Rosing et al., 2024), and making choices all by themselves (Modise, 2024). The study of Bahadar et al. (2023) shows a strong correlation between secondary school teachers' work effectiveness and authoritarian leadership style. It implies that teachers' efficacy may be impacted by high levels of autocratic leadership, calling for assistance and training to enhance classroom management and instructional techniques. On the contrary, in the study of Rezky et al. (2024), it is highlighted that the school environment was found to suffer when a principal adopted an authoritarian leadership style, underappreciated teachers (C & P, 2016), restricted flexibility (Tibogwa et al., 2016), coerced teachers (Jameslopresti, 2022), self-uncertainty of the teachers (Kincaid et al., 2024), and demoralized the staff (Mathur, 2021). Teachers are not committed to the organization (Cherak, 2024). Thus, in the end, it is the organization that will suffer. As a result, roles and actions within the organizational context may be hampered.

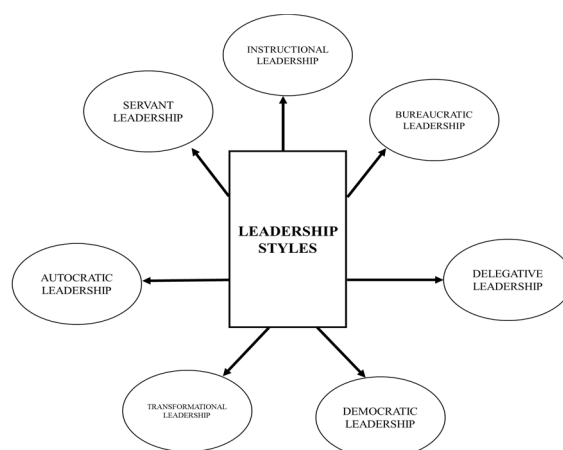


Figure 1. Final Thematic Map of Leadership Styles

Table 2

Mean Level of School Head Leadership Styles in terms of Autocratic and Bureaucratic

INDICATORS (Autocratic Leadership)	Weighted Mean	Verbal Description
1. *My school head supervises and monitors us closely.	4.40	High
2. *My school head retains the final decision-making authority within our school.	4.24	High
3. My school head exercises full authority in leading us.	4.27	High
4. My school head gives rewards and punishments to motivate the achievement of organizational objectives.	3.99	High
5. *My school head is the primary assessor of our achievements and accomplishments.	4.39	High
6. *My school head gives orders and clarifies procedures.	4.37	High
Composite Mean	4.28	High
INDICATORS (Bureaucratic Leadership)		
1. *My school head ensures that we comply with school and departmental policies and regulations, promoting a culture of shared responsibility.	4.53	Very High
2. *My school head fosters reliability and productivity in maximizing the school system.	4.40	High
3. *My school head clarifies teachers' roles and responsibilities, helping reduce conflicts of interest.	4.45	High
4. My school head prefers and employs rigid rules and regulations, sticking with memoranda and DepEd orders.	4.49	High

5. *My school head helps us understand the vision, mission, and goals of the school and department.	4.42	High
6. My school leader focuses on specialization, allowing us to focus on our strengths.	4.39	High
Composite Mean	4.45	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low *Adapted statement

Moreover, the recorded composite value of 4.45, which denotes a high level, means that the bureaucratic leadership style effectively develops an organized, responsible, and accountable school culture in which teachers' roles are well-defined. The reliability and productivity from this type of leadership remain effective, although at the same time, it can be too rigid and devastatingly dead against creativity and flexibility for educators. Therefore, though the imposition of rules and regulations keeps things in order and ensures a clear focus on institutional goals, balancing this approach with opportunities for innovation and professional growth is necessary. Encouraging some level of autonomy and teacher input can enhance engagement and morale, ultimately benefiting the overall educational environment. In addition, decisions are made according to a well-defined chain of command that is based on laws and regulations (AIHR, Academy to Innovate HR, 2024), and freeing up staff members to concentrate on their areas of competence (Emeli, 2024) affirms the effectivity bureaucratic school structures have on fostering a friendly work environment, administrator support, and occupational cooperation, all of which have a beneficial impact on teacher leadership culture (Parlar & Cansoy, 2017); yet inevitable consequences are unavoidably brought about by bureaucracy (Monteiro et al., 2021).

Table 3 reveals the mean level of school heads' delegative, democratic, and instructional leadership styles in Magsaysay elementary schools, which were measured numerically using the weighted mean with recorded composites of 4.39, 4.39, and 4.45, respectively, which denotes a high level. The elevated mean score for delegative leadership among principals at Magsaysay Elementary Schools suggests that school heads successfully empowered their teachers by providing them with increased autonomy and responsibility. This method can cultivate a sense of ownership and engagement among educators, which may contribute to teaching performance and student outcomes. The implication is that ongoing investment in delegative leadership practices can promote greater collaboration and innovation within the school, further enriching the academic environment. Additionally, school leaders can consider implementing training programs to hone leadership skills to optimize their positive influence on the school community. Moreover, the composite mean of 4.39, suggesting that the school heads are also practicing delegative leadership at a high level emphasizing the importance of quality through collaborative decision-making (Philips et al., 2023) letting group members decide (Staff & Staff, 2024) gives team members the freedom to think for themselves (Okiri & Hercz, 2024) without prejudices, telling us to do our work at own pace, willingness to delegate tasks and shard responsibilities (Okiri & Hercz, 2024) for resource on skills allocation and be able to concentrate on their strength (Sharma, 20204) the trust that was build (Iqbal, 2024 & Myers, 2024) encourage teachers to be motivated accountable and collaborative (Amos et al., 2022).

Moreover, the composite mean of 4.44 under the democratic leadership style indicates high effectiveness or influence within the study context. This means that the variable significantly contributes to achieving desired outcomes in the school environment. The implication is that prioritizing and sustaining this variable, whether related to leadership styles, teaching methods, or another element, can be crucial in driving further improvements in school performance. Stakeholders, including administrators and educators, may leverage this high level of effectiveness to cultivate an environment that promotes ongoing growth and success. Investing in areas that align variables can yield substantial benefits for both taught pupils over time. With the high level of delegative leadership, it is supported in the study of Laghari et al. (2024b) that head teachers who embrace a democratic leadership style can enhance teachers' performance by boosting their commitment and productivity.

Lastly, the instructional leadership style in Magsaysay Elementary Schools reveals a high level with a recorded composite value of 4.45. Strong instructional leadership will likely positively affect pupils' outcomes and academic performance. School heads can cultivate a culture of continuous improvement and excellence in education by fostering a supportive environment where teachers feel empowered and guided in their instructional efforts.

Therefore, school heads must maintain and further develop their instructional leadership skills. Additionally, ongoing professional development programs and collaborative practices among teachers may strengthen this leadership style, ultimately benefiting teachers and pupils. Kilag & Sasan (2023b) believed that putting instructional leadership into action in schools helps teachers learn and grow, fosters strong connections between teachers and administrators, and creates continuous opportunities for professional development. Nurabadi et al. (221) emphasize that when principals actively guide instruction, it helps teachers become more effective, leading to pupils' achievement.

Table 3*Mean Level of School Head Leadership Styles in terms of Delegative, Democratic, and Instructional*

INDICATORS (Delegative Leadership)	Weighted Mean	Verbal Description
1. *My school head lets us do our work at our own pace and allows us to appraise it.	4.39	High
2. *My school head emphasizes the importance of quality, allowing us to establish control standards.	4.45	High
3. *My school head allows us to vote whenever a major decision must be made.	4.40	High
4. *My school head delegates tasks to implement a new procedure or process.	4.35	High
5. *My school head lets us think ahead and develop strategic long-term plans.	4.37	High
6. *My school head allows us the right to determine our organizational objectives.	4.37	High
Composite Mean	4.39	High
INDICATORS (Democratic Leadership)		
1. *My school head believes that working together has greater potential than working individually.	4.52	Very High
2. My school head is transparent and includes stakeholders and students in the decision-making process.	4.38	High
3. My school head allows us to work optimally and fosters a flexible work environment.	4.45	High
4. *My school head creates an environment where we take ownership of our work or project.	4.45	High
5. My school head is receptive to ideas and advice from us.	4.40	High
6. My school head encourages us to use our creativity and ingenuity to solve organizational problems.	4.42	High
Composite Mean	4.39	High
INDICATORS (Instructional Leadership)	Weighted Mean	Verbal Description
1. *My school head makes sure that our priorities in the classroom are to align with the goals and direction set by the school and department.	4.56	Very High
2. *My school head engages us in discussions about academic performance results to pinpoint the strengths and weaknesses of the curriculum.	4.50	Very High
3. My school head proactively promotes the application of skills learned during in-service training in the classroom.	4.45	High
4. *My school head actively assists us in acknowledging and rewarding student contributions and achievements in the classroom.	4.40	High
5. My school head motivates us to use instructional time for teaching and practicing new skills and concepts.	4.42	High
6. My school head visits classrooms to discuss school matters with teachers and students.	4.37	High
Composite Mean	4.45	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low *Adapted statement

Presented in Table 4 are the mean levels of school heads' servant and transformational leadership styles in Magsaysay elementary schools. Their level of leadership style was measured numerically using the weighted mean with a recorded composite value of 4.38, which denotes a high level. The servant leadership of the school head can contribute considerably to a positive school culture built on collaboration, support, and shared success. This leadership style not only enhances the morale and job satisfaction of the teachers but also creates a sense of community and belonging among the staff. By focusing on the needs and welfare of others, the school head lays

the groundwork for long-term growth and development within the organization. However, this balance must be maintained because a strong servant leadership orientation needs to be complemented with mechanisms that ensure proper goal achievement and organizational performance. A servant leadership style can significantly improve a school's climate and culture, increasing teacher satisfaction, engagement, and retention. School heads who embrace this approach will likely cultivate trust and loyalty among staff, fostering teamwork and collaboration. Furthermore, servant leadership empowers teachers to take the initiative and participate in decision-making, enhancing instructional quality and better student outcomes.

Table 4

Level of School Head Leadership Styles in terms of Servant and Transformational

INDICATORS (Servant Leadership)	Weighted Mean	Verbal Description
1. *My school head emphasizes the importance of empowering the school and community through service and contribution.	4.38	High
2. *My school head cares more about others' success and accomplishments than his/her own.	4.29	High
3. *My school head prioritizes our personal wellness.	4.40	High
4. *My school head sacrifices his/her own interest to meet our needs.	4.24	High
5. My school head creates a safe space for us to share our thoughts and feelings at a personal level.	4.42	High
6. My school head holds high ethical standards and recognizes our individuality.	4.42	High
Composite Mean	4.38	High
INDICATORS (Transformational Leadership)		
1. *My school head enables us to think about old problems from fresh perspectives.	4.26	High
2. My school head challenges us to achieve our full potential.	4.41	High
3. *My school head rarely gives direction or guidance to us if s/he senses we can achieve our goal.	4.28	High
4. *My school head regularly gives us coaching and feedback to help us understand our progress.	4.35	High
5. *My school head helps us with our self-development.	4.39	High
6. My school head supports experimentation, creation, innovation, and collaboration in learning.	4.42	High
Composite Mean	4.35	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low *Adapted statement

The high level of servant leadership in the Magsaysay district positively influences the teachers, as supported by Silalahi et al. (2022), who mention that leaders who prioritize serving their team members cultivate loyalty and boost performance. As reflected in the table, six indicators were rated high, with a value of 4.42. The high level of servant leadership can pose a sense of professionalism, as disclosed in the study of Poobalan and Talip (2020), that when school leaders adopt servant leadership, they create a supportive environment that boosts teachers' professionalism and performance. This style not only manages the school better but also creates changes in education, leading to greater, more tremendous pupils. Moreover, Hailu (2023) addressed in his study that a transformational leader inspires and motivates his or her team to unlock their full potential and exceed expectations. Table 4 shows the mean level of school heads' transformational leadership style in Magsaysay Elementary Schools. It reveals a high level of leadership, which was measured numerically using the weighted mean with a recorded composite value of 4.35. This indicates that transformational leadership is likely to drive positive changes within the schools, boosting teacher motivation and engagement, which, in turn, contributes to enhanced pupil performance. Therefore, focusing on transformational leadership practices can further strengthen the school environment and encourage continuous development. As the table shows, six indicators were rated high, with a value of 4.42. The high level of transformational leadership can greatly enhance teacher performance, with charisma and inspiration being the most influential factors (Sugianto, 2024b). It also plays a key role in shaping the school climate, as pinpointed in the study of Irawan et al. (2024).

An excellent teacher's performance in terms of lesson plan preparation was disclosed in Table 5 with a composite mean of 4.70. This indicates that teachers were well-prepared and organized in their instructional

planning, which created an engaging and productive learning environment. Such exceptional performance in lesson plan preparations can enhance teaching quality and improve student learning outcomes. To maintain this high level of performance, it is essential to prioritize ongoing professional development and support for teachers, ensuring they have access to the necessary resources and training to continue to refine their lesson planning skills showed similarity in the study of Fraefel (2023), which disclosed that effective lesson planning boosts teachers' performance by aligning teaching strategies with pupils' outcomes. This focus ensures that tasks are meaningful, promote successful learning, and help avoid the pitfalls of over- or under-planning.

The six descriptors under the teachers' performance in assessing pupils yielded a high weighted mean of 4.75, which is excellent. This finding implies that teachers were assessing pupils' progress and likely used various assessment strategies that positively impacted pupils' learning and development. Such an excellent performance indicates a commitment of teachers to understand their pupils' needs and adjust their instructional methods accordingly. Consequently, they can offer meaningful feedback, pinpoint improvement areas, and maximize support to enhance individual pupils' outcomes. It showed that the respondents possessed an excellent performance in assessing pupils, which is also reflected in the study of Yakimowski & Truxaw (2016), which found that when pupils' performance is assessed, it can significantly influence teacher effectiveness by providing valuable insights that link teacher training programs to pupils' success. These data help uncover opportunities to improve teaching methods and support their pupils.

Table 5

Level of Teachers' Performance in terms of Lesson Plan Preparations, Assessing Pupils, and Involvement in Extracurricular Activities

INDICATORS (Lesson Plan Preparations)	Weighted Mean	Verbal Description
1. I prepare my lesson plan to adhere to adhere to standards, pupils' needs and diversity, and the availability of resources.	4.82	Excellent
2. I make instructional materials for my lessons to enhance collaborations.	4.65	Excellent
3. I prepare fun, interactive, and meaningful activities for my pupils.	4.63	Excellent
4. I deliver engaging lesson recaps and conclusions to enhance pupil understanding.	4.70	Excellent
5. I make well-planned lessons because I believe it fosters engaging and meaningful learning.	4.73	Excellent
6. I make sure to finish the learning competency assigned weekly and quarterly on time.	4.69	Excellent
COMPOSITE MEAN	4.70	Excellent
INDICATORS (Assessing Pupils)		
1. I give formative, summative, diagnostic, performance-based tests, etc., to my pupils.	4.78	Excellent
2. I align my assessments to the learning competencies.	4.81	Excellent
3. I prepare differentiated assessments to address the diversity of learners.	4.72	Excellent
4. I communicate assessment results with students and parents.	4.73	Excellent
5. I give summative tests every two weeks and formative tests at the end of the quarter.	4.76	Excellent
6. I create assessment criteria for every learning outcome to conduct a thorough evaluation of pupils' learning.	4.67	Excellent
COMPOSITE MEAN	4.75	Excellent
INDICATORS (Involvement in Extracurricular Activities)		
1. I accept ancillary tasks such as coordinatorship, like ICT coordinator, LRMSD coordinator, SIC coordinator, etc., in school.	4.65	Excellent
2. I embrace extracurricular activities as opportunities to grow beyond my designated instructional responsibilities.	4.62	Excellent
3. I coordinate and manage school programs like Reading Month Celebration, School Meet, United Nations Celebration, Children's Month Celebration, etc.	4.77	Excellent
4. I accept coaching and mentoring to support pupils' development in extracurricular activities.	4.70	Excellent

5. I enthusiastically showcase my talents through various school programs and events.	4.59	Excellent
6. I provide guidance and support to various school clubs like sports club, dance club, arts club, music club, etc.	4.50	Excellent
COMPOSITE MEAN	4.64	Excellent

Legend: 4.50-5.00 – Excellent; 3.50-4.49 – Very Good; 2.50-3.49 – Good; 1.50-2.49 – Fair; 1.00-1.49 – Poor

Furthermore, the mean level of teachers' performance in terms of involvement in extracurricular activities is excellent, with a composite mean of 4.64. This indicates that teachers were actively engaged in and supporting extracurricular activities, which can significantly enhance the overall educational experience of pupils. Such participation can strengthen the relationships between teachers and pupils, foster community within the school, and contribute to pupils' social and emotional growth. Furthermore, this commitment to extracurricular activities reflects teachers' understanding of the value of a well-rounded education and their willingness to dedicate extra time and effort to nurture pupils' interests and talents beyond academics. This encouraging observation underscores the need for ongoing support and acknowledgment of teachers' contributions in these areas, as they are instrumental in the comprehensive development of pupils. Significantly, all indicators obtained weighted averages between 4.59 and 4.77, signifying that they performed excellently in this variable. This means teachers in elementary schools in the Magsaysay district were willing to involve themselves in extracurricular activities in schools. Sutton (2015) affirms that teachers who get involved in extracurricular activities and encourage their pupils to do the same help build strong connections within the school community. When pupils feel they belong, they are more likely to engage with their teachers. This sense of community has been linked to improved academic performance.

Table 6

Level of Teachers' Performance in Terms of IPCRF Rating

IPCRF Rating	Descriptive Rating	Frequency	Percent
3.500–4.499	Very Satisfactory	29	20.1
4.500–5.000	Outstanding	115	79.9
Total		144	100.0

Table 6 shows the level of teachers' performance based on the IPCRF rating. The IPCRF assesses teachers' performance by pinpointing their strengths and weaknesses within key result areas, ultimately guiding professional development and intervention programs designed to improve teaching effectiveness (Gresula, 2024). The IPCRF is a collaborative initiative between school leaders and teachers that encourages open dialogue regarding the expectations for each course, key result areas, objectives, and their alignment with the broader goals of the department. As shown in Table 5, the majority of the teachers received an outstanding rating within the range of 4.500 to 5.000. Meanwhile, 20.1% of the respondents achieved a very satisfactory rating of 3.500 to 4.499. The results of the IPCRF demonstrate a strong indication of the teachers' performance for the year, suggesting that they met the performance and behavior standards established by the Department of Education.

The high ratings suggest that teachers successfully applied educational strategies and exhibited professionalism in their roles, which can enhance pupils' learning outcomes. Additionally, such favorable evaluations can boost teacher morale and motivation, fostering a culture of excellence within the educational setting. These data also highlight the importance of ongoing professional development and support for those who performed satisfactorily, ensuring that all educators can improve and aim for exceptional performance. In summary, these findings underscore the need to acknowledge teachers' efforts and create an environment promoting continuous growth and professional excellence.

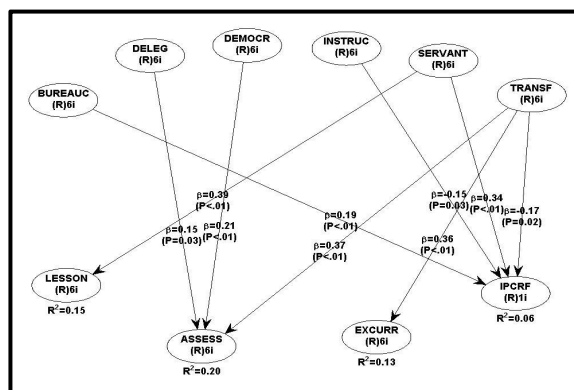


Figure 2. Emerging Model of Leadership Styles and Teachers' Performance

From the structural model that reflects seven leadership styles, an emerging model presents only six leadership styles. Figure 2 emerged from the structural equation modeling using the partial least squares method generated by WarpPLS version 7.0. As seen in the new model, the transformational leadership style has the most influence, followed by the servant and bureaucratic leadership styles. The lesson plan preparations of teachers contributed to a small degree ($R^2=0.15$) to the school heads' servant leadership style. Assessing pupils ($R^2=0.20$) attributed to the effect of the combined delegative, democratic, and transformational styles of leadership. The transformational leadership style also contributes to a small degree ($R^2=0.13$) to the teachers' involvement in extracurricular activities. Although to a minimal extent, the teachers' performance, as indicated by the IPCRF rating, contributes to the combined leadership styles applied by the bureaucratic, instructional, servant, and transformational school heads. Due to structural equation modeling, the *beta coefficients* (β), ranging from 0.15 to 0.39, are also shown with the corresponding *p*-values or significance levels set at 0.05.

Six recognized emergent leadership models have transformational leadership exert the most significant impact. The lesson plan preparations made by teachers affect school heads' servant leadership marginally, according to analysis. Assessing pupils is effectively delegative, and the combined effects of democratic and transformational leadership styles combined with transformational leadership have a negligible impact on teachers' involvement in extracurricular activities, whereas, in contrast, teachers' involvement is weakly associated with school heads' bureaucratic, instructional, servant, and transformational leadership styles. The beta coefficients reveal differing extents of influence, validating the importance of the given relationships at the $p < 0.05$ level. Transformational leadership is the determining factor in improving teachers' contributions to school activity. This finding is supported by Fernando et al. (2024), who say that strong leadership styles significantly impact school performance, particularly regarding teacher effectiveness. When principals exhibit traits such as innovation and resourcefulness, they motivate teachers to excel, resulting in enhanced outcomes for the entire school.

Table 7

Proposed Development Plan to Enhance Teacher Performance through Effective Leadership Styles

Goals and Objectives	Development Needs	Action Strategies	Intervention	Timeline	Resources Needed	Persons Involved
Increase awareness of various leadership styles among school heads.	School heads can have a foundational understanding of leadership theories and styles, including their characteristics, benefits, and challenges.	Conduct a thorough self-assessment through surveys, peer reviews, and self-reflection.	Organize workshops on varied leadership styles and their impact on teaching and learning.	First Quarter	MOOE	Schools Division Office Personnel School Heads School District Supervisor Teachers

Leadership styles and teachers' performance in Magsaysay, Occidental Mindoro elementary schools

	School heads need to reflect on their leadership styles and how they can adapt to meet the needs of their teachers.	Compare leadership effectiveness with desired outcomes (e.g., teacher satisfaction and performance).	Include training on emotional intelligence and conflict resolution.			
Foster adaptable leadership styles that meet the needs of diverse teachers.	School heads can develop a deep understanding of their teaching staff's diverse backgrounds, experiences, and needs.	Enable school heads to pursue self-improvement through targeted training and reflection.	Organize workshops led by experienced facilitators who can provide real-life examples and facilitate discussions.	Second Quarter	MOOE	Schools Division Office Personnel
	School heads can be knowledgeable about different leadership styles and their application to various situations and individuals.	Pair school heads with experienced mentors for guidance on situational leadership and feedback.	Provide cultural awareness, equity, and inclusion training to help school heads adapt their styles to a diverse workforce.			School Heads
	School heads must develop self-awareness regarding their leadership style and how it impacts their interactions with teachers.	Implement anonymous surveys for teachers to provide feedback on leadership effectiveness and areas for improvement.	Engage a leadership coach specializing in adaptive leadership to work with school leaders on setting personal goals and developing their skills.			Schools District Supervisor
Implement leadership strategies that boost teacher motivation and engagement.	Create a clear framework for assessing teacher performance, including criteria, methods, and timelines.	Review teacher performance regularly and adjust leadership approaches accordingly.	Conduct regular classroom observations with a focus on constructive feedback and professional growth.	Year round	MOOE	Teachers
	Determine necessary professional development opportunities based on identified gaps.	Conduct surveys or assessments to gauge the current skills of teachers against required competencies.	Create a framework outlining key competencies required for various teacher roles (e.g., technical skills, interpersonal skills, and problem-solving abilities).			Schools Division Office Personnel
	Establish mechanisms for ongoing feedback from teachers regarding leadership effectiveness.	Use feedback from co-school heads, supervisors, and self-assessments to uncover specific areas for improvement.	Create a structured framework for collecting, sharing, and using feedback within the team.			School Heads
						Schools District Supervisor

	Define the specific metrics and criteria that signify leadership and teacher performance improvements.	Acknowledge and celebrate improvements in leadership and teacher performance to motivate ongoing development.	Develop a structured recognition program that honors improvements in leadership and teacher performance.			
Enable leaders to pursue self-improvement through targeted training and reflection.	Leaders can develop self-awareness, self-regulation, empathy, and interpersonal skills to lead effectively.	Provide training on emotional regulation techniques such as cognitive restructuring, stress management strategies, and grounding exercises to help leaders manage their responses effectively.	Workshops on emotional intelligence, active listening, and conflict resolution	Fourth Quarter	MOOE	Schools Division Office Personnel
	Encourage leaders to set SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals based on identified needs.	Organize a dedicated workshop on the SMART goals framework that provides an overview of each element (Specific, Measurable, Achievable, Relevant, Time-bound).	Use self-assessments and peer feedback to identify individual strengths and weaknesses.			School Heads Schools District Supervisor Teachers

The proposed development plan aims to enhance leadership effectiveness within educational settings through targeted training, self-reflection, and organized interventions. Knowledge management and leadership styles are critical to an organization's long-term sustainability. The behaviors and attitudes of leaders have a significant influence on both employee and organizational performance (Wang et al., 2024). Each plan segment addresses specific needs, fostering a more supportive and effective environment for teachers and pupils. The foundational goal is for school heads to understand various leadership styles. This awareness will help them assess how their styles impact their teachers and school performance. As noted by Ify et al. (2024), various leadership styles are suited to different organizational contexts, and they are most effective when leaders have a clear understanding of the tasks at hand, can effectively convey that vision to their team, and develop actionable plans to achieve it. It also aims to foster adaptable leadership styles wherein leaders are cognizant of their teaching staff's diverse backgrounds and needs, which will enable them to adapt their leadership styles better and implement strategies to boost teacher motivation aimed at creating an environment where teachers feel motivated and engaged, which will subsequently enhance student learning. Kilag and Sasan (2023) state that instructional leaders are essential in assisting teachers by showcasing effective teaching strategies, providing ongoing constructive feedback, fostering collaboration, and facilitating professional development opportunities. They establish clear expectations and cultivate strong relationships, empowering teachers to take ownership of their own growth and development. Moreover, it enables continuous self-improvement where leaders are encouraged to pursue professional development, fostering self-awareness and emotional intelligence.

Each objective identifies specific areas that require improvement of foundational understanding, where school

heads need a comprehensive grasp of different leadership theories to assess and adapt their styles, self-reflection, and adaptability. School heads should engage in self-reflection to understand how their inherent leadership styles can evolve to meet the needs of their teachers. Feedback mechanisms wherein implementing processes for ongoing feedback from teachers about leadership effectiveness can ensure that leaders remain responsive and accountable.

The development plan also outlines actions to achieve the goals, highlighting self-assessments, training, mentoring and surveys, and professional development frameworks. Whereas self-assessments will allow leaders to evaluate their current styles, workshops will provide insight into various leadership models and skills, including emotional intelligence, pairing leaders with mentors and conducting anonymous surveys that will provide constructive feedback and facilitate the sharing of best practices, and a structured approach to assessing teacher performance will identify gaps and inform necessary training, ultimately benefiting both school heads and teachers. The development plan includes specific workshops directed by experienced facilitators and trained coaches, focusing on diverse themes such as emotional regulation techniques for leaders to handle stress and enhance interpersonal skills and workshops on creating SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals to help leaders set clear objectives for improvement. This development plan emphasizes the importance of structured, ongoing professional development for school leaders. By enhancing their leadership skills through self-reflection, targeted training, and feedback mechanisms, the plan aims to create a more effective educational system where teachers feel supported and motivated. This can lead to improved teaching performance and ultimately benefit the pupils they serve. The structured timeline and collaborative engagement of key stakeholders reflect a commitment to fostering a responsive and effective leadership culture in the educational environment.

4. Conclusions

Following the end of the study, the researchers presented the conclusions generated from the statistical analysis of data: final themes for leadership styles were revealed. There were seven themes: autocratic, bureaucratic, delegative, democratic, instructional, servant, and transformational leadership styles. A strong commitment to effective practices across diverse styles marks the leadership at Magsaysay Elementary School. Effective practice in varying styles is revealed as a distinctive hallmark of the leadership at the Magsaysay Elementary Schools; The school heads practice close supervision; School heads are hierarchical in structure and require subordinates to comply school policies strictly, Deped memoranda and orders; , School heads emphasize quality assurance; delegates task and allows to asks when majority of them are decided on must be made; School heads allow teachers to work on their own, show creativity and transparency; School heads prioritize pupils at the heart of instruction by engaging in discussions with the teachers; Empowering the school and community by serving and sacrificing his/her interest was practiced by interests heads. School heads embrace changes and provide coaching and feedback for teacher development. Teachers in Magsaysay Elementary Schools excel at multiple aspects of their roles, including lesson plan preparations, assessing pupils, and involvement in extracurricular activities. Teachers prepare lesson plans that cater to pupils' needs, meaning they are meaningful and interactive. Teachers prepare differentiated assessments, ensuring open communication of the results. Teachers met the professional standards and performance targets, ensuring high-quality education.

Various leadership styles positively influence teaching performance indicators such as autocratic leadership has no significant relationship to be found, bureaucratic leadership has a significant effect on IPCRF indicating bureaucratic practices impact teachers' effectiveness, delegative leadership affects assessing pupils, showing that this style promotes better assessment strategies among teachers, democratic leadership has a strong significant effect on assessing pupils, indicating this participative style enhances assessment effectively, instructional leadership shows a significant negative adverse IPCRF implicating that this style might be counterproductive in enhancing teacher effectiveness, servant leadership demonstrates a strong significant positive influence on both lesson planning and IPCRF showing that a servant-oriented approach can substantially enhance both areas and transformational leadership significantly influences both assessing pupils and involvement in extracurricular activities, showing that this style effectively motivates and engages teachers in these areas. Based on the study's findings, a development plan is proposed to the respondents and their schools to enhance teacher performance

through effective leadership styles. The development plan is geared towards strengthening the school administrators' leadership skills training and reflective practices. School administrators will be more competent in motivating and engaging their teachers by instilling knowledge of various leadership styles, promoting self-refinement, and utilizing sound mechanisms for feedback.

Recommendations - The research findings presented in the conclusion explain the significant relationship between school head leadership styles and teachers' performance. The following recommendations were presented: Schools can create a comprehensive professional development program focused on adaptive leadership training. School heads can evaluate the practical application of each leadership style and track its influence on key educational metrics, such as pupil achievement, teacher satisfaction, and retention rates. School heads can be more participative in decision-making. This can be achieved through regular feedback sessions with teachers to share insights, team meetings, LAC sessions, and open forums to encourage collaboration. Leaders may practice flexibility in their formal system. This ranges from establishing flexible rules as defined by the changing needs of teachers and pupils. School leaders can encourage shared leadership practices such as involving the teachers in making policies, curricula, and initiatives. School heads can create an environment that is cooperative and inclusive. This can be done by involving teachers in decision-making processes and providing avenues for their input. School heads can encourage teachers to undergo continuous professional development concerning effective teaching techniques and pupil engagement. Implementation of atal development focused on empathy and teamwork, establishing implemented programs for new teachers, and creating mechanisms to assess the needs of teachers and pupils further to enhance servant leadership are recommended. It is recommended that continuous leadership development programs focus on collaboration and innovation be introduced to improve the benefits of transformational leadership in the organization.

A comprehensive professional development program is recommended to enhance its focus on the best practices in teaching. Regular professional development in advanced instructional strategies can be organized to improve lesson planning, which improves the effect on pupil learning. Diversified methods of assessing can be made available to the teachers. Use a multifaceted approach to pupil assessment if necessary. Comprehensive assessment practices can be systematically integrated into the instructional process. To increase teachers' involvement in extracurricular activities, schools can provide time and resources for preparation and participation. Schools can prioritize holding professional development programs for teachers. Given the significant impact of various leadership styles on teaching performance in Magsaysay Elementary Schools, it is recommended to implement a structured Leadership Development Initiative (LDI) to cultivate and promote the beneficial styles identified—bureaucratic, delegative, democratic, instructional, servant, and transformational. This development plan, if implemented, is hoped to foster a dynamic leadership culture, enhance teacher performance, and improve pupils' outcomes. This promotes a more effective and responsive leadership environment within schools that adapts to the changing needs of teachers and pupils. Future researchers are also recommended to investigate the adaptive and other leadership styles and their effectiveness in addressing complex organizational challenges and promoting resilience within teams across diverse contexts.

