Republic of the Philippines

EULOGIO "AMANG" RODRIGUEZ INSTITUTE OF SCIENCE AND TECHNOLOGY

Nagtahan, Sampaloc Manila

VOLUME XXIII, No. 33 | ISSN 0119-5212 | JANUARY - JUNE 2023

EARIST RESEARCH JOURNAL

"Showcasing Innovation on Educational Teachnology Research in the Digital Knowledge Experience"

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FOREWORD

The Eulogio “Amang” Rodriguez Institute of Science and Technology takes pride in publishing Volume XXIII, No. 33, January – June 2023 of the EARIST Research Journal as it contributes to the attainment of EARIST’s Mission, Vision, Goals, and Objectives through scholarly publications.

This volume is the output of researches conducted by EARIST faculty during the Academic Year 2023. This volume highlighted Twenty-Four (24) distinct researches in different fields, but most noteworthy, each individual research achievement.

The topics vary as shown in every page, but each is full of diverse stories confirming happenings in every college of the Institute. The office of research hopes to mirror the activities of our educators in assuming their task as researchers.

There are more challenges left in the various fields waiting for further scrutiny. We continue the never-ending cycle of the quest for new knowledge and further understanding of the issues at hand. The work remains unsolved. But unless we produce our own solutions to existing problems, the challenges will never be met.

The research work undertaken by faculty members and staff are included with the hope that these will contribute to the advancement of research activities of the institute and will serve as medium in the dissemination of research outputs to the community.

Dr. Jesus S. Paguigan
Director, Research Services

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STREET LIGHT CHARGING SYSTEM

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INTRODUCTION

No matter how big or small, any city must be ready to deal with natural disasters to keep its economy and environment healthy in the face of climate change in developed and developing countries. Suppose cities are to remain competitive in a world where the number of people living in cities is increasing. In that case, they must have a steady and continuous supply of resources like energy, water, sanitation, and other essentials.

The use of mobile phones is still growing significantly. Developed nations like Japan, US, and Europe predict a more than 30% growth rate in the following years. Mobile phones are a necessity in modern society. Given how essential it has become to day-to-day life, most people find it difficult to live without it. On a device, almost anything is possible with a swipe, including bill payments, online shopping, and financial services. Also, users can interact with friends and family and listen to music at the same time. However, a nightmare begins when the battery dies, particularly in a storm. When charging stations are dependable and accessible, people's lives are made more stable, and the community is better connected.

The proposed device may be helpful in this situation. Many urban areas may install the item so people can charge their gadgets as needed. The researchers claim that the device would be helpful for bikers and people who are working outside their homes.

This study, which is focused on physics, electronics, electricity, and streetlight design, conducted pilot testing to determine the functionality of the device.

The primary goals of this study are to determine and evaluate how streetlights can be more beneficial besides providing light during the night. Moreover, the study aims to determine the feasibility of placing charging systems in streetlights with solar panels. The paper also highlights the construction, installation, and evaluation of the device.

LITERATURE

Coal, petroleum, and other fossil fuels are the primary energy sources used in the modern society. Since the previous year, every learner in the classroom saw cell phones as a distraction. However, when technology integrates into contemporary education, a better result will emerge when appropriately applied. Furthermore, mobile devices can enhance the educational process by making it more functional for students to complete their homework and fostering more significant social interactions. Nevertheless, one drawback is that it cannot maintain a full battery charge for long.

Solar power is one of the renewable energy sources (Stephen & Eric, 2016). The energy of the sun can be converted directly to electricity using photovoltaic principles. Renewable energy sources can be used to generate electricity. Energy use has been reconsidered due to rising oil prices, growing awareness of energy-related pollution, and the detrimental effects of climate change.

Finally, energy efficiency in industry, electricity production, lighting, home appliances, and transportation have all improved due to energy assessment. The improvement in energy consumption that has happened in recent decades in practically all developed countries is primarily due to the efficient use of energy, according to Lacap (2004). Wilczynski (2015) stated that cell phone chargers will become increasingly prevalent as solar-powered electricity increases.

METHODS

The construction of the device was made possible through the concepts of physics, electronics, electricity, streetlight, and solar energy. The first idea is about light. In order to assess the brightness of the streetlight and determine how far the light should go, it is needed to understand how light functions. Whether the battery will have enough energy and whether the solar panel can produce enough energy for the system must be determined. The second idea is electricity. It is a must to determine whether streetlights use the correct voltage and wattage for illumination. The third idea is to improve the design of the streetlights so that the solar panel can be used as a source of energy and be used as a cellphone charging system at the same time.

Materials used in the study included strip light, PVC pipe, wire, 12V 20AH battery, cement, solar panel, charge controller, screw, acrylic, cyno, square bar, switch, and solder, to wit:

- A strip light is a multi-circuit stage lighting that offers accent, backlighting, task, and decorative lighting;
- PVC pipe is a widely utilized and versatile thermoplastic used in plumbing applications. A wire is a long, thin metal used to carry current or fasten things;
- To make cement, limestone, shells, chalk, or marl are combined with clay, slate, slate, iron ore, blast furnace slag, and silica sand;
- Photovoltaics, another name for solar panels, are devices that convert solar energy, such as sunshine, into electricity. This electricity may then run a station for charging street lights;
- A charge controller, charge regulator, or battery regulator regulates the rate at which electric current is added to or removed from electric batteries. Lighting, dimmer, and battery charging functions are provided via smart controllers;
- Portable power supply: A power-supplying device has a housing, a battery module that is housed inside the housing, a circuit board that is housed inside the housing and connected to the battery module, and a battery module that has a battery, a battery circuit board that is connected to the battery, and an ignition output port that is connected to the battery circuit board;
- Multifunctional portable power bank consists of a primary body, a circuit board, and a battery;
- There are three control units on the circuit board: a wireless transmission unit coupled to the second control unit and a second control unit coupled to the first control unit. The first control unit controls the input voltage of an external power source and the output voltage of battery power, which tells the second control unit to switch on. With these configurations, the multipurpose portable power bank provides electricity for charging different electronic devices connected to local or wireless networks and enabling data access via those networks. The second control unit allows a router mode or a network service mode, as well as wireless access. A flexible mobile power bank, a solar-powered LED street light that can communicate its power status;
- The solar cell contains a charge controller, a battery, and a solar board;

- The charge controller may also supply DC power to the LED streetlight;
- The charge controller's power data digital output interface connects to a power cable data communication unit and outputs power data from the solar cell to that device;
- The main power cable monitors the condition of each LED lamp's solar cells. Solar-powered LED streetlights are fully solar-powered street lighting systems; and
- Solar panels are positioned to charge a maintenance-free storage battery that can power streetlights.

FINDINGS

Findings led to the development of street light charging devices, which have several benefits and are useful for everyone who runs out of battery. According to survey findings, many individuals are satisfied with the streetlight charging system. The ability of the built-in device to light up and charge the cellphone is good and acceptable. Derived from the tests carried out by the researchers, the charge of the battery after 24 hours matches the predicted amount with reference to theoretical calculations. The device also works regardless of the weather, based on what the researchers experience during device testing.

The output power of the solar panel is displayed in Tables 1, 2, 3, and 4, as well as in Figures 1, 2, 3, and 4. According to Figures 1, 2, 3, and 4, the solar panel produces the most energy between 9:00 a.m. and 12:00 p.m. and between 3:00 p.m. These are the hours when the sun is the brightest. The energy output of the solar panel is lowest at 6:00 a.m. and 6:00 p.m., when the sun rises or sets, respectively. The findings indicate that the solar panel works best in the middle of the day. The numbers 1, 2, and 4 demonstrate that the outside weather is always sunny or partially sunny. Even if there is some sunshine at 9:00 a.m. and 12:00 p.m., Figure 3 demonstrates that the energy produced at noon is lower than that produced at 9:00 a.m.

Table 1
Trial 1 Solar Panel Power at Different Times of Day

Time	Voltage (V)	Current (A)	Power (W)
6:00 AM	12.15	1.88	22.84
9:00 AM	19.86	2.92	57.99
12:00 PM	20.42	3.02	61.67
3:00 PM	19.57	2.80	54.80
6:00 PM	8.36	1.23	10.28

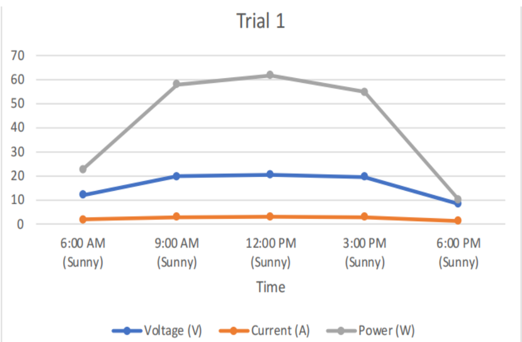

Figure 1. Trial 1

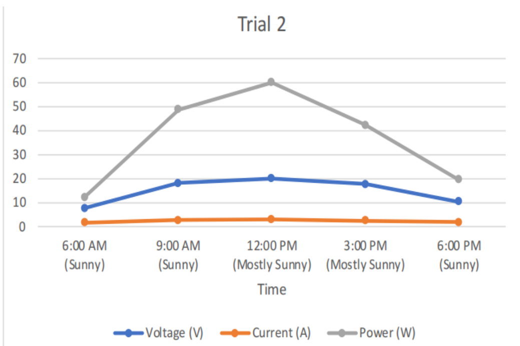

Figure 2. Trial 2

Table 2
Trial 2 Solar Panel Power at Different Times of Day

Time	Voltage (V)	Current (A)	Power (W)
6:00 AM	7.7	1.6	12.32
9:00 AM	18.03	2.71	48.861
12:00 PM	20	3	60
3:00 PM	17.6	2.4	42.24
6:00 PM	10.3	1.9	19.57

Table 3
Trial 3 Solar Panel Power at Different Times of Day

Time	Voltage (V)	Current (A)	Power (W)
6:00 AM	8.1	1.76	14.256
9:00 AM	20.8	2.98	61.984
12:00 PM	19.2	2.55	48.96
3:00 PM	16.8	2.17	36.456
6:00 PM	10.2	1.59	16.218

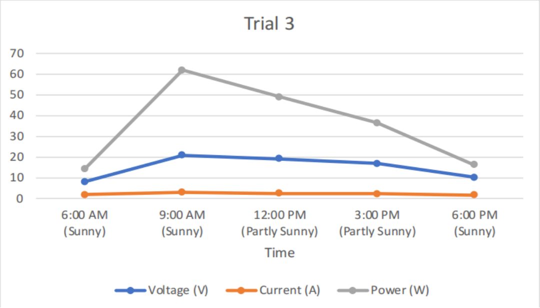

Figure 3. Trial 3

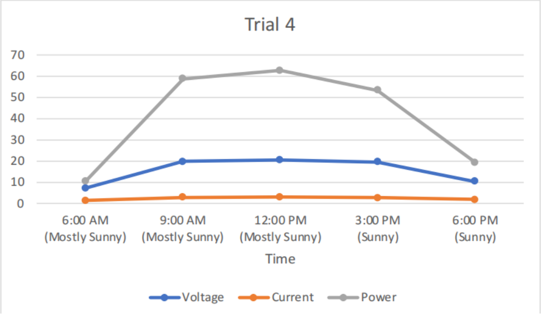

Figure 4. Trial 4

Table 4
Trial 4 Solar Panel Power at Different Times of Day

Time	Voltage (V)	Current (A)	Power (W)
6:00 AM	7.2	1.44	10.368
9:00 AM	19.8	2.97	58.806
12:00 PM	20.5	3.06	62.73
3:00 PM	19.6	2.72	53.312
6:00 PM	10.3	1.88	19.364

The device was built, improved, and given additional features before being tested to see how well it worked. The battery of the smartphone had a 50% charge. A 24-hour test period was used to put the device to the test. In order to draw attention to the device evaluation, the researchers tested the device in public. The researchers gave everyone who used the device access to evaluate it. The survey findings demonstrate that the device is well-made, secure, and useful.

CONCLUSIONS

Based on the results of the respondents' evaluations, the design and safety of the constructed device were satisfactory and acceptable. The ability of the built-in device to charge cellphones and provide light is good and acceptable; and the charge of the battery after 24 hours matches the amount that was predicted theoretically.

Finally, findings and several testings reveal that the device functions well regardless of the weather condition. Currently, solar power systems are frequently employed to generate electricity and are the most preferred energy source for lighting because they are pollution-free and environment-friendly.

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LIGHTNING PROTECTION SYSTEM

Daisy Mae R. Bongtiwon

INTRODUCTION

Lightning frequently damages people and properties. A lightning protection system protects the region, including homes and farms, against lightning. This research looked into the frequency of deadly lightning strikes in rural areas across the country. Farmers, cattle grazers, and workers have been the most common casualties, as they reside in disadvantaged locations where people are most vulnerable to the catalytic elements of lightning.

Lightning rods protect structures from lightning. It can be hollow, pointed, rounded, flat strips, and bristle brushes. The most used materials in lightning protection are copper and its alloys. Thunderstorms create lightning, which kills more people than tornadoes.

Lightning protection systems intercept lightning strikes with a low-impedance path to the ground to safeguard structures. Bonded to extra earthling or grounding connections, they exhibit low resistance and self-inductance. The split current can harm secondary side flashes, starting fires, breaking bricks and concrete or injuring people in structural structures.

Solar panels can affect the city's microclimate by generating heat or power from the sun. Lightning protection technologies like surge protection, utility bonding, and correct grounding avoid lightning-related fires. A complete lightning protection system includes lightning rods, conductor cables, arrestors, ground electrodes, utility bonding clamps, and surge protection. The researchers designed a lightning protection system different from the conventional type. Metal roofs may benefit from this design.

LITERATURE

Lightning is a high-voltage discharge between clouds or the ground, according to Pangonilo, V. (2022). This high current discharge momentarily balances cloud-earth charges and protects buildings, transmission lines, and electrical equipment from lightning discharges and surges. Lightning creates transient overvoltage in electrical circuits and is one of the most researched natural occurrences. Understanding lightning is necessary to plan lightning protection to safeguard structures and electrical systems.

Goetz (1915) said the invention of lightning rods provides an all-metal, detachable connection for lightning rod branch sections, consisting of a single flexible metal piece that is secured to a metal plug on one side and whose free end is designed to be bent over to engage the other side of the plug to encircle one rod. When the plug is inserted into the socket on the first rod, the tubular extension of the other rod detachably secures the ends of the metal piece. The invention provides a new and enhanced branch connection. He also noted that combining a flexible metal strip intended to ring the other section of a lightning rod with the branch parts, one of which has a tubular end, and a technique for attaching the ends of the strip within the tubular end of the first section,

A lightning arrester is usually placed at a building's highest point to safely transmit charges from a thundercloud to the ground. It has a lightning-protecting rod connected to the ground at one end and a discharge plate electrically linked to the rod under the rod cap and to which ground charges from the ground can be charged. A rod cap is electrically connected to the opposite end of the rod. (Chung, Y., 2007)

An Electric conduction compound-filled ground rod and connecting sleeve (Korea Electric Power Corporation, 2010) is a ground rod installation structure that drives the rod deeply into the ground includes an overhead earth wire installed to protect transformers, power transmission lines, etc. from lightning; a ground wire extended from a lightning arrester to the ground; a multi-stage ground rod extended by a thread type connection and connected with the end of the ground wire; and a connecting sleeve for attaching the ground rod to the ground wire.

Lightning Protection prevent fires and electrocution by protecting building electrical systems. Lightning conductors, usually metal rods, protect buildings from lightning strikes. If lightning strikes the structure, the lightning rod will be hit first, sending the strike safely through a wire to the ground. Lightning is an electrical charge that opposes electrical charges. The bottom of the cloud closest to earth has a negative charge, while the land below has a positive charge. The earth is non-conducting, dry air strip separates these opposed charges. Lightning falls in 150-foot increments when the two opposing charges pile up and the dry air belt moistens. The lightning protection mechanism draws the positive ground charge upward.

METHODS

The construction of the Lightning Protection System includes copper-and-aluminum Lightning Arrester (LA) rods. Copper and other materials prevent lightning from scattering the charges during thunderstorms. Lightning strikes the building's highest poles. Once the bolt hits, the rod safely distributes millions of volts through copper or aluminum wires to ground the home and the earth. Lightning rods stop direct lightning strikes and flames. The researchers tested the device and the bulb's built-in output from an outlet. They checked the lamp's electrical flow, multi-tested output voltage counting at 250 volts on clay soil and checked the backyard voltage capacity. Since Philippine lightning testing is unavailable, the researchers undertook Do-It-Yourself experiments. The lLightning protection is optional, but the correct design method improves efficiency and utility. It requires theoretical and scientific inquiry, and air terminal improvements protect roof surfaces.

The study utilized Copper wire, Solid Copper, Rubber Socket, Arduino Jumper Wires, LCD, and Clamp in the experiment, to wit:

- Cu-wire several types of electrical wiring use copper. Copper wire is utilized in power generation, transmission, and distribution for telecommunications, electronics circuits, and innumerable electrical devices;
- Copper, Solid metal core wire is heavier and thicker than stranded. Outdoor application requires durability and greater currents. This tough, affordable wire can withstand weather, harsh circumstances, and frequent transportation;
- Rubber Socket that fits to a ratchet or socket wrench to tighten or loosen a fastener by spinning it;
- Arduino Jumpers, Jumper wires have connection pins at either end. They join circuit locations without soldering. Jumper wires can change or diagnose circuits LCD;
- The liquid crystal display (LCD) panel projects microcomputer on-screen information onto a bigger screen using a normal overhead projector so large crowds may observe it without crowding around the TV monitor; and
- Clamp, Clamps can temporarily fasten work. They are used in carpentry, woodworking, welding, building, and metalworking.

FINDINGS

Components of lightning protection are made of corrosion-resistant materials, which need to be protected against rapid degradation. Copper and its alloys are utilized to make the highly conductive components of current-carrying systems. The strong corrosion resistance of copper, a noble metal that can endure attack rather well, is a result of its capacity to adapt to its environment and attain weathering equilibrium. When high electrical or thermal conductivity is required, copper alloys are preferable over copper alloys comprising more than a few percent total alloy content. It is prohibited to utilize material mixes that electrolytically couple in the presence of moisture. The outstanding combination of high strength and high ductility found in class 1 copper wire makes it the preferred material for lightning protection systems. Electrical wires may be made out of it because it is ductile, affordable, highly electrically conductive, and thermally resistant. Copper has a greater thermal conductivity rating than aluminum, which makes it more effective in reducing thermal hot spots. It is also thermally resistant, which makes it safer to use.