5. References

- Abdullah, N., & Wahab, J. L. A. (2023). Principal Autocratic Leadership Practice and Its Relationship with Teacher Job Satisfaction in Secondary Schools of Jempol District, Negeri Sembilan. *International Journal of Academic Research in Business and Social Sciences*, 13(9).
<https://doi.org/10.6007/ijarbss/v13-i9/18637>
- AIHR, *Academy to Innovate HR*. (2024, May 28). What Is Bureaucratic Leadership? | HR Glossary - AIHR. Retrieved from <https://www.aihr.com/hr-glossary/bureaucratic-leadership/>
- Amos, O., Siamoo, P., & Ogoti, E. (2022). Influence of delegation of responsibility in participative leadership style on improving the quality of education in public secondary schools in the Arusha region, Tanzania. *British Journal of Education*, 10(7), 1–19. <https://doi.org/10.37745/bje.2013/vol10n7pp119>
- Aunga, D., & Masare, O. (2017). Effect of leadership styles on teachers' performance in primary schools of

- Arusha District, Tanzania. *International Journal of Educational Policy Research and Review*, 4(4). <https://doi.org/10.15739/ijepr.17.006>
- Bahadar, S., Ullah, H., & Ayaz, M. (2023). Relationship between Autocratic Leadership Style and Teachers' Job Performance in Secondary Schools of Khyber Pakhtunkhwa. *Journal of Social Sciences Review*, 3(2), 211–218. <https://doi.org/10.54183/jssr.v3i2.253>
- Bwalya, A. (2023). Leadership styles. *Journal of Entrepreneurship, Management and Innovation*. 11 (8): 181. <https://doi.org/10.6084/m9.figshare.23932113>
- Cadimas, M.-A. C., Cañedo, L. C., & Mercado, M. V. (2024). School Heads' Leadership Styles in relation to Teachers' Performance. <https://doi.org/10.5281/zenodo.11665973>
- C, K. D., & P, O. N. (2018). Impact of autocratic leadership style on job performance of subordinates in academic libraries in Port Harcourt, Rivers State, Nigeria. *International Journal of Research - Granthaalayah*, 6(10), 212–220. <https://doi.org/10.29121/granthaalayah.v6.i10.2018.1187>
- Cherak, M. (2024). Effect of Leadership Style on Organizational Commitment in Algeria. *American Journal of Leadership and Governance*. 9. 64–76. <https://doi.org/10.47672/ajlg.2147>.
- DepEd Order No. 24, s. 2020 – National Adoption and Implementation of the Philippine Professional Standards for School Heads | Department of Education. (2020c, September 7). Retrieved from <https://www.deped.gov.ph/2020/09/07/september-7-2020-do-024-s-2020-national-adoption-and-implementation-of-the-philippine-professional-standards-for-school-heads/>
- DepEd Order No. 25, s. 2020 – National Adoption and Implementation of the Philippine Professional Standards for Supervisors | Department of Education. (2020, September 7). <https://www.deped.gov.ph/2020/09/07/september-7-2020-do-025-s-2020-national-adoption-and-implementation-of-the-philippine-professional-standards-for-supervisors/>
- Emeli, F. (2024, January 31). The Key Characteristics of Bureaucratic Leadership Style (With Examples). Retrieved from <https://favouremeli.com/management-2/bureaucratic-leadership/>
- Fernando, L. S., Kularathna, E. A. I., & Kumarasinghe, I. D. C. D. (2024). Impact of effective leadership style on school performance: with reference to Central Colleges in the Western Province of Sri Lanka. *Sri Lanka Journal of Social Sciences*, 46(02), 159–176. <https://doi.org/10.4038/sljss.v46i02.8765>
- Fraefel, U. (2023). *Focused Lesson Planning*. <https://doi.org/10.5771/9781475869118>
- Gresula, M. a. S., Lopres, J. R., Acson, J. G., Apatan, C. F., Pilapil, G. M. P., Hernandez, J. F., Urciada, M. G. P., & Dongon, M. L. T. (2024). The relationship between kindergarten teachers' performance rating and their profile as the basis for intervention program. *International Journal of Research and Scientific Innovation*, XI(V), 461–484. <https://doi.org/10.51244/ijrsi.2024.1105031>
- Hailu, A. (2023). Leadership style. <https://doi.org/10.13140/RG.2.2.11935.64160>
- Ify, P., Ayodele, M., & Waliu, B. (2024). Effective Leadership Styles on Employee Performance. *Journal of Harbin Engineering University*, 45 (3). https://www.researchgate.net/publication/379874503_Effective_Leadership_Styles_on_Employee_Performance/fullTextFileContent
- Iqbal, M. H., Siddiqie, S. A., & Mazid, M. A. (2021). Rethinking theories of lesson plan for effective teaching and learning. *Social Sciences & Humanities Open*, 4(1), 100172. <https://doi.org/10.1016/j.ssaho.2021.100172>
- Irawan, A. C., Wijaya, S., & Jaolis, F. (2024). Pengaruh Transformational Leadership terhadap Teacher Performance Pada Sekolah Kristen dengan School Climate Sebagai Variabel Mediasi. *JAMP Jurnal Administrasi Dan Manajemen Pendidikan*, 7(1), 122. <https://doi.org/10.17977/um027v7i12024p122>
- Jameslopresti. (2022, May 5). *Autocratic Leadership: Definition, examples, and Pros and Cons*. Villanova University. <https://www.villanovau.com/articles/leadership/autocratic-leadership-explained-what-is-autocratic-leadership/>
- Kilag, O. K. T., & Sasan, J. M. (2023). Unpacking the Role of Instructional Leadership in Teacher Professional Development. *Advanced Qualitative Research*, 1(1), 63–73. <https://doi.org/10.31098/aqr.v1i1.1380>
- Kincaid, K. M., C, A., MA, Rast, D. E., & Hogg, M. A. (2024). That is my autocrat: Self-uncertainty elevates support for autocratic leadership during Canada's Freedom Convoy. *Analyses of Social Issues and*

- Public Policy*. <https://doi.org/10.1111/asap.12414>
- Laghari, N. M. A., Jalil, N. A., Chachar, N. Z. A., & Gopang, N. a. S. (2024). Impact of Head Teachers' Democratic Leadership Style on Teachers' Performance at Public Secondary Schools. *Progressive Research Journal of Arts & Humanities (PRJAH)*, 5(2), 157–168. <https://doi.org/10.51872/prjah.vol5.iss2.304>
- Legacee. (2024, June 11). *The autocratic leadership style: 5 strengths and 7 weaknesses - Legacee*. Legacee - Work Skills for the 21st Century. <https://legacee.com/types-of-leadership-styles/autocratic/>
- Mamchii, O. (2024, January 3). Autocratic Leadership: Advantages and Disadvantages in 2024. *Best Diplomats | Diplomatic Conferences | New York*. <https://bestdiplomats.org/autocratic-leadership/>
- Mathur, D. (2021, December 4). *Autocratic leadership Advantages and Disadvantages*. Harappa. <https://harappa.education/harappa-diaries/advantage-and-disadvantage-of-autocratic-leadership/>
- Modise, J. M. (2024). Assessing the Impact of Autocratic Leadership Styles on Police Department Effectiveness and Community Relations. *International Journal of Innovative Science and Research Technology (IJISRT)*, 3386–3397. <https://doi.org/10.38124/ijisrt/ijisrt24apr428>
- Myers, E. (2024). Laissez-Faire Leadership Style. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/characteristics-of-laissez-faire-leadership.html>
- Monteiro, P. & Adler, P. (2021). Bureaucracy for the 21st Century: Clarifying and Expanding Our View of Bureaucratic Organization. *The Academy of Management Annals*. 10.5465/annals.2019.0059.
- Normakoh, E. (2019). Bureaucratic Leadership Style as it is Applied in Public Secondary School. *International Journal of Scientific Research in Education*, 377–395. [https://www.ij sre.com.ng/assets/vol.%2C-12\(3\)--normakoh.pdf](https://www.ij sre.com.ng/assets/vol.%2C-12(3)--normakoh.pdf)
- Nurabadi, A., Irianto, J., Bafadal, I., Juharyanto, J., Gunawan, I., & Adha, M. A. (2021). The effect of instructional, transformational, and spiritual leadership on elementary school teachers' performance and students' achievements. *Jurnal Cakrawala Pendidikan*, 40(1), 17–31. <https://doi.org/10.21831/cp.v40i1.35641>
- Okiri, P. O., & Hercz, M. (2023). The tenets of distributed pedagogical leadership in educational contexts—A systematic literature review on perception and practice. *Educational Management Administration & Leadership*, 174114322311544. <https://doi.org/10.1177/17411432231154444>
- Pambansa Blg. (232). - An act providing for the establishment and maintenance of an integrated system of education. - Supreme Court E-Library. (n.d.-b). <https://elibrary.judiciary.gov.ph/thebookshelf/showdocs/2/13524>
- Parlar, H., & Cansoy, R. (2017). The Effect of Bureaucratic School Structure on Teacher Leadership Culture: A Mixed Study. *Educational Sciences Theory & Practice*. <https://doi.org/10.12738/estp.2017.6.0150>
- Pettiegrew, H. I. (n.d.). The Perceptions of Principal Instructional Leadership Practices on 8th Grade Ohio Achievement Assessment (OAA). Engaged Scholarship @CSU. https://engagedscholarship.csuohio.edu/etdarchive/240/?utm_source=engagedscholarship.csuohio.edu%2Fetdarchive%2F240&utm_medium=PDF&utm_campaign=PDFCoverPages
- Phillips, D. R., Stewart-Fox, T., Phillips, S., Griffith, M., & Bhojedat, J. (2023). Distributed Leadership in Education: A Systematic Review of Its Role in Fostering Innovative Practices and Enhancing School Performance. *International Journal of Science and Research (IJSR)*, 12(11), 2083–2089. <https://doi.org/10.21275/sr231128014118>
- Poobalan, G., & Talip, R. (2020). The Servant Leadership Practice among school leaders promotes the development of Teacher Professionalism in Malaysia: a Conceptual Review. *International Journal of Academic Research in Business and Social Sciences*, 10(9). <https://doi.org/10.6007/ijarbss/v10-i9/7879>
- Republic Act No. 9155 - An act instituting a framework of governance for basic education, establishing authority and accountability, renaming the Department of Education, Culture and Sports as the Department of Education, and for other purposes - *Supreme Court E-Library*. (n.d.). <https://elibrary.judiciary.gov.ph/thebookshelf/showdocs/2/7353>
- Rezky, S., Saragih, R., Fahira, R., Lubis, W., & Winara, W. (2024). The Influence of Authoritarian and Democratic Leadership Styles on Organizational Climate in an Educational Environment. *International*

- Journal of Educational Research Excellence (IJERE)*, 3(1), 482–487.
<https://doi.org/10.55299/ijere.v3i1.915>
- Rosing, F., Boer, D., & Buengeler, C. (2022). When timing is key: How autocratic and democratic leadership relate to follower trust in emergencies. *Frontiers in Psychology*, 13.
<https://doi.org/10.3389/fpsyg.2022.904605>
- Sharma, S. (2024, August 9). The Top 7 Advantages and Disadvantages of Delegation Leadership Style - Risely. Retrieved from https://www.risely.me/pros-cons-of-delegation-leadership-style/#Pros_of_delegative_leadership_style
- Silalahi, M., Candra, V., Grace, E., Simatupang, S., & Julyanthry, J. (2022). Servant leadership and its influence on employee performance. *International Journal of Educational Review Law and Social Sciences (IJERLAS)*, 2(2), 295–304. <https://doi.org/10.54443/ijerlas.v2i2.232>
- Staff, H. (2024, February 14). *Essential Elements of Lewin's Leadership Theory: A Breakdown*. HRDQ. https://hrdqstore.com/blogs/hrdq-blog/lewins-leadership-theory-breakdown?srltid=AfmBOoqLE4eXGkZ3COcBhPV-MPRtN3ET34y726Qtmy_vueb3lxgy4PXX
- Sugars, B. (2024, February 20). Autocratic leadership: The Pros and Cons of being an Autocratic leader - Brad Sugars. *Brad Sugars*. <https://bradsugars.com/autocratic-leadership/>
- Sugianto, E. (2024b). Pengaruh Kepemimpinan Transformasional Kepala Sekolah terhadap Kinerja Guru. *TSAQOFAH*, 4(5), 3415–3421. <https://doi.org/10.58578/tsaqofah.v4i5.3291>
- Sutton, G. (2015). *Extracurricular engagement and the effects on the teacher-student educational relationship*. <http://hdl.handle.net/10092/11452>
- Team, C. (2024, August 13). Leadership Styles. Retrieved from <https://corporatefinanceinstitute.com/resources/management/leadership-styles/>
- Tibagwa, K. N., Onen, D., & Oonyu, J. (2016). The effect of transformational and bureaucratic styles of leadership on the quality of teacher support supervision. *European Journal of Education Studies*. <https://doi.org/10.46827/ejes.v0i0.332>
- Towler, A. (2021). Autocratic leadership. *CQ Net - Management Skills for Everyone!* <https://www.ckju.net/en/dossier/autocratic-leadership-what-it-and-how-it-impacts-individual-and-organizational-performance>
- Wang, Y. & Zhang, C. (2024). The Influence of Leadership Style on Organizational Sustainability: the Mediating Role of Knowledge. *Journal of Global Economy, Business and Finance*. 6. 20–26. 10.53469/jgebf.2024.06(08).04.
- Yakimowski, M., & Truxaw, M. (2016). Assessing Teacher Education through Mathematics Pupil Performance: A Case Study about Implementation in Response to External Pressure. *Journal of Assessment and Institutional Effectiveness*, 6(1), 28–49. <https://doi.org/10.5325/jasseinsteffe.6.1.0028>
- Zee, M., Roorda, D. L., & Hanna, F. (2023). Principal–teacher relationships: Dimensionality and measurement invariance of a measure for primary and secondary school teachers. *Management in Education*. <https://doi.org/10.1177/08920206231154740>

A feasibility study on production and marketing of “Tuna Tocino” (Sweet Cured Tuna Meat) in San Jose, Occidental Mindoro

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Abstract

Tocino is a delicious, sweet, and savory dish that Filipinos love, especially for breakfast. This feasibility study aims to introduce a new version of tocino with a unique taste of seafood and a healthier option than red meat. Specifically, it seeks to assess the production and marketing of tuna tocino (sweet cured tuna meat) in San Jose, Occidental Mindoro, and determine its profitability and viability. The product will be marketed on social media platforms to reach wider potential customers and will be distributed at the Divine Word College of San Jose canteen, grocery stores, and food kiosks around the San Jose area. Tuna is the product's main ingredient and will be directly procured from the local fishing community in Barangay Ligaya in Sablayan, Occidental Mindoro. The researcher will manage the business as the sole owner of the business; two production staff and one delivery man will be hired to ensure production and efficient daily operation. The initial investment needed to implement the business is Php 805,525.13. It is expected to reach a 541 percent return on investment after the five-year run. Based on the information gathered from surveys and interviews with the respondents, analyzing the data from the government, and assessing the financial projection, this proposed business offers a promising opportunity, driven by the growing demand for healthier and more sustainable food options. Thus, the business can generate profits and expand over time as costs will be managed well and the demand remains steady. The study shows that the proposed business is financially feasible, providing a good chance for long-term success in the market.

Keywords: seafood, local delicacy, tuna tocino, financially feasible, feasibility study

A feasibility study on production and marketing of “Tuna Tocino” (Sweet Cured Tuna Meat) in San Jose, Occidental Mindoro

1. Introduction

Tocino, a classic Filipino breakfast, is a delicious, sweet, and savory dish typically served alongside fried rice. The term “*tocino*” comes from the Spanish word for bacon; the dish can also be made from chicken or beef. Its vibrant red color often comes from annatto seed, a natural food coloring from the achiote tree (Bruno, 2024). To this day, tocino remains a staple in Filipino cuisine. The taste and tender texture continue to captivate taste buds worldwide, making it a must-try for anyone seeking a delicious glimpse into Filipino culinary heritage (Walter, 2024). As an archipelago, the Philippines' culinary industry diversifies based on the cultural significance of its various regions. Different regions have their version of tocino. The Kapampangan style is renowned for creating the original tocino. They prepare by mixing the ingredients by hand for three hours and then leave them to ferment at room temperature for one night. The next day, these are put in the fridge to dry to prolong the shelf life. Other regions also have their unique version of tocino, showcasing the rich diversity of their culture and the deep-rooted practices accompanying each recipe (Amcarmen, 2018). The fishing industry is one of the foundations of the Philippine economy, making the country among the world's leading producers of different varieties of fish, especially tuna. In 2020, the country exported one hundred forty thousand (140,000) metric tons of tuna species such as yellowfin, skipjack, eastern little tuna, and frigate tuna (BFAR, 2020).

Occidental Mindoro, an island facing the West Philippine Sea, has earned the title of emerging tuna capital of the Philippines due to its abundant marine resources and vibrant fishing communities (Urlanda, 2019). The Philippine Statistics Authority (2020) reported that the fishing industry in Occidental Mindoro significantly contributed to the province's economy, with tuna being one of the top catches. The growing fishing industry in the province has evolved over the years, adapting to both market demands and environmental challenges. Recognizing the potential of this industry, local authorities and organizations have been sponsoring the sector through infrastructure development and capacity-building programs. The Rural Development Project (PRDP) has funded facilities in Occidental Mindoro to support the tuna industry, aiming to enhance production efficiency and product quality (JAM Seafoods Working on Providing Free Ice and Potential Livelihood for Occidental Mindoro Small-Scale Tuna Fishers, 2024). As consumer preferences continually move toward healthier and more sustainable food options, products like tuna tocino have a favorable chance to meet these growing demands. According to Kotler and Keller (2016), understanding market dynamics and consumer behavior is crucial in determining the success of new products. Introducing tuna tocino (sweet cured tuna meat) in San Jose leverages the local abundance of tuna and the growing consumer interest in alternative protein sources, making it a product with significant market potential.

Objectives of the Study - This study aims to assess the production and marketing of tuna tocino (sweet cured tuna meat) in San Jose, Occidental Mindoro. The objectives of the study include (1) evaluating the profitability and viability of the proposed product, (2) evaluating consumer preferences and demand for tuna tocino, (3) evaluating the financial feasibility of the proposed business, (4) analyzing the production process requirements for tuna tocino, and (5) encouraging the production of alternative products like tuna tocino that support the local fishing community.

Significance of the Study - The study on the market potential of tuna tocino (sweet cured tuna meat) in Occidental Mindoro holds significant importance for several stakeholders: This study will benefit consumers by introducing them to tuna tocino, a product rich in omega-3 fatty acids that offers a healthier alternative to classic tocino. This locally produced product ensures fresher, potentially safer food choices for consumers. This food innovation contributes to preserving and enhancing San Jose's local culinary legacy. To the local fishing community, this study will assess the use of locally sourced tuna, potentially providing sustainable and stable

income sources for local fishermen. Engaging fishing communities in the supply chain will promote community development and improve living standards. The local government will benefit by promoting economic growth by creating new business opportunities and jobs in the community. The success of tuna tocino could increase local tax revenues, attract further investments, and boost the local tourism industry by introducing the product to tourists. The study introduces a unique local delicacy that provides a healthier alternative, offering them an authentic culinary experience that reflects Occidental Mindoro’s fishing culture. The study will provide local businesses with valuable details about tuna tocino production that could be profitable. This will allow them to expand their product offerings and their potential customers. The study can encourage people to start businesses in the area and help the economy grow. To future researchers, his study aims to provide insights into customers' preferences regarding exploring new versions of tocino. It focuses on operational and managerial aspects of tuna tocino production, such as managing the supply chain, making quality products, and understanding the market.

Scope and Delimitations of the Study - This study evaluated the profitability and viability of producing and marketing tuna tocino (sweet cured tuna meat) in San Jose, Occidental Mindoro. Using complete enumeration, survey questionnaires were distributed to 103 DWCSJ personnel, who served as respondents and the potential target market for the proposed product. The target market analysis centered only on understanding the potential market's preferences, consumption habits, and purchasing power. Interviews with potential tuna suppliers were also conducted to assess the volume of raw tuna supply. Tocino sellers in the San Jose public market were surveyed to evaluate the demand for the same product. The financial aspect included figuring out how much it will cost, how to set prices, revenue projections, and how profitable the business will be. The proposed product will be marketed in San Jose through direct or online sales.

2. Methodology

This study involved collecting and analyzing data to assess the business's market potential and financial viability. The researcher made a survey questionnaire using a descriptive method as the primary means. The survey was checked and validated by the experts from the graduate school professor at Divine Word College of San Jose. After approval, the survey questionnaires were utilized to gather data through Google Forms and in tangible copies to collect pertinent data on customer preferences from the 103 employees at the Divine Word College of San Jose. The researcher interviewed two (2) fishing boat owners, identified as potential tuna suppliers, to gain information on their daily tuna catch volume and pricing structures. The researcher also interviewed tocino sellers in the San Jose public market to gather insights into their market performance. Using this research method, the proponent got the data straight from the respondents, which helped them develop an evaluation based on the study results. The researcher treated all collected data with the utmost confidentiality and used all the information gathered for the study. The researcher also utilized articles and journals about tuna tocino (sweet cured tuna meat) and related topics from the internet, along with relevant studies as references.

3. Market Study

Market Description - San Jose is a first-class municipality in the southern part of Occidental Mindoro. It has the largest commercial airport and seaport and is the most progressive town in the province. The town is on the west side of the Mindoro Strait; thus, many of its residents rely on fishing as their primary source of income. The province is rich and blessed with various types of tuna, like yellowfin and skipjack, providing a relatively strong food basin for small and large tuna fishers (PSA Fisheries Production Survey, 2023). The study will focus on employees of DWCSJ to test the market because of their different backgrounds. The interests of this demographic, a sample of San Jose's broader market, will help determine whether or not the product is accepted in the future.

Demand Analysis - Table 1 shows the respondents’ awareness of tuna tocino (sweet cured tuna meat) and willingness to purchase tuna tocino as an alternative to pork tocino. To determine the demand for tuna tocino (sweet cured tuna meat), the proponent distributed a survey questionnaire to the 103 employees of Divine Word College of San Jose. The proponent understood consumer preferences and thoughts about the product through the

survey. The information gathered was evaluated to determine the size of the possible market and the factors affecting buying choices. With this, the product and the marketing plans can be adapted to satisfy customer preferences. Table 1 shows that the majority of respondents, which comprised eighty-six (86) out of one hundred three (103) of the respondents, do not know much about the tuna tocino, which may be a good target market to introduce the proposed product. On the other hand, seventeen (17) respondents aware of tuna tocino products can be an excellent platform to assess what existing consumers prefer. Moreover, the table also shows that among the 103 respondents, 69, or 67%, of customers were willing to try the tuna tocino as an alternative to the regular pork tocino, and thirty-three (33) were still undecided. This indicates a positive reception for the tuna tocino option, suggesting that many consumers are open to exploring healthier or more sustainable alternatives. The undecided group can represent an opportunity for targeted marketing strategies to highlight the benefits of tuna tocino

Table 1

Respondents' Awareness of Tuna Tocino (Sweet Cured Tuna Meat) & Willingness to Purchase Tuna Tocino as an Alternative to Pork Tocino (n=103)

Respondents' Awareness of Tuna Tocino	Frequency	Percentage
I am aware of tuna tocino	17	17
I am not aware of tuna tocino	86	83
Total	103	100
Respondents' Willingness to Purchase Tuna Tocino		
I will purchase tuna tocino	69	67
I am not interested in purchasing tuna tocino	1	1
I am still undecided whether to purchase tuna tocino	33	32
Total	103	100

Supply Analysis

Table 2

Supply of Tocino Variants at the San Jose Public Market

Tocino Producers	Pork Tocino Capacity (kg/day)	Chicken Tocino Capacity (kg/day)	Total Tocino Capacity	Annual Volume of Tocino (in kilograms)
Producer 1	30	40	70	25,550
Producer 2	40	50	90	32,850
Producer 3	30	40	70	25,550
Producer 4	40	50	90	32,850
Producer 5	50	60	110	40,150
Producer 6	30	40	70	25,550
Total	220	280	500	182,500

Table 2 shows the supply of tocino variants at the San Jose public market. According to the MBA Skool Team (2023) and Cajayon et al. (2024), supply analysis helps businesses understand how production costs, raw materials, and market conditions affect the quantity of goods supplied, which is essential for planning and decision-making. To gain insights about the existing supply of tocino products in San Jose, the researcher interviewed six producers who dominate the public market in San Jose, offering both pork and chicken tocino variants. These producers have a combined pork-tocino capacity of two hundred twenty (220) kilograms per day, with Producer 5 dominating the sales with fifty (50) kilograms daily. In the chicken-tocino segment, the total capacity is 280 kg/day, with producer 5 having the highest daily sales of sixty (60) kilograms. The total daily pork and chicken tocino sales at the San Jose public market are five hundred (500) kilograms.

Based on the computation in Table 2, there is a projection of 182,500 kilograms of annual supply of tocino in the San Jose public market from the data gathered from the six stall owners. As the population increases yearly, there will be an annual increase in tocino supply based on the average increase in household population in San Jose, Occidental Mindoro, considering the population growth rate from the Philippine Statistics Authority's 2015–2020 population census. Table 3 presents the five-year projected supply of tocino at the San Jose public market. Over five years, the supply is expected to grow steadily, starting from an initial supply in the first year.

Table 3*Five-Year Projected Supply of Tocino at the San Jose Public Market*

Year	Total Projected Supply
2024	182,500
2025	184,581
2026	186,685
2027	188,813
2028	190,965
2029	193,142

This projection assumes an annual growth rate of 1.14%, reflecting anticipated increases in consumer demand, population growth, and local market activity. In the second year, the supply is expected to increase to approximately 184,581 kilograms, followed by 186,685 kilograms in the third year. By the fourth year, supply is projected to reach around 188,813 kilograms, and by the fifth year, it is estimated to grow further to 193,142 kilograms. This gradual upward trend demonstrates a consistent and manageable increase in supply, allowing suppliers to respond to the market's evolving needs.

Table 4*Projected Household Population of San Jose, Occidental Mindoro*

Census Year	Total Population	Projected Household Population
2024	160,376	37,722
2025	162,205	38,152
2026	164,054	38,586
2027	165,924	39,026
2028	167,816	39,471
2029	169,729	39,921

Source: PhilAtlas.com: Population of San Jose, Occidental Mindoro (Based on the Results of the 2020 Census of Population)

The data presented in Table 4 is sourced from the 2020 population census conducted by the Philippine Statistics Authority. The proponent added the projected population for the following year based on the average growth rate of 1.14%. To compute the household population, the total population was multiplied by the average household percentage of 4.30% from the data given by the PSA. The researcher included the projection of the total population to determine the whole group of people the study focuses on, such as possible customers or people who might try the product. Knowing this number helps to understand how big the market is and how many people might be interested in buying tuna tocino. By knowing the total population, the researcher can make better plans for selling the product, including how much to produce and how to promote it. It also helps in creating more realistic sales and profit estimates. This information will make the study more believable and reliable because it shows that the research is based on real numbers.

Demand-Supply Analysis - Demand and supply analysis evaluates the connection between market demand and supply to determine the prices and quantities of products within a market (Cajayon et al., 2024). This study is essential for understanding how economies allocate resources (Mankiw, 2020). The proponent determines the demand based on the customers' willingness to purchase. Also, the quantity will depend on how well the production can manufacture the products. Table 6 shows the five-year projected demand and supply for tuna tocino at the San Jose market. The gap refers to the difference between the amount of demand and the available supply. The percent unserved is a way of expressing this gap as a percentage of total demand. The yearly projected demand for tocino is three hundred thirty-two thousand seven hundred twelve (332,712) kilograms. The current year's supply is one

hundred eighty-two thousand five hundred (182,500) kilograms. This results in a supply-demand gap of one hundred fifty thousand two hundred twelve (150,212) kilograms in the first year, indicating that the current production capacity is insufficient to meet the market needs. There is still a gap to fill the total demand for tocino.

Table 5

Five-Year Projected Demand and Supply of Tocino

Year	Projected Demand	Projected Supply	Gap Yearly	Percent Unserved
2024	332,712	182,500	150,212	45.15%
2025	336,492	184,581	151,911	45.15%
2026	340,326	186,685	153,641	45.15%
2027	344,214	188,813	155,401	45.15%
2028	348,138	190,965	157,173	45.15%
2029	352,098	193,142	158,956	45.15%

Table 6

Five-Year Projected Sales and Market Share of Tuna Tocino (Sweet Cured Tuna Meat)

Year	Sales Projection (in kilograms)	Projected Supply	Sales Projection and Supply	Market Share
2024	15,600	182,500	198,100	7.9%
2025	17,160	184,581	201,741	8.5%
2026	18,720	186,685	205,405	9%
2027	20,280	188,813	209,093	9.6%
2028	21,840	190,965	212,805	10.2%
2029	23,400	193,142	216,542	10.8%

Table 6 shows the five-year projected sales and market share of *tuna tocino* based on the annual capacity of the proposed business. In the first year of operation, the proposed business will produce 50 kilograms of *tuna tocino* daily for twenty-six (26) days in a month, or a total of fifteen thousand six hundred (15,600) kilograms yearly. If the business thrives and gains loyal customers, its production capacity will increase by ten percent (10%) each year to cater to a larger demand. Market share is calculated by dividing a company's sales by the total industry sales over the same period, providing a clear picture of a product's market penetration and growth potential (Nickolas, 2024). This refers to the total sales in a specific market earned by a particular company or product over a defined period. It is a key indicator of competitiveness and business performance within an industry. For this study on tuna tocino, analyzing market share is essential in understanding the product's potential standing in the local processed food sector. It helps estimate how much of the target market tuna tocino could capture from existing competitors. According to Kotler and Keller (2016) and Masangkay et al. (2023), having a good market share shows the product's strength. They suggest focusing on areas where gaining a significant share can lead to success. This also emphasizes that good market share helps businesses grow, build their brand, and position themselves in the market. For a starting business projecting a 7.9% market share, this suggests that the goal is achievable with a clear plan and good marketing.

Marketing Strategies - Marketing strategy is crucial to the success and growth of any business. According to Kotler and Keller (2016), marketing strategy involves a series of activities to understand the target market, identify customer needs and preferences, and develop effective strategies to promote and distribute products or services in a competitive marketplace. It is a comprehensive plan designed to effectively promote and sell a product or service.

Product. Tuna tocino (sweet cured tuna meat) is an innovative take on the traditional tocino available in the market. The product combines the sweet and savory flavors of classic tocino with the distinct taste of tuna, thus creating a new flavor. Introducing a fresh twist is better for people who want to enjoy tocino. Freshly caught tuna is marinated in a mixture of sugar, pineapple juice, soy sauce, garlic, and pepper for more than eight hours to ensure that the tuna will absorb all the flavors. The product is vacuum sealed to preserve its freshness during transportation and can be stored for 30 days before consumption.

Price. The proponent aims to maintain the price of the proposed product at a minimum level without compromising its quality, estimating that this price will remain within the customers' buying capacity. Considering the fluctuating cost of raw materials, particularly tuna, the proposed product's competitive introductory price is Php 150.00 for 250 grams of tuna tocino.

Distribution Channel. Tuna Tocino will use an online distribution channel to reach potential customers in San Jose, Occidental Mindoro. The proponent will establish an online presence through social media platforms and online markets. This will make the product more visible while minimizing the cost of marketing. The proposed business will also partner with local retail stores, grocery stores, and food kiosks to cater to more customers and make the products readily available for purchase.

Promotion. To promote the product, the business will create a social media account, specifically a Facebook page, as this platform can reach a wide range of customers. Sharing content on sustainable fishing practices, the health benefits of tuna over pork, and recipes incorporating tuna tocino builds a loyal customer base interested in the product's values. The proposed business will also put tarpaulins near schools, grocery stores, and public markets to make the product known to potential customers. Another promotional activity is conducting tasting events at grocery stores and school canteens for potential customers to try the product. Additionally, the business will rely on word-of-mouth and other free promotional methods, given that it is a beginner business with a limited advertising budget.

Product Description - Tuna tocino, a new variant of the classic pork tocino, is a good alternative among health-conscious customers and seafood lovers looking for a tasty and healthier option. The proposed product might appeal to individuals who are reducing red meat in their diet but still want to enjoy the sweet and savory flavor that a tocino is known for. With tuna being rich in omega-3 fatty acids and lower in fat, it caters to consumers focused on heart health and fitness. It also has the potential to attract seafood enthusiasts who are always looking for innovative ways to enjoy fish in their diet. In addition to its convenience and flavor, tuna tocino is supported by a steady availability of raw materials. The province's established tuna fishing industry ensures a reliable and sustainable fresh tuna source. Properly packaged and stored in a vacuum-sealed bag, tuna tocino has a shelf life of around 1 month when kept frozen, maintaining its freshness and flavor. This makes it a versatile and long-lasting option for local consumers and export markets. Figures 1 and 2 show the picture of the actual tuna tocino product prepared by the researcher.



Figure 1. Tuna Tocino

(sweet cured tuna meat)



Figure 2. Product Packaging

Product Production Process - The production process for *tuna tocino* (sweet cured tuna meat) begins with sourcing fresh tuna directly from the fishing boat. During this phase, the staff will conduct thorough inspections, assessing the quality of tuna based on the smell, color, and texture to ensure that only safe, fresh fish moves forward in production. After the selection process, the following steps are preparation and filing. These steps involve removing the fish's skin, bones, tail, and head. The marinating process occurs in sanitized containers and is refrigerated to prevent bacterial growth, ensuring the tuna is safe and flavorful. After marinating, the *tuna tocino* is packaged. It is essential to use food-grade packaging materials to protect the product from contamination and

damage. Labels display production and expiration dates, enabling traceability and promoting safe consumption. Packaged *tuna tocino* will be stored in a freezer at -18°C or lower to ensure freshness and prevent microbial growth.

A. Ingredients for 50 kilos of *tuna tocino* (sweet cured tuna meat) :

50 kilograms of Yellowfin tuna fillet

15 cups of sugar

500 grams of salt

10 cups minced garlic

15 cups of pineapple juice

12 cups soy sauce

125 grams of ground pepper

B. Procedures for making *tuna tocino* (sweet cured tuna meat) :

1. Prepare the tuna. Clean and fillet the tuna. Remove skin and bones, then slice into thin pieces or bite-sized chunks, depending on preferred size for tocino.

2. Marinate the tuna. Dissolve the salt, sugar, and pepper in water in a mixing bowl. Add pineapple juice, soy sauce, and minced garlic.

Mix thoroughly until all ingredients are well combined.

3. Add the tuna fillets to the marinade. Massage the marinade into the fish to ensure the flavors penetrate the meat. Cover the bowl with plastic wrap.

4. Refrigerate the marinated tuna for at least eight hours to allow the curing process. Turn the fish occasionally to ensure even curing.

5. After marinating, the *tuna tocino* can be vacuum-sealed or packed in airtight containers for freezing.

When stored correctly in the freezer, it can last for up to a month.

Selling Process - Tuna tocino is a perishable product that requires on-time delivery to maintain freshness and quality. The delivery schedule in San Jose will occur every other day or thrice a week, a total of one hundred (100) kilograms of tuna tocino every delivery. This allows for a consistent supply of fresh products to retailers, resellers, or direct customers. The schedule provides sufficient time for production, packaging, and quality checks between delivery days. This arrangement will prevent overproduction and avoid excess inventory, which can lead to spoilage and additional storage costs. Delivering thrice a week reduces the frequency of trips compared to daily deliveries, lowering transportation costs while ensuring timely product availability.

Location. The production site of tuna tocino (sweet cured tuna meat) is in Ligaya, Sablayan, and sales take place in San Jose. Sablayan offers numerous advantages as a production location, including its proximity to fishing grounds, which ensures a consistent supply of fresh tuna, and the potential to reduce transportation costs for raw ingredients. Establishing the production area in Sablayan aligns with the researcher's strategic goal of creating jobs for the local community. Since San Jose has more people, marketing there is more effective because there are more potential customers. This position makes getting to stores, groceries, and restaurants easier, improving delivery options. Moreover, marketing the product in a busy place like San Jose can also help people see and hear about the business (Orquijo et al., 2023; Masangkay et al., 2023). The success of this two-location strategy is ensured by managing the logistics of transporting products from Sablayan to San Jose, adhering to local food production regulations, and conducting market research to customize marketing strategies according to consumer preferences.

Figures 3 and 4 present the proposed business's location map and floor plan of the production area.

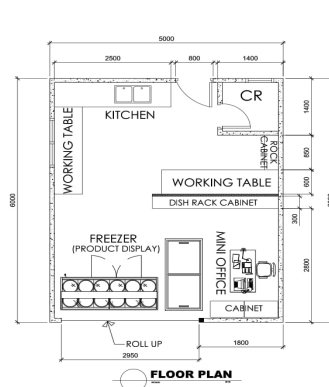


Figure 3: Location map of the proposed business.

Figure 4: Floor plan of the proposed business

Table 7

Cost of Packaging Materials for 250 grams

Equipment	Usage	Quantity	Unit Price (PhP)	Total Price (PhP)
Vacuum sealing bags	Food-grade bags for packing tuna tocino	200	2.00	400.00
Labeling stickers	For packaging	200	.50	100.00
Total			2.50	600.00
Furniture and Office Equipment				
Office table with drawer	For the management and storage of files	1 pc	2,000.00	2,000.00
Chairs	For office supplies	3 pcs	350.00	1,050.00
Receipt pad	For official receipt	10 pads	60.00	600.00
Ballpen	For writing reports, sales, and other office transactions	2 pcs	5.00	10.00
Record book	For recording sales	1 pc	100.00	100.00
Alcohol	For disinfection	1 bottle	70.00	70.00
Exhaust fan	For ventilation in the office	2 pcs	500.00	1,000.00
Total				4,830.00
Production Staff Sanitary Equipment				
Apron	A protective garment to prevent spills on clothing.			
Hairnet	The hairnet helps stop stray hair and shedding scalp skin from falling into food.	4	20.00	80.00
Gloves	For workers to protect their hands from food products and constant hand washing.	4	40.00	160.00
Total				440.00
Kitchen Equipment				
Cutting boards	For slicing tuna	3	200.00	600.00
Knife	For chopping ingredients and filleting fish	4	159.00	636.00
Mixing bowls	Large stainless steel bowls for mixing ingredients	3	129.00	387.00
Measuring cups and spoons	For precise measurements of ingredients	3	99.00	297.00
Weighing scale	To ensure accurate portioning	1	659.00	659.00
Marinating containers	Food-grade plastic or stainless steel containers	3	359.00	1,077.00
Spatula and spoon	For stirring and lifting ingredients	3	59.00	177.00
Tongs	For handling tuna	3	94.00	282.00
Wire whisk	For mixing ingredients	2	130.00	260.00

Equipment	Usage	Quantity	Unit Price (PhP)	Total Price (PhP)
Vacuum sealer machine	To seal packaging	2	1,495.00	2,990.00
Stainless table	For hygienic production	1	4,000.00	4,000.00
Freezer	For storing raw tuna and finished products before packaging	1	14,750.00	14,750.00
Icebox	For transporting the finished product	1	1,495.00	2,500.00
Total				28,615.00
Service Vehicle				
Top-down tricycle (2nd hand)	For the delivery of the product	1 unit	50,000.00	50,000.00
Total				50,000.00
Communication and Advertising Tools				
Smartphone (Xiaomi)	For transactions and advertisements	1 unit	4,000.00	4,000.00
Tarpaulins and product flyers	For advertising the product	1 set	2,000.00	2,000.00
Total				6,000.00
Janitorial Supplies				
Broom	For maintaining the safety and cleanliness of the production area and	1 piece	30.00	30.00
Dustpan		1 piece	30.00	30.00
Floor mop		1 piece	45.00	45.00
Garbage bag		1 pack	25.00	25.00
Dishwashing liquid		4 bottles	60.00	240.00
Sponge		1 dozen	75.00	75.00
Steel wool		1 dozen	90.00	90.00
Trash can		1 piece	45.00	45.00
Total				580.00

Table 7 shows the packaging materials, furniture and office equipment, production staff sanitary equipment, kitchen equipment, communication and advertising tools, and janitorial supplies. This equipment and these tools are needed for the small-scale production of *tuna tocino*. Each piece of equipment contributes to a specific aspect of the production process, from preparing the raw tuna to packaging the finished product. Investing in the right equipment will make the proposed business run more efficiently, with less risk of delays, waste, or food safety issues. This ensures consistent production, meets daily output targets, and meets the highest product quality and safety standards. The proponent will procure a secondhand vehicle to ensure the timely delivery of the product and maintain the quality from the production area to resellers and direct buyers.

4. Organization and Financial Study

Personnel requirements - The proposed business will require a total of four (4) workers. Two workers will handle the production operation, one will handle delivery, and the owner will oversee all business managerial and operational aspects.

Source of Financing - The initial investment needed is eight hundred five thousand five hundred twenty-five pesos and thirteen centavos (Php 805,525.13). The source of funds for the business will come from the proponent's savings gained from her employment and other sources. To start the business, the proponent identified the initial capital required. The breakdown includes equipment, marketing, staffing, and raw ingredients expenses. Below is the estimated cost of the project:

Financial Assumptions - The financial assumptions outlined in this study serve as the foundation for estimating the viability and sustainability of the proposed business. The following are basic assumptions used in the study: (1) Sales amount is calculated by multiplying the volume by the selling price. The selling price is Php 150.00 for 250 grams of *tuna tocino*. (2) Employee compensation and benefits will grow by 2% yearly. (3)

Operating costs will escalate by 3% annually. (4) The daily output of *tuna tocino* will grow by 5 kilograms yearly. (5) A straight-line method will be used to determine the depreciation costs for five years.

Table 8*Projected Cost for Tuna Tocino (Sweet Cured Tuna Meat)*

Pre-operating expenses	Amount (in Peso)
Permits and Licenses	6,770.00
Renovation Cost	2,370.00
Communication and Advertising Tools	6,000.00
Total Pre-operating expenses	15,140.00
Working Capital	
Direct Materials	559,156.00
Packaging	13,000.00
Direct Labor	28,086.81
Salaries	8,394.75
Premiums and Benefits	2,494.57
Janitorial Supplies	580.00
Kitchen Equipment	28,615.00
Furniture & Office Equipment	4,830.00
Production Staff Sanitary Equipment	440.00
Utilities Expenses	94,788.00
Total Working Capital	740,385.13
Acquisition of Assets	
Service Vehicle	50,000.00
Total Projected Cost	805,525.13

Financial Projections - The researcher carefully developed financial projections by analyzing various factors influencing the proposed business's financial performance. These projections serve as a guide in assessing whether the business will be feasible by providing a clear picture of expected revenues, expenses, and overall profitability (Garcia et al., 2023; Zapata et al., 2023).

The following projections for the five years are presented below:

Table 8*Projected Income Statement (in Peso)*

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Sales	9,360,000.00	10,296,000.00	11,232,000.00	12,168,000.00	13,104,000.00
Less: Cost of Goods Sold	7,333,585.50	7,553,593.07	7,780,200.86	8,013,606.88	8,254,015.09
Gross Profit	2,026,414.50	2,742,406.94	3,451,799.14	4,154,393.12	4,849,984.91
Less: Operating Expenses					
Permit & License	6,770.00	6,973.10	7,182.29	7,397.76	7,619.69
Renovation Cost	2,370.00	2,441.10	2,541.33	2,589.76	2,667.46
Communication & Advertising Tools	6,000.00	6,180.00	6,365.40	6,556.36	6,753.05
Production Staff Sanitary Equipment	440.00	453.20	466.80	480.80	495.22
Janitorial Supplies	580.00	566.50	583.50	601.00	619.03
Kitchen Equipment	28,615.00	29,473.45	30,357.65	31,268.38	32,206.43
Depreciation	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00

Furniture & Office Equipment	4,830.00	4,974.90	5,124.15	5,277.87	5,436.21
Utilities	94,788.00	97,631.64	100,560.59	103,577.41	106,684.73
Total Operating Expenses	154,393.00	158,724.79	163,186.53	167,782.13	172,515.59
Net Income before Tax	1,872,021.50	2,583,682.15	3,288,612.61	3,986,610.99	4,677,469.32
Business Tax 3%	280,800.00	289,224.00	297,900.72	306,837.74	316,042.87
Net Income after Tax	1,591,221.50	2,294,458.15	2,990,711.89	3,679,773.25	4,361,426.44

Table 8 shows the projected income statement of the business with the estimation of the financial performance from the first to the fifth year of operation. It includes anticipated revenue generated from selling tuna tocino products, less the cost of goods sold (COGS), which covers expenses such as raw tuna, curing ingredients, packaging materials, and direct labor. Operating expenses such as transportation, utilities, marketing, permits, and other administrative costs are also considered. The estimated net income or profit of the business is determined by subtracting both the COGS and operating expenses from the total projected revenue. This projection is based on realistic market assumptions, such as the average daily sales volume, the set selling price per pack, and regular supply from local fishermen in Barangay Ligaya. The income statement provides a clear picture of the business's profitability and is essential for evaluating its financial feasibility.

Financial Ratios and Analysis - The ratio analysis examines a company's income statement and balance sheet to determine its financial viability, cash flow, and operational effectiveness. It is a method of reviewing several types of financial information about a business rather than focusing on just one indicator (Bloomenthal, 2024).

(1)	Net Profit Margin =	Net Income/Sales	
	Year 1	1,591,221.50/9,360,000.00	= 17%
	Year 2	2,294,458.15/10,296,000.00	= 22.28%
	Year 3	2,990,711.89/11,232,000.00	= 26.63%
	Year 4	3,679,773.25/12,168,000.00	= 30.24%
	Year 5	4,361,426.44/13,104,000.00	= 33.28%

To compute the net profit margin, divide the net income by its sales and multiply the result by 100. The net profit margin is a key metric that shows the percentage of sales that remains as profit after all operating expenses, taxes, interest, and other costs have been deducted (Sanqui et al., 2023). It determines whether the proposed business is financially viable (Maverick, 2024). In the first year, the business had a net profit margin of 17%, which means that for every ₱100 in sales, ₱17 was kept as actual profit after covering all expenses. This shows a good starting point for a new business. By the second year, the profit margin increased to 22.28%, meaning the business could manage its costs better or improve its pricing, resulting in ₱22.28 profit for every ₱100 in sales. In the third year, the margin rose to 26.63%, showing continued improvement in operations and possibly stronger customer demand. The fourth year saw an even higher margin of 30.24%, meaning almost one-third of the sales became profit, a sign of solid financial performance and efficient operations. Finally, in the fifth year, the business achieved a 33.28% net profit margin, which means it was able to keep ₱33.28 as profit out of every ₱100 earned. This steady growth over the five years shows that the business is increasing its income.

(2)	Gross Profit Margin =	Gross Profit/Total Income	
	Year 1	2,026,414.50/9,360,000.00	= 21.65%
	Year 2	2,742,406.94/10,296,000.00	= 26.64%
	Year 3	3,451,799.14/11,232,000.00	= 30.73%

Year 4	4,154,393.12/12,168,000.00	=	34.14%
Year 5	4,849,984.91/13,104,000.00	=	37.01%

The projection of gross profit margin is understanding how much money a business keeps after covering the cost of making the products. It is calculated by dividing the gross profit (the money left after production costs) by the total income (the total money earned from sales), then multiplying by 100 to get a percentage. Looking at the figures for five years, there is a steady increase in the margin, starting at 21.65% in Year 1, moving to 26.64% in Year 2, 30.73% in Year 3, 34.14% in Year 4, and reaching 37.01% by Year 5. This means the business is improving at keeping more of its income as profit over time. For instance, in Year 1, out of ₱9,360,000.00 in sales, ₱2,026,414.50 was profit, but by Year 5, the business earned ₱4,849,984.91 in profit from ₱13,104,000.00 in sales. The increase in gross profit margin suggests that the company has improved in managing production costs or is generating more sales with fewer expenses. According to Cajayon et al. (2024), a higher gross profit margin indicates a company is selling its products at a higher profit, and consistent growth in this margin usually reflects better efficiency and financial liquidity.

(3) Cash Flows = Cash Flows From Operations/Total Income

Year 1	2,356,746.63/9,360,000.00	=	25.18%
Year 2	4,661,204.77/10,296,000.00	=	45.27%
Year 3	7,661,916.66/11,232,000.00	=	68.22%
Year 4	11,351,689.91/12,168,000.00	=	93.29%
Year 5	15,723,116.35/13,104,000.00	=	120%

A positive cash flow to start year 1 with 25.18% reflects good effort in operation and control costs of the management. By Year 2, cash flows soared to 45.27%. Higher sales and expense management imply more cash after operational costs. A business growth of 68.22% in the 3rd year indicates a consistent increase in liquidity. Cash movements approached 93.29% in Year 4, and by Year 5, the business had 120% cash on hand, likely due to continuous revenue growth, improved business efficiency, and efficient cost control. According to Nasimiyyu (2024), cash flow management is central to financial health because it determines a firm’s ability to sustain growth without depleting its financial resources.

(4) Return on Investment = Net Income / Total Investment

Year 1	1,591,221.50/805,525.13	=	198%
Year 2	2,294,458.15/805,525.13	=	285%
Year 3	2,990,711.89/805,525.13	=	371%
Year 4	3,679,773.25/805,525.13	=	457%
Year 5	4,361,426.44/805,525.13	=	541%

Return on Investment (ROI) is a financial metric used to evaluate the profitability of an investment or to compare the efficiency of different investments. It is calculated by dividing the net profit from the investment by the initial cost, typically expressed as a percentage. A higher ROI indicates more significant financial returns relative to the investment price (Koller & Wessels, 2020; Cajayon et al., 2024; Sanqui et al., 2022).

The ROI percentage of the *tuna tocino* business is expected to increase from Year 1 to Year 5. This means that the business will have a great return on investment over five years. A one hundred ninety-eight percent (198%) ROI shows that for every one peso (Php 1.00) invested, the business earned an additional one peso and ninety-eight centavos (Php 1.98) in profit. This ROI indicates strong profitability and business viability, making the *tuna tocino* a good investment. By the second year, ROI rises to two hundred eighty-five percent (285%), showing that the business is growing successfully. This improvement may result from increased production, stronger customer demand, better cost management, or expanded market reach. The high increase in Year 3 to three hundred seventy-one percent (371%) shows that the business is improving at earning profit and building brand recognition, which

leads to higher returns on invested capital. With an ROI of four hundred fifty-seven percent (457%) in Year 4, *tuna tocino* is improving in the market, and the business is increasing its market presence. By Year 5, the high ROI of five hundred forty-one percent (541%) shows that the business has built a strong base and gained loyal customers. This steady increase in ROI aligns with the growth stage of a successful business model. According to Cajayon et al. (2024) and Sanqui et al. (2022), a consistently increasing ROI reflects operational efficiency, market acceptance, and effective reinvestment strategies. Moreover, ROI is a vital tool for evaluating the return on capital in various business ventures, and a high ROI often implies that the investment gains are compared favorably to the cost.

5. Socio-Economic Aspects

The socio-economic aspect of a feasibility study shows the proposed business's positive aspects and examines its impact on the economy, employment, environment, community, and government. It also outlines how the business contributed to the economy. According to the Department of Trade and Industry (2023), small-scale food enterprises in the Philippines contribute significantly to rural development by creating livelihood opportunities, especially in areas with limited employment options. Food businesses can stimulate local economic activity and reduce poverty levels by utilizing locally sourced raw materials, such as tuna from nearby fishing communities. Socio-economic benefits are also tied to food innovation. The Department of Trade and Industry also emphasized that product diversification using traditional techniques and local ingredients can lead to increased income among producers and processors. It also fosters community-based entrepreneurship and promotes food security. In the case of Don Omeng's Tuna Tocino, the business model not only aims to offer a unique and healthy alternative to pork-based tocino but also seeks to uplift the livelihood of small-scale fishermen in Barangay Ligaya. The project can potentially create employment opportunities in both production and distribution and contribute to the local economy of Sablayan and San Jose, Occidental Mindoro. Establishing a business like tuna tocino aligns with government goals for inclusive growth and local economic development by promoting community-based products.

6. SWOT and Potential Problem Analysis

Strengths - Since tocino is already a popular cuisine, tuna tocino has the potential to appeal to a broad market, including both seafood and tocino consumers. This new variation on the classic tocino also appeals to health-conscious customers. Tuna tocino offers a healthier take because of the omega-3 fatty acids the tuna species has and also to customers whose diet eliminates red meat consumption. Procuring the raw tuna directly from the local fishermen removes intermediaries, thus reducing the costs and making the sourcing process more efficient. This also ensures quicker processing and delivery, preserving the tuna's freshness and quality. The proponent will also utilize social media sites to promote the product and reach more potential customers. Additionally, selling the tuna tocino at the DWCSJ canteen, where students, employees, and parents can purchase the product, is a strategic way to reach the target market.

Weaknesses - Relying on small-scale fishermen can lead to supply shortages during certain seasons or due to unpredictable weather. This problem might be addressed by diversifying suppliers and forming relationships with other local sources from other barangays or municipalities. Moreover, freezing excess tuna during high-supply periods can maintain production during lean seasons. Since raw tuna is perishable, ensuring its freshness requires proper handling and strict food safety standards. Immediate processing after the delivery of tuna helps reduce the risk of spoilage and ensures that the fish retains its optimal quality before marinating and preparing as tocino.

Opportunities - The proposed business will collaborate with the Department of Science and Technology through its Small Enterprise Technology Upgrade Program to embrace new technological innovations that will help enhance the product and boost productivity and competitiveness. Additionally, the Department of Trade and Industry's grant programs offer extra resources to improve production facilities and quality control that the business may avail itself of. Tourism in areas like Sablayan and San Jose offers the opportunity to market the *tuna tocino* as a local specialty. Participating in food trade events like the Agbiliwa and the night market is a beneficial opportunity for the business to promote the product to the locals and tourists.

Threats - The competition from the traditional tocino vendors is one of the threats to the business. Since these competitors already have consumer loyalty and popularity, it is challenging for *tuna tocino* variants to compete in the market. The business may face supply disruption if it relies heavily on local fishermen. Changes in season impact the availability of raw tuna, leading to production delays and/or an increase in cost. The unstable power supply in the province presents a significant risk to businesses due to the reliance on electricity for the cold storage of tuna. These threats in production compromise the operation of freezers, causing temperature fluctuations that can accumulate bacterial growth that leads to the spoilage of tuna. To address this, the business may consider investing in a backup power supply like a generator set that can provide continuous electricity during outages.

Potential Problems - The tuna tocino business faces several challenges, including supply chain disruptions, shelf-life problems, and maintaining product quality. Supply chain disruptions can occur due to small-scale fishermen and seasonal availability, leading to shortages. To address this, the business can establish alternative suppliers, collaborate with larger fish suppliers, acquire a fishing boat, freeze excess tuna, and invest in high-quality cold storage equipment. Shelf-life problems can result from improper handling, which can lead to spoilage. To maintain consistency, the business should invest in cold storage and efficient logistics and consider alternative methods like dehydrator drying. Quality and freshness can be maintained through standardized recipes, regular employee training, and quality checks. To increase brand awareness and marketing, the business can partner with local food kiosks, grocery stores, and online resellers and participate in food trade events. A free taste event can also be held at the DWCSJ canteen and the supermarkets around San Jose.

7. Conclusions

By carefully evaluating the costs, prices, and demand, it is evident that the production of *tuna tocino* is profitable, given that it is managed effectively over time and the quality stays the same. The study also showed that this product could meet the needs of consumers who want healthy options and explore options beyond the classic tocino. The survey results reveal a strong demand for tuna tocino and indicate a positive reception among the respondents. This indicates a significant potential for market acceptance and profitability. The business can generate profits and expand over time as costs are managed well and the demand remains steady. The study shows that the proposed business is financially feasible, providing a good chance for long-term success in the market. The assessment of production methods, procurement of raw materials, and compliance with hygiene standards are important to maintain the quality of the product. Establishing this kind of business will promote *tuna tocino* and help local fishermen by including them in the supply chain. Joining trade fair events and food exhibitions is a good opportunity for product promotion, direct sales, and networking with potential partners, distributors, and investors. Placing tarpaulin advertisements in public areas, such as markets and canteens, will help increase brand recognition and inform potential customers about tuna tocino.

Recommendations - Based on the conclusions, the following recommendations were presented to the future business owners or investors of the proposed business: first, they may invest in modern equipment like a generator set for backup during power outages and high-end cold storage to keep the tuna fresh and for improvement in production; second, they may focus on promoting the product as a healthier version of the classic tocino in the market. Third, they may share engaging content highlighting tuna tocino’s health benefits on various social media platforms. Additionally, putting nutritional facts on the product label displays clear nutritional information on packaging. They may explore opportunities for product diversification, such as introducing new flavors or developing other healthy seafood-based products to broaden the customer base and increase revenue streams. They may incorporate sustainability practices to reduce production costs in the long run. Sourcing sustainably caught tuna and reducing energy consumption in the production process are steps that align the business with current environmental trends and create further marketing opportunities. The business may adopt a funding strategy to ensure financial stability. Crowdfunding will serve as a source of capital, allowing the business to raise funds from a broad base of supporters who believe in the product’s potential. Additionally, openness to investors provides an opportunity to secure additional funding and expand the market reach of the product. This strategy will reduce the financial risk while creating pathways for strategic partnerships and long-term sustainability.

8. References

- Amcarmen. (2018, October 24). The Original Tocino—Amcarmen’s Kitchen.
<https://amcarmenskitchen.com/tag/the-original-tocino/>
- Bureau of Fisheries and Aquatic Resources (BFAR). Philippine Fisheries Profile 2020.
<https://www.bfar.da.gov.ph/wp-content/uploads/2022/02/2020-Fisheries-Profile-Final.pdf>
- Bruno, R. (2024, April 11). Pork tocino recipe. NYT Cooking. <https://cooking.nytimes.com/recipes/1023915-pork-tocino?smid=fb-nytimes&smtyp=cur>
- Cajayon, G. A. V., Macabata, N. S., Lazaro, N. J., & Limos-Galay, J. A. (2024). A feasibility study on the viability and market potential of “Suman Kalabasa” (squash sticky rice cake) in San Jose, Occidental Mindoro. *International Journal of Research Studies in Educational Technology*, 8(2), 131-148. DOI: 10.5861/ijrset.2024.8017
- Department of Trade and Industry (2023). Micro, Small, and Medium Enterprise (MSME) Development Plan 2023- 2028.
- Garcia, D.G., Loja, E.P., Catena, E.M.T., Espiriyu, S.Y.P., Valenzuela, B.F.V., Ursua, R.L.G., & Limos-Galay, J.A. (2023). A feasibility study on establishing infinite review center in San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 11(3): 97-106. DOI: 10.5861/ijrsm.2023.1031
- Gillis, A.S. (n.d). What is ROI? How to calculate return on investment.
<https://www.techtarget.com/searchcio/definition/ROI>
- JAM Seafoods Working on Providing Free Ice and Potential Livelihood for Occidental Mindoro Small-Scale Tuna Fishers. (2024). <https://archive.wwf.org.ph/what-we-do/food/projectbuhay/jam-seafoods-working-on-providing-free-ice-and-potential-livelihood-for-occidental-mindoro-small-scale-tuna-fishers>
- Koller, T., Goedhart, M., & Wessels, D. (2020). Valuation: Measuring and Managing the Value of Companies (7th ed.). Wiley Publisher.
https://books.google.com.ph/books/about/Valuation.html?id=gGXjDwAAQBAJ&redir_esc=y
- Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson Education Limited. *Google Books*. ISBN 9780133856460
- Mankiw, N.G. (2020). Principles of Economics (9th ed.): Cengage Learning. *Google Books* ISBN 9780357541593
- Masangkay, K.G.I., Silan, A.M.M., Picarzo, A.C.J., Reyes, K.M.E., Candava, J.B.S. & Limos-Galay, J.A. (2023). A feasibility study on establishing Likhang Mahika creatives as an event planning and styling business in San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 11(3): 41-53. DOI: 10.5861/ijrsm.2023.1026
- Maverick, J. (2024, October 8). Gross Profit Margin vs. Net Profit Margin: What's the Difference?
<https://www.investopedia.com/ask/answers/021215/what-difference-between-gross-profit-margin-and-net-profit-margin.asp>
- MBA Skool Team. (2023). Supply analysis. MBA Skool. <https://www.mbaskool.com/business-concepts/operations-logistics-supply-chain-terms/17220-supply-aanalysis.html>
- Nasimiyu, A.E. (2024). Cash Flow Management Practices and Financial Performance of Small and Medium Business Enterprises in Kenya. *African Journal of Commercial Studies*, 4(3): 252-263. DOI: 10.59413/ajocs/v4.i3.7
- Nickolas, S. (2024). How Do I Determine the Market Share of a Company?
<https://www.investopedia.com/ask/answers/033015/how-do-i-determine-particular-companys-market-share.asp>
- Orquijo, K.M.A., Diaz, P.L.N.A., Gallano, C.S., Nemil, R.C. & Limos-Galay, J.A. (2023). A feasibility study on establishing a saccharine crusty business in San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 11(3): 87-96. DOI: 10.5861/ijrsm.2023.1030
- Philippine Statistics Authority. Fisheries Production Survey 2023 <https://rssomimaropa.psa.gov.ph/statistics/fps>
- Philippine Statistics Authority | Republic of the Philippines. Highlights of the MIMAROPA Region Population

- 2020 Census of Population and Housing (2020 CPH) <https://psa.gov.ph/content/highlights-mimaropa-region-population-2020-census-population-and-housing-2020-cph>
- Sanqui, B.E.E., Tampol, R.A. & Galay, J.A. (2022). A feasibility study on tiger grouper (Black-Spotted Lapu-Lapu) production using a floating fish cage in Mapaya, San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 10(5): 113-124. DOI: 10.5861/ijrsm.2022.60
- Urlanda, R.. (2019, May 14). Occidental Mindoro: Emerging as the new “Tuna Capital of the Philippines”. Agriculture Magazine. <https://agriculture.com.ph/2019/09/25/mamburao-occidental-mindoro-emerging-as-the-new-tuna-capital-of-the-philippines/>
- Walter, F. (2024, March 28). Tantalizing Tocino: Unveiling the Delicious Secrets of this Filipino Specialty. Flavory Cooking. Retrieved from <https://flavorycooking.com>
- Zapata, M.M.S., Viaña, M.M.J., Tovillo, A.S., Tria, J.S. & Limos-Galay, J.A. (2023). A feasibility study on establishing a dance studio, “emotiondance studio” in San Jose, Occidental Mindoro. *International Journal of Research Studies in Management*, 11(3): 75-86. DOI: 10.5861/ijrsm.2023.1029

Customers' personality, buying attitude, and their influence on purchase decisions

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Abstract

This study utilized a mixed-methods approach, which examined the influence of personality types and buying attitude on consumer purchasing decisions among the administrative employees of Occidental Mindoro State College-Main Campus (OMSC). There were 151 respondents who participated in answering the validated survey questionnaire to evaluate how Type A and Type B personalities affect consumer behavior in terms of habitual, limited, and impulsive purchasing decisions. Statistical analysis was employed using SPSS version 26 for descriptive data and WarpPLS version 7.0 for PLS-SEM. The study found that Type A consumers prioritize product quality, service reliability, and variety, while Type B consumers focus more on convenience, accessibility, and promotional discounts. Results also indicate no significant correlation between demographic factors and purchasing decisions. However, personality type and buying attitude significantly impacted buying behavior. The findings suggest that businesses tailor their marketing strategies to appeal to consumers' psychological traits rather than just demographic characteristics. An intervention program was proposed to promote responsible consumer behavior through financial literacy initiatives, consumer awareness campaigns, and strategic retail practices. These efforts aim to encourage mindful purchasing decisions while maintaining business profitability. The study highlights the importance of understanding personality-driven consumer behavior in developing effective marketing strategies and fostering sustainable consumer practices. Thus, future studies can explore the impact of emerging digital shopping trends, such as e-commerce platforms and mobile shopping applications, on consumer purchasing decisions. Investigating how personality traits influence online versus offline shopping behaviors can provide valuable insights for businesses adapting to the evolving retail landscape.

Keywords: consumer behavior, personality type, buying attitude, product quality, promotional discounts

Customers' personality, buying attitude, and their influence on purchase decisions

1. Introduction

Every single day, the typical adult makes between 33,000 and 35,000 decisions. According to a study by Reill (2023), consumer behavior involves various decision-making processes since every decision has consequences. First, they choose which products to buy and then determine the quantity. His study generally explains these decisions using customer behavior models, which come in different forms. In addition, one version of the model tries to describe how consumers make rational brand choices despite having incomplete information and limited cognitive ability. Along with another model version, it provides little explanation of the internal factors influencing a consumer's personality or attitude toward a product (Burinskiene & Daskevici, 2014). Understanding how customers buy means grasping the key components of business success in a rapidly changing market. The sum of activities, thoughts, and feelings that buyers go through to purchase a product is clinically known as customer buying habits (Cai, 2023). Knowing the factors that cause a yes or no in a customer's buying decision can help retail enterprises change their strategies or products to suit these factors and, in so doing, make each trip to the shop a more efficient, more effective source of sales (Pelau et al., 2018). Owing to its virtuosity and innovative nature, information technology, especially the Internet, impacts every minute aspect of people's lives. These two advancements come with various side benefits that are convenient for people everywhere. In today's society, most shopping will be done via the internet. With the growing popularity of online shopping, people increasingly employ social media as middlemen: they use such services as bloggers to market the goods they want consumers to buy (Gunawan & Iskandar, 2020).