Materials for stainless steel framing are exceptionally strong, ductile, and resistant to corrosion. They also have a natural covering that inhibits oxidation. Also, they offer a variety of standard and bespoke forms that may be utilized to create practically any element of a building and are resistant to damage from heat, water, and chemicals.

When planning and installing lightning protection systems, grounding is an important consideration because it offers a low-impedance route for fault and lightning-induced currents to reach the earth, assuring maximum safety. The performance of a grounding system can be impacted by changes in season or weather as well as temperature and moisture content in the soil. Current sources are sources of variable voltage that change their voltage until the amount of current they produced is what is required. The source can consume less power when a modest resistance is introduced, but when a high resistance is added, it has to work harder to provide the same amount of current. Higher touch or step potentials may result from this, as well as an inability to consistently run over-current or over-voltage devices strike.

The least resistance path to ground is provided by copper rod, which has a smooth, bright, and clean surface. To join copper wire to a copper ground rod, copper wire is connected using ground clamp, a high strength, highly conductive copper alloy. Materials used to construct stainless-frame nags can endure the impacts of heat, water, and chemical degradation. Due to its special blend of high strength and great ductility, copper wire is the preferred material for wiring systems.

The height of a lightning arrester is what makes it stand out from other objects and impacts how well it can guard against lightning. The height of a lightning arrester when it is positioned on the ground is simply ascertainable, but this is not always the case with structures. The comparable collection area of a structure, which is three times as tall as the building, is calculated according to risk assessment criteria taking this into consideration. To discourage people from staying on the roof in the case of an approaching lightning strike, all roof components should be secured, and if the top half is open to the public, a local storm detector should be placed. With the addition of more technology to residential houses, the risk that electrical surges and strikes represent to homeowners is increasing.

Regardless of where it is situated in respect to the roof edge, the height of a single high-rise lightning arrester that is put on a roof and intended to shield structures below should be measured from the ground. The protective impact of the building itself should be evaluated when the facility's ground-level protection is insufficient, and the risk assessment parameters used to determine a residential property's lightning susceptibility include low risk, medium risk, and high risk.

Based on the experiment conducted by the researchers, the length of the cable for the lightning rod will depend on how high the house or building is, as long as the user has the same type of lightning rod/ground rod and wire. Copper and aluminum should not co-exist when constructing a lightning rod because of the galvanic reaction; the contact part of copper and aluminum will accelerate the oxidation of the aluminum wire. In addition, the copper and aluminum joints will lose contact over time. The prime example of this is the cable used that has a resistance of 3 ohms which is close to zero. This means that the circuit close to no resistance (0) would indicate a complete circuit or one that has no short.

With this, the experiment's length of the cable will not actually be an issue if the type of wires is correct and attached to the lightning and ground rods perfectly. The closer the cable to 0 resistance, the better the conduction of current.

The study investigated the time fatality rates from 2018 to 2020 in the Philippines. There are an annual total of 215 deaths: 70 in 2018, 49 in 2019, and 96 in 2020. This shows that there is a need to install lightning protection systems in barangay facilities to reduce the effect of lightning struck during thunderstorms.

Table 1
Numbers of Deaths from Lightning in Year 2018

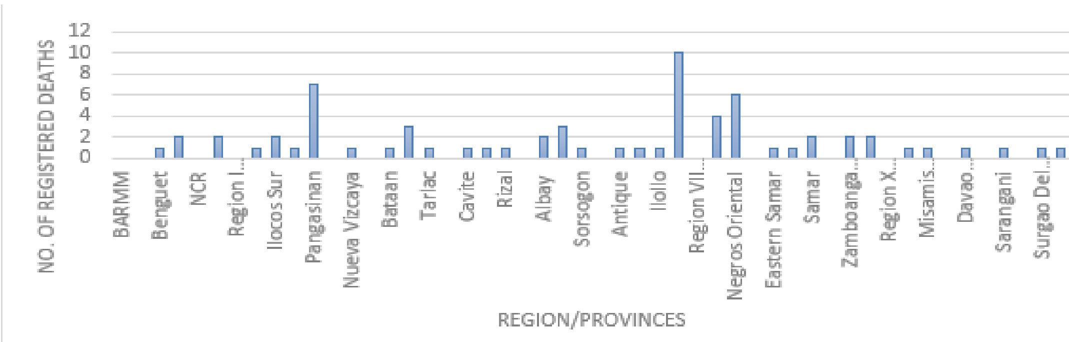


Table 2
Numbers of Deaths from Lightning in Year 2019

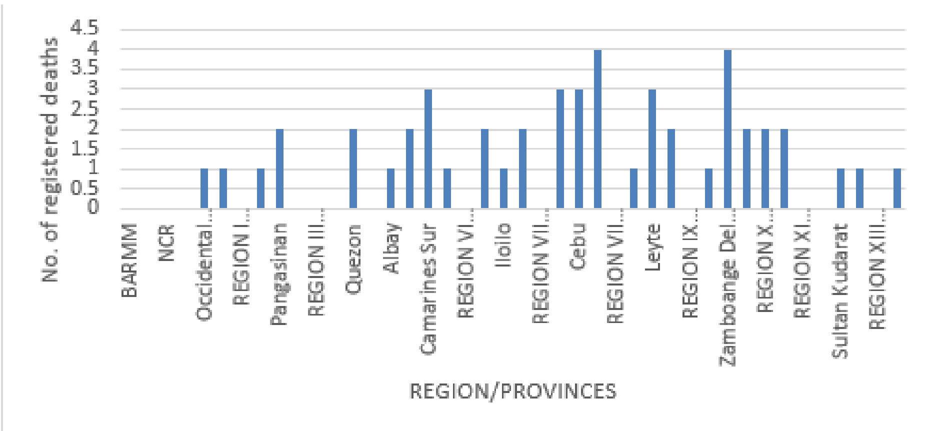
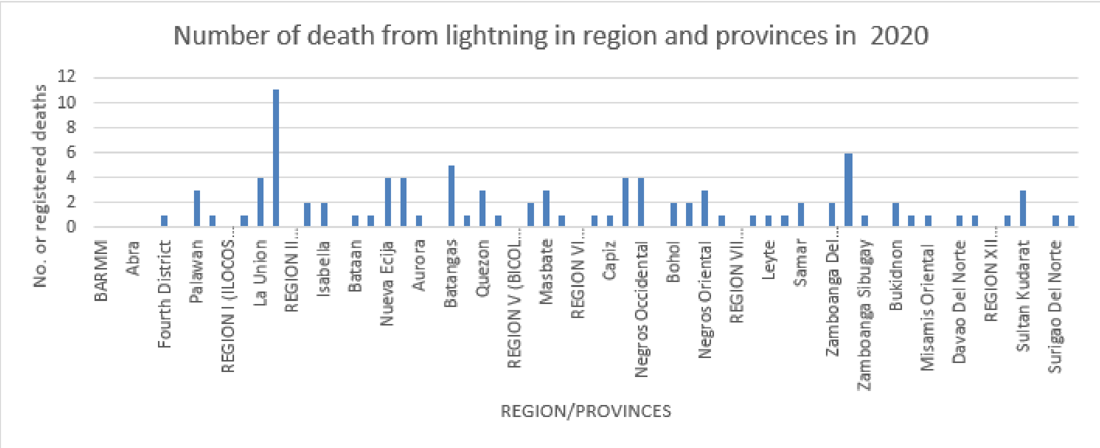


Table 3
Numbers of Deaths from Lightning in Year 2020



All of the aforementioned incidents, as well as a large number of others over the past few years, demonstrate how lightning can strike people while they are engaged in a variety of daily activities like working, walking, resting, riding a habal-habal, or seeking shelter from the rain. Additionally, they demonstrate how common fatal lightning strikes are in rural areas across the nation. The victims have mainly been farmers, cattle grazers, and laborers, who live in marginalized communities where people are most susceptible to the catalytic elements of lightning.

CONCLUSIONS

The device was built, improved, and given additional features before being tested to see how well it worked.

The respondents rated the design, safety, output materials, and usefulness as good and outstanding. The assessors found the manufactured output to be either satisfactory or exceptional at converting electricity. Researchers found that the output creates a safe power channel without harming the environment. The output shows that a cheap lightning rod can be protection against lightning.

Lightning often damages persons and property. Indirect impacts from inductive or capacitive coupling may damage electrical and electronic equipment inside the structure, while direct impacts may cause structural failure. The lightning protection evaluation study ensures that the facility, including buildings and tank farms, is lightning-proof. Traditional lightning protection uses exposed lightning masts or rods at the highest elevations of structures connected to a grounding system by downward conductors. A design approach determines the ideal lightning rod or mast positions based on their protective area. Lightning protection systems protect building occupants against fire, mechanical damage, and death.

Lightning protection is complex, and even the most advanced methods cannot silence thunder. Instead, use a complete management approach, the correct therapy, and prevent lightning strikes. The single signal ground prevents ground network stray current from disrupting communication equipment. The building's protective measures dampen the lightning electromagnetic field, reduce lightning overvoltage damage, and allow communication equipment to work correctly. It prevents lightning-related fatalities.

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ORGANOLEPTIC EVALUATION OF BASELLA ALBA INNOVATIVE RECIPE: MALABAR DELIGHT

Dr. Shirley P. De Leon

INTRODUCTION

Background of the Study

Basella Alba or Malabar nightshade leaves resemble spinach in appearance and taste, only that they became slimy and sticky when cooked [8]. It holds a storehouse of nutrients good for both young and old [10] [13] [15]. Though it is not familiar to everybody but is commonly seen in school gardens and house backyards in the Philippine area [14]. Leaves sprouts are popular as vegetables used as a salad ingredient sautéed or stir-friedviands, or as soup thickener [8].

Consumers trend today preferred healthy foods made of natural ingredients from vegetables like kamote, saluyot, and malunggay [17], all leafy greens which were not popularly utilized as main ingredients in certain food recipes except the Filipino traditional menu. And even leaves from guyabano fruit [18] were utilized at present, due to their medicinal value discovered lately. Different parts of vegetable plants are used as the main ingredient if not flavor bases in baked goods, beverages [19], and even pasta. Innovative recipes [4] subjected to organoleptic evaluation / sensory analysis [23] [25] gave birth to consumer acceptability [20] of new products. Food products that blend health and medicinal functions [11] known as functional food [1] became widely recognized. Snack items were infused with ingredients that have been scientifically proven to provide health benefits [9]. Aside from the inclusion of nutraceuticals which can be sources of macronutrients, fiber, vitamins [13], and, minerals that boost the immune system. This treading back to the path of natural simplicity by doing away with artificial flavoring and the use of preservatives [2], had greatly awakened the awareness of consumers of its negative effect.

Another trend among food products is the tendency to latch on to healthy and medicinal trends wherever there are chance. A healthy lifestyle had played a major role in renewed dispositions and decisions in the choice of food. Consumers had become aware and interested in the nutritional contents of the food they are consuming and buying. Now known as functional food, candies, pastries, cakes, beverages, viands, and merienda fare were scrutinized for healthier ingredient contents. Package label is a must to serve the information the consumers were expecting. Often looked at if the products are infused with ingredients that have been scientifically proven to provide health benefits. Aside from the inclusion of nutraceuticals which can be sources of vitamins and could boost health, food production has started treading back to the path of natural simplicity by doing away with artificial flavoring, ingredient and the use of preservatives.

Considering the foregoing developments and trends in the food industry [6], the researcher decided to explore the infusion of leafy veggies [17] which were known to have nutritional properties [10] in producing quick bread which appeals to consumers, especially children. This endeavor hopes to introduce an innovative product [6] laden with benefits that would serve both the desires of the human palate [28] and the goal to live healthy lives [4]. In this study, pureed basella alba leaves were used as the main flavoring ingredient in making quick bread known as 'Malabar delight'. This promotes the increased utilization of indigenous plants in tropical countries like the Philippines [1]. Which have been blessed with rich flora and fauna. The exploration of this innovative recipe will upshot additional food to the Filipino table [1] as this study may potentially offer.

Framework of the Study

The study was patterned after Michal Halagarda's (2008) new food product development process [5] as an adoption of Czapski's (1995) Food product development approach. The process was composed of the aim on conducting the project, formulation of initial recipes, subjection to organoleptic evaluation/ sensory analysis, final product development and technical production.

Objectives of the Study

This study is conducted to utilize Basella Alba as the flavor base in a baked product called 'malabar delight". Specifically, it aims to:

1. Develop standardized Malabar delight recipe.
2. Assess Malabar delight using organoleptic evaluation on four attributes.
3. Compare the assessments made by the three groups of respondents on the Malabar delights general acceptability.
4. Select packaging material
5. Make product costing.

MATERIALS AND METHODS

Research Design

The method of research employed in this study was the experimental design. The Malabar delight recipe was the product of trial recipe formulations to determine the most acceptable result [7] which was subjected to organoleptic evaluation on appearance, aroma, texture, palatability, and general acceptability. Sources of data were obtained from 120 respondents, all from Gen. M. Alvarez, Cavite grouped into three. (40) students aged 10 – 15, (40) Food experts, particularly those that perform product development like food technologists and nutritionists; and another 40 allotted to entrepreneurs and mothers.

Sources of Raw Materials

Raw material such as basella alba leaves, flour, shortening, sweetener, eggs, and cinnamon powder was bought from the nearby local market.

Preparation of Standard Recipe of Malabar Delight

Table 1 shows the ingredient formulation for the product development to come up with the Malabar delight.

Table 1
Ingredients in Preparing Basella Innovative Recipe: Malabar Delight

Ingredient	Formula 1	Formula 2	Standard
Flour	128 gms	160 gms	128 g
Basella alba	32 g	50 g	32 g
Shortening	45 g	85 g	85 g
Sweetener	75 gms	115 gms	96 g
Egg white	125 gms	90 gms	68 g
Liquid	32 ml	32 ml	32 ml
Cinnamon powder	11g	11 g	11 g

Flowchart of Malabar Delight Preparation

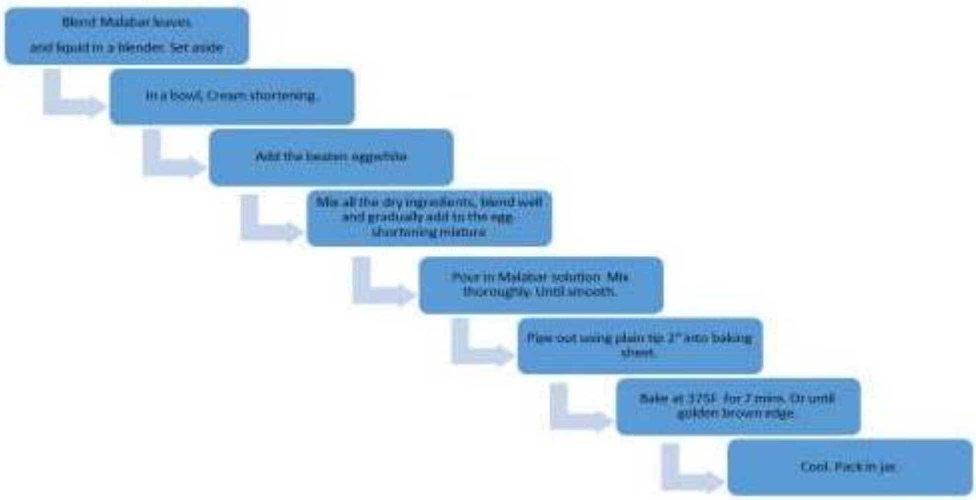


Figure 1. Shows the Step-by-step Process of Preparing Malabar Delight

Organoleptic Evaluation

With the help of the three groups of respondents, the scoring test was done. Appearance, aroma, texture and palatability [16] were the attributes that were considered and scored on a five-point scale such as **5** – Excellent **4** – Very Good **3** – Good **2** – Fair **1** – Poor

Whereas, for the general acceptability, **5** – Highly Acceptable **4** –Very Acceptable **3** – Acceptable **2** –Moderately Acceptable **1** – Not acceptable.

Packaging Material

Packaging plays a vital role in the appearance and safety of food [22]. To carry out its function, the researcher considers the characteristics of [21] packaging material to be non-toxic, lightweight, transparent, and protected from contamination and sealing features.

Costing

Costing refers to the price estimation or value of money spent [28] to produce Malabar delight. Ingredients were bought in larger quantities from a wholesale store to sustain the need and time all throughout the experimentation period and to lessen the expenses. The cost was calculated, after which the 20% markup was added and divided to its production yield [28].

RESULTS AND DISCUSSIONS

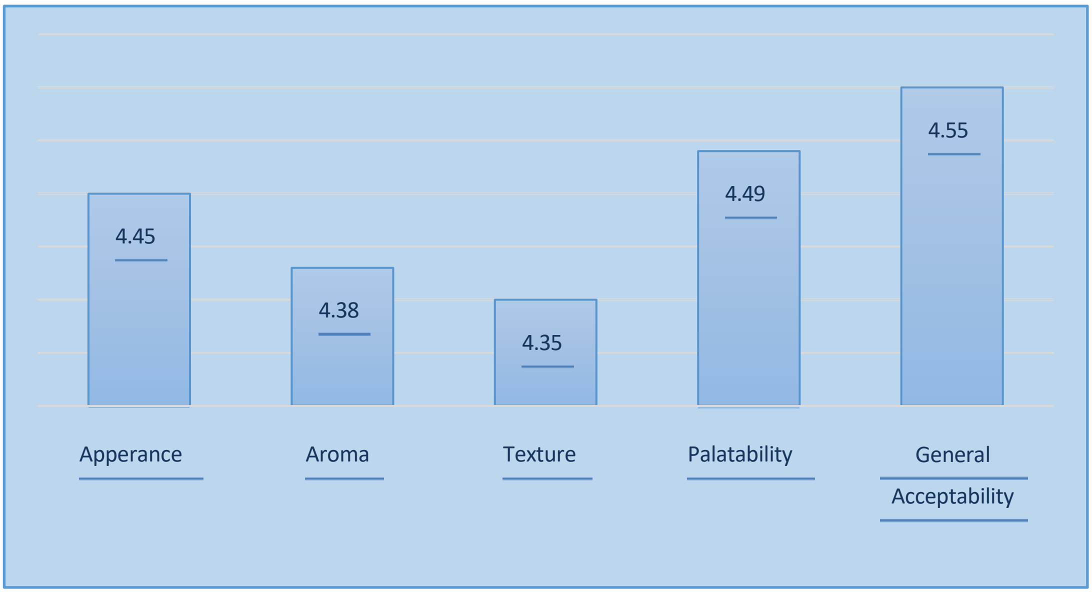
Development of Malabar Delight

The Malabar delight was conceptualized after searching and reading relevant literature. Experimentations [7] on the different recipe formulations were conducted in order to come up with the standard recipe [12]. Formula 1 is a little bit soggy, bland and dominant in egg taste that needs improvement but the appearance especially the color was very good. Formula 2 results were hard, too sweet, and not crunchy. The color was dull green. After series of quantity manipulations and diligently recorded the result of the trial, the standardized recipe for Malabar delight was achieved.