The purchasing decision process involves several stages, from recognizing a need to evaluating alternatives to choosing the product that best satisfies the consumer's needs (Roviqoh & Supriati, 2022). This complex process is often shaped by various factors, including psychological, economic, and situational influences (Kotler & Keller, 2016). Concerning Amos (2021), one of the most common approaches people use to a purchasing method is a purchasing decision-making style that touches a consumer's cognitive and affective traits. Many frames and structures can distract us from making better decisions. The process we go through while making decisions is the most complex process of human thinking. This research focuses on the effects on a customer's personality and attitude of making a decision to purchase a good or not. The main objective of this work is to generate useful information that will assist marketers and local policymakers in appreciating the determinants of consumer decision-making from the community's perspective.

Statement of the Problem - The study aimed to analyze the types of personality and attitude of consumers that influenced their purchasing decisions. It aimed to answer the following questions: (1) What influences the customers to purchase an item or product in a retail store? (2) What is the demographic profile of the respondents in terms of age, sex, monthly income, and number of children? (3) What is the level of personality type of the respondents in terms of Type A and Type B? (4) What is the level of the buying attitude of the respondents? (5) What is the level of the respondents' purchase decisions in terms of habitual, limited, and impulsive decisions? (6) Is there a significant relationship between the demographic profile and the level of purchase decisions of the respondents? (7) Is the level of purchase decision of the respondents significantly affected by the type of personality and buying attitude? (8) What intervention may be proposed to guide the consumers' purchase decision?

Significance of the Study - The study's results will benefit the following: first, it will guide the consumers and help them make better decisions on purchasing goods, not by whim or impulse, but by the basic need for the items. Second, this study highlights the importance of upholding consumer protection rights, recognizing that loyalty is built through years of quality service. By prioritizing ethical practices, transparency, and customer satisfaction, they can foster trust, ensure long-term success, and contribute to economic growth. Third, to the academic, the consumer attitude, personality, and purchase decision should be part of the curriculum, specifically

in business subjects, to foster awareness and predisposition toward purchasing a specific product or service. Fourth, this study provides insights to the local government unit to help the LGUs propose ordinances to protect consumers and business owners. Laws on fair trade, particularly those concerning quality and pricing, should be given due attention. Fifth, this study offers valuable information to policymakers and community developers that can direct economic initiatives to assist the regional business community. Policymakers may support initiatives that support local companies and meet customer demands by knowing what drives consumer spending. Lastly, for future researchers, this study's findings can be a good reference for those willing to study and scope consumer behavior, pricing strategies, and marketing effectiveness in the rural and small-town retail industries. Researchers in the future can expand on this study by examining other variables that may contribute to or influence the long-term effects of short-term discounts on customer loyalty or comparing cost trends across various areas.

Scope and Delimitation of the Study - This study aimed to investigate the factors that influenced consumer behavior in San Jose, Occidental Mindoro, focusing on the type of personality, attitude, and the purchase decision. Specifically, it sought to understand how consumers are influenced when making purchasing decisions, their attitude toward buying, and the types of personalities that drive their behavior. The research analyzed the demographic profiles of respondents, including their age, sex, monthly income, and number of children, and how these factors relate to their buying attitude and personality traits. Additionally, the study assessed the extent to which purchase decisions are habitual, limited, or impulsive. This study examined the relationship between personality and purchase decisions of administrative employees of OMSC Main Campus, School Year 2024-2025. The research focused on exploring the relationship between personality types (Type A and Type B) and consumer behavior, particularly in the three categories of purchase decisions: habitual, limited, and impulse. This classification did not consider other variables such as income level, product categories, or external impacts on purchase decisions (beyond personality and decision-making trends). The results of this research were limited to the administrative staff of OMSC only and therefore could not be generalized to other settings or subjects. The study was conducted from August 2024 to March 2025.

2. Methodology

Research Design - A mixed-methods approach provides several advantages for tackling intricate research problems, as it combines philosophical perspectives from both post-positivism and interpretivism, integrating qualitative and quantitative data to explain research issues effectively. Applying mixed methods allows researchers to address research questions with adequate depth and breadth, facilitating the generalization of findings and implications to the entire population (Dawadi et al., 2021). Results of the qualitative phase through interviews direct the quantitative phase, and quantitative results are used to validate the qualitative findings.

Respondents of the Study - For the qualitative phase, the respondents were the customers from a fast food chain in San Jose, Occidental Mindoro. The proponent randomly selected the 15 early customers of the fast food chain. These respondents were no longer included in the final administration of the questionnaire. For the quantitative research method, the researcher used stratified random sampling to identify the respondents. The respondents included in the study were the administrative employees of Occidental Mindoro State College (OMSC) Main Campus. The sample size was 151. The sample size computation was taken from Raosoft with a 5% margin of error and a 95% confidence level.

Research Instrument - The data from the qualitative phase were obtained from an interview guide. It was an open-ended question soliciting the respondents' opinion of their purchase decision. In the quantitative part, the questionnaire includes the demographic profile, type of personality, buying attitude, and consumer purchase decision of the respondents. Overall, the researcher-made questionnaire is divided into three (3) parts. Part I—Demographic Profile; Part II—Questions are about the respondents' dominant purchasing personality and buying attitude. This part of the questionnaire comprises 20 items, divided as follows: type of personality—10 items, and buying attitude—10 items. Part III—Questions are about the consumer purchase decision: habitual decision—10 items, limited decision—10 items, and impulse decision—10 items. In answering parts II and III, the researcher

asked the respondents to rate each statement on the type of personality, attitude, and consumer purchase decision by checking the column that corresponds to their agreement by using a 5-point Likert-type scale. The researcher sought the expertise of the Divine Word College of San Jose (DWCSJ) graduate school professors and Occidental Mindoro State College (OMSC) professors to validate the questionnaire, parts II and III only. All experts' suggestions were incorporated, and upon revising the questionnaire, the researcher presented it to her adviser for final approval. Moreover, upon approval, the researcher reproduced and distributed the instrument for reliability testing. Those who took the reliability testing were automatically excluded from the final survey. Moreover, the split-half method was used to test the reliability of the items in the questionnaire. It was tested only once on the 30 randomly selected respondents. Trochim et al. (2016) explained that in split-half reliability, all items measuring the same construct were randomly divided into sets to check for homogeneity within a single instrument.

Table 1**Reliability Analysis Results**

Variables	Number of Items	Reliability Coefficients*	Interpretation
Personality			
1. Type of Personality	10	0.744	High Reliability
2. Buying Attitude	10	0.718	High Reliability
Consumer Purchase Decision			
1. Habitual Decision	10	0.749	High Reliability
2. Limited Decision	10	0.781	High Reliability
3. Impulsive Decision	10	0.851	High Reliability

The results in Table 1 yielded a consistently high level of reliability based on Spearman-Brown coefficients of equal length, both for personality factors and consumer purchase decision factors. These are reflected in the coefficients ranging from 0.718 to 0.851. The results attest to the acceptability of the instrument and are therefore ready for administration to the final group of consumer respondents.

Data Gathering Procedure - In the qualitative phase, the researcher prepared a consent letter for the respondents, signed by the research advisor. After the respondents' approval, an interview guide and one-on-one discussions with randomly selected customers of a fast food chain in San Jose, Occidental Mindoro, were conducted. Respondents could openly share their opinions because the interviews were conversational and informal. Open-ended questions were used to explore their purchasing decisions and behaviors. The data-gathering process lasted for two weeks. The collected data were thematized, properly labeled, and systematically organized to facilitate accurate analysis. The researcher then applied a thematic coding process and an initial analysis. Finally, a thematic analysis was conducted using a diagram to highlight the key variables that served as the foundation for the quantitative phase of the study. This approach made it possible to see how various elements affecting customer behavior relate to one another. The findings from the qualitative phase were then integrated into the quantitative analysis, providing a comprehensive understanding of the trends observed in the purchasing decisions of the participants. It took another week to complete the survey procedure.

Statistical Treatment of the Data - Thematic analysis was used to analyze the qualitative problem of what enticed the consumer to purchase the product, and the coded answers were the variables for the quantitative part. Data were collected, classified, tabulated, and coded for analysis using statistical data treatment using SPSS ver. 26 & WarpPLS ver. 7. Frequency and percentage were applied to describe the consumer's profile and the dominant purchasing personality. The weighted mean was used to analyze the attitude and the extent of consumer purchase decisions regarding habitual, limited, and impulsive purchases. A quantitative research method was employed to analyze the relationship between respondents' demographic profiles and the connection between consumer purchase decisions, buying attitude, and personality types. The data were processed using WarpPLS version 7, ensuring a robust statistical analysis of the findings.

Ethical Considerations - All participants or respondents in this study were treated with utmost confidentiality and respect. The proponent ensured that the data did not allow tracing any person. The identities of respondents who participated in the survey were kept anonymous, and the results were published as a research article and

possibly in a peer-reviewed journal. The researcher ensured that the respondents were volunteers and had the right to withdraw at any time. The first page of the survey form included a consent letter that explained the study's principal elements and the requirements of respondents. Respondents were required to provide informed consent, demonstrating that they fully understood how the study would proceed.

3. Results and Discussions

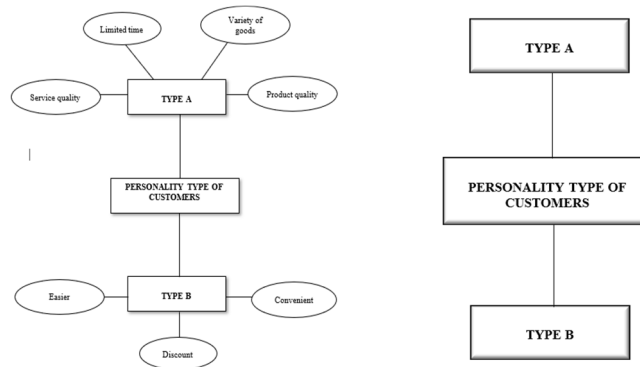


Figure 1. Initial Thematic Map and Final Thematic Map of Personality Type of Customers

The qualitative part of this study involved interviewing 15 randomly selected customers of a fast food chain in San Jose, Occidental Mindoro, on the factors that influenced their purchasing decisions. The respondents' answers on the purchasing decision based on the survey were further analyzed and grouped into two significant personality types, Type A and Type B (Lussier, 2021).

The Type B response was mainly on convenience being a significant determinant in their decision. Some respondents indicated that volume discounts and promotions like a "buy one, get one free" offer also impacted their purchasing habits. Convenience was particularly relevant for respondents juggling busy lives, limited funds, or daily household chores. This thematic code encapsulates the practical considerations of consumers with efficiency in mind, who prioritize cost-effective products. On the other hand, Type A respondents emphasized product quality, service quality, and the availability of different products as significant determinants of their decision-making process. Some wanted to interact with staff and have products available, influencing their purchasing decisions. Consumers' consciousness of quality and customer service tends to make a store based on product reliability and overall value. As a result, they prefer stores that match their standards: long-term-oriented, high-quality goods and a shopping experience.

This thematic analysis provides a meaningful realization of the interviews. It points out that the two most important contributors of customers in San Jose, Occidental Mindoro, are a balance between convenience and quality in the items they purchase in the store. This information helps evaluate what consumers want in local retail markets. As such, firms would need to sell convenience goods and higher-quality items to appeal to the two types of consumers, Type A and Type B personalities. Personality plays a significant role in shaping consumer purchasing decisions, as it influences how individuals express their emotions, attitudes, and behaviors in response to different situations (Tufail et al., 2018). The findings of this study align with the existing literature, which suggests that personality traits, such as aggression, dominance, and self-assurance, contribute to consumer behavior (Onu et al., 2014). Consistent with previous studies, the research found that Type A consumers prioritize product and service quality, the availability of different products, and staff interaction in their decision-making process (Samaras & Galanakis, 2022). This supports earlier findings that Type A individuals are goal-oriented, competitive, and value reliability when selecting products and services (Sohn & Ko, 2021). Conversely, Type B consumers emphasized convenience as a key determinant in their purchasing decisions, favoring promotions such as "buy one, get one free" and valuing efficiency in their shopping experiences. This finding aligns with the literature stating that Type B individuals are more relaxed and adaptable, making spontaneous or flexible purchasing decisions (Sharma &

Jain, 2015; Aragoncillo & Orús, 2018). Additionally, previous studies suggest that price-conscious consumers prioritize cost-effective products (Alavi et al., 2016), which is evident in the responses of Type B consumers, who highlighted the importance of affordability and ease of purchase.

Moreover, external factors, such as reference groups and social influences, have been found to impact purchasing decisions (Kushwaha et al., 2015). The study findings suggest that Type A individuals may be influenced by brand reputation and service quality. In contrast, Type B individuals focus more on practical benefits, such as price discounts and convenience. This reinforces the idea that psychological traits and external influences shape consumer behavior. Overall, the study confirms that consumers in San Jose, Occidental Mindoro, exhibit purchasing behaviors that balance convenience and quality, driven by their personality types. Businesses seeking to cater to these consumers must consider offering a mix of high-quality products for Type A consumers and cost-effective, convenient options for Type B consumers. Understanding these personality-driven preferences can help firms tailor their marketing strategies to meet the diverse needs of their target market.

Table 2

Distribution of Respondents' Demographic Profile (n=151)

Age	Frequency	Percent
20–29	65	43.0
30–39	60	39.7
40–49	17	11.3
50 and above	9	6.0
Total	151	100.0
Sex		
Male	75	49.7
Female	76	50.3
Total	151	100.0
Monthly Income		
Below P11,000	43	28.5
P11,000 - P20,999	61	40.4
P21,000 - P30,999	27	17.9
P31,000 - P40,999	12	7.9
P41,000 and above	8	5.3
Total	151	100.0
Number of Children		
0–2	124	82.1
3–4	25	16.6
5–6	2	1.3
Total	151	100.0

Table 2 presents the distribution of respondents' demographic profiles. This shows that most respondents fall under the 20-29 age bracket, with a frequency of 65, or 43 percent. This implies that the younger generation respondents of this study are conspicuously involved in purchasing behavior, likely due to their financial self-sufficiency and knowledge of e-marketing, the online world, and current consumer trends. This is followed by 60 respondents who belong to the middle-age group of 30-39, representing 39.7 percent of the respondents. This is consistent with prior research emphasizing the strong influence of age on consumer behavior (Slaba, 2020; Amos, 2021; & Yuvashree, 2021). They highlighted that younger individuals, particularly Millennials and Generation Z, exhibit distinct preferences and decision-making patterns compared to older consumers. In addition, it is important to consider how consumer behavior can change based on age. Moreover, low prices are an important factor for young consumers, while older individuals pay more attention to the durability and reliability of the product (Mohammad & Drolet, 2019). However, fewer respondents fell within the older age brackets (50 and above). This does not necessarily mean that their purchasing priorities have shifted as they aged but suggests potential changing trends (still early in each customer's lifecycle) as age increases. Puska et al. (2018) highlighted other demographic factors influencing purchase decisions, including income level, education, and family size. The purchasing behavior of the majority of respondents in this study, who are younger and middle-aged, is thus likely influenced by their age and these interrelated demographic variables. Finally, Yuvashree (2021) asserted that consumer buying behavior evolves as individuals move through different life stages. This aligns with the study's demographic

distribution, as younger consumers focus on affordability and trends, while older consumers prioritize long-term value and durability.

The respondents were almost evenly divided by sex, with the male respondents accounting for 49.7 percent, or 75 out of 151 respondents from Occidental Mindoro State College administrative employees, and the female respondents 76 for 50.3 percent. This even split indicates that men and women are just as likely to influence purchasing decisions in the context of this research. The findings on gender distribution reveal a nearly equal representation of male and female respondents, suggesting that consumer purchasing behavior is not significantly skewed toward one gender. This aligns with Amos (2021), who emphasized that while men and women may exhibit different purchasing preferences and motivations, both actively participate in decision-making. The balanced representation also supports the insights of Puska et al. (2018), who argued that purchase behaviors are influenced by gender alongside other factors such as marital status and household responsibilities. This suggests that businesses should adopt marketing strategies catering to male and female consumers by recognizing their distinct yet equally influential purchasing patterns. Additionally, given the interplay of demographic factors like age, income, and education, future research could further explore how these elements interact with gender to shape consumer decision-making. Moreover, they also emphasized that marketers have traditionally focused on women as primary decision-makers, particularly in household and family-related purchases.

The monthly income distribution shows respondents' financial differences, which might influence their purchasing choices or decisions. The monthly income of 40.4% of the sample population ranges from P11,000 to P20,999, which places them within the lower-middle income category. So, they could not care less about any possible upgrades in whatever they buy; affordability and value for money are prime considerations when purchasing. The majority of participants in the study are cost-conscious consumers who show a preference for practical and economical purchases. To attract buyers from this group, businesses must provide budget-friendly options and special deals that meet the financial limits of most consumers. Products and services that command premium prices will attract a limited market of customers with higher disposable incomes. Businesses can establish marketing and pricing plans that match their customers' financial capabilities by analyzing income segments. The findings aligned with existing literature on how income levels shape consumer purchasing behavior. As Puska et al. (2018) noted, income determines purchasing power, influencing whether consumers opt for premium or budget-friendly products. The study suggests that low-income consumers prioritize essential goods. At the same time, high-income earners have the financial capability to purchase luxury items such as real estate, high-end vehicles, and overseas travel. Similarly, Decena (2022) highlighted that low-income households, particularly in urban areas, are more affected by economic downturns, making them more price-sensitive and cautious in spending. This aligns with the 28.5% of respondents earning below PHP 11,000, who are likely to prioritize necessities over discretionary spending. High-income individuals are more inclined to invest in expensive, status-enhancing products, whereas those with limited income opt for practical, affordable goods. This insight supports the finding that most respondents in the lower-middle income bracket prefer cost-effective purchases. Additionally, Amos (2021) highlighted that income directly influences decision-making power, with dual-income families and high earners having greater financial flexibility in purchasing decisions.

Regarding the number of children, it indicates that the majority of respondents, 82.1 percent (n=124), have 0 to 2 children, indicating that many were single, newly married, or raising small families. This signifies that their expenditure might be freer. Instead, they can focus on consumers, lifestyle, or savings instead of burdening household expenses. On the other hand, 25, or 16.6 percent, of those who participated had three or four children. This implies that they are more likely to manage different responsibilities, including household, health, and education expenses. With a more prominent family to support, they may focus on saving money and looking for promotional deals like percentage discounts, buy-one-take-one promotions, etc. A very small group, 2 or 1.3 percent, have 5 to 6 children, indicating that large families are rare among the respondents. These households might have stricter financial priorities, concentrating on essential needs and making cost-effective purchasing decisions. The findings aligned with existing literature on family size and consumer behavior. Studies suggested that children today, influenced by television and the internet, have increasing purchasing power across various

product categories, regardless of the number of children in the household (Amos, 2021). However, it has also been noted that families with fewer children are more inclined to allow their children to influence purchasing decisions than more prominent families focusing on financial responsibilities (Pettigrew et al., 2016). Moreover, research highlighted that different family structures and obligations generate varied consumer demands, ultimately affecting purchasing patterns (Kushwaha et al., 2015). Families with 0 to 2 children may have more financial flexibility, allowing them to allocate resources toward lifestyle choices, discretionary spending, or savings instead of prioritizing household expenses. On the other hand, families with three or more children are more likely to prioritize essential needs, such as food, healthcare, and education, making them more inclined to seek promotional deals, such as percentage discounts or buy-one-take-one offers, to stretch their household budgets. These insights supported the study's findings that smaller families tend to have more financial freedom, while larger families focus on cost-conscious purchasing behaviors due to their more outstanding financial obligations (Amos, 2021; Pettigrew et al., 2016; Kushwaha et al., 2015).

Table 3*Respondents' Level of Personality*

Type of Personality	Type A		Type B		Neither A Nor B	
	F	%	F	%	F	%
1. I buy items or goods without thinking.	84	55.6	45	29.8	22	14.6
2. I enjoy buying the latest/newest items or goods.	97	64.2	40	26.5	14	9.3
3. I enjoy buying old items as keepsakes.	87	57.6	33	21.9	31	20.5
4. I buy only branded items.	80	53.0	48	31.8	23	15.2
5. It is a good purchase when I receive a larger discount.	128	84.8	7	4.6	16	10.6
6. I get upset when my favorite items or goods are out of stock.	103	68.2	21	13.9	27	17.9
7. I often brag about the big discount I get.	102	67.5	26	17.3	23	15.2
8. I measure the quality of an item or good based on its price.	127	84.1	7	4.6	17	11.3
9. I buy only things that I need.	123	81.5	10	6.6	18	11.9
10. I am anxious when the items or goods I need are out of stock.	88	58.3	33	21.9	30	19.9

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Table 3 shows the respondents' level of personality in terms of Type A and B. Moreover, the respondents were categorized into three groups: Type A, Type B, or neither. A moderate percentage of respondents tended to portray Type A purchasing attributes based on their responses. Some respondents confess to making unplanned purchases (55.6%), being motivated by new fashion trends (64.2%), and even nostalgic items kept for collection (57.6%). This means that many respondents in this study will likely be more impulsive, trendy, and sentimental shoppers. The data reflects some aspects of behavioral economics wherein an overwhelming majority correlates quality with price (84.1%) and derives enjoyment when more significant discounts are offered (84.8%). Notably, a number of them seem to find satisfaction in the price paid because a surprising 67.5 percent claim that they frequently boast about the discounts they receive. This reinforces the assumption that some respondents cited that shopping is more than a needful activity but a pleasurable chase for getting a bargain.

In contrast, a much smaller proportion of the respondents seem to exhibit some Type B personality traits, which are more characterized in this study by an easier and more thoughtful style of shopping. Only 6.6 percent of respondents claim that they routinely purchase only those they strictly require, while 4.6 percent admit they are less concerned about the price when judging quality. Further, respondents with Type B personalities are also the least affected by sentiments of unavailability of stock for their favorite brands. Only 13.9 percent of them feel frustrated in such instances, while 68.2 percent of the Type A respondents do so.

According to Samaras and Galanakis's (2022) prior study, Type A aggressive disposition, self-confidence, impatience, and a strong competitive spirit characterize a personality type. People with Type B personalities are patient, laid-back, and easygoing. Additionally, as Lateef et al. (2019) explained, Type A personality has various

unfavorable qualities, including aggressiveness and impatience. In agreement with Sharma and Jain's (2015) findings, people with the B personality type tend to plan things before carrying them out. According to Gambhir (2024), Type A is related to competition and acts quickly, whereas Type B is more relaxed and patient. These findings suggest that most of this study's sample are likely to have a type A personality, which means that they tend to have more buying impulses, are more price sensitive, and are emotionally invested during shopping. Knowing this behavior enables businesses to design strategies that arouse their excitement toward discounts, their inclination toward trendy branded items, and their consciousness.

Table 4*Respondents' Mean Level of Buying Attitude*

Buying Attitude	Weighted Mean	Interpretation
1. I purchase items or goods because I need them.	4.40	High
2. I buy items or goods in bulk to save time.	3.86	High
3. I purchase items or goods because my friends have those, too.	3.13	Moderate
4. I purchase items or goods to help our economy improve.	3.62	High
5. I purchase items or goods because of a credit arrangement.	3.36	Moderate
6. I purchase the branded item.	3.54	High
7. I buy items or goods to keep up with the latest trends.	3.47	Moderate
8. I need lots of information about the items or goods before I purchase them.	4.24	High
9. I buy items or goods on a regular patronage basis.	3.81	High
10. I rely on the opinion of my family before I buy items or goods.	3.87	High
Composite Mean	3.73	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Table 4 presents the mean level of the respondents' buying attitude. The composite mean of 3.73, which falls under the high interpretation, indicates that respondents generally exhibit a well-considered and purposeful approach to purchasing decisions. This suggests that, rather than making impulsive purchases, they evaluate their needs, consider relevant information, and make choices that align with their financial priorities and personal preferences. The high composite mean reflects a consumer base that values practicality, quality, and informed decision-making. Supported by Syahrivar (2016) and Parsad et al. (2017), they asserted that consumers had specific attitudes and opinions on various products. Attitude toward a product can be positive; hence, the consumer will be driven to repeat purchases and develop brand loyalty (Wang et al., 2016). A strong reason to buy is to support the economy (3.62). The low impact of the economy on business makes the efforts of many respondents to buy to support the local and relevant industry to help businesses stay afloat interesting.

These insights point to respondents being practical and cautious shoppers. They buy primarily out of necessity, rely on research, and consider their families' opinions. While trends and peer influence play a role, they are not the biggest drivers of their buying decisions. Businesses can use these findings by emphasizing product quality, offering bulk discounts, and providing detailed product information to cater to this consumer mindset.

Table 5*Respondents' Mean Level of Purchase Decision by Habitual Decision*

Consumer Purchase Decision	Weighted Mean	Interpretation
1. I purchase items or goods from a specific store.	4.19	High
2. I buy personal care products when there are price discounts.	4.19	High
3. I have a strong preference for discounted items or goods.	4.32	High
4. My budget influences my decision on low-cost products	4.23	High
5. I purchase in bulk to avail myself of the discount.	4.03	High
6. I wait for promotions before making purchases.	4.05	High
7. I prioritize stores that consistently offer low prices or discounts.	4.30	High
8. I stick to purchasing the same brand for essential items or goods.	4.28	High
9. I prefer shopping at stores where I have loyalty cards or rewards programs.	4.03	High
10. I choose the same product out of habit, even when there are other options.	3.96	High
Composite Mean	4.16	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Table 5 shows the mean level of purchase decision by habitual decision. The findings reveal that respondents strongly follow habitual buying behaviors, as reflected in the composite mean of 4.16 (high). This means that for most consumers, shopping is not just about making one-time choices but about routines, preferences, and patterns they have developed over time. Based on these findings, most consumers in the study are habitual and price-sensitive shoppers. They like stores with predictable discounts, tend to be loyal to known brands (Alavi et al., 2016), and make choices based on habit and value. For businesses, this could mean implementing strategies such as keeping prices competitive, having frequent promotions, and developing good customer loyalty programs to attract and keep hold of these buyers.

Table 6

Respondents' Mean Level of Purchase Decision by Limited Decision

Consumer Purchase Decision	Weighted Mean	Interpretation
1. Prior knowledge of the product is my consideration when buying.	4.44	High
2. I purchase items or goods based on a recommendation from my family and friends.	4.11	High
3. Few alternatives are a factor in my decision to purchase items or goods.	4.10	High
4. I check online reviews before I buy the items or goods.	4.46	High
5. I ask the opinion of the sales staff before I purchase the items or goods.	4.15	High
I go for the saleable item or good if the alternative is limited.	4.18	High
7. I buy an item or good that has clear and detailed information on its labels.	4.48	High
8. I purchase items or goods from brands I trust when there are limited options.	4.40	High
9. I prefer items or goods recommended by experts or influencers.	4.31	High
10. I consider the reputation of the store or seller when making a purchase decision if options are limited.	4.35	High
Composite Mean	4.30	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Table 6 presents the mean level of purchase decision by limited decision. With a composite mean of 4.44, consumers will consider familiarity with a product before making a purchase, and hence, ratings of the importance have a meaningful resource. In addition, recommendations from family or friends serve the same function. It has a mean score of 4.11. According to Xi et al. (2016), this study's findings show that customers' opinions and social connections play a crucial role in decision-making. Consumers in a situation where only a few alternatives are available probably depend largely on availability in purchasing, as shown in 4.10. Similarly, 4.46 says that information from online reviews is another primary source of reference value--suggesting extensive past research by consumers before purchasing behavior (Tufail et al., 2018) attests to the findings. In addition, a weighted mean of 4.15 suggests that shop assistants and the items they recommend are important sources that should not be overlooked before making a final decision. When alternatives are limited, the best sellers are the most important factor in market preference. Product labels that are clear and detailed carry heavy authority. These factors have the highest weighted mean, 4.48. Another key factor is brand trust. Here, the choice is expedient, while limited 4.40 gives us a clear span. Moreover, Kushwaha et al. (2015) highlighted that reference groups such as family, friends, and professional affiliations significantly impact consumer preferences and brand selection. Besides, experts and key opinion influencers, with an average of 4.31, also affect consumers' purchase decisions.

Finally, when there are few choices available to consumers, the reputation of the shop where they buy is important, with a score of 4.35. With an overall weighted mean of 4.30 (high), these results show that all factors strongly affect consumer purchasing behavior in such cases with limited decision-making capacity. This aligns with existing literature on consumer behavior, particularly the studies by Xi et al. (2016) and Kushwaha et al. (2015), emphasizing the influence of peers, reference groups, and external validation in shaping purchase decisions.

As seen in Table 7, impulse buying ranks high among respondents, shown in the setting of a weighted mean of 3.78 (high). This suggests that respondents frequently make spontaneous and unplanned purchases, often driven by external stimuli such as promotions, trends, or social influence. The best stimulus to impulse buying is attractive sales promotions (\$3.99). Consumers tend to be impulsive and make snap decisions when items are on sale. Likewise, shopping is sometimes used as another emotional outlet (3.99), with many respondents admitting to

purchasing items to cope with stress or just to feel better. Social influence also plays an important role in spur-of-the-moment buying. Respondents with openness to experience (3.81) buy products due to their curiosity, respondents who are open to social and advertisement influence (3.81), and human beings are influenced by new trends (3.63). This implies that peer effects and online marketing primarily drive the factors of spontaneous buying decisions. However, although impulse buying happens, it is not entirely unreasonable. The lowest-rated activity—making purchases despite having no real use for something (3.46, Moderate)—indicates that people still have some self-control, and their impulse is not always to spoil themselves. These findings align with existing research on impulsive buying behavior. According to Burton et al. (2018) and Reisch & Zhao (2017), impulsive purchases were often triggered by sudden desires, store environments, and promotional offers, which explains why sales promotions in this study strongly entice respondents to buy. Moreover, Xi et al. (2016) argued that the rise of e-commerce has increased impulsive purchasing by making products more accessible and transactions more convenient, which may contribute to respondents' inclination to buy items simply because they are trending (3.63). Furthermore, Liao et al. (2016) defined impulse buying as a spontaneous and rapid decision made without prior planning, which aligns with the respondents' high ratings for purchasing on a whim (3.77) and buying based on sudden desire (3.91). Chen & Wang (2016) further emphasized that impulse buyers make quick decisions with little time to process information, making them more likely to be swayed by price reductions, promotions, and external stimuli—factors that this study's respondents acknowledged as influencing their buying habits. Additionally, Kem et al. (2018) categorized impulse buying into pure, suggestion, and planned impulse buying. The findings suggested that respondents engage in all three types, as they exhibit behaviors such as breaking regular buying habits for instant gratification, purchasing out of curiosity, and spending beyond their initial budget when encountering discounts or promotions.

Table 7

Respondents' Mean Level of Purchase Decision by Impulsive Decision

Consumer Purchase Decision	Weighted Mean	Interpretation
1. I purchase items or goods on a whim.	3.77	High
2. I purchase based on a sudden desire for the product.	3.91	High
3. Attractive sales promotions entice me to buy the items or goods.	3.99	High
4. I buy items or goods out of curiosity.	3.81	High
5. I purchase items or goods without planning.	3.70	High
6. I buy goods on the spur of the moment.	3.75	High
7. I purchase items or goods as a way to relieve stress or feel better.	3.99	High
8. I am easily influenced by social media or online advertisements to buy items.	3.81	High
9. I purchase items or goods simply because they are trending or popular.	3.63	High
10. I buy items or goods even if I do not need them.	3.46	Moderate
Composite Mean	3.78	High

Legend: 4.50-5.00 – Very High; 3.50-4.49 – High; 2.50-3.49 – Moderate; 1.50-2.49 – Low; 1.00-1.49 – Very Low

Finally, O'Creevy et al. (2018) and Raposo et al. (2013) stated that impulse buying is often associated with emotional gratification, explaining why many respondents purchase items to relieve stress or feel better (3.99). This suggests that shopping serves as an emotional outlet for some consumers, reinforcing the psychological aspect of impulse buying. In conclusion, the findings highlight the strong influence of promotions, social media, and emotional factors on respondents' purchase decisions. This suggests businesses can capitalize on these behaviors by employing strategic promotional campaigns, influencer marketing, and targeted digital advertisements to drive sales. However, consumers should also be mindful of impulse buying tendencies to ensure spending aligns with their financial goals.

Figure 3 emerged from the structural equation modeling using the partial least squares method generated by WarpPLS version 7.0. While the structural model showed no significant link between the profile and purchasing decision, a new model reflects that personality and buying attitude are directly linked to the purchasing decision. Customers' habitual buying decisions are influenced moderately by the combined contribution of their personality type and buying attitude. Limited and impulsive levels of decision-making can be attributed to personality type and buying attitude. The beta coefficients (β), ranging from 0.260 to 0.512, are also shown with the corresponding

p-values, or significance levels, set at 0.05 as the result of the structural equation modeling. Limited decision-making takes place when consumers rely on prior experiences or outside recommendations, especially when product availability is limited. This is in line with Kumar et al. (2020), who pointed out that in rural areas, consumers' trust in local companies and customer service is essential when deciding what to buy.

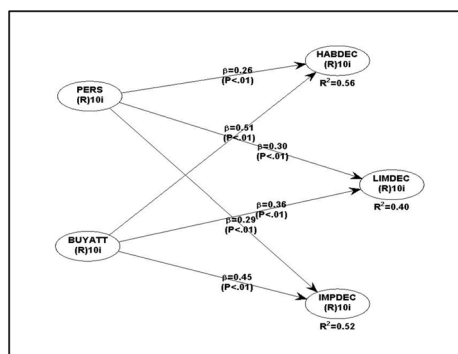


Figure 3. The Emerging Model

Furthermore, Tufail et al. (2018) noted that contemporary consumer behavior increasingly relies on digital information. Nowadays, customers use the internet to make quick selections about what to buy, eliminating the necessity for in-store visits. This shift supports Decena's (2022) claim that modern consumers are more informed and value-conscious. Limited decision-making is also heavily influenced by social factors. According to Xi et al. (2016) and Kushwaha et al. (2015), family, friends, and professional connections are examples of reference groups that significantly influence brand choice and buying behavior. The model's suggestion that personality and attitude influence buying habits was further supported by Amos (2021), who emphasized that product knowledge affects consumer decisions. Gunawan et al. (2023) also noted that electronic word-of-mouth (eWOM), experiences, and recommendations influence consumer choice. This supports Yuvashree's (2021) claim that social elements, including roles and reference groups, affect customer decisions and cause dissonance after a purchase. Consumer behavior in San Jose's rural area is further influenced by household size, personality qualities, and economic conditions, underscoring the necessity of customized company tactics. External factors like promotions and retail surroundings might influence impulsive purchases, which are frequently brought on by spontaneous urges (Burton et al., 2018; Reisch & Zhao, 2017). The study's conclusion that personality and buying attitude substantially impact impulsive decisions aligns with Xi et al. (2016), who pointed out that social influence and peer pressure are important factors in impulsive purchases.

In the study by Liao et al. (2016), impulse buying is defined as impulsive, unplanned purchases that result from an immediate demand. This is consistent with the study's concept, which postulates that snap judgments are made without much thought. Chen and Wang (2016) went on to explain that price reductions speed up impulsive purchases by reducing the time needed to make a decision. There are several types of impulsive purchases. According to Kem et al. (2018), pure impulse buying is a departure from typical purchase habits motivated by novelty. Contrarily, suggested impulse buying requires mental effort since buyers must remember prior encounters or product information before making an impulsive purchase. In line with the study's finding that a buyer's mindset influences their propensity for impulsive purchases, planned impulse buying happens when customers look for sales and discounts.

Considering the results of this study, a practical approach to intervening and directing consumers' purchase decisions is to encourage them to make informed and rational shopping decisions but acknowledge the psychological and habitual habits of humans. As many respondents show impulse buying behavior, are price sensitive, and focus on brand loyalty, businesses and policymakers should develop strategies that promote mindful consumption while being affordable and convenient. First, companies need to increase consumer awareness through detailed product descriptions, labeling, online comments, and knowledgeable sales assistants. Given the behavior of many consumers when purchasing products, they look for familiar brands or seek a recommendation.

Companies should bolster their marketing efforts with greater transparency, reliability, and quality, such as clear labeling, easy-to-navigate online platforms, and personalized recommendations tailored to past purchases. Second, structured financial literacy programs can help consumers (even impulse buyers) make more rational choices. Workshops and digital outreach campaigns can prepare shoppers with information to budget better, to compare prices, and to recognize marketing devices that encourage impulse purchasing (Chen & Wang, 2016). Moreover, retailers must consider in-store and online nudges that prompt shoppers to pause and think about need versus want before purchasing.

Table 9

Intervention Program to guide the consumers' purchase decisions

Intervention	Consumer Purchase Decision Domain	Objective	Expected Outcome	Facilitating Agency
Consumer Awareness Initiatives	Habitual, Limited	Improve consumer awareness through knowledgeable salespersons, internet reviews, and clear labeling.	Reduced impulsive purchases result from consumers making thoughtful and well-informed purchasing selections.	Department of Trade and Industry (DTI), Consumer Protection Organizations
Financial Literacy Programs	Impulsive, Limited	Teach customers to compare prices, create a budget, and understand marketing strategies.	Consumers' increased financial literacy results in improved purchasing choices and spending control.	Bangko Sentral ng Pilipinas (BSP), Financial Literacy NGOs, Schools and Universities
Balanced Promotional Strategies	Habitual, Limited, Impulsive	Use organized loyalty programs that encourage financial discipline instead of temporary incentives.	Consumers maintain spending control while businesses achieve customer retention and profitability.	Chamber of Commerce, Retail Business Associations
Community-Based Marketing	Habitual, Limited	Use peer evaluations, influencer referrals, and family-friendly promos to match social buying patterns.	Social media influencers that consumers trust boost brand loyalty by giving them greater confidence in their purchases.	Digital Marketing Agencies, Local Business Councils, Social Media Influencers
Cooling-Off Features for Online Shopping	Impulsive	Introduce a brief interval allowing consumers to reconsider and possibly undo impulse purchases.	Reduced impulsive buying results in more deliberate and well-considered purchases.	E-commerce Platforms, Consumer Rights Organizations
Responsible Retail Designs	Habitual, Limited	Optimize store layouts and online platforms to highlight essential products and budget-friendly options.	Customers are encouraged to purchase necessities, encouraging frugal spending and thoughtful purchasing.	Retail Store Owners, Urban Planners, Trade and Commerce Departments

Third, businesses need to rethink their promotional strategy to balance equivalent price incentivization with long-term value offerings. Given that discounts and promotions are significant determinants of purchase decisions, companies can implement loyalty programs that reward repeated purchases without encouraging overspending. Structured loyalty discounts can help promote repeat customers with financial expenditure control instead of temporary, one-time flash-based sales. Furthermore, considering the social impact and personal outlook, organizations can adopt a community-based, reachable showcasing structure through influencer suggestions, peer evaluations, or family purposes (Rachmawati, 2024). Offers like family bundle discounts or positioning social responsibility as a selling point are important in marketing strategies, because customers tend to consult families before purchasing.

Finally, retailers might integrate “cooling-off” features on e-commerce platforms where customers would have a brief interval to undo their impulse purchasing decisions before they are finalized. Stores and businesses can further organize their layouts or online platforms to guide shoppers toward more functional, necessity-oriented, and efficient purchasing choices through the more dominant display of need-based essentials, such as recommendations for budget-oriented shopping (Wadera & Sharma, 2018). Such an approach can help consumers work their way through the shopping experience more consciously while catering to their habits and emotions. The interventions could include improved consumer education, financial literacy programs, structured promotional strategies, social influence marketing, and responsible retail designs.

4. Conclusions

Based on the summary of the findings presented, the following conclusions are obtained: Types A and B personality influenced the buying attitude of the customers. Consumers are more inclined to make decisions based on their inborn temperament and attitudinal orientation than demographic orientations. Since most respondents are type A, businesses must design strategies that arouse their excitement toward discounts and trendy, branded items. Consumers’ choices are predicted by their unique preferences and their budget limit. The culture of the community is an important factor in determining the marketability of the products and services. Demographically driven purchasing behaviors have been acknowledged in several previous studies to exist in many different contexts, but since this study’s findings say otherwise, the researcher concludes that consumers nowadays are being practical. Consumers’ personality traits and attitudes play a substantial role in purchasing decisions. The intervention strategies aim to influence consumer purchasing decisions across habitual, limited, and impulsive behaviors. Consumer awareness initiatives and financial literacy programs enhance knowledge, helping shoppers make informed and budget-conscious choices. Retailer nudges and cooling-off features reduce impulsive purchases by encouraging mindful consumption. Balanced promotions and community-based marketing foster financial discipline while leveraging social influences to build brand trust. Lastly, responsible retail designs guide consumers toward necessity-based shopping, ensuring financial prudence and sustainable spending habits. These interventions collectively promote more intentional, informed, and responsible consumer behavior while balancing business profitability.

Recommendations - Based on the findings and conclusions presented, the following recommendations are stated to further analyze the type of personality and attitude of the consumers that influence purchasing decisions: to cater to the tastes of both Type A and Type B customers, the retail establishments may use a dual-focused approach. Reliability-driven clients will be drawn in by offering a wide range of products and services of the highest caliber. At the same time, saving money and improving store accessibility and convenience will draw in budget-conscious customers. By balancing these criteria, retail establishments can increase client happiness, retention, and revenue. Since demographic profile is not significant in the purchase decision, the researcher suggests that future researchers examine or study other factors, such as situational influences, psychological traits, and celebrities as product/service endorsers. Results of the study show that buying attitude has more impact on the customers’ purchase decision than personality type, so that marketers can focus more on the attitudinal preferences of the consumers. Companies need to establish positive shopping experiences, use social media platforms, and create strategies to direct brand loyalty. Marketers need to be aware that consumers are of different types, tastes, and socioeconomic statuses, so they must develop unique strategies for each type of consumer. Since the demographic profile is insignificant, the researcher suggests examining and studying other factors such as situational influences and celebrities as product/service endorsers. A follow-up survey related to personality may be conducted to revalidate the previous survey and get other points of view. Replicate the study but focus more on the demographic profile, the psychological and behavioral aspects of the consumers’ buying decisions, and preferences. Future studies can explore the impact of emerging digital shopping trends, such as e-commerce platforms and mobile shopping applications, on consumer purchasing decisions. Investigating how personality traits influence online versus offline shopping behaviors can provide valuable insights for businesses adapting to the evolving retail landscape.

5. References

- Alavi, S.A., Rezaei, S., Valaei, N., & Wan Khairuzzaman Wan Ismail (2016). Examining shopping mall consumer decision-making styles, satisfaction and purchase intention, *The International Review of Retail, Distribution and Consumer Research*, 26:3, 272-303, DOI: 10.1080/09593969.2015.1096808
- Amos, W. (2021). Influence of gender on family purchase decisions: A study of households in Naleerigu Community. The University of Cape Coast.
<https://ir.ucc.edu.gh/xmlui/bitstream/handle/123456789/10450/WALIBE%20AMOS.pdf?sequence=3&isAllowed=y>
- Aragoncillo, L., & Orús, C. (2018). Impulse buying: The role of affective states in the buying process. *Journal of Consumer Behavior*, 17(1), 6-18. <https://doi.org/10.1002/cb.1699>
- Burinskiene, A., & Daskevici, D. (2014). Consumer Demand: Online Retail Stores. *Economics and Management*: 2014. 19 (2) ISSN 2029-9338 (ONLINE). DOI: <https://doi.org/10.5755/j01.em.19.2.4742>
<https://www.ecoman.ktu.lt/index.php/Ekv/article/view/4742>
- Burton, S., Neslin, S. A., & Bui, M. (2018). The impact of retailer promotions on store choice and loyalty. *Journal of Retailing and Consumer Services*, 44, 35–42.
<https://doi.org/10.1016/j.jretconser.2017.07.011>
- Cai, J. (2023). Research on the Influencing Factors of Consumer Buying Behavior. Department of Mathematics and Computer Science, New York University, New York, USA.
[Research_on_the_Influencing_Factors_of_Consumer_Bu.pdf](#)
- Chen, Y-F., & Wang, R-Y. (2016). Are humans rational? Exploring factors influencing impulse buying intention and continuous impulse buying intention. Department of International Trade, Chung Yuan Christian University. *Journal of Consumer Behaviour, J. Consumer Behav.*, 15: 186–197 DOI: 10.1002/cb.1563.
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods Research: A Discussion on Its Types, Challenges, and Criticisms. *Journal of Practical Studies in Education*, 2(2), 25-36 DOI:
<https://doi.org/10.46809/jpse.v2i2.20>
- Decena, Y.M. (2022). Assessing the factors influencing the buying behavior of young adults before and during the COVID-19 pandemic. University of the Philippines Los Baños.
<https://www.ukdr.uplb.edu.ph/cgi/viewcontent.cgi?article=9970&context=etd-undergrad>
- Gunawan, N., Iskandar, I.BP., (2020). Analyzing the Impact of Fashion Influencers on Online Impulsive Buying Behavior. *KNE Social Science*. DOI: 10.18502/kss.74i6.6611.
- Kem, Z.K., Zhang, H., Xu, S.H. & Yugang, Y. (2018). Online reviews and impulse buying behavior: the role of browsing and impulsiveness. *Internet Research*, 28(3), pp. 522-543, <https://doi.org/10.1108/IntR-12-2016-0377>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education
https://students.aiu.edu/submissions/profiles/resources/onlineBook/S3D7W4_Marketing_Management.pdf
- Kushwaha, B. P., Rao, N. S., & Ahmad, S. Y. (2015). The Factors Influencing Consumer Buying Decisions of Electronic Products. *Management Dynamics*, 15(1). <https://doi.org/10.57198/2583-4932.1095>
- Liao, C., To, P., Wong, Y., Palvia, P., Kakhki, M.D. (2016). The Impact of Presentation Mode and Product Type on Online Impulse Buying Decisions. *Journal of Electronic Commerce Research*, 17(2).
http://jecr.org/sites/default/files/17_2Paper4.pdf
- Lussier, R. (2021). Human Relations in Organizations: Application & Skill Building. 12th Edition, January 8, 2021. McGraw-Hill, 978-1260682984.
- Mohammad, A. P. & Drolet, A. (2019). The influence of age and time horizon perspective on consumer behavior. DOI: 10.1016/j.copsyc.2018.07.008
- O'Creevy, M.F., Dibb, S., & Furnham, A. (2018). Antecedents and consequences of chronic impulsive buying: Can impulsive buying be understood as dysfunctional self-regulation? *Z Psychology & Marketing*, 35(3), pp. 175–188. <https://doi.org/10.1002/mar.21078>
- Onu, A. J. C., Akhimien, E., & Orji, M. G. (2014). Assessing the Relationship between Personality Factors and

- Consumer Buying Behavior in South-Eastern Nigeria.
https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Assessing+the+Relationship+between+Personality+Factors+and+Consumer+Buying+Behavior+in+South+Eastern+Nigeria+&btnG=
- Parsad, C., Asad, S., & Martinez, J. (2017). Sales promotion and impulsive buying behavior: Impact of discount levels and product categories. *Journal of Retailing and Consumer Services*, 34, 182-189.
<https://doi.org/10.1016/j.jretconser.2016.10.007>
- Pelau, C., Serban, D., Chinie, A.C. (2018). The influence of personality types on the impulsive buying behavior of a consumer. *Proceedings of the 12th International Conference on Business Excellence 2018*. DOI:10.2478/picbe-2018-0067, pp. 751-759, ISSN 2558-9652
- Pettigrew, S., Jongenelis, M., Quester, P., Chapman, K., & Miller, C. (2016). Factors associated with parents' attributes to unhealthy foods and beverages. *Journal of Pediatrics and Child Health*, 52(4), 449–454. <https://pubmed.ncbi.nlm.nih.gov/27145509/>
- Puska, A., Stojanović, I., Šadić, S., & Bečić, H. (2018). The influence of demographic characteristics of consumers on decisions to purchase technical products. *The European Journal of Applied Economics*. DOI: 10.5937/EJAE15-16576.
- Rachmawati, E. (2024). The role of influencer marketing, customer feedback, corporate social responsibility, and product quality on brand image and customer loyalty in the beauty and personal care market in Indonesia. *The Es Economics and Entrepreneurship*, 3(01), 128-144.
<https://doi.org/10.58812/esee.v3i01.301>
- Raposo, M. & Duarte, P. & Ferraz, M. (2013). Drivers of snack foods' impulse buying behaviour among young consumers.
https://www.researchgate.net/publication/235942333_Drivers_of_snack_foods_impulse_buying_behavior_among_young_consumers
- Reill, A. (2023). A simple way to make better decisions. Harvard Business Review. <https://hbr.org/2023/12/a-simple-way-to-make-better-decisions>
- Roviqoh, T.S., Supriati, S. (2022). The effect of price discounts on impulsive online purchase decisions. DOI: <https://doi.org/10.30871/jaba.v6i1.3295>
- Reisch, L. A., & Zhao, M. (2017). Sustainability and consumer behavior: From theory to policy. *Journal of Consumer Policy*, 40(4), 463-469. <https://doi.org/10.1007/s10603-017-9357-5>
- Samaras, A. & Galanakis, M. (2022). Type A and Type B Personality Types: An Evaluation in the Modern Organizational Psychology Scope. doi:10.17265/2159 5542/2022.12.006
- Sharma, K. (2024). Understanding Consumer Buying Behavior in Online Shopping: Exploring Transformative Trends in Digital Marketing Platforms through Innovation and Adoption for Sustainability.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4835997&utm
- Sharma, V., & Jain, S. (2015). Studying the Type A, Type B Personality Behavioral Patterns of Working Women. DOI: [10.5958/2321-5763.2015.00030.X](https://doi.org/10.5958/2321-5763.2015.00030.X)
- Slaba, M. (2020). The impact of age on the customers' buying behavior and attitude to price.
https://doi.org/10.36708/Littera_Scripta2019/2/0
- Sohn, D., & Ko, E. (2021). Planned versus impulsive buying behavior in retail environments. *Retail Management Review*, 34(3), 341-351. <https://doi.org/10.1016/j.jretman.2020.09.008>
- Syahrivar, J. (2016). Consumer behavior in Southeast Asian retail settings: Impulse buying and the store environment. *International Journal of Marketing Studies*, 8(2), 15-27.
<https://doi.org/10.5539/ijms.v8n2p15>
- Trochim, W.M., Donnelly, J., Arora, K. (2016). Research methods: The Essential Knowledge Base. 2nd Edition. Cengage. https://www.researchgate.net/publication/299437098_Research_Methods_The_Essential_Knowledge_Base
- Tufail, H.S., Humayon, A.A., Shahid, J., Murtza, G., Luqman, R., & Riaz, H. (2018). Impact of Lifestyle and Personality on Online Purchase Intentions of Internal Auditors through Attitude towards Brands. *European online Journal of Natural and Social Sciences*. 7(3). https://european-science.com/eojnss_proc/article/view/5479

- Wadera, D., & Sharma, V. (2018). Impulsive buying behavior in online fashion apparel shopping: An investigation of the influence of the internal and external factors among Indian shoppers. *South Asian Journal of Management*, 25(3),
- Wang, S.W., Kao, G. H-Y., & Ngamsiriudom, W. (2016). Consumers' attitudes of endorser credibility, brand, and intention with respect to celebrity endorsement of the airline sector. *Journal of Air Transport Management*. 60 (1). 10-17 <https://doi.org/10.1016/j.jairtraman.2016.12.007>
- Xi, H., Hong, Z., Jianshan, S., Li, X., Jiuchang, W., & Davison, R. (2016). Impulsive Purchase Behavior in Social Commerce: The Role of Social Influence. *PACIS 2016 Proceedings*. 364.
<http://aisel.aisnet.org/pacis2016/364>
- Yuvashree, K. (2021). A study on consumer buying behavior of FMCG at Reliance Supermarket.
<https://dkmcollege.in/wp-content/uploads/2022/12/K.-Yuvashree-march-2021.pdf>

Instructional supervision of the school heads in San Jose, Occidental Mindoro

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Abstract

This study aimed to determine the instructional supervision practices of school heads in San Jose, Occidental Mindoro, focusing on their profiles, leadership qualities, adherence to supervisory principles, important functions of supervision, and the problems encountered in their roles. Using a descriptive-correlational research design, the study surveyed all 70 elementary school heads in the district. The research highlights the school heads' significant educational attainment, proficiency in leadership skills, and firm adherence to instructional supervision principles, all of which contribute to their effectiveness in fostering teacher development and improving teaching quality. The findings reveal that most school heads are in mid-career stages, with 6 to 10 years of experience, and face challenges such as limited resources and a demanding school calendar. While district-level training is most accessible, regional and national professional development programs are hindered by logistical issues. Despite these challenges, school heads excel in collaborative supervision, emphasizing teacher welfare, constructive feedback, and community engagement. The study concludes that ongoing professional development, coupled with tailored training programs, is essential for enhancing the instructional supervision capabilities of school heads, ultimately improving educational outcomes. Thus, an action plan was presented and serves as a road map to enhance instructional supervision and ensure quality educational leadership for improved student outcomes.

Keywords: instructional supervision, function of supervision, school heads' leadership, qualities of school heads, improvement of teaching

Instructional supervision of the school heads in San Jose, Occidental Mindoro

1. Introduction

The primary function of the school head is to exert educational leadership to improve the quality of life for everyone within the school. They must be viewed by the community, the faculty, and the pupils as primarily accountable for achieving this function (Tedla & Kilango, 2022). The school leader must be able to devote time and energy to that duty without feeling drained by other urgent responsibilities to complete it successfully. The school head can make a significant difference when attuned to his functions. The principal is one of the most crucial elements of high-achieving schools. Stressing the importance of principals in promoting school improvement (Ozcan, 2021). They underscore how their engagement in self-reflection and leadership practices, including monitoring students' progress and providing feedback, directly influences student achievement.

The head of the school is unable to avoid making a difference in some way. The absence of the behavior above can mean a regressive situation, directionless, and sometimes counterproductive. In other words, negligence could be interpreted as failing to fulfill the primary responsibility of educational leadership. A school head fosters a pleasant school climate by setting high standards for all students and faculty members and fostering a strong sense of academic mission. They also encourage and motivate school personnel to maximize instruction and classroom management effectiveness. The school head becomes involved with and knowledgeable about community services and resources that may reinforce and extend the pupils' academic freedom (Martin, 2018). Instructional supervision allows teachers to improve their ability to support students' academic achievement. Because the benefits of an effective instructional supervision process may impact student performance improvement and, eventually, teacher professional development, the process is crucial. Coaching, like other forms of instructional supervision, can help teachers enhance their skills, directly contributing to better student performance, resonating with Sergiovanni and Starratt's assertion on the role of supervision in professional growth and student success (Kraft et al., 2018). In like manner, the school head develops a realistic and objective system of accountability for learning with the staff. He also works with the staff to develop and implement the staff evaluation. Providing students with leadership opportunities to assist them in creating a social structure and a meaningful and rational student government that fosters a strong sense of identity.

The Philippine Professional Standards for Teachers (PPST) is the framework to guide teachers' professional growth, as stipulated in DepEd Order No. 42, s. 2017. It emphasizes seven domains of effective teaching, including pedagogy, learner diversity, curriculum, assessment, and professional development. Instructional supervision aligns with the PPST by supporting teachers to meet these standards, ensuring continuous improvement in teaching and learning outcomes. Moreover, DepEd Memorandum No. 082, s. 2020, or the "Adoption of the Basic Education Learning Continuity Plan (BE-LCP) for School Year 2020-2021 in Light of the COVID-19 Public Health Emergency," guides delivering quality education amid disruptions caused by the pandemic. Its focus on maintaining the effectiveness of teaching and learning across a range of modalities necessitates strong instructional leadership and supervision, which is how it relates to instructional supervision. Classroom observations using various methods and time-on-task metrics, such as how much time teachers spend actively teaching and how engaged students are throughout classes, are important indications of good teaching techniques, as demonstrated by the RISE Programme research (2023). They employ various instructional management techniques to improve results while carrying out their responsibilities as school directors.

The role of school heads in exerting educational leadership is critical to the success and improvement of schools. However, many school heads face significant challenges in effectively fulfilling their functions due to competing tasks, inadequate instructional supervision, and the absence of structured accountability systems. These challenges may hinder their ability to create a positive school climate, foster teacher development, and improve student outcomes. To improve the relevance and quality of education in the Philippines and make sure that students

are ready for the demands of the modern world while fostering a sense of national identity and responsibility, school leaders must mentor and assist teachers in implementing creative and successful teaching strategies that are in line with the MATATAG Agenda (Department of Education, 2023). This study addresses how school heads effectively exercise their instructional leadership roles and overcome the challenges that impact their ability to foster teacher development, improve student achievement, and enhance the overall quality of education.

Statement of the Problem - This study aimed to determine the instructional supervision of the school heads in San Jose, Occidental Mindoro. Specifically, this study sought to answer the following questions: (1) What is the profile of the respondents in terms of highest educational attainment, present position, latest performance rating, length of service as a school head, and in-service training attended? (2) What is the extent of the qualities of the school head? (3) What is the level of adherence to the principles of supervision? (3) What is the level of importance of the function of instructional supervision as assessed by the respondents in terms of professional leadership, improvement of teaching, aiding teacher growth, supervisory task, and guiding staff and community relations? (5) What level of instructional supervision problems were encountered by the respondents? (6) What is the level of proficiency in instructional supervision of the school heads in terms of development supervision, differentiated supervision, clinical supervision, informal supervision, formal supervision, direct assistance, and collaborative supervision? (7) Is the level of proficiency in instructional supervision of the school heads significantly related to their profile, qualities as a school head, adherence to the principles of supervision, function of supervision, and problems encountered along supervision? (8) What action plan may be proposed to improve the school head's instructional supervision based on the findings of the study?

Significance of the Study - This study is essential to the following sectors and groups of people: first, school heads. This would provide school heads with a clear view of the importance of supervision and problems encountered so that possible actions could be taken to improve the conduct of supervision among teachers. Second, to teachers. This would provide insights and information about improving instruction through supervision. Pupils. The findings help the pupils identify their strengths and weaknesses so that proper interventions can be implemented to improve their learning. Parents. These findings help them know their essential roles in their children's education. Schools. This would support schools in adopting supervision practices that lead to consistent teaching and learning improvements. Communities. A better-informed community member results in a better relationship. Therefore, cooperation and support prevail. For future researchers, these findings motivate others to conduct a similar survey using other variables to help improve supervisory practices. DepEd Occidental Mindoro. The findings provide evidence to design or revise policies related to instructional supervision, emphasizing developmental and collaborative supervision approaches.

Scope and Delimitation of the Study - This study focused on the instructional supervision of the public elementary school heads in San Jose, Occidental Mindoro, during the A.Y. 2024-2025. It dealt with the respondents' circumstances, including age, gender, civil status, highest educational attainment, latest performance rating, present position, length of experience as school heads, and seminars attended relative to their functions. This study also revolved around the extent to which respondents subscribe to the traits of skilled school heads, the extent to which they adhere to the principles of supervision, the importance of the significant purposes of supervision, the extent to which they are proficient in the kinds of supervision, and the problems encountered while improving instruction through supervision. The study did not include other educational professionals who would have offered more comprehensive perspectives, such as district supervisors, instructors, or administrators from private schools. Additionally, the results were based on respondents' self-reported data, which could contain errors or biases. Policies, resources, socioeconomic circumstances, and all external elements that impact instructional supervision were not thoroughly investigated.

2. Methodology

Research Design - This study employed a descriptive-correlational research design. Descriptive research was used to describe the profile of the respondents, to determine the level of qualities of school heads, their adherence

to the principle of supervision function, supervision problems encountered, and the level of proficiency in instructional supervision. This method enabled the researcher to gather data and pertinent information about the group's present and existing conditions. This type of research plays a crucial role in providing valuable information to researchers who aim to study current trends and conditions. Moreover, a correlation design was used to determine if there is a significant relationship among the identified variables.

Respondents of the Study - The respondents of this study were the 70 elementary school heads from all public schools in San Jose, Occidental Mindoro. This study used complete enumeration, and they were all based on their crucial role in overseeing the implementation of educational policies and practices within their respective schools. Their insights and experiences provide valuable data on the research subject, contributing to a comprehensive understanding of the factors investigated.

Research Instrument - Before administering the researcher-made questionnaire, the researcher conducted test validation procedures. The researcher-made instrument was presented to subject matter experts to evaluate its validity. This study employed expert validity to ensure the survey items accurately reflect the concept under investigation. The experts reviewed the instrument for its relevance, clarity, and suitability to the study's context. The researcher consulted experts from the Divine Word College of San Jose to assess the accuracy and relevance of the questionnaire items. All necessary suggestions for instrument improvement were considered. With the assistance and support of experts, a researcher-made questionnaire was validated, ensuring its accuracy. The survey questionnaire underwent reliability testing before its use. Twenty private school heads in Occidental Mindoro were the subjects of this study. They answered the survey questionnaire via Google Forms, which yielded very high reliability and high-reliability ratings, proving the validity and applicability of the research tool. The table below displays the findings. The Spearman-Brown Coefficient was used to assess the questionnaire's item length consistency.

Table 1
Reliability Analysis Results

Indicators	Number of Items	Reliability Coefficients	Interpretation
Qualities of the School Head	6	0.809*	High Reliability
Adherence to Principles of Supervision	7	0.699*	High Reliability
Function of Instructional Supervision	35	0.951*	Very High Reliability
Problems Encountered on Instructional Supervision	7	0.882	High Reliability
Proficiency in Instructional Supervision	42	0.961	Very High Reliability

The analysis results revealed a generally high level of reliability, with coefficients from 0.699 to 0.961. Thus, the instrument was ready for administration to the final group of respondents.

Data Gathering Procedure - After the researcher-made instrument was validated, the researcher provided sufficient copies to accommodate all the respondents. Concurrently, the researchers prepared a letter of request to the school district supervisor. The researcher delivered the letter of request and copies to the school district supervisor. During the delivery, the researcher explained the details to assist them in completing the questionnaires. The questionnaires or data were gathered and answered for seven days. The results of the retrieved questionnaire copies were tabulated and treated correctly. Subsequently, the data were analyzed and interpreted using the most appropriate statistical procedures.

Statistical Treatment of the Data - To treat the data, this study used descriptive statistics such as frequency, percent distribution, and weighted mean to determine the profile of the respondents, qualities of the school head, respondents' adherence to the principle of supervision, the function of supervision, and problems encountered along supervision. Moreover, WarpPLS ver. 7.0 was used to determine if the identified variables were significant. For the interpretation of the response to challenges in business, both internal and external, and the beneficiaries' satisfaction, a 5-point Likert-type scale was used.

Ethical Considerations - The purpose of this study was discussed personally by the researcher and their

respondents. Moreover, the researcher gave informed consent to their participants and got their approval before the data-gathering procedure. Also, this study protected the respondents' personal information. Lastly, to properly cite the different studies and literature used in this study, the researcher followed the APA format, 7th edition.

3. Results and Discussions

As reflected in Table 2, 40 % of the highest category of school heads hold a Master of Education (MAEd) degree. The low percentage of school leaders obtaining or seeking doctoral degrees (Ed.D./Ph.D.) or CARMA (Candidate for a Master's Degree) corresponds with research indicating numerous obstacles that hinder educators from pursuing doctoral study. School leaders hold a master's degree, but pursuing doctoral degrees is hindered by time constraints, financial challenges, insufficient institutional support, and varying levels of intrinsic motivation. Addressing these barriers is essential to encourage more educators to engage in doctoral studies, thereby enhancing leadership within the educational sector (Burton, 2020; Rbarks, 2023; Greene et al., 2020). Moreover, the Table reveals that the most frequently held position among the respondents is Head Teacher III, with 18 individuals, accounting for 25.7% of the sample.

Table 2
Distribution of School Heads' Profile (n=70)

Highest Educational Attainment	Frequency	Percent
Bachelor's Degree	17	24.3
With MA units	2	2.9
CARMA	9	12.9
MAEd Graduate	28	40.0
With Ph.D. units	1	1.4
CARDO	3	4.3
Ed.D./Ph.D. Graduate	9	12.9
Others	1	1.4
Total	70	100
Current Position		
Head Teacher I	17	24.3
Head Teacher II	14	20.0
Head Teacher III	18	25.7
Principal I	5	7.1
Principal II	5	7.1
Principal III	9	12.9
Principal IV	2	2.9
Total	70	100
Current Performance Rating		
Outstanding	55	78.6
Very Satisfactory	14	20.0
Satisfactory	1	1.4
Total	70	100
Length of Experience as a School Head		
1 – 5	11	15.7
6 – 10	34	48.6
11 – 15	10	14.3
16 – 20	3	4.3
21 – 25	1	1.4
26 – 30	5	7.1
31 and above	6	8.6
Total	70	100
In-Service Training Attended		Percent
District	23	32.9
School	5	7.1
Division	7	10.0
National	9	12.9
Regional	4	5.7
International	16	22.9
Not Indicated	6	8.6
Total	70	100

In contrast, the least represented position is Principal IV, with only 2 individuals, making up 2.9% of the total.