Organoleptic Evaluation of Malabar Delight

Table 2 shows an organoleptic evaluation of Malabar Delight. From the graph all the attributes can be seen that the palatability, appearance, aroma, and texture scored 4.49, 4.45, 4.38 & 4.35 were all interpreted as **"very good"** while the general acceptability got a composite mean of 4.55 interpreted as **Highly acceptable** to the three groups of respondents [18] [26].

Table 2
Organoleptic Evaluation of Malabar Delight



Comparative Assessment on the General Acceptability of Malabar Delight

Table 3 manifests the comparative assessments of the three groups of respondents on the general acceptability of Malabar delight was not significant, hence the null hypothesis was accepted. The respondents unanimously agreed on their assessments of General Acceptability.

Table 3
Comparative Assessments of the Three Groups of Respondents on the General Acceptability of Malabar Delight

Variables	F-value	F critical value	Decision	Interpretation
General Acceptability	3.50	3.52	Not Significant	Accept Ho

Packaging Material

To pack and present Malabar delight, a polyethylene terephthalate jar [27] with a 200-gram capacity was utilized. The said packaging material characterized by its clear, transparent, strong, and light features was approved as safe for food and beverage contact [3]. It assures product protection from contamination against the smell, moisture, and harmful microorganisms [2].

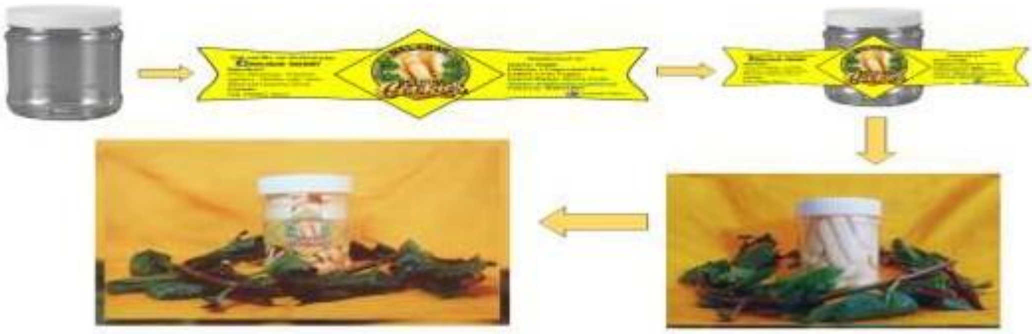


Figure 2. The packaging process of Malabar Delight

Costing

Quantity	Unit of Measurement	Ingredient	Unit Cost	Purchased
1	Kilo	All purpose Flour	Php 38.00	Php 38.00
1	Bundle	Basella Alba	Php 10.00	Php 10.00
1	Bar	Shortening	Php 42.00	Php 42.00
6	Pc/s	Eggwhite	Php 6.00	Php 6.00
1	Box	Sweetener	Php 37.00	Php 37.00
1	Can	Liquid/Milk	Php 28.00	Php 28.00
1	Bottle	Cinnamon Powder	Php 32.00	Php 32.00
			Cost of Ingredients	**Php 223.00**
			Packaging Material	**Php 35.00**
			Gas/Electricity/Water	**Php 65.00**
			Labor	**Php 50.00**
			Total Cost	**Php 373.00**

Pricing (Php 373 X .40 = 149.20) (Ph373 +149.20 = Php 522.20÷10)
Yield: 10 jars @200 g each
Cost per jar @ 40% mark-up = Php 55.00
Estimated Profit – Php 149.00 (single recipe based on a kitchen Test

SUMMARY

Basella alba can be used in baking with its leaves as the flavor base in making Malabar delight. The raw materials were all available in the local markets and procedures for doing the product are simple and easy to follow common baking tools and an oven will suffice for the production. The attributed characteristics of Malabar delight had been rated very good by the three groups of respondents and the comparative assessments on the general acceptability accepted the null hypothesis that shows no significant difference in their assessments. To protect the product, a clear, transparent, strong, and light material safe for food contact was utilized in the form of polyethylene terephthalate jars with a 200-gram capacity. The product cost is 44% lower than the existing product of the same kind in the market, thereby qualifying its possibility for entrepreneurial exploration.

CONCLUSIONS AND RECOMMENDATIONS

Malabar Delight's simple product development is an additional new food on the table by utilizing domestic endemic plants in the Philippine area.

The discovery of the main flavor base will be utilized to address health and nutritional problem among Filipinos that eventually will be developed into natural treatments and interventions.

This will help mothers and interested individuals to explore the entrepreneurial possibility.

The medicinal value can be further tested for its efficacy and effectiveness through the help of other agencies to prove its veracity.

HEIs particularly Research Development services may:

Allocate funding for technical production.

Encourage Translational research exploration in the future.

Collaborate with local farmers for the cultivation of domestic endemic plants such as Malabar.

Impact on Students

Conduct a follow-up study on entrepreneurial feasibility with bigger respondents.

Increased interest in studying least utilized edible vegetables and fruits.

Conduct product development using Philippine Indigenous food plants and vegetables.

Apply experimental cookery principles to discover a new dish.

Further study on the shelf-life, water activity, and moisture content of the developed products may be explored so as to increase their market potential.

Impact to Stakeholders

Adopt developed technologies/ recipes.

Communicate the nutritional and medicinal benefits gained.

Consider its possibility for entrepreneurial ventures.

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BATTERY-OPERATED HEATED TOWEL

Benjamin G. Haboc
Daisy Mae R. Bongtiwon
Derick Peralta

INTRODUCTION

Ever since, normal towels have dried people's bodies and prevented cold. No one has ever considered a better approach to counteract cold chills. People generally use regular towels or blankets to warm their bodies. They usually keep the towels on their bodies after bathing to feel warm and avoid chills. After using the towels, they would leave them and carry on with their activities while having cold chills. To solve this issue, researchers invented a heated towel that eliminates shivers and chills in cold conditions.

Reilly (2016) stated that evaporation is the cause why the bathroom seems cool after a hot shower. When leaving the bathmat, water on skin evaporates. Heat energy is needed to transform water into a gas. It absorbs heat to generate energy. The morning shower's draining water absorbs body heat and the person and water on the skin cool. It is not simply the shimmering water on flesh that is cold. Shivering increases as skin heat is lost through evaporation.

In summer, evaporative cooling is useful, but in winter it is inconvenient. Sweat, the body's natural cooling system, relies on it. But, on a hot day, sweat may not chill a person down. As the air is saturated with water, sweat cannot evaporate, making it hot and moist. Stepping out of the shower may be shocking. Water vapor trapped behind the curtain keeps the shower air wet and warm. Yet, the air outside the curtain is less humid. Hence, when a person leaves the shower, they encounter an atmosphere engineered to quickly evaporate their skin's water. As warm water evaporates faster, the bathroom might rapidly become an icebox.

The researchers developed a device that absorbs water and warms a person. It is effective in the Philippines, which has a rainy season and is surrounded by water. Due to its geography, swimming, hiking, and camping are popular in the Philippines. This battery-powered gadget that is compact and portable will not only be beneficial to people after bathing but more so to those who engage in different water activities

LITERATURE

According to Glazier, E., Ko, E. and McMeel, A. (2019), there is a danger of overheating the body when using an electric blanket on a baby or a person who is immobile. Neuropathy, a disorder that can affect a person's sensitivity to heat, can be brought on by several medical illnesses, including diabetes. Although there have been cases of heat stroke deaths brought on by higher core body temperatures by using an electric blanket while sleeping, they are uncommon. Preheating the bed before going to bed at night and turning it off before getting in is one possible compromise. Address any possible tripping dangers and adhere to the placement, maintenance, and cleaning instructions provided by the manufacturer if one wants to be sure an electric blanket is in good working condition.

Using a brand-new, non-disposable carbon-fiber resistive-heating system, Negishi, Hasegawa, Mukai, and Nakagawa (2003) assessed the effectiveness of the method for treating perioperative hypothermia. 24 patients undergoing open abdominal surgery were given a random choice between warming with a full-length circulating water mattress set at 42°C or a lower-body forced-air cover with the blower turned up. Using factorial analysis of variance and Scheffe (Combining Acute Accent) F tests, core (tympanic membrane) temperature differences across the groups were studied. The groups' differences in potential confounding variables were not very different. When 150 minutes had passed, the circulating-water group always saw much larger core temperature drops. Resistive heating keeps the core temperature of the body steady, which is just as effective as pushed-air, even throughout a major abdominal surgery.

METHODS

The researchers constructed a battery-operated heated towel using different materials. They conducted three trials and used batteries with different voltages. To obtain the desired voltage, they utilized different batteries connections such as series, parallel and combined connections.

The heated pad was constructed using the different electronic materials such as steel canthal nichrome wire, flat nichrome wire, MS 40 amp, Stainless Tape, 12 volts jack, Socket wire, Glossy Carbon Sticker, Matte carbon Sticker, Kitchen wallpaper for high temperature, Microfiber bath towel, Cotton bath towel, 18650 battery 18000 mah, 18650 battery LG Choco, Pure copper wire, Electrical tape, Shrinkable plastic tube Battery case, Duct tape, Soldering iron, Soldering lead LED display, Mini switch, solid wire and, Temperature Scanner gun type.

After the construction of the device, testing was conducted, and all data were analyzed and placed in a graph to observe the behavior of the towel when it is plugged into different voltage sources (Battery).

FINDINGS OF THE STUDY

The device is battery-operated and the battery used is a lithium-ion rechargeable battery. To get different voltage outputs, they connected several 18650 batteries in parallel, series, and combination circuits. According to their investigation, the best materials, for a heating pad are polyfine fabric inside and carbon fiber stickers on the front. They utilized a 12-volt jack to charge the battery and socket wire to discharge it. Also, the W1209 temperature switch, which was user-friendly, effective, and reasonably priced, is the least expensive switch with a thermal scanner and display. The nichrome wire is considered the most typical coil material, which is a high-temperature resistant material, was used for the coil. The nichrome flat wire is found to be good because it has a bigger warming area and can easily be broken during testing using 12-volt batteries.

The first trial is shown in Figure 1. The result shows that the temperature of the heating pad remains the same when the switch was turned on and plugged into the 3.7-V to 4.2- V battery pack. It was observed that the heater did not create much heat and there is no significant increase in the temperature of the heating pad.

The second trial is shown in Figure 2. The researchers used 7.4 to 8.4 battery packs to do this, researchers connected two pairs of 18650 battery packs in series to add up their voltages and get a pair of 7.4 to 8.4 battery packs. In Figure 2, after using 7.4 to 8.4 volts for 5 minutes, it only triggers the relay once at a time of 2 minutes and 55 seconds, and because of the slow increase in temperature, the temperature on the towel remains low even when the temperature switch turned the heater on.

The third trial is shown in Figure 3. The researchers used a battery management system to achieve a 12-volt battery pack (BMS). Individual cells in the battery pack are monitored by the battery management system. It then estimates how much current may safely enter (charge) and exit (discharge) the battery without causing damage. This protects the battery pack against excessively high or low cell voltages, extending the battery's life. 3s BMS was used by the researchers. Figure 3 shows that for a 5-minute run time of a heated towel utilizing an 11.1 to 12.6 battery, the relay triggers twice, first at 1 minute and 20 seconds, second at 1 minute and 20 seconds, and second relay triggers at 3 minutes and 35 seconds.

Based on the three different voltage representations of data, the constructed heating pad cannot be used with 3.7 to 4.2 battery voltage because the temperature does not have a significant increase. Using 7.4 and 8.4 volts, the device is functional, however, the heating process fall short to the desired temperature. Finally, using the 11.1 to 12.6 volts will warm the heating pad in one minute and will arrive at the temperature that is sufficiently good to warm a person's body.

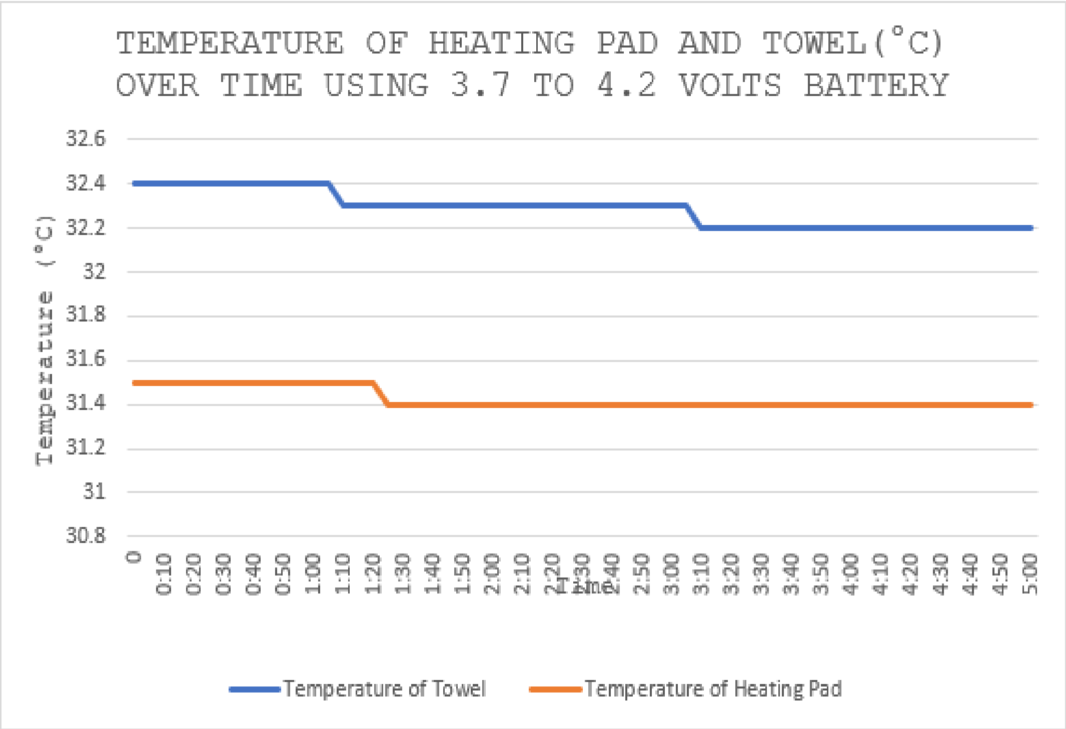

Figure 1 Temperature of Heating Pad over time using a 3.7 to 4.2 volts battery pack.

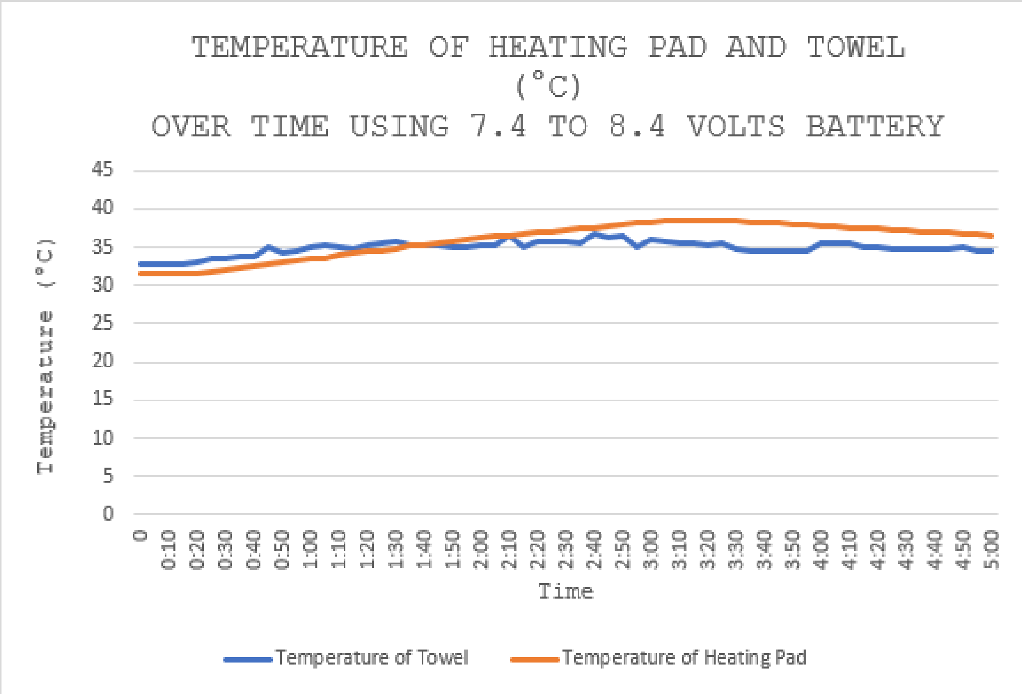

Figure 2. Temperature of Heating Pad over time using 7.4 to 8.4 volts battery pack.

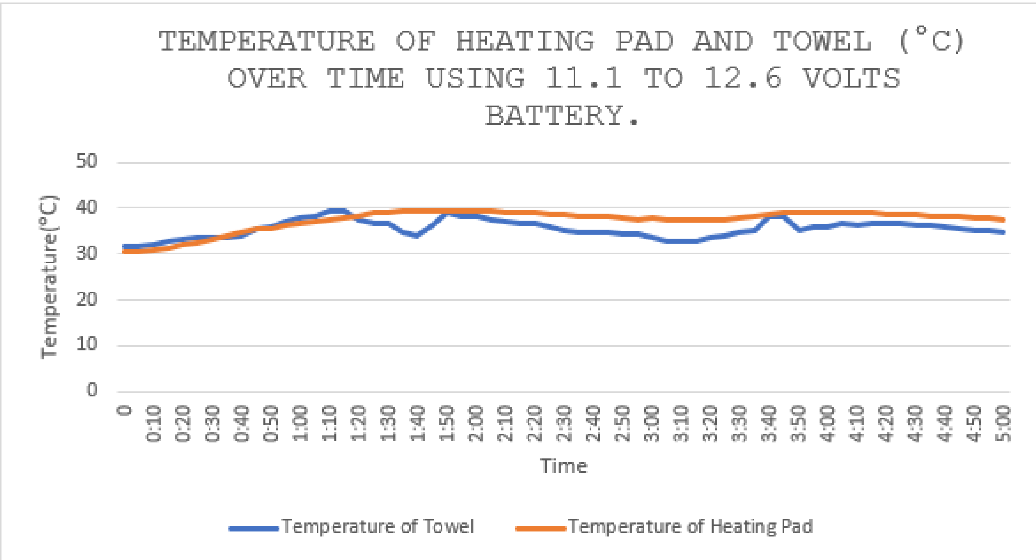

Figure 3. Temperature of Heating Pad over time using 11.1 to 12.6 volts battery pack

CONCLUSIONS

Researchers found that the heated towel warms the body during outdoor or indoor activity. The materials used can produce and maintain the needed heat to increase the body temperature by extending the heating pad's heat. The batteries used in the heated pad made it possible to reduce the effect of electric shock and the risk of getting burned.