This highlights a notable disparity in the distribution of positions, with Head Teacher III being the most common and Principal IV being the least common among the respondents. The observed imbalance in the distribution of positions, with Head Teacher III roles being the most prevalent and Principal IV roles the least, may reflect the hierarchical structure within educational institutions. Typically, more positions are available at the head teacher level compared to higher administrative roles like Principal IV, leading to more individuals occupying these positions. This structure aligns with findings from the National Center for Education Statistics, which indicate that leadership roles in education often have a tiered distribution, with fewer positions available at higher levels (NCES, 2023). In addition to the distribution of school heads' latest performance ratings based on their IPCRF. The performance ratings of the 70 individuals reveal that 78.6% achieved an outstanding rating, marking it as the highest category in frequency and proportion. Conversely, the satisfactory rating is the lowest, with only one individual, 1.4%, receiving this evaluation. This distribution underscores a trend of high performance among the majority, suggesting effective instructional supervision practices in fostering excellence. In the Philippine context, the Department of Education's competency framework positions instructional supervision as a key criterion for evaluating school heads (Cabigao, 2019). Adequate supervision in mentoring, monitoring, and instructional planning emerged as strong predictors of high-performance ratings. Complementing this, it was highlighted that teachers' positive perceptions of a school head's supervisory role enhance morale and teaching effectiveness, further elevating the leader's performance assessment (Mette et al., 2017).

Moreover, the distribution of school heads' length of experience as a school head indicates that the distribution of school heads' length of experience reveals a predominance of leaders with relatively short tenures. 48.6% have 6 to 10 years of experience; 15.7% have 1 to 5 years of experience. 1.4% is 21 to 25 years. Overall, the data highlight that most school heads are relatively new to their roles, which may affect the depth of instructional leadership expertise in their schools. The predominance of school heads with short tenures (1–10 years) aligns with studies highlighting the link between leadership experience and instructional expertise. It emphasizes that less experienced leaders may lack the depth of skills needed for adequate instructional supervision (Leithwood et al., 2020). Additionally, seasoned school heads demonstrate stronger mastery in instructional supervision, including classroom observations, feedback, and mentoring, fostering a culture of improvement and accountability (Montales & Digo, 2024). They establish systems for reflective practice and professional dialogue, enhancing instructional outcomes.

Lastly, regarding the types of training and seminars attended by school heads, the data indicate that school heads predominantly favor district and international in-service training programs, with 32.9% and 22.9% participation rates, respectively. In contrast, regional and school-based training programs are less favored, with participation rates of 5.7% and 7.1%, respectively. Supporting this observation, a study assessing school-based in-service training (INSET) for school heads and teachers in Southern Leyte, Philippines, found that well-designed school-based INSET programs, tailored to the specific contexts of teachers' work, significantly enhance their pedagogical skills and teaching techniques. The study concluded that such programs are crucial for making teaching-learning more meaningful for students (Mantilla et al., 2024). Additionally, research on the leadership practices of school heads in the Philippines revealed that effective leadership, encompassing planning, organizing, controlling, commanding, and coordinating, is essential for improving teacher performance. The study highlighted that while school heads' leadership practices are very high, there is no significant relationship between these practices and teachers' performance, suggesting that other factors may also influence teacher effectiveness (Aquino et al., 2021). These findings underscore the importance of providing school heads with diverse and contextually relevant training opportunities to enhance their leadership capabilities and improve educational outcomes. The Philippines' Department of Education (DepEd) prioritizes localized and centralized trainings for school heads and teachers, aligning with NEAP's professional development frameworks to address specific needs and national educational goals.

Table 3 reveals that school heads demonstrated exceptional qualities across various aspects, with an overall mean of 4.73. These findings emphasize the robust leadership qualities of school heads, which align with the principles of transformational leadership. Among the presented indicators, the ability to handle feedback gracefully

and professionally received the highest weighted mean of 4.83, underscoring their openness to constructive criticism and commitment to self-improvement. Conversely, viewing problems as temporary and surmountable obtained the lowest weighted mean of 4.57, though it still reflects a very high extent of resilience and problem-solving capabilities. Overall, the school heads exhibited these traits to a very high extent, with an overall weighted mean of 4.73. A systematic review of international literature indicates that transformational school leadership positively impacts school staff and culture, leading to increased motivation and a more positive school environment. Additionally, research has shown that transformational leadership enhances organizational resilience by fostering collective teacher efficacy, strengthening the school's ability to adapt and thrive amid challenges (Zadok et al., 2024). These studies support the notion that the qualities exhibited by the school heads, as reflected in Table 3, are integral to effective leadership and organizational resilience in educational contexts.

Table 3*Mean Extent of the Qualities of School Head*

Item No.	Qualities of the School Head	Weighted Mean	Interpretation
1	As a school head, I could see things from other people's perspectives	4.79	Very High Extent
2	learn from every experience	4.74	Very High Extent
3	acquire focus thinking	4.71	Very High Extent
4	view problems as temporary and surmountable	4.57	Very High Extent
5	handle feedback with grace and professionalism	4.83	Very High Extent
6	focus on continually improving my subordinates	4.76	Very High Extent
Composite Mean		4.73	Very High Extent

Scale: 4.50-5.00—Very High Extent; 3.50-4.49—High Extent; 2.50-3.49—Moderate Extent; 1.50-2.49—Low Extent; 1.00-1.49—Very Low Extent

Table 4*Mean Level of Adherence to the Principles of Instructional Supervision*

Item No.	Adherence to the Principles of Instructional Supervision	Weighted Mean	Interpretation
1	As a school head, I am constructive and creative in promoting a sense of community within the school	4.81	Very High Level
2	am democratic in my communication style, being open and transparent with all members of the school community	4.84	Very High Level
3	rely upon the collective resources of the group rather than upon the efforts of the supervisor alone.	4.73	Very High Level
4	based upon professional rather than personal relationships	4.73	Very High Level
5	am ultimately concerned with supervision to make more nearly possible the attainment of children's approved educational goals	4.79	Very High Level
6	promote the growth of teachers by developing their special strengths	4.83	Very High Level
7	am concerned with the personal welfare of teachers and with good intra-staff relations	4.86	Very High Level
Composite Mean		4.80	Very High Level

Scale: 4.50-5.00—Very High Level; 3.50-4.49—High Level; 2.50-3.49—Moderate Level; 1.50-2.49—Low Level; 1.00-1.49—Very Low Level

Table 4 reveals the level of adherence to the principles of instructional supervision. The results of these data indicate a school head who exhibits a very high level of adherence to the principles of instructional supervision, with a strong emphasis on fostering positive relationships and teacher welfare. The highest-rated statement, "I am concerned with the personal welfare of teachers and with good intra-staff relations," underscores the leader's priority of creating a supportive and harmonious work environment at 4.86. On the other hand, the lowest-rated items rely upon the group's collective resources rather than the supervisor's efforts alone. They are based upon professional rather than personal relationships with a weighted mean of 4.73, though still high, indicating areas where the leader may place slightly less emphasis. The overall mean rating of 4.80, indicating a very high level of adherence to instructional supervision principles, reflects a school culture rooted in professionalism, mutual respect, and a shared commitment to educational excellence (Sterrett, 2020).

Table 5 reveals the mean level of importance of instructional supervision function in terms of professional

leadership and improvement of teaching. As part of professional leadership, instructional supervision is pivotal in promoting collaboration, professional growth, and instructional focus within schools. The composite mean score of 4.78, indicating a “very high level” of professional leadership practices, aligns with the idea that school heads who focus on instructional leadership build a collaborative culture, which is crucial for enhancing teaching practices and improving student achievement (Mora-Ruano et al., 2021; Gading, 2024). In addition, the statement emphasizes the importance of professional growth through reflective dialogues and continuous learning opportunities. By supporting teachers in these areas, school heads contribute to individual professional development and overall institutional growth (Ohayon & Albulescu, 2022). This collective focus on professional leadership, collaboration, and growth shows how school heads, through effective instructional leadership, can positively impact both the teachers' development and the school's educational outcomes.

Moreover, in terms of improvement of teaching, the findings reveal that the school heads' actions are highly impactful, with the highest score recorded for assigning teachers appropriately to ensure a balance of skills and experience across the curriculum, scoring 4.91, representing a very high level. In contrast, the lowest mean score, although still indicating a very high extent of engagement, was for holding conferences and trainings using audio-visual equipment, with a score of 4.53.

Table 5

Mean level of Importance of Instructional Supervision Function in terms of Professional Leadership and Improvement of Teaching

Professional Leadership		Weighted Mean	Interpretation
No.	As a school head, I		
1	conduct teachers' regular meetings	4.91	Very High Level
2	offer workshops, seminars, and informal study groups	4.73	Very High Level
3	visit experimental centers, educational clinics, and social agencies	4.53	Very High Level
4	organize continuous teachers' activity.	4.77	Very High Level
5	provide continuous exchange of professional ideas and the free flow of professional and technical information on matters both of broader educational policy and more specific classroom application	4.81	Very High Level
6	establish an educational environment in the school, which is democratic, liberal, receptive to new ideas	4.84	Very High Level
7	observe teachers' focus on their instructional practices, not their personality or style	4.89	Very High Level
Composite Mean		4.78	Very High Level
Improvement of Teaching		Weighted Mean	Interpretation
No.	As a school head, I		
1	assign teachers correctly to ensure a balance of skills and experience across the curriculum	4.91	Very High Level
2	observe teachers at work and issue classroom observation tools	4.73	Very High Level
3	hold teachers' conferences and trainings on using audio-visual equipment and materials	4.53	Very High Level
4	conduct demonstration teaching with the use of modern techniques, strategies, and approaches	4.77	Very High Level
5	systematically use diagnostic testing programs	4.81	Very High Level
6	organize special classes for pupils who need or can benefit from special instruction.	4.84	Very High Level
7	create a collaborative environment where teachers can share ideas, learn from each other, and feel empowered to take risks.	4.89	Very High Level
Composite Mean		4.78	Very High Level

Scale: 4.50-5.00—Very High Level; 3.50- 4.49- High Level; 2.50-3.49- Moderate Level; 1.50-2.49 –Low Level; 1.00-1.49—Very Low Level

The composite mean of 4.78 further supports the overall decisive leadership actions the school head took to enhance teaching quality. The finding that shows a positive impact of transformational school leadership is evident in staff motivation and school culture, noting that such leadership fosters collaboration and enhances educational outcomes. The significance of the instructional supervision function in supporting teacher development is seen in Table 6. With the highest weighted mean of 4.90, which is defined as "very high extent," for offering in-service training, the data demonstrate a significant commitment on the part of school leaders to support teacher growth through instructional supervision. The focus on encouraging teachers to use their free time for intellectual and

artistic development is seen from the lowest mean, 4.71, which is still within the "very high extent" category. The composite mean of 4.82 indicates that the school heads' methods for encouraging teacher development are generally very successful. Teachers' professional development is greatly aided by school leadership. It was discovered that a composite mean score across a range of leadership behaviors demonstrated a high degree of effectiveness, indicating a strong association with teachers' evaluations of leadership traits, including empowerment and collaboration. Building relationships, trust, and working together are crucial for increasing teachers' collective efficacy (Voelkel et al., 2024; Lin et al., 2022).

Table 6

Mean Level of Importance of Instructional Supervision Function in Terms of Aiding Teacher Growth and Supervisory Task

Aiding Teacher Growth		Weighted Mean	Interpretation
No.	As a school head, I		
1	am aware of the special interests, plans, and ambitions of teachers and professional growth	4.86	Very High Level
2	assign promising or talented teachers to special responsibilities in the direction of the school program	4.84	Very High Level
3	encourage teachers to use their leisure time for study and the cultivation of intellectual and aesthetic interests	4.71	Very High Level
4	conduct in-service trainings	4.90	Very High Level
5	observe teachers at work regularly	4.80	Very High Level
6	build strong group morale, and to unify teachers into an effective term	4.80	Very High Level
7	create a collaborative environment where teachers can share ideas, learn from each other, and feel empowered to take risks	4.83	Very High Level
Composite Mean		4.82	Very High Level
Supervisory Task			
No.	initiate improvements in teaching techniques and methods	4.86	Very High Level
1	ascertain that the curriculum fits the needs of pupils	4.84	Very High Level
2	direct teachers to motivate pupils to learn at their optimal levels	4.71	Very High Level
3	provide teachers the opportunity to individualize programs	4.90	Very High Level
4	direct teachers to coordinate and articulate the subject matter taught at each grade level	4.80	Very High Level
5	assist teachers in diagnosing pupils' learning difficulties and plan effective remedial instruction	4.80	Very High Level
6	address performance issues in a timely and appropriate manner	4.83	Very High Level
Composite Mean		4.82	Very High Level
Guiding Staff and Community Relations			
No.	As a school head, I		
1	serve as a model school staff	4.89	Very High Level
2	recognize and reward merit	4.90	Very High Level
3	help teachers with their professional problems and be responsive to their personal needs	4.90	Very High Level
4	support and strengthen the parent and teacher partnership and extend the school program to the community	4.86	Very High Level
5	encourage teachers to assume positions of civic responsibilities	4.90	Very High Level
6	protect teachers from unreasonable demands by the public on their time and energy and from unwarranted criticisms	4.93	Very High Level
7	work to make sure the community understands our school programs and can help us succeed	4.91	Very High Level
Composite Mean		4.90	Very High Level

Scale: 4.50-5.00—Very High Level; 3.50-4.49—High Level; 2.50-3.49—Moderate Level; 1.50-2.49—Low Level; 1.00-1.49—Very Low Level

The significance of instructional supervision functions to supervisory responsibilities is displayed in the table above. The data show that giving teachers the chance to customize programs received the highest weighted mean of 4.90, indicating the mean level of importance of instructional oversight responsibilities. The duty of guiding teachers to encourage pupils to learn at their best levels received the lowest weighted mean of 4.71. School heads prioritize instructional supervision responsibilities, as evidenced by the total composite mean of 4.82 for all supervisory tasks. The results of recent studies show that proactive school administrators who provide the required resources, provide feedback, and encourage teacher growth, leading to higher teacher satisfaction and performance,

further validate this high regard for instructional oversight. The importance of instructional supervision is highlighted by the link between enhanced teaching effectiveness and school principals' leadership abilities. It has been demonstrated that school administrators' supervision and evaluation of instructors favorably impact students' academic achievement (Go & Eslabon, 2023).

Moreover, in terms of guiding staff and community relations, the school head demonstrates exemplary leadership in guiding staff and fostering community relations, achieving a composite mean of 4.90, "very high level". The highest-rated indicator, 4.93, reflects a strong commitment to protecting teachers from unreasonable demands and criticisms, ensuring their well-being. The lowest-rated indicator, 4.86, though still very high, suggests a minor opportunity to enhance parent-teacher partnerships and community engagement further. Overall, the school head supports staff, recognizes merit, and builds strong school-community relationships. Leadership practices such as sharing leadership roles, promoting social interaction, and involving teachers in decision-making processes positively influence teachers' organizational commitment. This collaborative approach supports teachers and contributes to a more cohesive and motivated teaching staff. Moreover, positive school leadership practices are crucial in improving teacher well-being. When school leaders actively support their teachers and create a positive working environment, it enhances educators' job satisfaction and overall well-being (Cann et al., 2021).

Table 7

Extent of Instructional Supervision Problems Encountered by the Respondents

Problems Encountered		Weighted Mean	Interpretation
No.	As a school head, I		
1	deeply understand the challenge of balancing a busy school calendar while making sure teachers have enough time to supervise students	4.60	Very High Extent
2	am aware of the challenges posed by teachers' negative attitudes	4.20	High Extent
3	recognize the difficulty of motivating teachers to embrace new teaching methods and innovations	4.10	High Extent
4	constantly face the challenge of insufficient modern equipment and facilities	4.27	High Extent
5	am concerned about the over-reliance on classroom visits as the sole method of instructional supervision	4.09	High Extent
6	engaged too much in the office and paperwork	4.43	High Extent
7	fail to conduct a pre-post conference before and after observing teachers at work	3.90	High Extent
Composite Mean		4.23	High Extent

Scale: 4.50-5.00- Very High Extent; 3.50- 4.49- High Extent; 2.50-3.49- Moderate Extent; 1.50-2.49 –Low Extent; 1.00-1.49- Very Low Extent

Table 7 shows the level of instructional supervision problems encountered by the respondents. The data provide an insightful interpretation of the problems encountered by school heads in the conduct of instructional supervision, balancing a busy school calendar while ensuring teachers have sufficient time for student supervision stands out as the most pressing issue with the highest weighted mean of 4.60, interpreted as a "very high extent," the issue of failing to conduct pre- and post-conferences before and after observing teachers at work received the lowest weighted mean of 3.90. However, it is still classified as a "high extent" problem. The data reveal that school heads face a substantial range of challenges, with an overall weighted mean of 4.23, interpreted as a "high extent." These findings emphasize the need to prioritize interventions, particularly those that address time management and scheduling difficulties, as they represent the most significant barriers to adequate instructional supervision. Similarly, Kenya found that 88.5% of school principals had teaching duties alongside administrative responsibilities, consuming most of their time and impeding adequate instructional supervision (William & Ligembe, 2022).

Table 8 shows the mean level of proficiency for the school heads' instructional supervision in terms of developmental supervision. The weighted mean of 4.90 reflects their perceptions and thoughts regarding difficulties. This indicates that school heads are proficient in constructively discussing challenges and outlining conditions and consequences for improvement, as evidenced by the weighted mean of 4.79. Although slightly lower, it still reflects a very high level of proficiency. The overall composite value of 4.84 reinforces the high

standard of developmental supervision among school heads. The teachers' quality was greatly influenced by school heads' supervision and performance evaluation skills (Go & Eslabon, 2023).

Furthermore, there was a substantial correlation between teachers' innovative work behavior and their job competency. This suggests that school heads who effectively supervise education create an environment that supports teachers' creativity and competence. These findings are consistent with the data, which showed that school heads had a composite mean of 4.84, indicating a high degree of competency in developmental supervision. This high skill level probably helps teachers perform better and act more creatively, eventually improving student learning results.

Table 8

Mean Level of Proficiency of the School Heads' Instructional Supervision in Terms of Developmental Supervision and Differentiated Supervision.

Developmental Supervision		Weighted Mean	Interpretation
No.	As a school head, I		
1	listen by saying nothing, perhaps nodding my head to indicate attention, and waiting for the teacher to finish talking	4.87	Very High Level
2	allow the teacher to talk at greater length about other factors that may be part of the problem	4.86	Very High Level
3	Offer my perceptions and thoughts about the complex matters	4.90	Very High Level
4	demonstrate by physically showing the teacher how she might act	4.81	Very High Level
5	solve the problem by initiating the discussion with statements aimed	4.81	Very High Level
6	reinforce by delineating the conditions and consequences for teacher improvement	4.79	Very High Level
7	recognize and celebrate teachers' achievements to boost morale and motivation	4.84	Very High Level
Composite Mean		4.84	Very High Level
Differentiated Supervision			
No.	As a school head, I		
1	allow teachers to choose the supervisory option that is appropriate to them	4.74	Very High Level
2	require a hands-on involvement by both the supervisor and the teacher	4.84	Very High Level
3	re-channel my attention and efforts to my other critical roles in school	4.80	Very High Level
4	promote a more agreeable school atmosphere	4.87	Very High Level
5	encourage professional exchange and communication	4.86	Very High Level
6	promote increased motivation in attaining instructional goals	4.87	Very High Level
7	provide a better response to the individual needs of teachers	4.83	Very High Level
Composite Mean		4.83	Very High Level

Scale: 4.50-5.00- Very High Level; 3.50-4.49-High Level; 2.50-3.49- Moderate Level; 1.50-2.49 –Low Level; 1.00-1.49- Very low level

Furthermore, in terms of differentiated supervision, the highest weighted mean score of 4.87, which is considered a "very high level," was noted for both promoting a more agreeable school atmosphere and increasing motivation in attaining instructional goals. These results demonstrate that school administrators excel in fostering a supportive environment and inspiring teachers to achieve their objectives. To allow teachers to choose the supervisory option that is appropriate to them, the lowest weighted mean score of 4.74, which is also considered a "very high level," was noted. This implies that there is still opportunity for development in terms of giving teachers more autonomy over their monitoring. Classified as a "very high level," the total composite mean of 4.83 indicates a consistently high level of skill in instructional supervision using varied techniques. The results are consistent with previous studies on educational leadership and differentiated supervision. Highlights how to use diversified supervisory strategies gives teachers some control over their professional development decisions while allowing leaders to concentrate their time and efforts on those who need help the most (McGhee, & Stark, 2021).

Table 9*Mean Level of Proficiency of the School Heads' Instructional Supervision in Terms of Clinical Supervision and Informal Supervisor*

Clinical Supervision		Weighted Mean	Interpretation
No.	As a school head, I		
1	see to it that teachers are capable of analyzing their teaching performance	4.77	Very High Level
2	provide input on ways to improve their teaching	4.90	Very High Level
3	provide feedback to improve	4.83	Very High Level
4	guide the instructional strategies of the teacher	4.84	Very High Level
5	encourage teachers to cooperate toward achieving common objectives	4.80	Very High Level
6	influence teaching behavior to a greater degree	4.77	Very High Level
7	allow for objective feedback which leads to improved results	4.86	Very High Level
Composite Mean		4.82	Very High Level
Informal Supervision			
No.	As a school head, I		
1	welcome unplanned conversations where two professionals share insights and experiences related to their work	4.89	Very High Level
2	hold causal encounters that occur between supervisors and teachers and are characterized by frequent informal visits to teachers' classrooms, conversations with teachers about their work, and other informal activities	4.83	Very High Level
3	assist department heads in motivating teachers, monitoring instruction and keeping them informed about instruction in the school	4.86	Very High Level
4	encourage informal conversations where two professionals share insights and experiences related to their work	4.83	Very High Level
5	give positive feedback to teachers	4.86	Very High Level
6	pay attention to non-verbal cues to understand the employee's emotions and reactions	4.79	Very High Level
7	use "I" statements to express my perspective without sounding accusatory	4.72	Very High Level
Composite Mean		4.83	Very High Level

Scale: 4.50-5.00- Very High Level; 3.50-4.49-High Level; 2.50-3.49- Moderate Level; 1.50-2.49 –Low Level; 1.00-1.49- Very Low Level

Table 9 shows the level of proficiency of the school heads' instructional supervision in terms of clinical and supervisory supervision. The data highlight the mean level of proficiency of school heads' instructional supervision in terms of clinical supervision, indicating a consistently strong performance in all areas. The highest proficiency observed in the area provides input on improving their teaching with a weighted mean of 4.90, interpreted as a very high level. The areas where teachers can analyze their teaching performance and influence teaching behavior to a greater extent exhibit the lowest proficiency, with a weighted mean of 4.77, which is still considered a very high level. The composite mean of 4.82 reflects a very high overall proficiency in clinical supervision. This shows that school heads consistently demonstrate high proficiency levels in clinical supervision, effectively supervising, guiding, and supporting instructional practices, ensuring positive outcomes in teaching performance. School heads highly skilled in clinical supervision positively influence teachers' teaching proficiency and students' mastery learning performance. The study concludes that proficient clinical supervision by school heads leads to improved instructional practices and enhanced student outcomes (Dagpin, 2022). This correlation underscores the critical role of school heads in providing adequate clinical supervision to elevate teaching quality and student achievement.

The school heads' proficiency in informal supervision shows a composite mean of 4.83, highlighting their openness to spontaneous professional interactions and emphasizing their importance in improving instructional quality (Rizada, 2024). The highest-rated item, "welcoming unplanned conversations," with a score of 4.89, underscores its importance as a key aspect of informal supervision. This practice fosters the sharing of insights and experiences between professionals, creating opportunities for reflection, mutual learning, and professional growth (Pylväs et al., 2022). The lowest-rated aspect, "using 'I' statements to express perspectives," with a score of 4.72, while still very high, indicates a slight area for improvement in non-confrontational communication. This finding aligns with a study that emphasizes the value of "I" statements in reducing perceptions of hostility, fostering

trust, and improving relationships. Focusing on the speaker's feelings and experiences, rather than assigning blame, "I" statements create a more constructive and collaborative communication environment crucial for effective leadership and conflict resolution (Rogers et al., 2018).

Table 10

Mean Level of Proficiency of the School Heads' Instructional Supervision in Terms of Formal Supervision and Informal Supervision

Formal Supervision		Weighted Mean	Interpretation
No.	As a school head, I		
1	encourage individual initiative or collaborative efforts among pairs or teams of teachers working together to solve problems	4.86	Very High Level
2	support collaborative projects that allow teachers to share best practices	4.91	Very High Level
3	establishing relationships between cause and effects	4.89	Very High Level
4	am committed to systematically gather evidence about the nature of a particular problem	4.89	Very High Level
5	have the ability to ask questions	4.86	Very High Level
6	encourage a culture of continuous improvement and professional growth	4.89	Very High Level
7	foster open communication and a supportive environment for teachers	4.90	Very High Level
Composite Mean		4.89	Very High Level
Direct Assistance			
No.	As a school head, I		
1	direct assistance to teachers as it continuously focuses on the improvement of classroom instruction	4.86	Very High Level
2	occur when the supervisor effectively provides the practices and challenges of school-based supervision feedback for individual teachers	4.91	Very High Level
3	provide feedback to teachers and make sure they are not feeling isolated but is an essential part of a team-oriented staff	4.89	Very High Level
4	am goal-oriented and committed to providing support and fostering improvement	4.89	Very High Level
5	provide teachers with a pre-conference, observation and post-conference, as well as study the effectiveness of this method	4.86	Very High Level
6	have open communication and a supportive environment for teachers	4.89	Very High Level
7	share examples of effective teaching practices from other teachers or schools	4.90	Very High Level
Composite Mean		4.88	Very High Level
Collaborative Supervision			
1	advocate for collaborative approaches based on the 'critical friend' process	4.89	Very High Level
2	use critical friends to offer insightful feedback and support for individuals – a student, a teacher, or an administrator or to a group	4.79	Very High Level
3	a critical friend is a trusted individual who asks thought-provoking questions, shares alternative perspectives through data, and offers friendly critiques of one's work	4.77	Very High Level
4	help teachers expand their repertoire of teaching styles, exploring untapped resources within themselves	4.80	Very High Level
5	provide opportunities to refine teaching skills through immediate feedback and through experimentation with alternate strategies as a result of the informal evaluation	4.91	Very High Level
6	support teachers in implementing differentiated instruction to meet the needs of all students.	4.83	Very High Level
7	involve teachers in decision-making processes related to instruction and professional development.	4.76	Very High Level
Composite Mean		4.82	Very High Level

Scale: 4.50-5.00- Very High Level; 3.50-4.49-High Level; 2.50-3.49- Moderate Level; 1.50-2.49 –Low Level; 1.00-1.49- Very Low Level

The data reflected in Table 10 is a "very high level" of performance across all indicators of formal supervision by the school heads. Among the items evaluated, the highest-rated aspect is the support for collaborative projects that allow teachers to share best practices, with a weighted mean of 4.91. This indicates that school heads foster teacher collaboration and knowledge-sharing (Hsieh et al., 2024).. Conversely, the lowest-rated indicators, scoring 4.86, encourage individual initiative or collaborative efforts and the ability to ask questions. While these scores are still within the "very high level" category, they suggest areas for slight improvement compared to the other indicators (Go & Eslabon, 2023). The composite mean of 4.89 underscores the overall effectiveness of the school heads' supervision, demonstrating exceptional leadership and a strong commitment to promoting a collaborative

and supportive teaching environment (Rizada, 2024).

Table 10 shows that school heads demonstrate exceptional proficiency in direct assistance, with an overall composite mean of 4.88, “very high level”. The highest-rated area provides effective feedback and supervision (4.91), while improving classroom instruction and using pre-conference methods received the lowest rating (4.86). This highlights their strong commitment to supporting and enhancing teaching practices. Regular instructional supervision by school heads, through direct teacher assistance, led to improvement in lesson preparation, punctuality, and engagement in school-community relations (Ampofo et al., 2019). This aligns with the current findings, where school heads’ effective feedback and supervision practices received the highest weighted mean of 4.91, indicating a substantial positive impact on teaching practices.

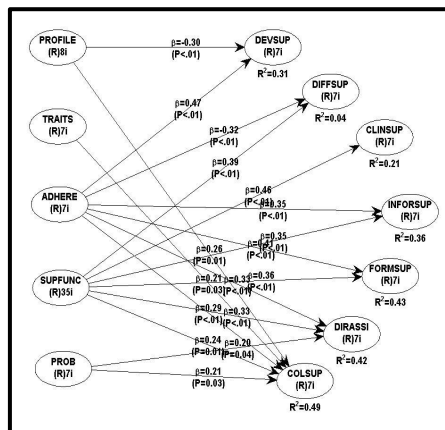


Figure 1. The Emerging Model of Level of Proficiency on Instructional Supervision

The structural equation modeling generates a new model, as presented in Figure 1. The emerging model discloses that profile affects developmental and collaborative supervision, qualities of the school head affect collaborative supervision, and direct assistance contributes to these effects. Meanwhile, adherence to supervision principles reveals a connection to the level of the school heads’ proficiency in instructional supervision, except in clinical supervision. The extent of the importance of the function of instructional supervision (SUPFUNC) showed a connection to school heads’ proficiency in instructional supervision, except in developmental supervision. The combined independent variables contribute to the highest percentage of variability, 0.49, in collaborative supervision. In contrast, the lowest percentage of variability, 0.04, in differentiated supervision can be attributed to a small degree of adherence to supervision principles and the function of instructional supervision.

The abovementioned results lead to the rejection of the null hypothesis. Therefore, there is a statistically significant relationship between the variables under study. The precise estimates, statistical significance (p -values < 0.05), and meaningful relationships suggest that the variables reliably influence each other. Furthermore, considering inverse relationships and correlation among predictors provides a deeper understanding of the dynamics between the variables. Development supervision and collaborative supervision are significantly associated with the profile of school heads, highlighting the role of background and characteristics in these supervision styles. The importance of developmental supervision, which adapts to teachers’ individual needs and fosters professional growth (Gordon, 2023). The traits of school heads also revealed an effect on collaborative supervision. Leaders positively impact school staff and culture by promoting collaboration and shared leadership. This approach fosters a supportive environment for collaborative supervision (Barkman, 2015).

Adherence to supervision principles significantly affects the development and formal supervision. Structured developmental supervision models can effectively enhance supervisors’ professional growth and autonomy, and by systematically implementing these formal supervision principles, organizations can create a robust framework that supports the continuous professional development of practitioners (Milne & Reiser, 2017). Development supervision does not have a statistically significant impact on the importance of instructional supervision; other

levels of supervision play a critical role in influencing its perceived value. Supervisory functions positively and meaningfully contribute to the importance of instructional supervision. This underscores the need for educational leaders to prioritize and enhance these adequate supervisory levels to improve teaching practices and instructional outcomes. Despite its non-significant result, developmental supervision should not be overlooked but re-evaluated to identify potential gaps or alternative approaches for fostering teacher growth and instructional quality (Sun et al., 2023; McGhee & Stark, 2021). School heads' proficiency in instructional supervision and various educational outcomes, highlighting the significance of direct assistance and collaborative supervision. Emphasized was the necessity for a collaborative and trust-based approach to supervision, advocating for regular, continuous, and high-quality supervisory practices. They identified key supervisory tasks, including direct assistance and group development, essential for enhancing instructional quality (Basilio & Bueno, 2021).

Table 11 shows the action plan made by the researcher based on the important findings of this study. The action plan serves as a road map to enhance instructional supervision and ensure quality educational leadership for improved student outcomes. Instructional supervision is a crucial component of educational leadership that seeks to enhance teaching strategies and student learning results. Current research has emphasized the need for collaborative, trust-based supervision approaches in light of the evolving educational landscape. Consistent, continuous, high-quality supervision, supported by adequate funding and capacity building, is essential for effectively addressing 21st-century educational challenges (Basilio & Bueno, 2021). Giving teachers constructive criticism is another aspect of effective instructional monitoring. Principals' verbal comments during post-observation conferences, both in substance and quality, revealed that targeted and encouraging feedback can significantly improve instructional strategies (Lavigne et al., 2023). Additionally, the competence and dedication of teachers have been connected to the function of school heads in instructional monitoring. The significance of good leadership in creating a favorable learning environment by finding a significant association between school heads' supervisory practices and teachers' professional growth (Ditabla, 2023).