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FABRICATION AND EVALUATION OF ADJUSTABLE GRINDING FIXTURE FOR CUTTING TOOLS FOR BENCH GRINDER

Eldon P. Perez

INTRODUCTION

The use of cutting tools grinding fixture for bench grinder is essential, and it can cater to different types of tool cutter like an end mill, drill bit, and tool bit use in milling machine operation, lathe machine operation, and drilling operation. The Machinists/Technicians can maximize their time and effort to give a sharpened and effective cutting tool in every work job.

In this study, the primary aim is to provide mechanical technology instructors and machinists/technicians a cutting tool grinding fixture for bench grinders, particularly in a different kind of machine operation that uses high-speed steel cutting tools, by giving them appropriate knowledge about the angles needed for a tool cutter. According to C. Thomas Olivo (2015), for a high-speed steel tool bit used in lathe machine operations, there are some parts that are needed to achieve a specified angle. The relief-angle, whether for the side-cutting or end-cutting edge, or the nose, permits the cutting tool to penetrate the workpiece. High-speed steel cutting tools grind with relief angles of 8° to 16°, the back-rake angle may also be a positive or negative rake to strengthen the cutting edge.

The recommended rake angle for the back rake is 5° to 10°, while the side relief angle requires to be 10° to 20°. Hence, the side-cutting edge angle requires 0° to 30°, depending on the material to be machined; a 20° angle is standard for general lathe turning processes. End-cutting edge angles requires 15° used for rough turning, while an angle of 25° to 30° used for general turning processes.

The drill-point shape cutting conditions vary for different materials that is necessary to change the shape of the cutting edge and cutting angle. The clearance angle range for general purposes is from 8° to 12°. The standard drill angle for general drilling operations is 118°, there is a 59° angle on each side of the drill axis. End mills used to mill grooves, slots, keyways, and another more extensive surface milling. End-mills are coarse-tooth cutters, the teeth cut on the periphery as well as on the face and requires much of patience to sharpen.

The principle of this study is to give information about grinding operation using a bench grinder with fixtures as a key to sharpen tool cutters, to achieve such objectives, the researcher ensured that machinists/technicians and mechanical technology instructors to have more idea in developing their skills in operating bench grinders with fixtures. Researcher made a study that fits today's work style that is why, the researcher decided that the tool cutter grinding fixture for mechanical technology is the one-of-a-kind fixture used in bench grinders where the machinists can highly use in every machine shop.

The existing in the market has its own sharpening holder for specific cutting tool used in machine shop and costs expensive in the market. Compared to the present study, the adjustable grinding fixture for cutting tools for bench grinder can sharpen tool bit, drill bit, and two-flute end-mill in an affordable price. The researcher conducted the study because during the demonstration of sharpening a dull cutting tool; it is difficult to identify the degree of an angle when sharpening on a bench grinder. At times, it can bump the hands on a grinding wheel and get a scratch wound. The students can gain knowledge and skills using the cutting tools grinding fixtures for bench grinders. Also, they will be exposed to the hands-on application of bench grinding operations.

RESEARCH PARADIGM OF THE STUDY

The conceptual models that guide the researcher in conducting the study are shown in the figures below.

For the fabrication of the adjustable grinding fixtures for cutting tools for bench grinder, the researcher was guided by the conceptual model shown in figure 1.

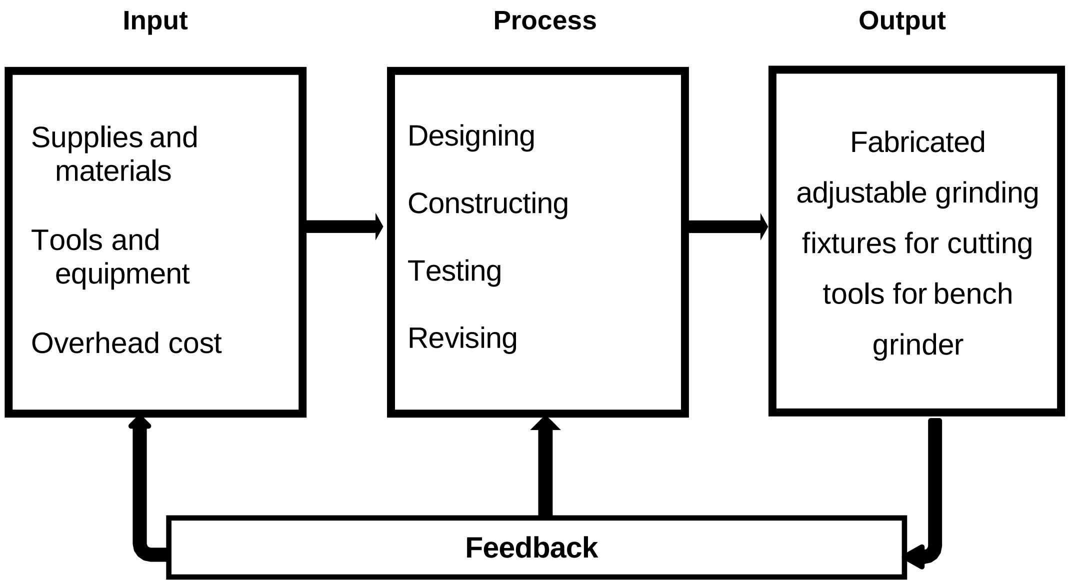


Figure 1. Conceptual Model for the Fabrication of Adjustable Grinding Fixtures for Cutting Tools for Bench Grinder

The input includes supplies and materials, tools and equipment, and the overhead cost. The process consists of designing, constructing, testing, and revising. The output is the fabricated adjustable grinding fixtures for cutting tools for the bench grinder. A feedback mechanism had been included to check the fabrication procedures is properly done.

Figure 2 shows the conceptual model for the evaluation of adjustable grinding fixtures for cutting tools for bench grinders.

The input includes the fabricated adjustable grinding fixtures for cutting tools for bench grinder, the survey questionnaire, and respondents. The process consists of the validation of survey questionnaire, administration, and retrieval of survey questionnaire, statistical treatment of data and interpretation and analysis of data. The output contains the evaluated cutting tools grinding fixture for bench grinder, significant difference (if any) in the evaluation of groups of respondents, the comments and suggestions to improve the adjustable grinding fixtures for cutting tools for bench grinder. A feedback mechanism had been used to check the evaluation procedures is properly conducted.

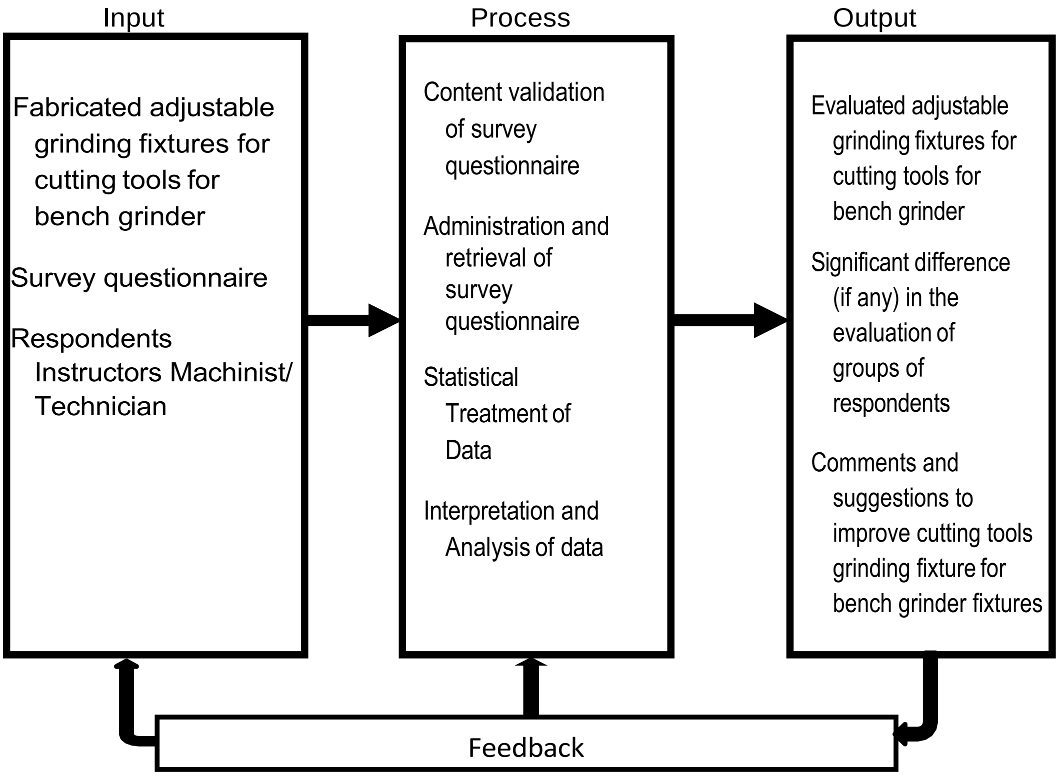
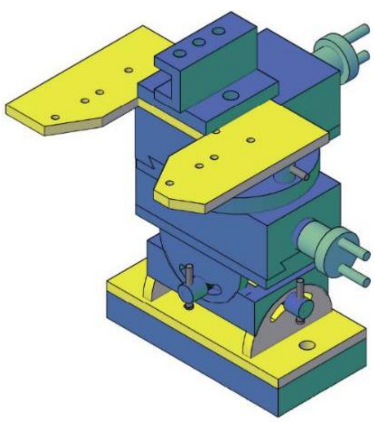


Figure 2. Conceptual Model for the Evaluation of Adjustable Grinding Fixtures for Cutting Tools for Bench Grinder

PROJECT DESIGN

Preparation of Working Drawing

This procedure showed the blueprint of the adjustable grinding fixture for cutting tools for the bench grinder shown in the figures. The researcher used AutoCAD 2020 to draw parts.



Isometric view of adjustable grinding fixture for cutting tools for bench grinder.

Isometric view of the table of the adjustable grinding fixture for cutting tools for bench grinder.

Preparation of Bills and Materials

The bill of supplies and materials needed to construct an adjustable grinding fixture for cutting tools for bench grinders was tabulated and shown in the tables below

Table 1
Bill for Bench Grinder

Qty.	Unit	Description	Unit Cost	Total
1	pc	DCA Bench Grinder ASE200 370W	₱4,700.00	₱4,700.00
1	pc	Diamond Dresser (10 mm diameter)	₱138.00	₱138.00
			Subtotal:	₱4,838.00

The table 1 shows the bill for the bench grinder costs ₱ 4,700.00 with a diamond dresser costs ₱ 138.00. The bench grinder costs ₱ 4,838.00.

Table 2
Bill of Supplies and Materials for Fixture

Qty.	Unit	Description	Unit Cost	Total
15	kg	Plate ¼” x 24” x 24”	₱60.00	₱900.00
5	kg	Plate ½” x 24” x 24”	₱60.00	₱300.00
2	pc	Hexagon Bolt 5/8” with nut	₱25.00	₱50.00
2	pc	Allen Bolt High Tensile (10 mm)	₱10.00	₱20.00
1	kg	Shafting Ø1” x 6”	₱90.00	₱90.00
1	pc	Stanley Hex key 10 mm	₱25.00	₱25.00
1	pc	Stanley Hex Key 12 mm	₱25.00	₱25.00
1	pc	Combination wrench (10 mm)	₱100.00	₱100.00
1	pc	Combination Wrench (13 mm)	₱100.00	₱200.00
2	pc	Socket cup point (6mm)	₱5.00	₱10.00
			Subtotal:	₱1,720.00

Table 2 shows the bill of supplies and materials for the fixture costs ₱1,720.00.

Table 3
Bill of Supplies and Materials for Table

Qty.	Unit	Description	Unit Cost	Total
4	pc	Cylindrical Hinges 5/8”	₱25.00	₱100.00
70	pc	Metal Screw ½” x Ø12	₱3.00	₱210.00
1	pc	Plate ¼” x 15” x 24”	₱1,076.00	₱1,076.00
3	pc	Galvanized Iron Square Tube 1” x 1”	₱335.00	₱1,005.00
2	pc	Catches Roller 1” x 0.5” x 0.5”	₱27.00	₱54.00
2	pc	Pull Cabinet 2”	₱38.00	₱76.00
2	pc	Bosny Primer Gray 250 ml	₱95.00	₱190.00
3	pc	Bosny Spray Paint Blue ml	₱95.00	₱285.00
3	pc	Bosny Spray Paint Yellow ml	₱95.00	₱285.00
1	pc	Plywood ¼” x 4 ft x 4ft	₱150.00	₱150.00
			Subtotal:	₱3,431.00

The table 3 shows the bill of supplies and materials for the fixture costs ₱3,431.00.

Table 4
Total Project Cost

Parts	Subtotal
Bill of Supplies for Bench Grinder	₱4,838.00
Bill of Supplies and Materials for Fixture	₱1,720.00
Bill of Supplies and Materials for Table	₱3,431.00
Grand Total:	₱9,989.00

Table 4 shows the total project cost on the bill of supplies and materials for the adjustable grinding fixture for cutting tool for bench grinder amounting ₱9.989.00.

Actual Project

RESULTS AND DISCUSSIONS

It can be seen in the table 5 that the Machinists/Technicians rated the design and durability, functionality and usefulness, safety and security, and cost as Acceptable with weighted means of 4.51, 4.35, 4.50, and 4.38, respectively with an overall weighted mean of 4.43. On the other hand, the instructors evaluated the variables as Highly acceptable with weighted means of 4.90, 4.85, 4.86 and 4.86, respectively with an overall average of 4.87. It can be concluded that the Adjustable Grinding Fixtures for cutting tools for Bench Grinder is highly acceptable for the instructors while machinist/technician respond acceptable based on the computed over-all weighted means.

Table 5

Summary of evaluations of the Two Groups of Respondents on the Adjustable Grinding Fixtures for Cutting Tools for Bench Grinder

CRITERIA	MACHINIST/ TECHNICIAN		INSTRUCTOR	
	WM	VI	WM	VI
Design and Durability	4.51	HA	4.90	HA
Functionality and Usefulness	4.35	A	4.85	HA
Safety and Security	4.50	HA	4.86	HA
Cost	4.38	A	4.86	HA
Over-all WM	**4.43**	**A**	**4.87**	**HA**

As shown on the table 6 that the overall computed t-value on the Machinist/Technician and Mechanical Technology Instructors is -10.04, at 0.05 level of significance with 3 degrees of freedom, the critical t-value is 3.18. Since, the computed t-value is outside the critical t-value for the evaluation of the two groups on the Adjustable Grinding Fixtures for cutting tools for Bench Grinder on all variables where it led to the rejection of null hypothesis. This implies that there is a significant difference between the evaluation of Machinist/Technicians and Instructors whereas found on the result for the statistical treatment made for per variable basis, instructors evaluated it higher than the Machinist /Technicians since all variables are rated and interpreted as highly acceptable. Moreover, Instructors also mentioned that the product is a good output and can be utilized as instructional tool in Mechanical Field. On the other hand, even Machinist/Technicians evaluated the product lower than the instructor's evaluation, it is found that the Adjustable Grinding Fixtures for cutting tools for Bench Grinder is still acceptable on their preference as they keenly evaluated it. Some Machinist/Technician provide recommendations to further improve the output. One of them mentioned to have an adjustable wheel to transfer it easier or to use a turret system for holding and adjusting the height of the tool bit for fast alignment. Thus, Machinist/Technician agreed that the Adjustable Grinding Fixtures for cutting tools for Bench Grinder is acceptable but needs further improvement to further achieve its purpose and become viable, marketable, and useful.

Table 6

Summary of Computation of Significant Difference in the Evaluation of the Two Groups of Respondents on the Adjustable Grinding Fixtures for Cutting Tools for Bench Grinder

	Critical t-Value	Computed t-Value	Decision	I
Design and Durability	2.57	-10.33	REJECT Ho	Significant
Functionality and Usefulness	2.77	-9.25	REJECT Ho	Significant
Safety and Security	2.44	-6.539	REJECT Ho	Significant
Cost	3.18	-8.01	REJECT Ho	Significant
Machinist / Technician Vs. Instructors	**3.18**	**10.04**	**REJECT Ho**	**Significant**

The researcher utilized the descriptive method of research to acquire a more reliable and dependable results with the survey questionnaire as the data gathering instrument. The questionnaire includes criteria such as design and durability, functionality and usefulness, Safety and security, and cost to determine the level of acceptance of the grinding fixture. The study was conducted and evaluated in different State College and Universities in NCR and in industry practices Mechanical Technology or Machining.

The statistical treatment used on this study were percentage, weighted mean, and the two-tailed t-test used to determine the significant difference between the evaluation of the two groups in terms of the foresaid variables.

The salient findings of the study are as follows:

1. The adjustable grinding fixture was constructed starting in the preparation of mock-up to identify some adjustments before applying it into the actual material and made a working drawing to show the blueprint of the adjustable grinding fixture. The researcher prepared the bill of materials to know the cost of the project and identify the tools and equipment needed to fabricate the adjustable grinding fixture. The prototype undergone testing to find out the problems and revising to apply the adjustments needed for the prototype more functional and efficient. The fabricated adjustable grinding fixture is formed with combining materials of the thick metal sheet, shafting, and a high tensile bolt. The production cost of the completed project amounted to Php 9,989.00 and was finished in 134 days.

2. Sharpening High-Speed Steel tool bit, drill bit and two-flute end-mill are the operations that can be performed on the adjustable grinding fixture for cutting tools for bench grinder. In operating the adjustable fixture, prepare the materials and tools needed and set the proper height, required angle for the specific cutting tool and align with the centerline of bench grinder. Make sure all the knobs are tight before starting to grind. Always remember to clean the adjustable grinding fixture and the table after used.

3. The Machinists/Technicians rated the design and durability, functionality and usefulness, safety and security, and cost as Acceptable with weighted means of 4.51, 4.35, 4.50, and 4.38, respectively with an overall weighted mean of 4.43. On the other hand, the instructors evaluated the four variables as Highly Acceptable with weighted means of 4.90, 4.85, 4.86 and 4.86, respectively with an overall average of 4.87 verbally interpreted as Highly Acceptable. It can be concluded that the Adjustable Grinding Fixtures for cutting tools for Bench Grinder is Acceptable for both respondents based on the computed over-all weighted mean.

4. There is a significant difference between the evaluation of Machinist/Technicians and Instructors on the result for the evaluation in terms of design and durability, functionality and usefulness, safety and security, and cost.

5. The comments and suggestions of the respondents are listed below:

Comments

a. Nice idea & Great, very useful, innovative, creative and highly beneficial to machinists and the prototype is highly recommended for mass production.

b. Good prototype, it could lessen the burden of sharpening and very useful for beginners & Good research output, and it is useful specially to a beginner in conventional lathe and the prototype is good but it needs lot of improvement on its functionality to achieve its purposes and become marketable.

Suggestions

a. Install a diamond dresser and holder so that the grinding wheel will always be in perfect condition.

b. Use a turret system for holding and adjusting the height of the tool bit for fast alignment. Much better if you use a collet type for holding the drill bit and end mills.

CONCLUSIONS

Based on the findings of the study, the conclusions were as follows:

1. The Adjustable Grinding Fixture for Cutting Tools for Bench Grinder can be produced out of locally available materials.

2. The developed adjustable grinding fixture for cutting tools for bench grinder can be utilized to sharpen and resharpen high-speed steel tool bit, drill bit, and two-flute end-mill.

3. The Instructors and Machinist/Technicians differ in their evaluation of the developed adjustable grinding fixture for cutting tools for bench grinder in terms of Design and Durability, Functionality and Usefulness, Safety and Security, and Cost.

4. The adjustable grinding fixture for cutting tools for bench grinder can be utilized as instructional tool in field of Mechanical Technology.

RECOMMENDATIONS

Along way through the project, the following recommendations are hereby proposed:

1. The future researcher may encourage to conduct similar study to add some features to enhanced the adjustable grinding fixture for cutting tools for bench grinder.

2. The adjustable grinding fixture for cutting tools for bench grinder may be patented and mass produced.

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Behavioral
Research

LEARNING STYLES IN THE NEW NORMAL: READINESS FOR BLENDED MODE

Dr. Melba S. Asuncion

RATIONALE OF THE STUDY

This study aims to know how the Blended Learning being assessed by the students and faculty members and also to provide more specific information whether blended learning offered may differ with the different learning styles adopted and learning capability of the students; and identify potential tactics that may be used in the future by school administrators, faculty members and students.

STATEMENT OF THE PROBLEM

This study determined the Learning Styles in the New Normal: Readiness for Blended Mode at the College of Business and Public Administration, EARIST, Manila.

Specifically, it sought to answer the following:

1. How do the students and faculty members assess the blended learning offered by the college as to:

    1.1. Course Learning Outcome;
    1.2. Content;
    1.3. Method; and
    1.4. Assessment?

2. What are the learning styles adopted by business students as to:

    2.1 Classroom Session;
    2.2. Coaching and Mentoring;
    2.3 Advising and Counseling;
    2.4 Forum Chats; and
    2.5. Gamification?

3. Is there a significant difference on the blended learning offered and learning styles adopted as assessed by students and faculty members?

HYPOTHESIS

There is no significant difference on the blended learning offered and learning styles adopted by students and faculty members.

RESEARCH METHOD USED, RESEARCH LOCALE, RESPONDENTS OF THE STUDY, SAMPLING PROCEDURE, INSTRUMENTATION AND DATA ANALYSIS

1. The study utilized a survey research technique.

2. The study was participated by the HRDM Students in all levels of the College of Business and Public Administration at the Eulogio “Amang” Rodriguez Institute of Science and Technology, Manila, SY 2021 – 2022.

3. The descriptive method of research was utilized in this study.

4. The researcher used the survey questionnaire to gather data via Google platform.

5. The data and information tallied and tabulated were analyzed and interpreted using the following:

   5.1 Frequency;
   5.2 Percentage;
   5.3 Weighted Mean;
   5.4 Likert Scale; and
   5.5 Ranking.

FINDINGS AND CONCLUSIONS

Findings

The salient findings of the study are as follows:

1. On the assessment of the faculty members and students assess the blended learning offered by the college.

The overall assessment on the blended learning offered rated as Always with the grand mean of 4.28. All items rated as Always, such as: assessment with composite weighted mean of 4.33 as rank 1; content with composite weighted mean of 4.30 as rank 2; course learning outcome with composite weighted mean of 4.27 as rank 3; and method with composite weighted mean of 4.20 as rank 4.

2. On the assessment of the learning styles adopted by business students.

The assessment on the learning styles adopted as to classroom session rated as Often with overall weighted mean of 4.17. One (1) item rated as Always which is participate to recitations and activities properly with composite weighted mean of 4.20 as rank 1. Two (2) items rated as Often, namely: ask questions and able to understand the answer with composite weighted mean of 4.18 as rank 2; and clear audio and visual presentation with composite weighted mean of 4.12 as rank 3.

Further, the group of respondents’ assessments on the learning style adopted as to classroom session are as follows: faculty members rated as Always with overall weighted mean of 4.48; and students rated as Often with overall weighted mean of 4.12.

3. On the significant difference on the assessment of blended learning offered and learning styles adopted by business students as assessed by faculty members and students.

The computed t-values are as follows: blended learning offered with 0.36273; and learning styles adapted with 0.43001 were lower than the critical value of 1.660 with 121 degree of freedom with 0.05 level of significance. Hence, there is no significant difference on the blended learning offered and learning styles adapted by business students as assessed by faculty members and students. Hence, the hypothesis is accepted.

Conclusions

1. The students and faculty members readiness in blended learning as to course learning outcome, content, method, and assessment were always observed.

2. The students have difficulty adopting learning styles through classroom sessions, advising and counseling, and gamification.

3. The proposed hypothesis on significant difference of the blended learning offered and learning styles adopted is accepted.

ONLINE LEARNING AND ACADEMIC PERFORMANCE IN SECONDARY HIGH SCHOOL DURING THE PANDEMIC

Daisy Mae R. Bongtiwon
Joseph T. Moraca

INTRODUCTION

The fast advancement and integration of technology into education have led to the emergence of online teaching and learning as popular approaches and viable supplements to traditional face-to-face teaching and learning. Technology may be a powerful instrument for motivating learners' attention, interest, cognition, and feelings during educational activities. Several research studies have examined the viewpoints of educators and students who use various technologies for online learning and pedagogies for online teaching during the past few years. Online learning is frequently referred to as virtual learning, internet learning, cyber-learning, and asynchronous learning. The major concepts that define online education are community, discovery, shared knowledge, multisensory experience, collaboration, connectedness, student-centeredness, unboundedness, and authenticity. According to research that used a survey conducted by the Philippine Center for Investigative Journalism (PCIJ), 13% of students in the Philippines lacked laptops or computers. Just 41 percent of the 87.0% of individuals who owned electronic devices had access to the internet. The survey also showed that 49% of participants had mobile phone connectivity but no home internet access, 10% or more did not have either.

This corroborates claims made by several parents and kids that they were unable to finish all the module activities because they lacked these gadgets. It was found that some elements of a self-learning program need to watch internet videos. For this study to be successful, instructional materials, namely a worksheet includes the science topics of chemistry, biology, earth science, and physics. This study aimed to demonstrate how the student's academic performance in science has improved while using the current online learning method.

RESEARCH PROBLEM

This study aimed to determine the effect of online learning on academic performance in the concept development of science students. Specifically, it sought to determine the problems encountered in the present online learning and the significant relationship between the academic performance for the first and second quarter grades.

METHODS

There are forty-three (43) grade 10 students who participated in this study. Eighteen (18) students from the Knowledge section, eighteen (18) students from the Modesty section, and seven (7) students from the Patience section. Simple random sampling is used to select the respondents of the study. Due to a time constraint and a continuing pandemic, the Internet was used to gather data.

The researchers used a two-step procedure. Initially, a letter of request had to be sent to the head of the science department and the advisor for each group of grade 10 students. Upon clearance, they compiled the data using survey questions that were distributed to student respondents via Google Form. The results of the survey were tabulated and analyzed by the researchers using statistical techniques. The privacy of survey questionnaires and the names of survey respondents were ensured.

The information gathered was compiled, collected, and summarized. The comments to each topic were classified depending on the specific problems mentioned. Frequency and percentage, weighted mean, Cronbach Alpha, and Pearson r correlation were the statistical methods employed.

RESULTS AND DISCUSSION

Table 1
Problems Encountered Prior to Online Class

QUESTIONS	WEIGHTED MEANS	DESCRIPTIVE INTERPRETATION	RANK
Q10 (Need to fulfill responsibilities at home)	3.33	Moderately a Problem	1
Q5 (Difficulty adjusting learning styles)	3.07	Moderately a Problem	2
Q9 (Limited space conducive for studying)	3.03	Moderately a Problem	3
Q12 (Financial distress within the household)	2.93	Moderately a Problem	4
Q23 (Power interruptions)	2.80	Moderately a Problem	5

Q9 (Limited area favorable to studying) ranks third as an issue reported by online class respondents, with a weighted mean of 3.03 and is rated as a considerable worry. Q12 (Financial trouble inside the household) was ranked fourth, with a weighted mean of 2.93 indicating significant worry. The fifth most common difficulty reported by online class respondents is Q23 (Power interruptions), which has a weighted mean of 2.80 and is considered as a moderate concern.

Focusing on individual and domestic obstacles, according to researchers, is the best strategy to overcome challenges experienced prior to online learning. Both Friedman (2020) and Shore (2020) agree that technological issues, distraction and time management, staying motivated, understanding course expectations, a lack of in-person interaction, adjusting to foreign technology, and uncertainty about the future are all barriers to online learning. Most students' self-motivation is high at the start of a course or term, but it might dip at times. When this happens, it is critical to acknowledge it and act to regain attention and direction. Knowing parents' perspectives of distant learning difficulties is critical for developing solutions.

Researchers discovered that most students' self- motivation is strong at the start of a course or term but might dip at periods. Because online learners have particular obstacles in terms of motivation, it is critical to notice when this occurs and take steps to regain concentration and focus. Knowing parents' perspectives of distant learning hurdles is critical for developing solutions to eliminate them and assist their children's education.

Significant relationship between the academic performance of students in the first two-quarters of Grade 10.

The correlation coefficient between the final average grades of respondents in the first two-quarters of grade 10 level was determined to be 0.90, which is between 0.70 and 0.90. This implies that the majority of the grades earned in the first quarter of grade 10 improved in the second quarter. To analyze student success in a typical online course within a specific industry, compare the grade evaluated in the first quarter.

The greatest online revolution in educational history has resulted from COVID-19's tremendous influence on how education is offered globally. Secondary schools were forced to embrace virtual and digital methods swiftly, and many people think that after the epidemic, online distance learning will remain popular. Yet, the digital divide-related inequality disparities may get worse as a result of new teaching strategies.

Experiences of students in the online learning delivery modality.

According to the results of this study, there is a considerable correlation between students' learning experiences and academic success when learning online. The correlation coefficient, which is 0.157648 or 0.15 and ranges from 0.00 to 0.30, was calculated.

As teachers and students do not interact, the null hypothesis was accepted since there is no significant relationship. Online learning, which makes use of the internet for virtual classes, immediate feedback, and student-teacher communication has no significant relationship at all.

Table 2
Academic and Student Performance/Expectation

QUESTIONS	WEIGHTED MEANS	DESCRIPTIVE INTERPRETATION	RANK
Q1 (my teacher in science major subjects have provided course assignments (e.g., readings, homework, quizzes) on a regular basis.)	3.37	Satisfactory	1
Q4 (my teacher in science major subjects have been open to students' suggestions and adjustments of online classes.)	3.30	Satisfactory	2
Q5 (my teacher in science major subjects have informed me on what exams will look like in this new situation.)	3.10	Satisfactory	3
Q3 (my teacher in science major subjects have responded to my questions in a timely manner.)	3.07	Satisfactory	4
Q10 (I can figure out how to do the most difficult classwork since face-to-face classes were canceled.)	3.07	Satisfactory	4

The above table presents the experiences of respondents in the online learning delivery modality in terms of Academic and Student Performance/ Expectation. Researchers ranked question answered to interpret as data symbolized as Q1-Q10.

The responses of respondents to the online learning delivery mode are the most essential elements in this article. Q1 has regularly provided course assignments, Q4 has been open to suggestions and adjustments to online classes, Q5 has informed respondents about what exams will look like, Q3 has responded to questions in a timely manner, and Q10 has figured out how to do the most difficult classwork since face-to-face classes were canceled.

Table 3
Infrastructure and Skills for Studying from Home

QUESTIONS	WEIGHTED MEANS	DESCRIPTIVE INTERPRETATION	RANK
Q7 (I am confident in using online communication platforms (e-mail, messaging, etc.).	3.23	Satisfactory	1
Q1 (I am confident in browsing online information)	3.13	Satisfactory	2
Q4 (I am confident in using online collaboration platforms (Zoom, MS Teams, Skype, etc.)	3.07	Satisfactory	3
Q6 (I am confident in public relations (websites and social media information).	3.03	Satisfactory	4
Q8 (I am confident in using software and programmes required for my studies.)	3.00	Satisfactory	5
Q9 (I am confident in applying advanced settings to some software and programmes.)	3.00	Satisfactory	5

The most relevant aspects in this research are the respondents' experiences with online learning delivery in terms of infrastructure and capacities for studying from home. Q7 (using online communication platforms), Q1 (browsing online information), Q4 (using online collaboration platforms), Q6 (public relations), Q8 (using software and programs required for studies), and Q9 (applying advanced settings to some software and programs) are examples of these experiences. The overall weighted mean of the experiences in terms of Academic and Student Performance/Expectation is 2.99, while the overall weighted mean in terms of Infrastructure and Skills for Studying from Home is 2.97. The most often mentioned experience among respondents was "my instructor in scientific major areas has delivered course tasks on a regular basis."

Due to the COVID-19 pandemic, virtual learning— also known as online learning or remote learning— has changed the way that education is delivered. Extended learning sessions and technology are two difficulties, although technological assistance and students' enthusiasm boost teacher satisfaction. Stress and worry have a negative impact on people's mental health, and not all students have the same amount of access to or expertise with digital technology. In the twenty-first century, it is anticipated that technology learning will include skills like digital literacy, collaboration, advanced communication, and system thinking.

CONCLUSION

Respondents most frequently reported having to take care of domestic duties, problems altering learning styles, a lack of study spaces, financial stress in the home, and power outages when using the online learning delivery method.

The Pearson Correlation Coefficient used to measure the association between grades at the grade 10 level is 0.90, which is between 0.70 and 0.90 and is viewed as highly positive or connected.

The teacher delivering course assignments, being receptive to ideas and modifications of online classes, and feeling comfortable utilizing online communication platforms are the most frequent experiences in terms of academic performance and student expectations. In online learning, there is a 0.15 connection between students' learning experiences and academic achievement, which indicates that there is little to no association between the two variables.

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CASH INNOVATION OFFERING FOR FINANCIAL INCLUSIVITY AMONG GEN Z BUSINESS STUDENTS

Annalyn Y. Buenaseda

INTRODUCTION

The researchers want to touch on the benefits of GCASH innovation. The investigators have created a financial system that enables people to save and invest money in a way that suits them. The researchers provide features like the ability to manage your own finances, choose how much money you want to set aside each month for savings, choose which investments to make and how much money to set aside for them, as well as track the progress of your savings over time and the amount of money you've managed to accumulate. For this system, they are presently working on creating a mobile application called GCASH that would enable users to access their accounts from any location with an internet connection. Users of this app can also move funds between accounts if they require more or less money than they have saved up. Using GCASH in business transactions in light of its reliability and effectiveness as a digital payment method Increasingly, more people are using digital payment methods since they are quick, simple, and practical. In reality, some people are able to use digital payments even when they do not have access to a bank account or credit card. In this article, the researchers talk about GCASH's dependability and effectiveness as a digital payment option for commercial transactions. The researchers also go through how you can utilize GCASH to pay for business-related purchases. The way customers pay for goods is changing along with the rest of the globe. A few years ago, purchasing something and paying for it were two separate transactions. However, that transaction has changed with the advent of the digital age. Thanks to the growth of online shopping and e-commerce, we now have a wide range of payment options, including GCASH (formerly known as Gold Cash). It was originally made available on the blockchain network of Bitcoin in 2009, so it has been around since then. GCASH is a cryptocurrency-based online payment system that has successfully displaced more established payment options like credit cards and bank transfers. GCASH is an electronic payment system that may transmit and receive money in commercial transactions. The organization behind it was established in 2016 and goes by the name of GCASH. Its goal is to make cashless transactions simple for both individuals and companies. GCASH is a smartphone application that makes it simple for users to send money using their phones. Both iOS and Android smartphones support it, and an iOS version was made available in 2017. The app is also accessible in web versions on many websites, including the Google Play Store and Apple App Store. Because the software uses blockchain technology, transactions are safe and clear. Peer-to-peer (P2P) transfers, international money transfers, bank transfers, and immediate currency conversions between two currencies are just a few of the services the company provides to its clients without the need to go through a middleman bank or exchange service provider like Western Union. GCASH is a digital payment system that has been applied to Philippine business operations. By examining earlier research on the usefulness of this payment system, this paper will investigate its legitimacy and efficacy. In the Philippines, the GCASH digital payment system has become preferred since it is quick and trustworthy. People who want a simple way to withdraw money from an ATM or pay their bills online also frequently use it. The ease of use, security, and convenience of this system make it a preferable alternative to other traditional payment methods. Regarding the reliability and effectiveness of this new digital payment method, there are still some questions.

GCASH is an e-wallet that makes it simple to purchase goods and services. The fact that this digital payment method gives safety to both businesses and customers is its best feature. There are no unstated costs, chargebacks, waiting periods, or delays in withdrawals. Without having to modify any information, you can use GCASH to make payments using your credit card or another existing account. Along with these capabilities, GCASH also offers a mobile app that makes it simple for you to access your money wherever you are and whenever you want. The organization that created GCASH is a top supplier of cutting-edge technological solutions that assist companies in securely managing their financial affairs while simultaneously providing transparency and security. They have created blockchain technology that enables them to create their own coin and make it accessible to their consumers in order to accomplish this goal. This will aid them in resolving a number of contemporary issues, such as financial access and a lack of interpersonal trust.

STATEMENT OF THE PROBLEM

This study aims to assess the GCASH innovation offering for financial inclusivity among Gen Z business students.

1. What is the demographic profile of GCASH subscribers as to:

   1.1 Program;

   1.2 Curriculum Year;

   1.3 Purpose of Subscription; and

   1.4 Years of Subscription?

2. How do Gen Z business students assess the GCASH innovative offering for financial inclusivity in terms of:

   2.1 Retail Banking;

   2.2 Payments;

   2.3 Expense Management;

   2.4 Wealth management; and

   2.5 Insurance?

3. What is the purpose of the GCASH subscription for Gen Z business students?

   3.1 Bills Payments;

   3.2 Savings; and

   3.3 Loans?

4. Is there a significant relationship between demographic profile and GCASH's innovative offering for financial inclusivity?