Table 11

Action Plan to Improve The School Head's Instructional Supervision

Strengths	Development Needs	Learning Objective	Intervention	Time Frame	Resources Needed	Persons Involved
High proficiency in handling feedback with grace and professionalism	Low involvement in decision-making related to instruction and professional development	Enhance decision-making skills related to instructional practices and professional development.	Organize leadership workshops and collaborative decision-making sessions	Every 3 months	Workshop facilitators, Training materials, Venue	School Heads, Training Facilitators
Very high level of adherence to supervision principles, particularly teacher welfare	Minimal focus on motivating teachers to use leisure time for intellectual growth	Promote a balanced approach to professional and intellectual development of teachers	Encourage programs focusing on teacher development during leisure time (e.g., book clubs, study groups)	Every 2 months	Time and space for activities, Facilitators, Materials for discussion	School Heads, Teachers, Facilitators

Strong leadership in guiding staff and fostering community relations	Limited focus on enhancing parent-teacher partnerships and community engagement	Strengthen parent-teacher relationships and community engagement	Initiate regular parent-teacher meetings, open houses, and community engagement events	Every 6 months	Event organizers, Communication tools, Parent-teacher meeting resources	School Heads, Parents, Community Leaders
High proficiency in collaborative supervision and immediate feedback	Low level of teacher involvement in decision-making regarding instructional practices	Increase teacher participation in decision-making processes regarding teaching methods	Implement regular teacher forums for collaborative decision-making in curriculum and instructional planning	Every 3 months	Meeting platforms (physical or digital), Facilitators	School Heads, Teachers
High importance placed on conducting in-service training	Limited focus on 'visiting experimental centers, educational clinics, and social agencies	Promote the value of external learning experiences like visits to experimental centers or agencies	Organize field trips or virtual tours to educational clinics and experimental centers for professional development	Every 4 months	Coordination with external centers, Transportation (for physical visits)	School Heads, Teachers, External Organizations
Strong focus on the professional growth of teachers	Insufficient strategies for motivating teachers to motivate students to learn at optimal levels	Enhance teacher motivation strategies to foster student engagement and optimal learning outcomes	Organize workshops on motivational techniques, student-centered teaching practices, and engagement strategies	Every 3 months	Trainers, Workshop materials, Motivational resources	School Heads, Teachers
High emphasis on individualizing teaching programs for teachers	Insufficient use of technology for teacher development (e.g., audio-visual equipment training)	Improve the integration of technology into instructional practices for both teachers and students	Provide training on the use of audio-visual equipment and other educational technologies	Every 2 months	Training materials, Equipment, Trainers	School Heads, IT Specialists, Teachers
Clear focus on developmental supervision and collaborative supervision	Time management issues in balancing school calendar with adequate teacher supervision time	Improve time management skills in balancing school activities and effective supervision	Implement time management workshops and reorganize supervision schedules to ensure adequate teacher observation time	Every 3 months	Time management tools, Scheduling tools, Trainers	School Heads, Teachers, Administrative Staff
Very high leadership in providing feedback and refining teaching skills	Limited participation in regional-level training programs	Encourage participation in regional-level training programs for broader exposure and knowledge sharing	Promote regional-level training opportunities through incentives and encouragement.	Every 4 months	Regional training schedules, Incentive programs	School Heads, Regional Education Authorities

4. Conclusions

Based on the findings, the following conclusions were presented: the majority of the school heads in the municipality of San Jose District hold a Master of Education (MAEd), are head teachers III, received an outstanding performance rating, served for 6-10 years as a school head, and attended district in-service training. The qualities of a school head show the ability to handle feedback with grace and professionalism. The level of adherence to instructional supervision principles reflects a school culture rooted in professionalism, mutual respect, and a shared commitment to educational excellence. The level of importance of the function of instructional supervision. In professional leadership, the school heads are highly effective in promoting a culture of collaboration and professional growth for effective school leadership. In improving teaching, the school heads create a collaborative environment and ensure the balance of skills and experience across the DepEd curriculum. In aid of teacher growth, the school heads assign talented teachers special responsibilities in the direction of the school program. In supervisory tasks, the school heads allow teachers to individualize different school programs. Leadership practices such as sharing leadership roles, promoting social interaction, and involving teachers in the decision-making process show the importance of instructional supervision in guiding staff and community relations. The problems encountered by school heads in the conduct of instructional supervision were balancing a school calendar and ensuring that teachers have sufficient time for student supervision.

The level of proficiency in the instructional supervision of the school heads is particularly skilled in addressing challenges constructively and creating a conducive environment for improvement. This reflects a strong commitment to fostering growth and development among teachers, maintaining high standards of instructional supervision, and effectively supporting educational excellence; the school heads excel in creating a positive school atmosphere and motivating teachers to achieve instructional goals. Furthermore, they effectively empower teachers by offering flexible supervisory options tailored to individual needs, and the school heads excel in providing constructive feedback to help teachers improve their teaching practices. While slightly less proficient in fostering teacher self-analysis and influencing teaching behaviors, their overall skills in clinical supervision remain exceptional. This reflects their strong capability to guide and support teachers in enhancing instructional quality. The school heads are open to informal conversations to build strong interpersonal and supervisory skills and foster a supportive professional environment. The school heads demonstrate their consistent commitment to fostering collaboration, professional growth, and continuous improvement among teachers; they strongly support and enhance teaching practices. The school heads show room for improvement in promoting participatory decision-making. The level of proficiency of instructional supervision of the school heads related to their profile, qualities as a school head, adherence to the principles of supervision, function of supervision, and problems encountered along supervision, significant effects are evident as proficiency levels considering developmental supervision and collaborative supervision were connected to the profile, the qualities of school heads also revealed an effect on collaborative supervision, adherence to supervision principles is significant to developmental and formal supervision, the importance of instructional supervision functions is only connected to developmental supervision and the rest of the supervision levels were found to have a significant connection with the importance of instructional supervision, except for direct help and collaborative supervision, there was no correlation between the respondents' issues and the way instructional supervision was conducted, and the school heads' level of expertise in this area. The action plan was presented to improve the head's instructional supervision.

Recommendations - Based on the findings and conclusions of the study, the following recommendations are drawn up: School heads may offer incentives like study leaves and scholarships, leadership mentoring, and professional development programs for building collaborative networks among their teachers. School heads may incorporate resilience training, foster a growth mindset, and establish peer support groups or mentorship programs among their teachers. Integrating emotional intelligence into their professional growth can enhance their ability to handle difficulties and cultivate a more resilient leadership style, ultimately improving their ability to approach problems with a flexible and upbeat attitude. School heads may prioritize teachers' personal well-being and staff relationships by implementing collaborative supervision models and regularly assessing the effectiveness of

supervision principles. This will lead to better teaching methods and a more engaging workplace. School heads may enhance instructional supervision and professional leadership by engaging with external resources, bridging technological gaps, and promoting teacher growth through in-service training programs and mentoring. School heads in instructional supervision, particularly balancing a busy school calendar and conducting pre- and post-conferences with teachers. To address these issues, it is recommended that school heads adopt strategic time management practices, prioritize professional development on effective supervision techniques, and embrace collaborative approaches to share responsibilities. Furthermore, providing additional resources and revising policies to allocate protected time for supervision could alleviate the burden on school heads. School heads' proficiency in collaborative supervision is high, but their ability to involve teachers in decision-making for instruction and professional development needs improvement. Thus, school heads may conduct regular forums and shared leadership training to foster inclusivity and improve the teaching quality of their teachers. The study emphasizes the need for developmental and collaborative supervision practices to improve school heads' instructional supervision proficiency. It is recommended that the school heads provide training programs to address technical and relational aspects, tailor workshops to strengthen leadership qualities, and consistently apply and capacity-building initiatives to reinforce adherence to supervision principles. The proposed action plan may be used to improve the school head's instructional supervision. Future researchers may use other variables that could similarly affect this study.

5. References

- Ampofo, S. Y., Onyango, G. A., & Ogola, M. (2019). Influence of School Heads' Direct Supervision on Teacher Role Performance in Public Senior High Schools, Central Region, Ghana. *IAFOR Journal of Education*, 7(2), 9–26. <https://doi.org/10.22492/ije.7.2.01>
- Aquino, C. J., Afalla, B., & Fabelico, F. (2021). Managing educational institutions: School heads' leadership practices and teachers' performance. *Available at SSRN* 3948871. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3948871
- Barkman, C. (2015). The Characteristics of an Effective School Leader. *BU Journal of Graduate Studies in Education*, 7(1), 14–18. <http://files.eric.ed.gov/fulltext/EJ1230685.pdf>
- Basilio, M. B., & Bueno, D. C. (2021). Instructional supervision and assessment in the 21st century and beyond. Online Submission, 4, 1-8. <https://files.eric.ed.gov/fulltext/ED629212.pdf>
- Burton, E. (2020). Factors leading educators to pursue a doctorate to meet professional development needs. *International Journal of Doctoral Studies*, 15, 75–87. <https://doi.org/10.28945/4476>
- Cann, R.F., Riedel-Prabhakar, R. & Powell, D. A. (2021). Model of Positive School Leadership to Improve Teacher Wellbeing. *Int J Appl Posit Psychol* 6, 195–218 (2021). <https://doi.org/10.1007/s41042-020-00045-5>
- Cabigao, J.R. (2019). Professional Competencies of School Heads and Their Impact on School Outcome, Organizational Culture, and Principals' Performance. https://www.researchgate.net/publication/337110967_Professional_Competencies_of_School_Heads_and_Their_Impact_on_School_Outcome_Organizational_Culture_and_Principals'_Performance/citations
- Dagpin, R. (2022). Effect of school heads' clinical supervision skills on teachers' teaching proficiency and pupils' mastery learning performance. *International Journal of Advanced Multidisciplinary Studies*, 2(1), 2799-0664, <https://www.ijams-bbp.net/wp-content/uploads/2022/04/IJAMS-JANUARY-16-32.pdf>
- Department of Education (DepEd). (2017). Department Order No. 42, s. 2017: Philippine Professional Standards for Teachers (PPST). Retrieved from <https://www.deped.gov.ph/2017/08/11/do-42-s-2017-philippine-professional-standards-for-teachers/>
- Department of Education (DepEd). (2020). DepEd Memorandum No. 082, s. 2020: Adoption of the Basic Education Learning Continuity Plan (BE-LCP) for School Year 2020-2021 in Light of the COVID-19 Public Health Emergency. Retrieved from <https://www.deped.gov.ph/2020/06/19/memo-082-s-2020/>
- Department of Education (DepEd). (2023). Guidelines on the Conduct of In-Service Training for Teachers (INSET) for School Year 2023-2024. Retrieved from DepEd Official Website

- Department of Education. (2016, April 19). DepEd order No. 13, s. 2016: Guidelines on the utilization of the in-service training fund. Department of Education. <https://www.deped.gov.ph/2016/04/19/department-order-no-13-s-2016/>
- Ditabla, J. (2023). Secondary School Heads' Instructional Supervision Practices Correlate to Teachers' Competencies and Work Commitment. *Psychology and Education: A Multidisciplinary Journal*, 12(9), 1–1. https://www.academia.edu/106039147/Secondary_School_Heads_Instructional_Supervision_Practices_Correlate_to_Teachers_Competencies_and_Work_Commitment
- Gading, S.J. (2024).. Instructional Leadership Practices of the School Heads to Improve Teachers Performance. *United International Journal for Research & Technology*, 5(6).
- Go, A. D. G., & Eslabon, R. T. (2023). School Heads' Instructional Supervisory Skills and Teachers' Performance. *Polaris Global Journal of Scholarly Research and Trends*, 3(1), 13–28. <https://doi.org/10.58429/pgjsrt.v3n1a104>
- Gordon, S. P. (2023). Supervision, Teaching, and Learning in Successful Schools: A Hall of Mirrors. *Journal of Educational Supervision*, 6(3). <https://doi.org/10.31045/jes.6.3.1>
- Greene, C., Zugelder, B. S., Warren, L. L., & L'Esperance, M. (2020). What Factors Influence Motivation for Graduate Education? Critical Questions in Education, 11(1), 21–37. <http://files.eric.ed.gov/fulltext/EJ1287209.pdf>
- Hsieh, C.-C., Chen, Y.-R. and Li, H.-C. (2024). Impact of school leadership on teacher professional collaboration: evidence from multilevel analysis of Taiwan TALIS 2018, *Journal of Professional Capital and Community*, 9(1), pp. 1–18. <https://doi.org/10.1108/JPCC-01-2023-0002>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547–588. <https://doi.org/10.3102/0034654318759268>
- Lavigne, A. L., Allen, S., Shao, S., & Feliz, J. a. A. (2023). Learning from Post-Observation Conferences: Emerging Measures of and Mechanisms to Improve Principals' Feedback to Teachers. *Journal of Educational Supervision*, 6(3). <https://doi.org/10.31045/jes.6.3.2>
- Leithwood, K., Sun, J., & Pollock, K. (2020). How school leaders contribute to student success: The four paths framework. *Springer Nature*. <https://doi.org/10.1007/978-3-030-32929-5>
- Lin, W., Yin, H., & Liu, Z. (2022). The Roles of Transformational Leadership and Growth Mindset in Teacher Professional Development: The Mediation of Teacher Self-Efficacy. *Sustainability*, 14(11), 6489. <https://doi.org/10.3390/su14116489>
- Mantilla, E. J., Hungo, M., & Casinillo, L. (2024). School-based In-Service Training (INSET) management for personal and professional development of public-school principals and teachers. *St. Theresa Journal of Humanities and Social Sciences*, 10(1), 155-173. <https://journal.stic.ac.th/index.php/sjhs/article/view/710>
- Martin, M. (2018). Qualities of Instructional Leadership Among Principals in High-Performing Christian Schools. *Journal of Research on Christian Education* 27(2):157-182
DOI:10.1080/10656219.2018.1500501
- McGhee, M. W., & Stark, M. D. (2021). Empowering Teachers Through Instructional Supervision: Using Solution Focused Strategies in a Leadership Preparation Program. *Journal of Educational Supervision*, 4 (1). <https://doi.org/10.31045/jes.4.1.5>
- Mette, I. M., Range, B. G. , Anderson, J., Hvidston, D. J., & Nieuwenhuizen, L. (2017). Teachers' PerceptionsOf Teacher Supervision And Evaluation: A Reflection Of School Improvement Practices In The Age Of Reform. *Education Leadership Review*, 16(1), 16–30.
- Milne, D. L., & Reiser, R. P. (2017). A Manual for Evidence-Based CBT Supervision [Book]. John Wiley & Sons. <https://onlinelibrary.wiley.com/doi/pdf/10.1002/9781119030799>
- Montales, J. C. & Digo, G.S. (2024). Correlational Study on the Performance of School Heads and Their Instructional Leadership Practices. *International Journal of Advanced Multidisciplinary Studies*, 4(3). I: <https://doi.org/10.55677/ijssers/V04I3Y2024-05>
-

- Mora-Ruano JG, Schurig M, and Wittmann E (2021). Instructional Leadership as a Vehicle for Teacher Collaboration and Student Achievement. What the German PISA 2015 Sample Tells Us. *Front. Educ.* 6:582773. doi: 10.3389/educ.2021.582773
- National Center for Education Statistics. (2023). Characteristics of Public and Private School Principals. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved [date], from <https://nces.ed.gov/programs/coe/indicator/cls>.
- Ohayon, A., & Albulescu, I. (2022). Professional Learning Communities: Teachers' Collaborative Learning As a Tool For Improving Students' Achievements. In I. Albulescu, & C. Stan (Eds.), *Education, Reflection, Development - ERD 2021*, vol 2. *European Proceedings of Educational Sciences* (pp. 196-203). European Publisher. <https://doi.org/10.15405/epes.22032.19>
- Ozcan, M. (2021). Factors affecting students' academic achievement according to the teachers' opinion. *Education Reform Journal*, 6 (1), 1–18. <http://dx.doi.org/10.22596/erj2021.06.01.1.18>
- Pylväs, L., Li, J. & Nokelainen, P. (2022). Professional Growth and Workplace Learning. In C. Harteis, D.Gijbels, & E. Kyndt (Eds.), *Research Approaches on Workplace Learning* (pp. 137-155). Professional and Practice-based Learning, vol 31. *Springer*. https://doi.org/10.1007/978-3-030-89582-2_6
- Rbarks. (2023, September 29). Graduate School Challenges and Powering Through. Graduate Programs for Educators. <https://www.graduateprogram.org/2023/09/graduate-school-challenges-and-powering-through/>
- Rogers, S. L., Howieson, J., & Neame, C. (2018). I understand you feel that way, but I feel this way: the benefits of I-language and communicating perspective during conflict. *PeerJ*, 6, e4831. <https://doi.org/10.7717/peerj.4831>
- RISE Programme. (2023). Improving teaching effectiveness through classroom observations and time-on-task metrics. Retrieved from <https://www.riseprogramme.org>
- Rizada, Ma. (2024). Supervision of Instruction: Teachers and School Heads' Perspective. *American Journal of Education and Technology*. 3. 78-85. 10.54536/ajet.v3i4.3862.
- Sterrett, B., Rhodes, G., Kubasko, D., Reid-Griffin, A., Robinson, K. K., Hooker, S. D., & Ryder, A. J. (2020). Shaping the Supervision Narrative: Innovating Teaching and Leading to Improve STEM Instruction. *Journal of Educational Supervision*, 3 (3). <https://doi.org/10.31045/jes.3.3.5>
- Sun, H., Zhang, W., Wang, B., & Ma, M. (2023). The Guiding Role of Teaching Supervision in the Classroom—A Practical Research from Evaluation to Improvement. *Curriculum and Teaching Methodology*, 6(16), 142-147.
- Tedla, B. A., & Kilango, N. C. (2022). The role of school leadership toward improving student's achievement: a case study of secondary schools in Changchun, China. *Journal of Positive School Psychology*, 6(4). <https://journalppw.com/index.php/jpsp/article/view/4639>
- Voelkel, R. H., Jr., Prusak, K. J., & Van Tassell, F. (2024). Effective Principal Leadership Behaviors That Enhance Teacher Collective Efficacy. *Education Sciences*, 14(4), 431. <https://doi.org/10.3390/educsci14040431>
- William, A., & Ligembe, N. (2022). Challenges Facing Instructional Supervision in Public Secondary Schools Students in Nyamagana District, Tanzania. *Direct Research Journal of Education and Vocational Studies*, 4(1), 81. <https://doi.org/10.26765/drjevs52110224>
- Zadok, A., Benoliel, P., & Schechter, C. (2024, June). Organizational resilience and transformational leadership for managing complex school systems. In *Frontiers in Education* (Vol. 9, p. 1333551). Frontiers Media SA. <https://www.frontiersin.org/journals/education/articles/10.3389/educ.2024.1333551/full>

Night classes and academic performance of San Jose National High School Students

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Abstract

This study investigated the challenges encountered by grade 12 HUMSS students attending night classes at San Jose National High School and examined the relationship between those challenges and their academic performance. Through an exploratory sequential mixed method, the study identified key challenges faced by the respondents, which were themed into five: health-related concerns, academic mastery, safety, sleep patterns, and time management. The findings revealed that while health issues are present, they are not overwhelmingly severe but still significant enough to impact the respondents' well-being and academic performance. For academic mastery, the students find it difficult to fully grasp the academic content presented in their night classes, which may affect their overall learning outcomes. Also, students experience moderate challenges with their sleep patterns when attending night classes and imply that sleep management remains a significant concern. Thus, they feel moderately safe attending night classes, though safety remains a notable concern that can influence their attendance and participation. Students also struggle to effectively manage their time among academic responsibilities, household chores, and other personal activities, potentially leading to stress and decreased productivity. The findings indicate that all challenges encountered were moderate, and despite these challenges, a significant portion of students maintain high academic performance. The study recommends addressing the identified challenges, including implementing health and wellness programs, enhancing academic support, increasing campus security, educating on sleep hygiene, offering time management workshops, and recognizing academic excellence. These interventions aim to improve students' overall experience and performance in night classes.

Keywords: night classes, academic performance, health-related concerns, academic mastery, sleep patterns, safety, time management

Night classes and academic performance of San Jose National High School Students

1. Introduction

In recent years, educational institutions worldwide have been exploring innovative approaches to accommodate students' diverse needs and schedules, such as the lack of school facilities, infrastructure, and resources. One such approach that is gaining attention is the implementation of morning and night class sessions. Ashong-Katai (2013) agrees that this schooling system can be found in developing countries due to the lingering scarcity of teachers and material resources. San Jose National High School is implementing a double-shift system, and students attending the night classes have been experiencing various difficulties with transportation, frequent electrical problems, and maintaining proper time management between household chores and school assignments. The teachers also observe that students' attention spans in night classes diminish from the beginning to the end of the school year. In connection with that, Bray (2008) states that a double-shift system is commonly embraced to respond to the ballooning enrollment rate by translating more relevant and responsive educational policies into action to enhance social equity. Additionally, to address the inadequacy of educational facilities, policymakers and school managers formulated the double-shift policy to cater to more pupils by instituting different teaching shifts during the school day.

To address the classroom shortage and reduce class sizes in the public schools, the double-shift system policy becomes a systemic measure as specified in DepEd Order No. 62, s. 2004 and further reiterated in the DepEd Order No. 54 s. 2008. However, all schools' divisions are directed to implement a single-shift class for those with available resources. San Jose National High School, situated in Bagong Sikat, San Jose, Occidental Mindoro, serves as an ideal setting for examining the effects of night classes on grade 12 Humanities and Social Sciences (HUMSS) students, since this is the only middle school institution in the province that offers two shifts of classes. The HUMSS strand, which includes disciplines such as humanities and social sciences, was chosen to attend the night classes because of the number of subjects they must take per semester. This study examines how the timing of class sessions impacts students' engagement, comprehension, and academic performance within this strand. By analyzing the factors the night classes entail, this research aims to provide an understanding of how they affect students' academic performance.

In line with this, the study hopes to contribute to the ongoing dialogue surrounding educational innovation and student support by examining the potential benefits and challenges associated with alternative class scheduling, specifically for grade 12 HUMSS students. Additionally, this study seeks to address the gap in the literature by conducting a comprehensive investigation into the effects of night classes on the academic performance of grade 12 HUMSS students. Analyzing their relationship aims to provide valuable insights that can enhance their academic performance. The researcher finds an interest in pursuing this study to enrich the understanding of how night classes may shape the academic performance, including health-related concerns, academic mastery, safety, sleep patterns, and time management of grade 12 HUMSS students in San Jose National High School.

Statement of the Problem - This study aimed to identify the challenges encountered by the grade 12 HUMSS students at San Jose National High School attending night classes and to determine the relationship between the challenges they encountered during night classes and their academic performance. Specifically, it aimed to answer the following questions: (1) What are the challenges encountered by the respondents attending the night classes? (2) What is the level of the challenges encountered by the respondents attending the night classes in terms of academic mastery, health-related concerns, safety, sleep pattern, and time management? (3) What is the level of the academic performance of the respondents attending the night classes? (4) Is there a significant relationship between the challenges encountered by the respondents attending the night classes and the level of their academic performance? (5) What program can be proposed to improve the respondents' academic performance in their night classes?

Significance of the Study - This study is significant to the following: First, to the students, the findings will give a worthy contribution to improving their learning in school while maintaining their time correctly and prioritizing their well-being. Second, this study can help and guide the teachers on the importance of providing activities that best suit their students attending the night classes. Third, the results may offer new opportunities for head and master teachers to develop teaching strategies to improve their students' academic performance. Fourth, to the education program supervisors, this may serve as their foundation for devising activities and providing necessary programs to enhance students' academic performance continuously. Fifth, to school administrators, this will encourage them to reassess and improve educational programs through instruction. This will also guide them in looking into their stakeholders' challenges and help meet those. Sixth, to the parents/guardians, the study's findings will help them guide and support their children even more, especially regarding time management. Seventh, to the DepEd Sub-Office, this can pave the way for the organization to respond to the changing and challenging demands of local schools and the developmental needs of learners, particularly those attending night classes. Eighth, to Barangay Officials, the study's outcome can help the Barangay Officials develop their targeted interventions to alleviate the existing challenges the students of night classes face. Ninth, the study's outcome can help the local government unit (LGU) effectively allocate resources and prioritize the safety and protection of everyone attending the night classes. Lastly, to future researchers, this serves as a guide or reference to those with somewhat similar studies as they investigate further and conduct more profound research in line with this area.

Scope and Delimitation of the Study - This study focused on the grade 12 HUMSS students attending the night classes at San Jose National High School. They came from the eight courses of Aristotle, Bloom, Confucius, Locke, Plato, Hobbes, Russel, and Socrates for the school year 2023-2024. The study focused on respondents attending the night shift, excluding other strands attending the morning shift. This focus ensured a detailed and specific understanding of the challenges faced by HUMSS students but limited its findings to other strand populations. The primary purpose of this study was to identify the relationship between the challenges encountered by the respondents attending night classes and their academic performance. It used an exploratory sequential research design, which resulted in over a month of data collection from a sample size of 106 out of a population of 420.

2. Methodology

Research Design - This study adopted an exploratory sequential mixed-methods design, integrating both qualitative and quantitative approaches to comprehensively investigate the effects of night classes on the academic performance of the grade 12 HUMSS students. The qualitative component employed an open-ended interview question to explore students' perceptions and experiences of night classes. This qualitative inquiry sought to uncover insights, identify underlying motivations, and contextualize quantitative findings within the lived experiences of grade 12 students attending the said shift. On the other hand, the quantitative component involved collecting and analyzing numerical data to assess the academic performance of the grade 12 students attending the night classes. It is used as a researcher-made instrument, and their academic record and/or report cards with their General Weighted Average (GWA) quantify the key variables and examine statistical relationships.

Respondents of the Study - The respondents of this study were the eight sections of grade 12 HUMSS who have been attending the night classes: Aristotle, Bloom, Confucius, Hobbes, Locke, Plato, Russel, and Socrates. The grade 12 HUMSS students were selected to attend night classes because they must cover more subjects per semester than other strands like STEM, GAS, and ABM. The classes run from 1:00 to 8:15 PM, 7 hours each school day. They were chosen randomly and with a confidence level of 95%. Slovin's formula sample size computation suggested a need for 206 students among the 442 population size at San Jose National High School for the school year 2023-2024.

Research Instrument - This study used a two-pronged approach to data collection. The qualitative component involved an interview guide, and the quantitative component involved a researcher-made questionnaire to understand various relevant factors affecting these students. A questionnaire was checked and validated by the

experts from the graduate school professors and administered to grade 12 HUMSS students enrolled in night classes to collect demographic information, health-related concerns, academic mastery, safety, sleep patterns, and time management within the learning environment. For academic performance metrics, the General Weighted Average (GWA), a combination of first-semester and second-semester grades, was used to assess the students' academic performance in the night classes. The 50 items in the questionnaire were tested for reliability using the split-half method. The instrument was administered to 30 grade 12 students who were excluded from the final set of respondents in the study. The five components of the survey questionnaire consisted of 10 statements each. Since the instrument was administered once, a correction formula known as the Spearman-Brown coefficient of equal length was used to measure the inter-item reliability. The results are presented in Table 1.

Table 1*Reliability Results*

Indicators	Number of Items	Reliability Coefficient	Interpretation
A. Academic Mastery	10	0.926	Very High Reliability
B. Health-Related Concerns	10	0.918	Very High Reliability
C. Safety	10	0.900	High Reliability
D. Sleep Pattern	10	0.935	Very High Reliability
E. Time Management	10	0.879	High Reliability

*Spearman Brown Coefficients of Equal Length

The results revealed a generally high reliability of the items, which ranged from 0.879 to 0.935. The instrument was recommended for administration to the final group of student respondents.

Data Gathering Procedure - The researcher used an interview guide for the qualitative data and gathered data online through group chat in the Messenger application for a week. The data collected was transferred to a Word document, ensuring each transcript was properly labeled and organized to facilitate the analysis. The researcher then read the data carefully while taking notes of the emergent ideas, patterns, and insights observed. It was followed by the coding process, wherein the researcher assigned colors per theme and created a heading based on the relevant text excerpts under their respective themes. Finally, the researcher developed a thematic analysis through a diagram to highlight the basis of the quantitative analysis. The researcher used a survey questionnaire distributed online via Google Forms for the quantitative data. The survey included closed-ended questions to get numerical data that could be analyzed statistically. First, the questionnaire was pilot-tested to ensure reliability before being disseminated to the target respondents. Then, the collected data were automatically compiled into a spreadsheet, ensuring accuracy and efficiency in data recording. The researcher cleaned the data to identify and address any missing or inconsistent responses. Afterward, the data were subjected to descriptive statistical analysis, including measures of central tendency (mean, median, mode) and variability (standard deviation). To further analyze the relationships between variables, inferential statistical tests such as correlation analysis and regression were conducted with the help of her statistician. Finally, the findings were visualized through the table to aid interpretation.

Statistical Treatment of the Data - The quantitative data answered the descriptive problems, which were processed by the statistical software SPSS version 26. For the inferential issues and the hypothesis, the Partial Least Squares-Structural Equation Modeling (PLS-SEM) was used, and results were generated by WarpPLS version 7.0. Frequency and percent distribution were used to describe the respondents' responses. A 5-point Likert Scale was also employed to measure their responses.

Ethical Considerations - The researcher complied with the research guidelines provided by the Divine Word College of San Jose graduate school department. The study's purpose and the respondents' participation were first explained before administering the questionnaire. The data gathering took two weeks to complete, during which the respondents' confidentiality of information and/or answers and their anonymity were maintained throughout the data collection, analysis, and presentation of findings. It was ensured that all data and results collected were solely used for the study. The American Psychological Association (APA), 7th Edition, was employed to give credit to the authors of research studies used as references. On the other hand, previous studies and sources used

as bases for this study were cited correctly and acknowledged. This study seeks to offer its humble contribution to the education sector and poses no risk to anyone involved in its conduct.

3. Results and Discussions



Figure 1. Initial Thematic Map of Challenges Encountered

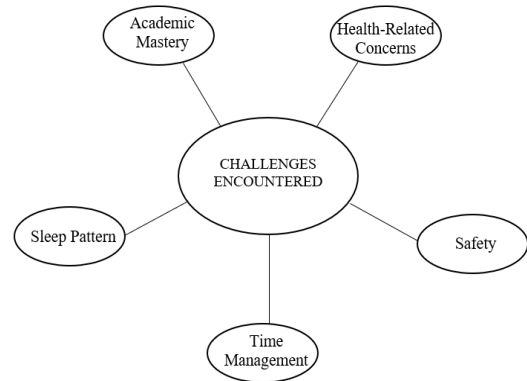


Figure 2. Final Thematic Map of Challenges Encountered

The respondents' initial approaches to the challenges encountered during the night classes were divided into five themes, as shown in Figure 1. Fatigue and poor eating habits were categorized under health-related concerns; lack of motivation and poor-quality output were categorized under academic performance; sleep deprivation and fighting drowsiness fell under sleep pattern; hard to commute and brownout fell under safety; and household chores and no time to socialize fell under time management. The final five themes in Figure 2 served as a foundation for the questionnaire, which included academic mastery, health-related concerns, safety, sleep patterns, and time management. Students with longer sleep durations and earlier bedtimes tended to achieve higher academic performance, according to the study by Ali et al. (2013); this aligns with sleep patterns and time management themes of this research. In addition, Howel et al. (2004) and Bahammam et al. (2013) emphasize the importance of sleep quality, health, and time management on academic performance, reinforcing the factors in academic mastery and safety.

Table 2

Mean Level of Challenges Encountered in Attending Night Classes in Terms of Academic Mastery & Health-Related Concerns

INDICATORS (Academic Mastery)	Weighted Mean	Interpretation
1. I have improved my grades since attending night shift classes.	3.42	Moderate Level
2. I feel confident in my ability to succeed academically despite attending night shift classes.	3.74	High Level
3. I am able to concentrate and focus during night shift classes.	3.06	Moderate Level
4. I feel motivated to perform well in my studies despite attending night shift classes.	3.34	Moderate Level
5. I am satisfied with my performance since attending night shift classes.	3.19	Moderate Level
6. I am able to understand and grasp new concepts taught during night shift classes.	3.26	Moderate Level
7. I actively participate in class discussions during night shift classes.	3.42	Moderate Level
8. I am able to complete assignments and projects on time despite attending night shift classes.	3.54	High Level
9. I feel my critical thinking skills have improved since starting night shift classes.	3.27	Moderate Level
10. I find the learning environment during night shift classes conducive to my academic success.	3.26	Moderate Level
Composite Mean	3.35	Moderate Level

INDICATORS (Health-Related Concerns)		
1. I maintain good health during night shift classes.	3.14	Moderate Level
2. I maintain stable mental health while attending night shift classes.	3.16	Moderate Level
3. I am able to maintain a balanced diet while attending night shift classes.	2.73	Moderate Level
4. I engage in physical activity or exercise regularly during my free time.	3.00	Moderate Level
5. I feel that my overall health has improved since attending night shift classes.	2.47	Low Level
6. I am able to maintain a healthy sleep schedule despite night shift classes.	2.37	Low Level
7. I feel well-rested even on days following night shift classes.	2.64	Moderate Level
8. I am able to manage stress effectively while attending night shift classes.	2.76	Moderate Level
9. I can find time for relaxation and leisure activities while attending night shift classes.	2.85	Moderate Level
10. I have maintained a healthy appetite since attending night shift classes.	2.61	Moderate Level
Composite Mean	2.77	Moderate Level

Scale: 4.20-5.00 Very High Level; 3.40--4.19 High Level; 2.60-3.39 Moderate Level; 1.80-2.59 Low Level; 1.00-1.79 Very Low Level

Table 2 reveals the mean level of challenges encountered in attending night classes in terms of academic mastery & health-related concerns. Most aspects of academic mastery are categorized as having a "moderate level" of challenge, with a composite mean of 3.35. This moderate level indicates that while students face some difficulties, these challenges are not overwhelming. However, it also implies room for improvement in instructional methods and strategies to help students progress from moderate to high levels of academic mastery, similar to the two aspects of confidence in achieving academic success and completing assignments and projects. Studies have shown that students who attend night classes often develop a strong sense of self-efficacy and confidence in their academic abilities. This aligns with the high confidence levels and ability to complete assignments in the table. Furthermore, Sweller's Cognitive Load Theory (1988, as cited by The Education and Training Foundation, 2023) stresses that effective teaching methods and engagement are essential for academic mastery. The moderate scores for understanding new concepts and critical thinking skills suggest that, while students grasp the material, cognitive load and other challenges, such as maintaining focus and motivation due to factors like fatigue and competing demands from work or family responsibilities, may hinder complete comprehension, as also highlighted by Herlambang et al. (2021).