METHODOLOGY

Research Method Used, Research Location, Respondents of the Study, Sampling Procedure, Instrumentation and Data Analysis.

1. The study employs a descriptive research design to assess the GCASH innovation offering for financial inclusivity among Gen Z business students.

2. The respondents to this research are students from the College of Business and Public Administration at **Eulogio "Amang" Rodriguez Institute of Science and Technology.**

3. The sampling technique that the researchers used is the purposive sampling technique, a non-probability method for obtaining a sample where researchers use their expertise to choose specific participants that will help the study meet its goals.

4. The researchers used a survey questionnaire to acquire data.

5. Statistical Treatment of Data

The data and information, tailed and tabulated, were analyzed and interpreted using the following:

1. Frequency;
2. Percentage;
3. Weighted Mean;
4. Likert Scale; and
5. Chi-Square

RESULTS AND DISCUSSION

Findings

Retail banking creates the GCASH innovative offering for financial inclusivity, with an overall weighted mean of 4.17. The items were generally rated as agreeable. GCASH integrates various money transfer methods, such as QR codes, into its app. Payments also create an innovative GCASH offering for financial inclusivity, with an overall weighted mean of 4.14 rated as agreeable. GCASH is a financial innovation that is accessible to Gen Z to spend, save, invest, and shop wisely. Insurance also creates a GCASH innovative offering for financial inclusivity, with an overall weighted mean of 4.13 as rated agree. Insurance is easier to access, especially for those who are new to opening insurance. Expense management also creates the GCASH innovative offering for financial inclusivity, with an overall weighted mean of 4.09 rated as agreeable. GCASH can improve its innovation offerings for financial inclusivity. Wealth management also creates the GCASH innovative offering for financial inclusivity, with an overall weighted mean of 4.00 rated as agreeable. The overall experience of using GCASH innovation offerings for financial inclusivity was rated at 4.10, as agreed.

The purpose of the GCASH subscription for Gen Z business students for bill payments was generally rated as agreeable, with an overall weighted mean of 4.18. Pay Bill is a feature that allows GCASH users to pay bills via the app. The total weighted mean rating for the GCASH subscription's purpose of savings for Gen Z business students was 4.17. GCASH can be used as a bank just as it is. Also, loans for the GCASH subscription for Gen Z business students were rated as agreeable, with an overall weighted mean of 4.13. Problems for customers. The grand mean was rated 4.16, as agreed.

There is no significant relationship between the demographic profile and the GCASH innovative offering for financial inclusivity for program, age, or years of subscription, and only one significant relationship was sex.

CONCLUSIONS

1. GCASH is a financial innovation that is accessible to Gen Z to spend, save, invest, and shop wisely. Retail banking, insurance, expense management, and wealth management overall are rated as agreeable. This is the overall experience of using GCASH innovation offering for financial inclusivity.

2. The study found that Gen Z business students, including those with bill payments, and the purposes of saving for the loan GCASH subscription overall were rated as agreeable by the respondents. The study also found all student groups among Gen Z business students value the specialization in savings, bill payments, and loans supplied by GCASH.

3. The study concludes that there is no significant relationship between demographic profile and GCASH innovative offering for financial inclusivity by program, age, or year of subscription.

RECOMMENDATIONS

The following are the recommendations of the study based on the results and conclusions.

1. The study recommends Gen Z as the future of business and financial services to further their knowledge about the potential use of GCASH in transforming their financial and business transactions in easy ways. Gen Z is encouraged to also give attention to the other innovative power of GCASH for loans, savings, insurance, and others. The proper way of using GCASH in the lives of Gen Z may give them opportunities to manage their expenses well and monitor their finances.

2. Business professionals are encouraged to use GCASH as one of their payment methods in their businesses, considering that most Gen Z populations are using GCASH as their e-wallets. Business professionals are also encouraged to take advantage of the use of GCASH to promote their businesses.

3. Financial professionals are encouraged to further disseminate awareness with regard to the other uses and potential of GCASH for its customers' convenience and to raise the level of its innovations.

4. GCASH providers are encouraged to inform their users about other functions of their application. GCASH providers may offer tutorial videos to disseminate awareness and information on what other services GCASH may offer for its subscribers. Also, GCASH is encouraged to tighten its security further to ensure that personal information and user account information will not leak or be subject to any form of harm.

5. For future researchers, it is recommended to use a quantitative approach, which may lead to a deeper understanding of the potential of GCASH innovation offering financial inclusivity not only for Gen Z business students but also to the rest of its users to more comprehensive and in-depth data on the role of financial literacy on business resiliency. The study is also limited to business students. Therefore, it is recommended to explore the larger scale of GCASH users or specific industries to provide comprehensive knowledge about the subject matter.

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CRAFTING A STRATEGY FOR SOCIAL MEDIA PROMOTION UTILIZING FACEBOOK ANALYTICS

Dr. Aguida V. Cabreros

INTRODUCTION & BACKGROUND

This research intends to explore the use of Facebook analytics in social media promotion. Unlocking the Power of Facebook Analytics! Unlock success, and open more opportunities in social media teaser. See and explore! Among social media platforms, Facebook is one of the most widely used by businesses due to its massive user base and powerful advertising features (Tracey,2023). This is to investigate how businesses can use Facebook analytics to improve content strategy and ad targeting. Examining the challenges and limitations of using Facebook analytics, such as issues with data privacy and the complexity of interpreting analytics data. By analyzing this information, businesses can learn what strategies for social media promotion are effective and which ones are unsuccessful (Drake, 2019).

Statement of the problems are focused in determination of:

a.) the key variables that significantly influence the level of social media audience engagement with Facebook Page as to Content Strategy, Visual Design, Relevance, Audio Effects, and Compelling Headline; assessment of page owners/admins of Facebook analytics for social media promotion as to Facebook Page Reach, Facebook Page Likes, Facebook Page Followers, Facebook Page Visitors, and Facebook Page Messages; encountered problems with social media promotion.

This research study explores Facebook analytics' potential for effective social media promotion and strategy formulation, offering practical insights to help businesses make informed decisions in their marketing strategies.

METHODOLOGY

This research would provide information about the research method and the type of research the researchers come up with. It also includes population sampling, research instruments, data gathering procedures and will reveal the statistical treatment of data.

Methods utilized are quantitative aspects using Stratified Random Sampling three groups of respondents are categorized in the study namely, Facebook Page Owners, Facebook Page Admins, and Facebook Page Audiences.

RESULTS & DISCUSSION

There are eighty (80) respondents composed of 20 or 25% Facebook page owners, 20 or 25% Facebook page moderators, and 40 or 50% Facebook page audience.

In problem 1 where the researchers assessed the Key Variables that Influences the Level of Social Media Audience Engagement with Facebook Page signifying that all of the variables presented are the most influential in terms of influencing social media audiences to engage in a social media post with the grand mean of 4.54. Having this result will help the social media pages to consider the provided variables as universal features for good marketing to create Facebook posts to provide content to their viewers/audiences and to promote their page Jacunski (2018).

Indicator	Overall		Rank
	WM	VI	
1. Content Strategy	4.43	MI	5
2. Visual Design	4.65	MI	1
3. Relevance	4.53	MI	3
4. Audio Effects	4.52	MI	4
5. Compelling Headline	4.55	MI	2
GRAND MEAN	**4.54**	**MI**	

In problem 2, the researcher assessed the Facebook analytics for social media promotion where it resulted as Most Useful with the grand mean of 4.42 to utilize by the page owners to use of all the data gathered effectively to plan, predict, assessing the performance of particular Facebook post and to identify what is the most engaged content or trend with the guidance of Facebook Page Analytics Szabó (2019).

Indicator	Overall		Rank
	WM	VI	
1. Facebook Page Reach	4.38	MU	3
2. Facebook Page Likes	4.37	MU	4
3. Facebook Page Followers	4.52	MU	2
4. Facebook Page Visitors	4.27	MU	5
5. Facebook Page Messages	4.58	MU	1
GRAND MEAN	**4.42**	**MU**	

In problem 3, the researcher assessed the ***Problems*** Encountered with Social Media Promotion where it resulted as Highly Encountered with the grand mean of 4.39 that makes Facebook Pages, this makes it difficult for Facebook pages to maintain a steady stream of audience engagement Stieglitz et. al. (2018).

Indicator	Overall		Rank
	WM	VI	
1. Alignment to the Public Needs	4.57	HE	1
2. Schedule of Posting	4.20	E	5
3. Digital Promotion Plan	4.43	HE	3
4. Market Analysis	4.27	HE	4
5. Statutory & Regulatory Requirements	4.49	HE	2
GRAND MEAN	**4.39**	**HE**	

In problem 4, the researcher assessed the relationship of each variable between problem 1 which represents the social media promotion as it contains the online post features and problem 2 which represents the Facebook Analytics as it contains the variables used in Analytics, to investigate the relationship of Facebook Analytics and Social Media Promotion. The problem 4 is a null hypothesis which states that there is no significant relationship between Facebook analytics and social media promotion which will be discussed further.

FACEBOOK POST FEATURES on FACEBOOK ANALYTICS							
Indicator	**Coefficient (r) >**	**N**	**T-Statistics**	**Degrees of Freedom (DF)**	**P-value**	**Interpretation**	**Decision**
Content Strategy on Facebook Analytics	0.0705155	40	0.4357714	38	0.6654680	Strong Relationship	Reject Ho
Visual Design on Facebook Analytics	0.0191134	40	-0.117844	38	0.9068116	Very Strong Relationship	Reject Ho
Relevance on Facebook Analytics	0.0335667	40	0.2070358	38	0.8370874	Very Strong Relationship	Reject Ho
Audio Effects on Facebook Analytics	0.0010395	40	0.0064081	38	0.9949208	Very Strong Relationship	Reject Ho
Compelling Headlines on Facebook Analytics	0.0705047	40	0.4357044	38	0.6655163	Strong Relationship	Reject Ho

Level of Significance 0.05

As the table reveals, all of the indicators reject the null hypothesis. Three of the items has very strong relationship namely between: Visual Design and Facebook Analytics with p-value of 0.09068116; Relevance and Facebook Analytics with p- value of 0.8370874; and Audio Effects and Facebook Analytics with p-value of 0.9949208. Two of the items have strong relationships namely between: Content Strategy and Facebook Analytics with the p-value of 0.6654680; and Compelling Headline and Facebook Analytics with the p-value of 0.6655163.

Therefore, Online Post Features in Social Media Promotion and Facebook Analytics has a significant relationship where people can effectively use data information to make predictions, assess performances, and identify trends to better understand the needs of the customers Szabó (2019).

CONCLUSIONS

The following conclusion were carefully drawn from the findings of the study:

1. Audience responds more to posts that use visually appealing and creative content. Furthermore, colors, fonts, and layout of content influence audience engagement. Interactive elements such as polls or contests also make the posts more relevant to the targeted audience. Use of audio effects as well as attention- grabbing headlines increase audience engagement. It is also worth noting that consistency in posts and design responds well to the audience.

2. Owners/admins use a) Reach – to understand how many people are being exposed to their brand, b) Likes – to determine brand awareness and audience interest, c) Followers – to enhance the conversion rates of audience, d) Visitors – to assess participation in discussions and interactions, and e) Message – to receive inquiries from the audience.

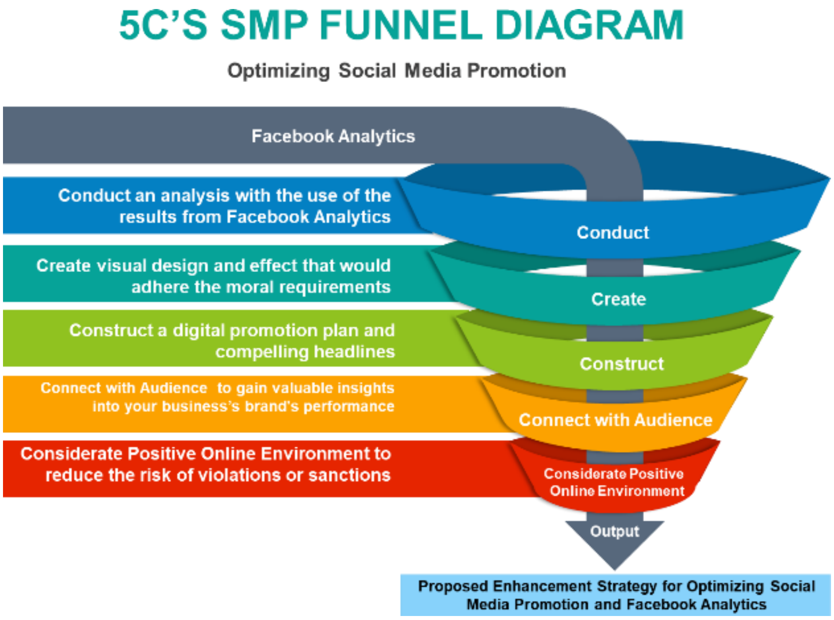
3. Top problems encountered with Social Media Promotion are the following: a) Alignment – disconnect with public needs, b) Schedule of Posting – promotions appear not exactly during prime time, c) Digital Promotional Plan – user- friendliness of page tools, d) Market Analysis – inaccuracy in data collection, and e) Statutory and Regulatory Requirements – page may not follow Facebook community standards.

4. Content Strategy and Visual Design are weakly but significantly correlated to Page Visitors. This may indicate that the audience tends to visit pages with visually appealing and creative content. Font, styles, and layout of the post may contribute to the appeal of the page.

RECOMMENDATION

5C SMP FUNNEL DIAGRAM:

Optimizing Social Media Promotion



Using the SMP 5C's Model practice explores Facebook analytics' potential for effective social media promotion and strategy.

C- "**Conduct"** proposing that Page Owners must conduct an analysis with the use of the results from Facebook Analytics to enhance audience engagement, utilizing high-qualityvisuals, infographics, video, user- generated content, storytelling, memes, GIFs, seasonal content, and consistency for a cohesive presence.

C- "Create" recommends creating visual design that adheres to moral requirements, using clear objectives, audience segmentation, engagement monitoring, paid promotions, influencer marketing, content optimization, monitoring Facebook Insights, and benchmarking against competitors. Aligning strategies with clear objectives enhances brand visibility and social media marketing success.

C- “**Construct”** referring to one of the problems encountered with social media promotion is connecting a digital promotion plan to create a compelling headline; defining goals, targeting audience, choosing the right digital channel, crafting value proposition, using emotional triggers, testing and optimizing, creating content calendar, engaging with audience, and monitoring results to ensure successful digital promotion plans.

C- “Connect with Audience” to improve Facebook Page Reach and gain insights, track organic and paid reach, explore post reach, pay attention to engagement metrics, monitor competitors, and integrate data sources. Tracking reach over time helps identify trends, while analyzing individual posts refines content strategy and identifies industry trends. Also, recommends optimizing Facebook Page Messages to increase engagement, maintain brand reputation, and user satisfaction. This includes enabling instant replies, creating categorization and tagging systems, setting SLAs, personalizing responses, using rich media, promoting Messenger, hosting Q&A sessions, responding to reviews, tracking metrics, advertising, and integrating with CRM systems.

C- “Considerate Positive Online Environment” recommends reviewing Facebook's Community Standards to create a positive online environment, promote respectful content, protect intellectual property, monitor user- generated content, promote authenticity, report violations, and be mindful of advertising guidelines. Owners/Admins should be updated on these standards and engage responsibly, avoiding spamming and excessive promotion. U-CARP Practice will put into effect the Proposed Crafting Strategy for Social Media Promotion Utilizing Facebook Analytics.

MANPOWER REQUIREMENT AND DEVELOPMENT IN BPO COMPANY: A FUTURE HRDM REFERENCE

Evelyn R. Celestial

INTRODUCTION

The Business Process Outsourcing (BPO) industry is one of the Philippine economy's two main "legs," contributing $26 billion in 2019. Over 1000 companies employ 1.3 million people in BPO. Workers provide services for multinational corporations such as facilitating travel and insurance coverage, providing customer support for technology, and providing telehealth services. During quarantine periods, BPO operations have been exempt from closure, However, the closure of public transportation means that many employees are unable to get to warn others are unable to work from home due to a lack of home internet connectivity. COVID-19 has wreaked on the BPO industry and the multinational corporations it serves.

That is why BPO companies are trying to come up with new ideas on how they will adopt the new normal to raise Manpower development. BPOs are carrying out the Work from Home setup given the advantages it can offer, both substantial and elusive. For example, the remote working environment will assist with reducing working costs such as office leases and utility expenses. Tardiness, absences, and low productivity can likewise be checked, as long as outside elements like inclement weather, an ideal opportunity to work, and so forth, are kept away from them. Further, the security of employees on the late shift is guaranteed, as they presently don't need to leave during the extremely early hours of the day. As well as the outsourcing of employees, it is gradually conducted via virtual schemes.

The researcher chose Stellar to be the center of the study due to particular circumstances where it is practicing virtual recruiting of employees as well as working from home schemes. Stellar Company is one of the finest BPO businesses In the Philippines that is thriving to help Filipinos have a better life and a better future. The work they do is the primary reason why most Filipinos choose to work with Stellar because they have Innovation at the heart of their business.

The unemployment rate arose in the country because businesses and establishments and transportation activities were spared from shutdown, and that includes the BPO companies. The COVID19 crisis has adversely impacted the industry of BPO, with disrupted supply chains, country-wide lockdowns and organizations exploring the possibility of long-term and even permanent remote working. Some key concerns faced by BPO Company are Flexibility, Digital Adoption, and the impact on manpower due to either inadequate infrastructure at employees' homes or the lack of supervision. Some other issues include difficulties in recording calls when working remotely, outsourcing and insourcing of employees, and finding out the applicants who have the skills.

The purpose of this research is to delve into the manpower requirements and development in the BPO business and the important role played in teaching future employees how to sharpen skills and professional attitudes and gain more knowledge in order to improve employee performance and properly adopt the new normal. We are taking several steps to ensure that we produce the best results possible to assist future employees.

This will allow the future employees to execute more difficult tasks and problem-solving in order to have concrete manpower to arise and achieve the goal.

STATEMENT OF THE PROBLEM

This study is aimed to determine the process of setting qualifications of manpower inside Stellar Company in Cubao, Quezon City.

It seeks to answer the following questions in particular:

1. What are the manpower requirements of BPO company as to:
    1. Knowledge;
    2. Skills; and
    3. Attitude?
2. What are the manpower developments offered by BPO companies?
    1. Communication Skills;
    2. Problem Solving Skills;
    3. Technology Skills; and
    4. Interpersonal Skills?
3. Is there a significant relationship between the manpower requirements and development in BPO companies?

RESEARCH METHOD USED, RESEARCH LOCALE, RESPONDENTS OF THE STUDY, SAMPLING PROCEDURES, INSTRUMENTATION AND DATA ANALYSIS.

1. The study utilized the descriptive method which involved gathering, tabulation, interpretation and analysis of the data.
2. The study's participants were chosen from 200 Stellar Company employees, consisting of agents in the call center, human resource personnel, a team leader, and the operation manager, all whom collaborate.
3. In this study, a rigorous method for selecting responders called a stratified random sample was used.
4. The researcher used the following instruments to gather data:

    4.1 Survey Questionnaire. Concretely, Google forms.

5. Statistical Treatment

    The data and information tallied and tabulated were analyzed and interpreted using the following:

    5.1 Frequency;

5.2 Percentage;

5.3 Weighted Mean;

5.4 Likert Scale;

5.5 Ranking; and

5.6 Correlation Ratio

FINDINGS AND CONCLUSIONS

Findings

The salient findings of the study are as follows:

1. The manpower requirement of BPO company, the grand mean of 4.44 contextualized the respondent's overall assessment of the manpower requirements of a BPO company showed outstanding result. All items rated Excellent, specifically: skills with composite weighted mean of 4.45 as rank 1; attitude with composite weighted mean of 4.44 as rank 2; and knowledge with composite weighted mean of 4.42 as rank 3. This really showcases what are needed requirements in BPO Companies.

2. The manpower developments offered by BPO companies, the respondents' overall assessment on the manpower developments offered by BPO companies rated as Excellent with the grand mean of 4.42 this really showed a great positive result. All items rated as Excellent, these are: problem solving skills with composite weighted mean of 4.44 as rank 1; technology skills as Excellent supported by the obtained grand mean value of 4.43 in rank 2; interpersonal skills as Excellent supported by the obtained grand mean value of 4.42 in rank 3; and communication skills with composite weighted mean of 4.40 as rank 4.

3. The significant relationship of manpower requirements and development in BPO companies. The Overall assessment that revealed on the result is highly significant, as reflected in the result, the computed r-value is 0.98 which is Very Strong Correlation. Hence, there is a significant relationship between manpower requirements and development in BPO companies.

Conclusions

In view of the foregoing findings, the following conclusions are made:

1. BPO companies' manpower requirements, such as attitude, knowledge, and skills, are well practiced in BPO Manpower Requirements, therefore we concluded that these three are vital components in BPO.

2. We came up to the conclusion that interpersonal skills, communication skills, problem-solving abilities, and technology skills are critical attributes when applying for positions in the BPO sector based on the quantitative analysis of the results. The findings suggested that these were highly important for BPO.

3. The significant relationship of the manpower requirements and development in BPO companies, are highly acceptable.

RECOMMENDATIONS

Based on the findings and conclusions the following recommendations are drawn:

1. Researcher and future employees should continue to adopt manpower need and development practice that will meet the needs of most companies to provide efficient skills and knowledge for high- quality workforce.

2. Explore ways to acquire more about what is required in BPO companies in order to connect with the industry on a greater scale.

3. Practice applications required external and internal skills in the BPO manpower and development industry to eliminate any negative impact upon entering the workplace.

4. Ensuring the collective efforts of school administrator, faculty and organizations in learning broad areas to further discuss and understand the needed manpower requirements and development in applying BPO.

5. Future researchers may practice gathering first-hand information from BPO professional employees through face to face interview to further strengthen their ideas in manpower requirement and development, as it was not conducted in this study.

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EFFECTS OF IDENTIFIED BEHAVIORAL FACTORS ON FILIPINO CONSUMERS' REPURCHASE TENDENCY IN SHOPPINFG ONLINE

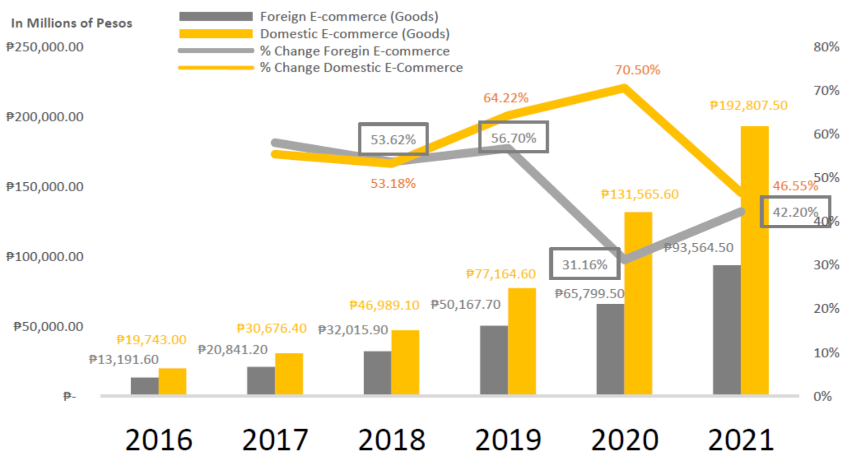
Jefferson A. Costales
Charls A. Chua
Maria Rhoda D. Dinaga

INTRODUCTION

It was in the 1960s that electronic commerce (also known as e-commerce) was first heard of. It is an expanding industry and is currently most known for its online shopping capabilities. Technology is considered one of the main contributors to the development of this industry. In the Philippines, the earliest forms of e-commerce were seen in the early 1990s. Currently, there are many small e-commerce businesses along with some major e-commerce shopping companies that are based in the country, an indication that the industry is gaining traction throughout these years. Businesses that utilize an E-commerce structure know that it comes with its own advantages and disadvantages as to having a brick-andmortar physical store. Owners should know how to analyze trends (i.e. consumer behaviors) and performance metrics to be considered as important factors in running a successful business.

A report from Euromonitor [1] showed that the total ecommerce industry of the Philippines had experienced value growth of ~770% (Php 33B to Php 286B) from 2016 to 2021.

Figure 1 illustrates that it is key to note that a slight slowdown in e-commerce growth was observed in 2018 versus the previous year 2017, but consequently, it regained growth in 2019. The pandemic effectively changed the playing field of the e-commerce industry in the Philippines, with absolute values of sales continuing to grow in domestic and foreign e-commerce year after year. The year 2020 experienced a change in trend in foreign e-commerce, dropping significantly due to restrictions, whereas domestic e-commerce was flourishing during that year. Foreign e-commerce recovered its growth in 2021, tying with the level of local e-commerce growth once again.



Source: Euromonitor [1]

Figure 1. Value of E-commerce in the Philippines

Another study conducted by Benedict [2] in August 2021 indicated that as of that moment, the Filipino population was already at 100.3 million within which 73.91 million were internet users, 89 million users are active on social media, and 38.88 million users have bought consumer goods online. Smartphone user penetration was an identified key driver to the e-commerce growth in the Philippines as reported by Statista.com [3], where there was an increase from 57.60% users back in 2017 to 74.10% in 2021. Within the internet users aged 16 to 64, 85.7% have used shopping mobile apps for the reported month.

Identified factors are to be investigated and are to be tested separately to see how they affect consumer repurchase for more profitable transactions in the Philippine e-commerce business context. Different research studies about consumer behaviors in the e-commerce business from different countries will be considered. These factors are then to be consolidated to form a working framework where their correlations to repurchase intention and other factors are to be investigated. Results will then be compared to previous studies, which will guide better decision-making for both business owners and consumers.

RELATED STUDIES AND THEORETICAL FOUNDATIONS

A. Trust

Trust is the individual's perception of belief in the trading of transactional integrity and reliability. Trust was identified as a vital factor for success by several studies. It is a recognized contributor to greater productivity, profitability, and during the undertaking of establishing and sustaining beneficial relationships between trading partners. However, trust is also recognized as somehow difficult to handle. Issues of trust arise in e-commerce due to that consumers' confidence is the basis of an internet purchase and the lack of online transparency of processes. In contrast, traditional physical store businesses treat trust based on the relationship built personally through physical interactions of the consumers with the sellers.

Studies [4], [5] have indicated that trust might also be needed to strengthen retention through satisfaction. Trust is one important aspect of e-commerce in having extremely satisfied and producing loyal consumers. Trust has a longer-term impact on consumer loyalty through satisfaction. Some researchers suggest that, oftentimes, even if businesses have satisfied consumers, they might still be able to retain them.

B. Expectation, Performance, and Confirmation

Expectation is the evaluation of the performance of the transaction in e-commerce businesses. Some see it as the prediction of the likelihood of what consumers believe is likely to happen in the future, whereas others view expectations as desires consumers think should happen. Performance is defined as how the products or services did deliver. Confirmation on the other hand is the when consumer assesses the performance of a product or service based on the standards expected according to the consumer's wants, desires, and needs. Alignment of the performance with expectation will lead to confirmation of the online transaction and results in a positive consequence of the purchase.

C. Switching Cost

Initially, web presence and low prices are believed to be the drivers of e-commerce success [6]. Compared to an equivalent traditional market, it would cost 20% to 40% more in attracting new consumers for online vendors [7]. Not only are switching costs emotional and psychological in nature [8] but are also economic [9]. Perceived costs not only consider financial transactions but also give up non-monetary activities like consumed time, consumed energy, and involvement of stress. The venture of money, time, and deeds in consumers' beliefs renders switching to other vendors challenging.

Consumer retention is affected by switching barriers in a positive interaction effect [10]. Switching costs presumes a notable moderating impact on the loyalty of consumers as a consequence of satisfaction. Switching costs influence consumer vulnerability to their expected level of satisfaction.

D. Satisfaction

Consumer satisfaction is an important foundation for a successful long-term relationship. Studies support that satisfied consumers are more inclined to use the service offered by the business compared to those that are not satisfied. Satisfied consumers would highly recommend to their close relationship the products or services which would increase repurchase intentions [6]. Consumer Satisfaction is established as the comprehensive optimistic sensibilities with regard to the benefit of the received services from the vendor.

Trust is a crucial ingredient in achieving consumer satisfaction. In order to maintain a successful long-term business relationship, trust, and satisfaction are essential with consumers. It is expected that trust and satisfaction have a positive relationship. This suggests that trust raises levels of performance which leads to good, confirmed transactions. This then results in future substantial consumer satisfaction. Satisfaction by itself is not enough to guarantee for an e- commerce business a continuous consumer commitment. Satisfaction also by itself warrants no assurance for long-term consumer patronage.

E. Loyalty

Consumer loyalty is described as repeat patronage (the frequency of a buyer where the same product or service is purchased). Retention of loyal consumers and gaining new consumers is a challenging task as it usually pertains to high expenditures. In general, there are many ways that growth and profit can be improved by loyalty a 30% to 85% increase in profitability could be expected from as little as a 5% increase in loyalty [4].

Loyal consumers tend to be satisfied easier, more considerate to pay more and are more understanding during downturns. Loyal consumers will recommend the business to other consumers which increases the consumer base with no additional promotional costs. Many studies have aimed to identify satisfaction and switching barriers as the most important antecedents of loyalty.

Consumer satisfaction positively affects consumer loyalty even though satisfaction is needed for further investigation to ensure that genuine loyalty exists. Unexpected results in the literature show that trust has much less significant effects on consumer loyalty [11].

Loyal consumers are undeniably influential to the survival of an e-commerce business. These behaviors can be evaluated by imploring the extent of desirability to the brand, how engaged are the people, whether will they advocate it to others, and do they have constructive confidence and sentiment for the e-commerce business.

F. Re-purchase intention

Economies determine satisfaction utilizing surveys to estimate consumer retention and the long-term performance of financials at the industry level. Aside from satisfaction as an important driver for retention, switching barriers and trust together influence retention independently by themselves [12]. The problem then is when intentions based on identified behaviors may not result in actions and the repeat of purchase [13].

Retention is directly related to satisfaction, the more satisfied the consumer is, it is expected that the more retention will be higher [14], and the spreading of positive word-of- mouth is expected to be coming more from them [15], which would equate to a better benefit financially to the online platforms who serve them. Word-of-mouth and consumer retention behaviors are linked to behavioral intentions and satisfaction. This connection is vital due to satisfied consumer needs are fundamental for repurchasing.

In another study [16] trust was found that it does not directly influence repurchase intention and whereas another study also stated that E-commerce institutions should support the context of the positive relationship between trust and online repurchase [17].

METHODOLOGY

A. Proposed Conceptual Framework

Figure 2 illustrates a proposed conceptual framework by which it considers that the consumer had already purchased something from an online platform. Upon completion and receipt of the purchased products or services, identified behaviors in blue circles are tested to check how they affect repurchase tendency. The framework also shows the relationships and interactions between the identified behaviors thru the directions of the arrows as to how the consumer is expected to perceive it.

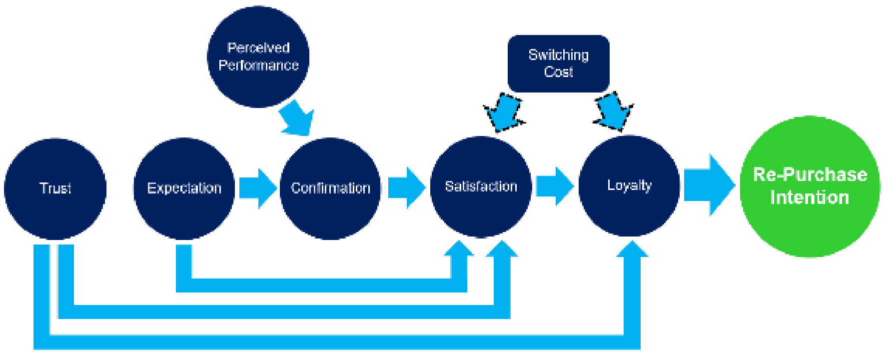


Figure 2. Proposed Conceptual Framework

B. Approach to Respondent Sampling

The questionnaire was composed of twenty-two (22) unique questions from three (3) different papers' study's scale questions [18], [19], [20] and with the approval of the authors was used and adjusted for the purpose of this study. The questionnaire utilized a 7-point Likert scale to consider variance, answering based on the level of agreement with which when the answer is one (1) it denotes strongly disagree and an answer of seven (7) denotes strongly agree. Cronbach's alpha testing was initially conducted to ensure scale reliability and internal consistency. Based on a formula to calculate sample size by Bonnet [21], A sample size of 7 respondents was needed to determine Cronbach's alpha coefficient at alpha = 0.05 and statistical power of 90%. A resulting coefficient of at least 0.80 is the basis of an acceptable limit to ensure reliability [22].

Convenience sampling was implemented for the conducted survey using an online survey through Google Forms. The ratio of a sample size to the number of free parameters of at least 5:1 was the consideration so that the study would be able to obtain trustworthy parameter estimates [23]. Control variables and demographics such as age, education, sex, and usage frequency of internet and services were requested from the respondents for further classification. Three other constructs that were answerable by yes or no were also asked which were the success of a purchase, its peso value, and the consumer's future intention to repurchase in the same online platform.

C. Initial Data Handling and Statistical Analysis

Data cleaning and preprocessing of raw data were done in Python to initially eliminate errors in data entry, mislabels, missing data, and unwanted duplicates by using NumPy and Pandas libraries. Processed data were then evaluated and analyzed using Structural Equation Modeling (SEM) in constructing the model to represent the behaviors and their relationships with other latent or observed variables. Latent variables are defined as the factors that cannot be directly measured, an example is intelligence which is difficult to measure directly in degree or quantity instead distinct categories of observed variables are used as indicators.

Figure 3 illustrates how structural equation modeling is implemented. It considers qualitative data of hypothesized causes, questions on relationships of identified variables, and nonexperimental or quasi-experimental designs as possible inputs. It then processes the data and then comes out with the possible outputs of a numeric estimate for hypothesized effects, a model of objective indications for identified factors, and a level of support of data to test model implications.

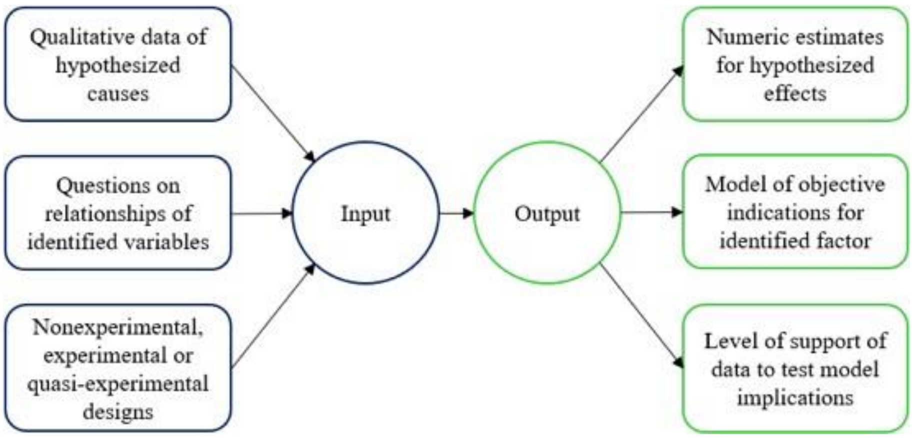


Figure 3. Scheme of Structural Equation Modeling

Following the proposed conceptual framework R Studio integrated development system was used where the Lavaan (Latent Variable Analysis) package was implemented to calculate significant statistical measures and the relationships of the different identified behaviors.

Table 1 shows the analysis to be done to check for the fitness of the model assumption using different indices. Additional Statistical tests were also done on the SEM model to fit and test the proposed relationship among variables. Relationships between observed variables and latent variables are measured by multi-regression and factor analysis, estimating dependencies in the proposed relations.

The minimum requirements in the assessment of the goodness to model fit of latent variable modeling are the following: the ratio of chi-square to the degrees of freedom which measures the relative efficiency of the model [24], “Comparative Fit Index” (CFI), the “Tucker-Lewis Index” (TLI) or “Non Normed fit Index” (NNFI), and the “Root Mean Square Error of Approximation” (RMSEA) that are obtained to test if indices are within acceptable values [25].