The National Center for Education Statistics (2022) also found that students in evening classes often excel at completing assignments on time and engaging in critical thinking activities, reflecting their strong time management skills and maturity. This supports the high rating for assignment completion and the moderate improvement in critical thinking skills observed in the table. These studies collectively provide a comprehensive view of the challenges and benefits of attending night classes, reinforcing the interpretations presented in the table. In connection with that, Birhan (2018) found that mastery learning can improve academic achievement and close achievement gaps. The "high level" score in confidence to succeed academically and assignment completion aligns with this idea, showing that some students already benefit from strategies that foster mastery. Finally, Pintrich & De Groot (2019) argue that mastery orientation can increase pressure and anxiety, which could explain the moderate ratings in motivation and satisfaction with performance. Night shift students may struggle to maintain focus due to external challenges like fatigue, despite their confidence in academic success.

Furthermore, the health-related concerns faced by students attending night classes are at a moderate level, except for overall health improvement and maintaining a healthy sleep schedule, which are at a low level. The composite mean of 2.77 indicates that while some students may encounter health issues, they are not severe or critical. In their study, Lee et al. (2020) highlighted that chronic health issues can hinder academic performance, leading to increased absenteeism, negatively affecting learning outcomes. Similarly, Smith and Johnson (2018) emphasized that regular attendance is essential for academic success, underscoring the impact of health on learning outcomes. Kessler et al. (2005) added that it is a critical period for educational attainment, underscoring health's importance in educational settings. Baker & Goodwin (2018) emphasized that better health correlates with improved academic performance. A news story from the University of Oxford (2016) highlighted the benefits and challenges of evening classes. The research indicated that while students reported improvements in mental and physical health and greater life satisfaction, the structure and demands of night classes also presented moderate

challenges, particularly in maintaining regular physical activity and managing stress effectively. This aligns with the findings of moderate health concerns among night class attendees. Another study conducted during the COVID-19 pandemic by Barrot et al. (2021) examined the mental health challenges of college students in the Philippines. It found that students faced moderate to significant mental health issues, including increased levels of anxiety, stress, and depression. These challenges were worsened by the shift to online learning and the general disruptions caused by the pandemic, which impacted their overall health and sleep schedules. Both studies of news stories from the University of Oxford (2016) and Barrot et al. (2021) corroborate the findings that while students benefit from night classes in certain areas, they also encounter moderate challenges related to their health, with significant difficulties in maintaining a healthy sleep schedule and overall health improvement.

Table 3

Mean Level of Challenges Encountered in Attending Night Classes in Terms of Safety, Sleep Pattern, & Time Management

INDICATORS (Safety)	Weighted Mean	Interpretation
1. I feel safe commuting to and from school during night shift hours.	2.79	Moderate Level
2. I have not encountered any safety concerns or incidents while attending night shift classes.	3.28	Moderate Level
3. I feel confident that there are adequate safety measures or protocols in place during night shift classes.	3.45	Moderate Level
4. I feel comfortable walking alone on the campus during night shift hours.	3.07	Moderate Level
5. I perceive that security personnel are readily available and visible during night shift classes.	3.50	High Level
6. I find that campus lighting during night shift hours is sufficient to ensure safety.	3.42	Moderate Level
7. I am confident that the security measures are in place during night shift classes.	3.47	Moderate Level
8. I feel assured by the presence of security personnel during night shift classes.	3.38	Moderate Level
9. I believe the campus environment is safe during night shift hours.	3.48	Moderate Level
10. I have not experienced any safety issues while attending night shift classes.	3.39	Moderate Level
Composite Mean	3.32	Moderate Level
INDICATORS (Sleep Pattern)		
1. I get enough sleep on nights before attending night shift classes.	2.93	Moderate Level
2. I experience difficulties falling asleep after attending night shift classes.	2.44*	Low Level
3. I have experienced an improvement in the quality of my sleep since starting night shift classes.	2.57	Moderate Level
4. I feel well-rested and refreshed after sleeping following a night shift class.	2.74	Moderate Level
5. I use effective strategies to improve my sleep quality during the day.	3.12	Moderate Level
6. I maintain a consistent sleep schedule even with night shift classes.	2.83	Moderate Level
7. I wake up feeling energized after sleeping following a night shift class.	2.66	Moderate Level
8. I fall asleep easily and quickly after attending night shift classes.	3.32	Moderate Level
9. I find my sleep to be uninterrupted and restful after night shift classes.	2.84	Moderate Level
10. I am satisfied with the amount of sleep I get despite attending night shift classes.	2.67	Moderate Level
Composite Mean	2.81	Moderate Level

Scale: 4.20-5.00 Very High Level; 3.40--4.19 High Level; 2.60-3.39 Moderate Level; 1.80-2.59 Low Level; 1.00-1.79 Very Low Level

*Reversed

Table 3 shows the mean level of challenges encountered in attending night classes regarding safety and sleep patterns, with a composite mean of 3.32 and 2.81, respectively. This indicates that students, on average, experience moderate challenges regarding safety while attending night classes. They perceive security personnel as readily available and visible during night shift classes. They find the campus lighting sufficient, though there is still a moderate concern regarding commuting, walking alone, and overall safety during night shift hours. The composite mean of 3.32 indicates that while safety measures are somewhat effective, there is still room for improvement. Cordero (2022) found that students who attend classes at night express moderate concerns about personal safety, especially when commuting and walking alone on campus during late hours. Additionally, the availability and visibility of security personnel significantly influence students' perceptions of safety, as highlighted in a study by the University of Oxford (2016), which found that campuses with visible security personnel and adequate lighting

tend to have students feeling secure. In connection with that, Sinthumule (2017) emphasizes the critical role of school leadership in maintaining a secure environment through regular safety drills and effective communication, which are reflected in the “High Level” for the availability of security personnel. Moreover, another study by Campbell et al. (2022) reported that while safety protocols and measures are generally in place, safety can still be moderate due to occasional incidents and the inherent challenges of ensuring complete security during night hours. This supports the table's findings of moderate confidence in safety measures and the need for continuous improvement in the campus safety protocols. Finally, Fisher & Sloan (2015) found that while perceived safety is essential for well-being, it is not always directly related to academic performance. This could explain why, despite moderate safety concerns, students still report relatively high confidence in safety measures but lower ratings in specific areas like commuting and walking alone.

Moreover, the composite mean of 2.81 shows that overall, students experience moderate challenges with their sleep patterns when attending night classes, implying that sleep management remains a significant concern. While some aspects, like the ability to fall asleep easily and using effective sleep strategies, are relatively better managed, students still face moderate difficulties in maintaining consistent sleep schedules and waking up feeling refreshed. The difficulty of falling asleep after night classes, rated low level, indicates that a significant issue in sleep patterns may impact the overall sleep quality. This is supported by Hershner & Chervin's (2014) research, which found that while adequate sleep is crucial for cognitive function, the impact of sleep timing disruptions, such as those caused by night classes, can sometimes lead to better sleep onset despite overall sleep challenges. In addition, research indicates that night classes can disrupt standard sleep patterns, leading to moderate difficulties in maintaining good sleep. A study by the National Sleep Foundation (2022) found that night shift workers, including students attending night classes, often struggle with maintaining a consistent sleep schedule and achieving restful sleep due to the misalignment with their natural circadian rhythms. The study suggests that disruptions to standard sleep patterns, like those caused by night classes, can lead to moderate challenges in sleep quality. Furthermore, Athar et al. (2020) reported that individuals working or studying at night often experience moderate improvements in sleep quality with effective interventions but still face challenges in falling asleep and feeling energized after sleep. This supports the findings of moderate improvements in sleep quality and low difficulty in falling asleep after night classes.

Table 4

Mean Level of Challenges Encountered in Attending Night Classes in Terms of Time Management

INDICATORS (Time Management)	Weighted Mean	Interpretation
1. I effectively prioritize tasks and responsibilities during night shift classes.	3.29	Moderate Level
2. I have enough time to complete assignments and study effectively during night shift classes.	3.03	Moderate Level
3. I have had to make adjustments to my daily schedule or routine to accommodate night shift classes.	3.70	High Level
4. I effectively manage extracurricular activities or personal commitments alongside night shift classes.	3.23	Moderate Level
5. I have noticed an improvement in my time management skills since starting night shift classes.	3.34	Moderate Level
6. I efficiently handle deadlines and timelines during night shift classes.	3.34	Moderate Level
7. I feel confident in my ability to manage my time effectively despite attending night shift classes.	3.27	Moderate Level
8. I have established a productive daily routine that accommodates night shift classes.	3.12	Moderate Level
9. I am proactive in planning and organizing my study sessions around night shift classes.	3.21	Moderate Level
10. I am able to maintain a healthy work-life balance while attending night shift classes.	3.15	Moderate Level
Composite Mean	3.27	Moderate Level

Scale: 4.20-5.00 Very High; 3.40-4.19 High; 2.60-3.39 Moderate; 1.80-2.59 Low; 1.00-1.79 Very Low

Table 4 shows the overall composite mean of 3.27, indicating that students experience moderate challenges in time management while attending night classes. A high level of challenge is adjusting daily schedules or routines to accommodate night classes, rated at a 3.70. This suggests that students struggle to balance academic

commitments with other responsibilities and activities. Other aspects are all rated moderately, implying that there is always room for managing time properly and balancing priorities. This indicates that night classes pose significant challenges to students' time management. Cordero (2022) found that students attending night classes often struggle to balance their academic activities with personal and extracurricular ones, with moderate to high levels of time management challenges. The necessity to adjust daily routines to fit night classes is particularly challenging, aligning with the high level of challenge in this aspect, as observed in the table. Another study by the University of Oxford (2016) reported that while night class students develop moderate improvements in time management skills over time, they face consistent difficulties in prioritizing tasks and maintaining a healthy work-life balance. This supports the table's findings of moderate challenges in these areas. Moreover, Liu et al. (2024) found that effective time management is linked to better academic performance and lower stress levels. This supports the moderate-level ratings for prioritizing tasks and handling deadlines, suggesting that while students manage their time to some extent, there is room for improvement. Wilson et al. (2021) also reported that time management training can significantly enhance students' planning and organizational skills. This aligns with the moderate improvement in time management skills (3.34) and the moderate effectiveness in managing extracurricular activities (3.23). Furthermore, Cordero (2022) highlighted that proactive planning and effective handling of deadlines are crucial to the success of night class students. However, maintaining confidence in their time management remains a moderate challenge, as shown in Table 4. These studies collectively support the interpretation that while students attending night classes manage to develop some level of proficiency in time management, they still face moderate to high challenges in various aspects, particularly in adjusting their routines to accommodate the demands of night classes.

Table 5*Level of Students' Academic Performance*

Academic Performance	Descriptor	Frequency	Percent
90–99	Outstanding	107	51.9
85–89	Very Satisfactory	49	23.8
80–84	Satisfactory	33	16.0
75–79	Fairly Satisfactory	17	8.3
Total		206	100.0

Legend: 90-99—Outstanding; 85-89—Very Satisfactory; 80-84—Satisfactory; 75-79—Fairly Satisfactory

The data indicate that most students (51.9%) attending night classes achieve outstanding academic performance, while 39.8% perform at very satisfactory levels. Only 8.3% of students are in the reasonably satisfactory range, suggesting that while most students perform well, this small group may benefit from targeted academic interventions. The Challenge and Support Theory of Sanford (1966, as cited by Rainmaker Companies, 2018) emphasizes the importance of balance and support for growth, requiring physical and psychological readiness, which plays an important role in the day-to-day activities of the respondents. Despite these challenges, the high percentage of students achieving outstanding and very satisfactory performances suggests that many students successfully navigate these difficulties. The research of Wyatt (2014) supports those non-traditional students, including those attending night classes, who often exhibit high levels of motivation and resilience, which can contribute to their academic success.

Table 5*Path Coefficients and p-values for Hypothesis Testing*

Path	Beta (β) Coefficient	p-value*	Interpretation
Challenges Encountered			
MASTERY→ACADPERF	-0.144	0.017	Significant
HEALTH→ACADPERF	0.125	0.034	Significant
SLEEP→ACADPERF	0.128	0.030	Significant
SAFETY→ACADPERF	0.021	0.382	Not Significant
TIMEMGT→ACADPERF	-0.034	0.314	Not Significant

*Significant at $p < 0.05$

The hypothesis test brings out the relationship between the challenges encountered by the respondents attending their night classes, considering health-related concerns ($\beta=0.125$), academic mastery ($\beta=-0.144$), and sleep pattern ($\beta=0.128$), and their academic performance. Although low, these beta coefficients (β) substantiate the direct influence on the students' academic performance. Thus, the result ascertains the rejection of the null hypothesis of no significant relationship between the challenges encountered regarding health-related concerns, academic mastery, and sleep pattern and the level of their academic performance. Surprisingly, based on the responses, academic mastery had an inverse effect on academic performance. It is likely that while students have not fully mastered academics, they still manage to get high grades.

Meanwhile, safety and time management were found to have no connection with academic performance, as p-values exceeded the 0.05 level. A study by Baker & Goodwin (2018) found that students with better physical health tend to perform better academically due to reduced absenteeism and enhanced cognitive function. This aligns with the significant positive path coefficient for health. Conversely, a meta-analysis by Pintrich & De Groot (2019) highlights that while mastery orientation can foster deep learning, it may also increase pressure and anxiety, negatively impacting academic performance. This is consistent with the significant negative path coefficient for mastery.

In terms of sleep, research by Hershner & Chervin (2014) demonstrated a strong correlation between adequate sleep and improved academic performance, with students who get sufficient sleep showing better concentration and memory retention. This supports the significant positive path coefficient for sleep. However, Fisher & Sloan (2015) found that while perceived safety on the campus is crucial for overall well-being, its direct impact on academic performance is not significant, aligning with the non-significant path coefficient for safety. Lastly, Britton & Tesser (2016) observed mixed results regarding the impact of time management on academic performance, suggesting that effective time management does not always translate directly to better grades. This finding corresponds to the non-significant path coefficient for time management. These studies provide a comprehensive context for understanding the relationships in Table 5, reinforcing the significant and non-significant impacts of the examined factors on academic performance. This study hypothesizes that there is no significant relationship between the challenges encountered by the grade 12 students attending night classes at San Jose National High School and their level of academic performance.

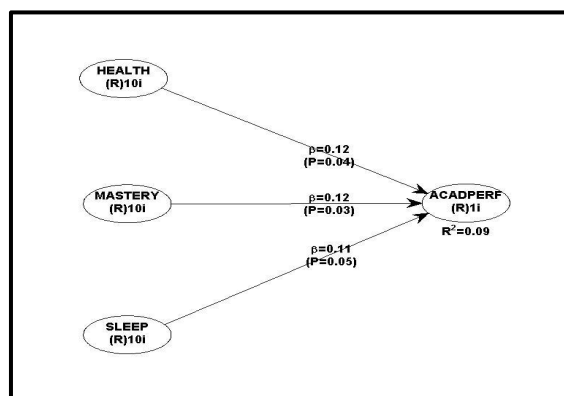


Figure 3. The Emerging Model

An emerging model is generated since the structural model showed two links that indicate very low beta coefficients and high p-values. It can be noted that with the three indicators connected to the level of academic performance, the value of R^2 reveals a slight increase from 0.03 to 0.09. Approximately 9% of the variability in the students' academic performance can be explained by the variability in the challenges they encounter, considering health-related concerns, academic mastery, and sleep patterns. The significant positive relationship between health and academic performance, albeit small, underscores the importance of maintaining good physical health for academic success. Educational institutions should consider investing in health programs, promoting physical activity, and providing resources for mental and physical well-being. By doing so, they can enhance students' overall academic outcomes. Baker & Goodwin (2018) emphasize that better physical health correlates

with improved academic performance. This finding aligns with the positive and significant path coefficient, suggesting that health initiatives can positively impact students' academic performance, even if the effect size is small.

The positive but small effect of mastery orientation on academic performance suggests that fostering a mastery-oriented approach can be beneficial. Educators should create an environment that encourages mastery learning, focusing more on understanding and competence than performance. This can be done through formative assessments, feedback, and opportunities for students to engage deeply with the material. Pintrich & De Groot (2019) indicate that while mastery orientation fosters deep learning strategies, it must be balanced to prevent stress and anxiety. This supports the finding that focusing on mastery can positively influence academic performance, even if the effect size is small. The significant relationship between sleep and academic performance, with a small effect size, highlights the critical role of adequate sleep in the success of academic performance. Educational policies should advocate for proper sleep hygiene among students, potentially adjusting school schedules for sufficient rest. Awareness programs on the importance of sleep could also be beneficial. Hershner & Chervin (2014) found that adequate sleep is crucial for cognitive functions like concentration and memory retention, which are essential for academic performance. This supports the finding that promoting good sleep habits can positively influence academic outcomes, even with a small effect size. While the effects of health, mastery orientation, and sleep on academic performance are statistically significant, the small effect sizes indicate that these factors, though important, are part of a broader set of influences on academic success.

Table 7

Action Plan for Project Recharge: Empowering Wellness, Academics, and Balance

HEALTH AND WELLNESS PROGRAM			
Objective: Address health-related concerns by offering physical fitness, mental health, and stress management programs.			
ACTION STEPS	TIMELINE	SUCCESS INDICATOR	REQUIRED RESOURCES
Create Wellness Workshops: Organize workshops on stress management, physical fitness, and mental health. Offer Flexible Scheduling: Ensure programs are scheduled to accommodate night class students. Establish Health Check-Ups: Provide regular health screenings and mental health check-ups. Promote Physical Activity: Develop fitness programs or partnerships with local gyms.	2 months for program development, ongoing for execution	Increased participation in wellness programs and fitness activities.	Personnel: Wellness coordinators, health professionals, and fitness center staff. Facilities: Fitness centers or partnerships with gyms. Materials: educational brochures, online content, and digital resources for tutoring. Budget: Allocation for partnerships with local gyms.
ENHANCED ACADEMIC SUPPORT			
Objective: Improve students' academic mastery by providing targeted tutoring services and digital resources.			
ACTION STEPS	TIMELINE	SUCCESS INDICATOR	REQUIRED RESOURCES
Establish Evening Tutoring Services: Provide tutoring sessions specifically for night class students. Form Study Groups: Facilitate peer study groups and online discussion forums. Develop Online Resources: Create or curate digital resources and study aids. Train Faculty: Offer professional development for faculty on diverse teaching methods.	3 months for setup, ongoing for support	Improve academic performance (GPA, retention rates, etc.).	Personnel: Tutors and faculty members Facilities: Classrooms for workshops and online platforms for academic support Materials: educational brochures, online content, and digital resources for tutoring. Budget: Allocation for professional development programs for faculty and educational materials.

SLEEP HYGIENE EDUCATION			
Objective: Promote healthier sleep patterns through workshops, counseling, and educational outreach.			
ACTION STEPS	TIMELINE	SUCCESS INDICATOR	REQUIRED RESOURCES
Organize Workshops: Conduct workshops on sleep hygiene and managing sleep disruptions. Distribute Educational Materials: Provide brochures, online content, and resources on sleep management. Offer Counseling: Provide access to counseling for sleep-related issues.	2 months for development, ongoing for education	Increased utilization of health services and counseling for sleep-related issues.	Personnel: Experts in sleep hygiene, sleep therapists, or psychologists will lead the workshops. Facilities: Classrooms for workshops, conference rooms, or virtual meeting platforms. Materials: Printed handouts, posters, or slides for presenting information during the workshop. Budget: Allocation for professional sleep therapists.

This action plan addresses the growing health, academic, and sleep-related challenges students face, particularly those in night classes. Studies such as Barrot et al. (2021) have highlighted significant mental health struggles, including anxiety and stress, exacerbated by irregular schedules and competing demands. Similarly, Lee et al. (2020) emphasized the impact of chronic health issues on academic performance, while Hershner & Chervin (2014) demonstrated the correlation between adequate sleep and improved cognitive function. With the increasing pressure of balancing academics, personal responsibilities, and irregular schedules, students often experience physical inactivity and mental fatigue, as noted by Owens et al. (2000). Addressing these concerns, Bloom's mastery learning model (1968), as cited by Conley (2020), underscores the importance of formative assessments, corrective feedback, and self-efficacy in fostering academic success. By implementing a comprehensive approach that includes health and wellness programs, enhanced academic support, and sleep hygiene education, the plan aims to improve the students' well-being and academic success. Through targeted resources and flexible services, as suggested by these studies, this initiative seeks to foster a supportive environment that promotes holistic student development.

4. Conclusions

Based on the summary of the presented findings, the following conclusions are obtained: The night class respondents face various challenges. In this study, those challenges were themed as health-related concerns, academic mastery, safety, sleep patterns, and time management. These challenges encompass physical and mental health issues and logistical and academic difficulties. The challenges faced by respondents attending night classes were found to be moderate, indicating that while students encounter these challenges, they are not overwhelmingly severe. This assessment is based on several key areas, including health-related concerns. While health issues are present, they are not overwhelmingly severe but still significant enough to impact the respondents' well-being and academic performance. The students struggle to fully grasp the academic content presented in their night classes, which may affect their overall learning outcomes. Students experience moderate challenges with their sleep patterns when attending night classes and imply that sleep management remains a significant concern. Students feel moderately safe attending night classes, though safety remains a notable concern that can influence their attendance and participation. Time Management. Students struggle to effectively manage their time among academic responsibilities, household chores, and other personal activities, potentially leading to stress and decreased productivity. Many students can maintain high academic standards despite the challenges encountered in attending night classes. There is a significant relationship between the challenges encountered by the respondents attending the night classes and the level of their academic performance in terms of health-related concerns, academic mastery, and sleep patterns. Project ELEVATE aims to empower, lead, energize vision, achieve, transform, and excel by addressing the comprehensive needs of night class students through a multifaceted approach. The project is designed to create a supportive environment that enhances student well-being and academic success.

Recommendations - Based on the findings and conclusions presented, the following recommendations are stated to further improve the academic performance of students attending night classes: To address the diverse challenges faced by students attending night classes, it is recommended for schools to implement an integrated student support system. This system may offer comprehensive resources, including mental health counseling, academic tutoring, time management workshops, and safety initiatives. By providing a holistic support network, institutions can better assist students in navigating the physical, mental, logistical, and academic difficulties associated with night classes, ultimately enhancing their well-being and academic success. The following are recommended for the respondents to overcome the challenge: Institutions may establish comprehensive health and wellness programs that include regular mental health check-ups, stress management workshops, and initiatives to promote physical activity. These programs may be accessible to all students, with flexible scheduling to accommodate those attending night classes. Institutions may provide enhanced academic support services to help students better understand and retain course material. This can include evening tutorial sessions, study groups, and online resources that cater specifically to the needs of night class students.

Training faculty in diverse teaching methods can also help address different learning styles. To improve the perception of safety, educational institutions may increase the presence of security personnel during night hours and ensure that campuses are well-lit. Additionally, offering safety escorts or shuttle services for students traveling to and from classes can enhance their sense of security and encourage attendance. Institutions may provide education on sleep hygiene, emphasizing the importance of maintaining a consistent sleep schedule, even with night classes. Workshops or informational resources on managing sleep disruptions and creating conducive sleep environments can help students mitigate the adverse effects of irregular sleep patterns. To assist students in balancing their academic and personal responsibilities, institutions may offer time management workshops. These workshops can teach practical skills such as prioritizing tasks, setting realistic goals, and using time effectively. Additionally, flexible deadlines or assignment extensions can help reduce stress and improve productivity. Since many students attending night classes achieve outstanding or satisfactory academic performance, institutions may implement programs recognizing and supporting these high achievers. This can include academic excellence awards, scholarships, and leadership opportunities. Additionally, providing resources such as advanced study materials, mentorship programs, and research or professional development opportunities can further enhance their academic and career prospects while motivating other students to strive for excellence. To enhance students' academic performance by attending night classes, educational institutions should address health-related concerns by providing targeted wellness programs and promoting healthy lifestyles. Additional support in academic mastery through tutoring and adjusted assessment methods is crucial, while education on sleep hygiene and flexible scheduling can help improve sleep patterns. Although safety and time management were not found to significantly impact academic performance, ensuring a secure learning environment and offering time management resources can still be beneficial. Further research is recommended to explore the unexpected inverse effect of academic mastery on performance, and continuous feedback mechanisms may be implemented to address emerging challenges. To maximize the impact of Project Recharge: Empowering Wellness, Academics, and Balance, it is recommended that the student support committee actively oversee the implementation and continuous evaluation of all initiatives, including the integrated support system, health and wellness programs, academic support, and enhanced campus security. Future researchers may focus on a detailed examination of the specific impacts of night classes on sleep patterns, time management, and overall academic performance, including studies to assess long-term effects. Evaluating targeted interventions, such as sleep hygiene programs and time management training, as well as exploring the effectiveness of technology and digital tools, could provide practical solutions for students. Comparative studies between night and daytime classes also offer valuable insights into optimizing educational strategies for diverse student needs.

5. References

Ali, A., Majeed, M., Saba, K., Bodenarain, A., & Bukhari, M. (2013). Effects of different sleeping patterns on academic performance in medical school students. *Natural Science*, 5(11), 871–875. DOI:

- <https://doi.org/10.4236/ns.2013.511146>
- Ashong-Katai, L. N. (2013). Abolition of the double shift system of schooling in Ghana: Policy and its implementation in public schools (Master's thesis).
- Athar, M., Vahid, M., & Ashouri, A. (2020). The Influence of Shift Work on the Quality of Sleep and Executive Functions. *Journal of Circadian Rhythms*, 4-8. https://jcircadianrhythms.com/articles/10.5334/jcr.194?utm_source
- Bahammam, A., Alaseem, A., Alzakri, A., Almeneessier, A., & Sharif, M. (2013). The relationship between sleep and wake habits and academic performance in medical students: A cross-sectional study. *BMC Medical Education*, 13(1), 61. <https://bmcmmededuc.biomedcentral.com/counter/pdf/10.1186/1472-6920-12-61.pdf>
- Baker, P. & Goodwin, A. (2018). Physical health and academic performance: A review. *Journal of Health Education Research & Development*, 36(2), 155-16. <https://doi.org/10.1177/0971528418774726>
- Barrot, J.S., Llenares II, Del Rosario, L.S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. PMC. DOI: 10.1007/s10639-021-10589-x
- Birhan, A. T. (2018). Effects of Mastery Learning Instruction on Engineering Students' Writing Skills Development and Motivation. *Journal of Language and Education*, 4(4), 20-30. <https://doi.org/10.17323/2411-7390-2018-4-4-20-30>
- Britton, B. & Tesser, A. (2016). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405-410. <https://doi.org/10.1037/0022-0663.83.3.405>
- Bray, M. 2008. Double-Shift Schooling: Design and Operation for Cost-Effectiveness. 3rd ed. London, Paris: Commonwealth Secretariat; UNESCO, *International Institute for Educational Planning*. <https://unesdoc.unesco.org/ark:/48223/pf0000163606>.
- Campbell, L., Hilaire, B., Laguardia, E., Howard, C., & Kelchner, V. (2022). Exploring Higher Education Students' Perceptions of Safety on Campus. *Journal of Threat Assessment and Management*, 9(2), 67-79. <https://psycnet.apa.org/buy/2022-44216-001>
- Conley, L. (2020). Mastery Learning: A Mixed-Methods Study of Teacher Efforts Implementing Key Components of the Mastery Learning Framework. *Doctor of Education Dissertations*. 11. <https://digitalcommons.gardner-webb.edu/education-dissertations/11>
- Cordero, L. (2022). Time Management and Personal Safety Concerns Among Night Class Students. *Journal of College Student Affairs*, 40(4), 223-234. <https://doi.org/10.1080/07424811.2022.2038452>
- Department of Education. (2004). Adoption of Double Shift Policy in Public Schools to Address Classroom Shortage. <https://www.deped.gov.ph/2004/12/13/do-62-s-2004-adoption-of-double-shift-policy-in-public-school-to-address-classroom-shortage/>
- Department of Education. (2008). Reiterating the Policy on Double Shifting of Classes and Requiring Strict Compliance Thereto. <https://www.deped.gov.ph/2008/07/07/do-54-s-2008-reiterating-the-policy-on-double-shifting-of-classes-and-requiring-strict-compliance-thereto/>
- Fisher, B., & Sloan, J. (2015). Perceived Safety on Campus and Its Impact on Academic Performance. *Journal of College Student Development*, 56(7), 712-727. <https://doi.org/10.1353/csd.2015.0073>
- Herlambang, A., Cnossen, F., & Taatgen, N. (2021). The Effects of Intrinsic Motivation on Mental Fatigue. *Journal of Educational Psychology and Learning*, 15(2), 112-127. <https://doi.org/10.1371/journal.pone.0243754>
- Hershner, S. & Chervin, R. (2014). Causes and Consequences of Sleepiness Among College Students. *National Library of Medicine*, 18(1), 33-45. <https://pubmed.ncbi.nlm.nih.gov/25018659/>
- Howell, A., Jahrig, J., & Powell, R. (2004). Sleep quality, sleep propensity, and academic performance. *Psychological Reports*, 95(3), 735-737. <https://doi.org/10.2466/pms.99.2.525-535>
- Kessler, R., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593-602. <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/208678>
- Lee, A., Lee, S., Vigoureaux, T., Hyer, K., & Small, B. (2020). Prevalent Insomnia Concerns and Perceived Need

- for Sleep Intervention Among Direct-Care Workers in Long-Term Care. *Journal of Student Health and Wellness*, 15(2), 123-134. <https://doi.org/10.1177/0733464820978612>
- Liu, D., Shahani, C., & Dipboye, R. (2024). The Analysis of Time Management and Students' Self-Efficacy of Blended Learning: A Case Study of College. <https://doi.org/10.1037/0022-0663.82.4.760>
- National Center for Education Statistics. (2022). Students in evening classes: Academic performance and engagement. U.S. Department of Education. <https://nces.ed.gov/>
- National Sleep Foundation. (2022). Sleep patterns and sleep quality among night shift workers. National Sleep Foundation. <https://www.sleepfoundation.org/>
- Owens, J., Maxim, R., Nobile, C., McGuinn, M., & Msall, M. (2000). Sleep Self-Report. *Archives of Pediatric and Adolescent Medicine*, 170(7), 619-624. <https://doi.org/10.1037/t72716-000>
- Pintrich, P. & De Groot, E. (2019). Motivational and Self-Regulated Learning Components of Classroom Academic Performance. *Journal of Educational Psychology*, 91(1), 25-39. <https://psycnet.apa.org/doi/10.1037/0022-0663.91.1.25>
- Rainmaker Companies. (2018). Balancing Challenges and Support for Optimal Growth. In Leadership Development and Professional Growth Strategies. The Challenge of Support - Rainmaker (therainmakercompanies.com)
- Sinthumule, D. (2017). Creating a safe and secure teaching and learning environment: a successful school leadership imperative. University of Venda. <https://univendspace.univen.ac.za/items/ef4a4732-629b-44e4-815c-be5940cb103e>
- Smith, A., & Johnson, L. (2018). The role of health in student absenteeism: A comprehensive review. *Journal of School Health*, 88(6), 454-466. <https://doi.org/10.1111/josh.12606>
- The Education and Training Foundation. (2023). Enhancing Academic Mastery: Insights from Cognitive Load Theory. In Effective Teaching Practices. <https://www.et-foundation.co.uk/>
- University of Oxford. (2016). Health benefits of evening classes revealed. ScienceDaily. <https://www.ox.ac.uk/news/2016-09-20-health-benefits-evening-classes-revealed>
- Wilson, R., Joiner, K. & Abbasi, A. (2021). Improving students' performance with time management skills, *Journal of University Teaching & Learning Practice*, 18(4), <https://ro.uow.edu.au/jutlp/vol18/iss4/16>
- Wyatt, E. (2014). An Exploration of the Academic Success and Persistence of First-Generation, Ethnic Minority Female College Students. Capella University ProQuest Dissertations & Theses. 11-15.

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