Table 1
Goodness of Fit Definition and Acceptable Values

Indices of Fit	Measures	Acceptable value
(NC) Normed Chi Square - Chi-Square divided by Degrees of Freedom	Relative efficiency of model	< 5 [24]
(NNFI/TLI) Non-Normed Fit Index or Tucker Lewis Index	Goodness of fit for a statistical model. Preferred for smaller samples.	> 0.90 [25]
(CFI) Comparative Fit Index	Discrepancy between the data and the hypothesized model. A revised form of NNFI. Low sensitivity to sample size.	> 0.90 [26]
(PNFI) Parsimony-Adjusted Measure Index	A lower fit index is expected for a more complex model.	> 0.50 [27]
(IFI) Incremental Fit Index	Adjusts the NNFI for sample size and degrees of Freedom.	> 0.90 [28]
(RMSEA) Root Mean Square Error of Approximation	Demonstrates the extent of the projection through the measured true values. Avoids issues of sample size. A good fit is represented when values are closer to 0.	< 0.08 [29]

Orange data mining application was used to visualize processed data from Python and calculation results from R Studio. Data and transform packages were used in grouping the results for demographics and calculated coefficients of observed and latent variables. The text mining package consists of a corpus and pre-process text widgets were also utilized for processing text outputs to create a word cloud. Selected columns were then loaded into the visualize and time series widgets to plot the data.

RESULTS AND ANALYSIS

Seven (7) respondents were asked to answer the questionnaire to test for reliability using Cronbach’s alpha. A resulting coefficient of 0.8798 was observed signifying the reliability of the questionnaire. The survey was then answered by 158 initial respondents and was trimmed down to 116 valid responses after initial data handling. Out of the 116, 63 or 54.31% are male, while 53 or 45.69% are female. Also, 75% are college graduates, 10% are still in college, 9% have a master’s degree, 4% graduated from high school, 1% have a doctorate degree, and 1% finished a vocational course.

Table 2 shows a statistical summary of the demographics of the respondents.

Table 2
Demographic Summary

	Age	Years of Personal Computer usage	Years of Smartphone Usage	Hours of Internet Usage Per Day	Year of First Online Purchase
Min	14	2	4	1	2005
1st Quartile	28	13	10	8	2012
Median	31	19	12	12	2015
Mean	31.09	16.91	12.32	10.89	2015
3rd Quartile	34	20	15	15	2019
Max	48	30	22	24	2022

	Days in a week reading product information online	Online purchases in the past month	Days of usage of e-commerce site per week	Last purchase amount
Min	0	0	0	₱ -
1st Quartile	2	2	1	₱ 294.25
Median	3	4	3	₱ 600.00
Mean	3.10	5.81	3.01	₱ 1,386.32
3rd Quartile	4	9	4	₱ 1,500.00
Max	7	25	7	₱ 11,000.00

Figure 4 illustrates the text inputs from the responses were tokenized and filtered to divide into common words. The similarity of the last items bought online by the responders was observed using word cloud.

Figure 4. Last online-purchased item

Table 3 shows the measure of the p-value of each surveyed question towards their respective latent variable. Answers to questions relating to trust, expectation, performance, confirmation, switching cost, loyalty, and repurchase intention were used as inputs to calculate the magnitude of their impact on the latent variables. The output of the latent variable analysis resulted in all p-values less than 0.05, indicating the significance of the survey questions to the latent variables.

Table 3
P-values of Observed Variables to Latent Variables

		P(>|z|)
Trust	=~	
X1		0.000
X2		0.000
X3		0.000
Expectation	=~	
X4		0.000
X5		0.000
X6		0.000
Performance	=~	
X7		0.000
X8		0.000
X9		0.000
Confirmation	=~	
X10		0.000
X11		0.000
X12		0.000
Satisfaction	=~	
X13		0.009
X14		0.009
X15		0.009
X16		0.009
Switching Cost	=~	
X17		0.000
X18		0.000
X19		0.000
Loyalty	=~	
X20		0.000
X21		0.000
X22		0.000
Repurchase	=~	
X23		0.000

Table 4 shows the modeling output where standardized coefficients for latent variables were determined and their respective p-values. It was observed that performance and expectation yielded a positive impact on confirmation with standardized estimates of 0.42 and 0.50 respectively. Confirmation with a standardized estimate of 0.55 and expectation of 0.39 has a positive effect on satisfaction while switching cost and trust have small values of 0.04 and 0.12 respectively. Satisfaction yielded the highest estimated value of 0.94 among coefficients towards loyalty. Both switching costs with an estimate of -0.19 and trust with at -0.17 have a negative impact on loyalty. With loyalty to repurchase intention, an estimated value of -0.04.

Table 4
Latent Variables Standardized Coefficients (Model Generation)

	Estimate	Std. Err	z-value	P(>|z|)	Std.lv	Std.nox
Confirmation	~					
Expectation	0.946	0.414	2.283	0.022	0.419	0.419
Performance	1.135	0.403	2.816	0.005	0.503	0.503
Satisfaction	~					
Expectation	2.671	1.301	2.053	0.040	0.387	0.387
Confirmation	1.692	0.739	2.291	0.022	0.554	0.554
Switching Cost	0.264	0.272	0.972	0.331	0.038	0.038
Trust	0.817	0.492	1.661	0.097	0.118	0.118
Loyalty	~					
Satisfaction	0.253	0.102	2.488	0.013	0.937	0.937
Switching Cost	-0.344	0.118	-2.908	0.004	-0.185	-0.185
Trust	-0.312	0.174	-1.792	0.073	-0.168	-0.168
Repurchase	~					
Loyalty	-0.020	0.051	-0.397	0.691	-0.038	-0.038

Figure 5 illustrates the relationship of standardized estimates of the different variables to their latent variable versus their respective significance measured in p-value.

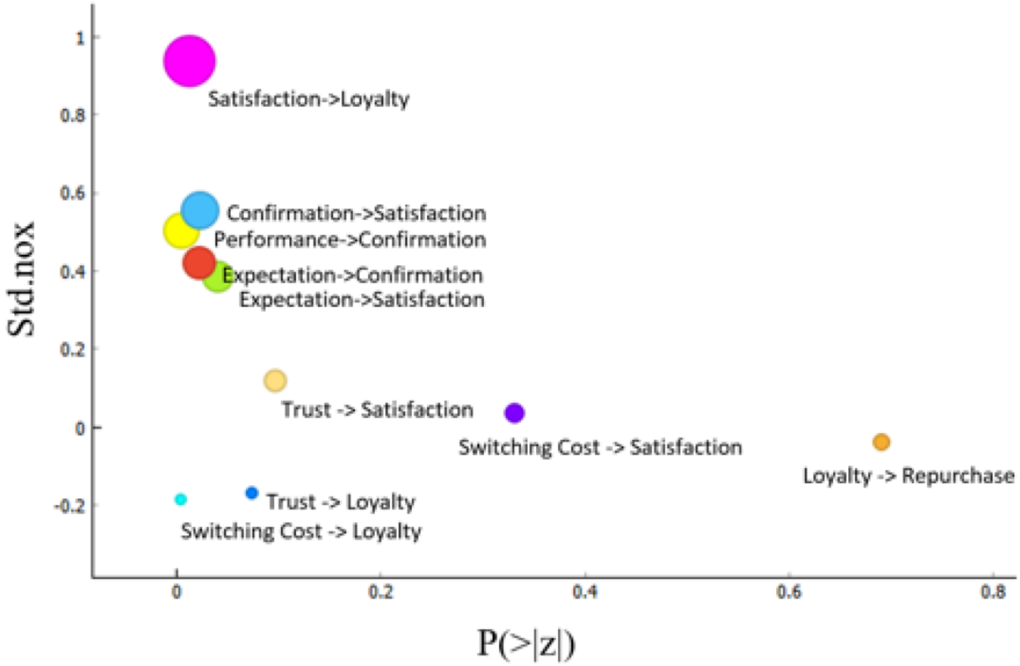


Figure 5. Model standardized estimates versus p-values

The results showed that the effect of switching cost and trust to satisfaction was not significant with p-values of 0.331 and 0.097 respectively. The effect of trust on loyalty also was found insignificant with a p-value of 0.073. The most important finding is that the effect of loyalty to repurchase was found to be also insignificant with a very high p-value of 0.691.

Table 5 shows the representation of the significance of the coefficient through a simple symbol that will be used to illustrate the model output.

Table 5
Significance Matrix

Significance Level P(>|z|)	Symbol
0.001	***
0.01	**
0.05	*
0.1	. or '
1	

Figure 6 illustrates relationships between the identified behaviors, their significance, positive or negative relationships, and their standardized coefficients.

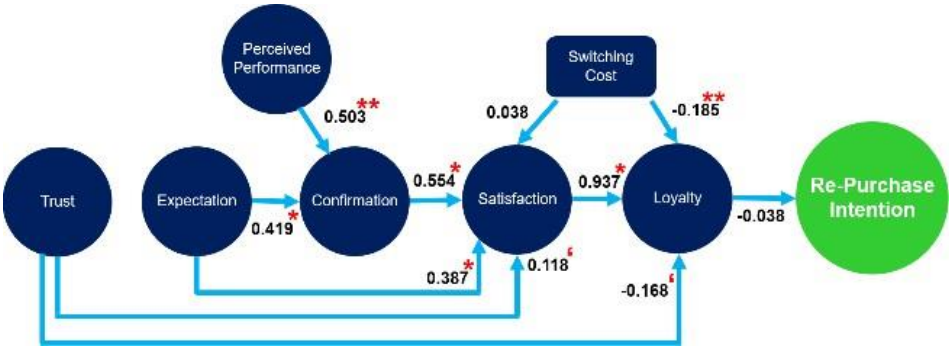


Figure 6. Graphical representation of conceptual model output

Table 6
Test of Goodness of Fit Results

	Results	Acceptable Value	Pass/Fail
Chisq/df	1.856	<5.0	Pass
NNFI	0.921	>0.90	Pass
CFI	0.933	>0.90	Pass
PNFI	0.736	>0.50	Pass
IFI	0.934	>0.90	Pass
RMSEA	0.086	<0.08	Fail

Table 6 shows the validation test results to check the goodness of fit of the proposed model. All indices except RMSEA have achieved acceptable values, with just RMSEA failing with a difference of 0.006 from the acceptable value.

CONCLUSION AND RECOMMENDATIONS

Our research supported the critical role of technology in e-commerce similar to the benefits in other domains. In education, technology supported learning among different groups of learners [32], [33], [34]. In healthcare, it ensured better accuracy and increased efficiency in handling patient records [35], [36]. As society embraces the Internet, it has slowly become a platform to establish and maintain different forms of social relationships [37]. Thus, our results widen the understanding of how the Internet facilitates online repurchase behavior.

Overall, the model had passed five (5) out of the six (6) identified fitness indices, where RMSEA barely passed with just a difference of 0.006 from the acceptable value. 6 out of the 10 identified behavioral interactions had significant relationships except for switching cost to satisfaction, trust to satisfaction, trust to loyalty, and most surprisingly loyalty to repurchase.

The study implicated that trust had no significant effect on post-purchase behaviors that are related to it namely satisfaction and loyalty. This indicates that in the Philippine e- commerce industry, trust does not affect consumer satisfaction and loyalty.

Switching cost on the other hand was also insignificant for consumers that were already satisfied, but once the consumers became loyal, switching cost then becomes a significant factor.

Unexpectedly, loyalty had no significant effect on the re-purchase tendency. This does not mean that Filipinos are not loyal to their online e-commerce platforms, but instead, it just shows that loyalty is not a prerequisite to repurchasing. Filipinos will still buy again from the same shop despite them not being loyal to the same platform, though the same is also true that there is a tendency for them to buy from a different online platform. This could guide business owners to allocate their resources more effectively focusing on more important other aspects of the business considering this result of relationships on repurchase.

It is recommended to conduct a re-evaluation and analysis of this study to confirm results will be similar and valid using a more robust sample size and more relevant questions. It would also be best to explore other possible methods and behaviors to the determination of the interactions of their effects on each other.

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THE ONLINE SHOPPERS DESIRABILITY TO LAZADA AND SHOPEE PERIODIC PROMOTIONAL SCHEME

Estrellita S. Glodo
Irma F. Filler

INTRODUCTION

The emergence of e-commerce now a day becomes a prominent tool in day-to-day lives. The two major applications that people in our generation mostly used are Lazada and Shopee. These two applications would not be gone in people's phones. Scrolling and adding to cart in these applications are the major part of how a day spent by an online shopper. Especially during the months of November and December, this is the shopping period for the most of us who tends to buy gifts and new stuffs for the Christmas and New Year, and these are when the periodic promotional schemes of Lazada and Shopee comes in, that makes people go crazy and start adding to cart.

The periodic promotional schemes of Lazada and Shopee bought online revolution in terms of e-commerce and made all online selling platforms adapt to its campaign. Lazada and Shopee offering cash backs, product bundles, coupon/voucher codes, payday promos, social media promos and free shipping with or without minimum spend. These promotional schemes are more likely catchy in the eyes of the consumers.

In observing, consumers are highly attractive into these e-commerce applications and they diligently wait to these promotional schemes when placing their orders.

This study aims to determine the periodic promotional schemes of Lazada over Shopee and their competitiveness to provide a specific knowledge and information whether the periodic promotional schemes of Lazada differ from Shopee and to measure their competitiveness levels.

Objective of the Study

This research attempts to identify competitiveness between the periodic promotional schemes of Lazada over Shopee.

Specifically, it seeks to answers to the following questions;

1. What are the periodic promotional scheme of Lazada over Shopee as to:
   1.1. Vouchers;
   1.2. Coupon Code;s and
   1.3. Promo Codes?

2. How do the subscribers assess the periodic promotional scheme of Lazada and Shopee as to:
   2.1 Promo period and promo offer;
   2.2 Availment procedure;
   2.3 Terms and conditions; and
   2.4 Customer support.

3. What is the Impact of periodic promotional scheme of Lazada and Shopee to its customers?

4. Is there a significant difference between Lazada and Shopee's periodic promotional scheme?

The main focus of this research is the competitiveness of periodic promotional scheme of Lazada over Shopee. The system will consist of some significant review in order to satisfy the company's needs as well as the customers. This study aims to know the comparison between the Lazada and Shopee for the customers or customer choice.

The selected location of the study, are as follow: City of Manila, Quezon City, Mandaluyong City.

The duration of the study was from October 2021 to June 2022.

It will be conducted through distribution of survey questionnaire to the selected respondents. The target respondents of this study are the customers that have accessed Lazada and Shopee, our target respondents in answering the survey is approximately 120 people.

RESEARCH METHODOLOGY

This descriptive-correlational study wants to know the relationship between the periodic promotional scheme of Lazada and Shopee with the selected residents of Manila, Quezon City and Mandaluyong City. In order to attain the objectives of this study, the researchers employed the descriptive design.

The instrument is composed of Demographic Profile of the Respondents, the Promotional schemes of Lazada and Shopee, the Customer Feedback, and the Customer Services of these two applications.

FINDINGS

The salient findings of the study are as follows:

1. The periodic promotional schemes of Lazada over Shopee are as follows: vouchers found as availed and coupon codes and promo codes were found moderately availed.

2. The online shoppers assessed the periodic promotional scheme of Lazada and Shopee are the promo period and promo offer, availment procedure, terms and condition, and customer support. There were found as very satisfactory;

3. The impact of periodic promotional scheme of Lazada over Shopee are as follows:

   3.1 Online customer benefited from hassle-free shopping:
   a) Promotions have and important attribute to the purchasing decisions;
   b) Make quick purchases during monthly sale;
   c) Easy access when on impulse situation; and
   d) Promotional scheme of e-commerce application affects the buying behavior of the consumers were found as strongly agree.

3.2 Also, the following five (5) items, identified as customer's satisfaction such as:

a. Customer's attitude towards online shopping is largely dependent on pricing and service attributes,
b. The promotional schemes of online application help customer to spend less,
c. Convenient and safe to purchase on online application,
d. Stay up until 12:00 A.M. to avail free shipping and discounts and
e. The periodic promotional schemes are tricky and deceiving scheme of Lazada and Shopee to its customers was found as agree.

4. There is no significant difference on the Lazada and Shopee's periodic promotional scheme as assessed by Lazada and Shopee buyers.

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

1. Vouchers were mostly used among Lazada and Shopee buyers as to periodic promotional schemes. On the other hand, coupon codes and promo codes were usually used only if necessary.

2. The subscribers assess the promo period and promo offer, availment procedure, terms and conditions, and customer support were very satisfying.

3. Online customer benefited from hassle-free shopping, promotions have and important attribute to the purchasing decisions, make quick purchases during monthly sale, easy access when on impulse situation and, promotional scheme of e-commerce application affects the buying behavior of the consumers were found have biggest impact on Shopee and Lazada buyers based on its periodic promotional scheme. While Customer's attitude towards online shopping is largely dependent on pricing and service attributes, The promotional schemes of online application helps customer to spend less, Convenient and safe to purchase on online application, Stay up until 12 A.M. to avail free shipping and discounts, and The periodic promotional schemes is tricky and deceiving were found that have great impact.

4. The Lazada and Shopee periodic promotional scheme as assessed by Lazada and Shopee buyers were found relevant to one another.

RECOMMENDATIONS

Based on the conclusions made, the following recommendations all given:

1. Lazada and Shopee have the same periodic promotional schemes. Researchers suggest that they may offer different bundles of vouchers, coupon codes, and promo codes than their usual offer during the periodic promotional schemes.

2. Lazada and Shopee can consider increasing the discount offer on most availed products. Improve and maintain their current promo period and promo offer, availment procedure, terms and conditions, and customer support so that the buyers can experience excellent service.

3. Lazada and Shopee can be more organized in terms of setting the vouchers, promo and coupon codes section as well as a detailed description so that customers can avail it more conveniently. Providing security and safe shopping experience to prevent them from tricks and fraud.

4. In order to attract the subscriber's interest this two leading e-commerce can work on enhancing their methods in terms of promo period and promo offer, availment procedure, terms and conditions and customer support to achieve excellent results.

5. The future researchers can use more respondents and other indicators in promotional schemes. The future researchers may use this research as their guide, and determine a more focused result on the relationship.

SOCIAL MEDIA ADVERTISEMENT: PURCHASE DECISION REFERENCE OF MARKETING STUDENTS

Ma. Lourdes H. Gomez

INTRODUCTION

Social media advertisement has become an integral part of modern marketing strategies, and its impact on consumers' purchase decisions cannot be overlooked. In the Philippines Benjie Tan launched the country's first internet connection on March 29, 1994, using a PLDT network center in Makati City. The Philippines' gradual digitization has progressed since the nation's connection to the world wide web was established. One of the first social media networking sites to enter and take off in the nation was Friendster in 2002. More than 8 million people used Friendster at its peak. The major feature of the site was its Testimonials area, commonly referred to as "testi," which was a portion of a user's profile where people could make remarks about the individual, whether it be a lengthy essay outlining how they met or how thankful they were of each other. In spite of the fact that Facebook has surpassed Friendster as the most popular app in the nation, other websites and apps are also succeeding in the Philippine online market.

In today's digitally connected world, social media platforms have transformed into powerful marketing tools, allowing businesses to reach a vast audience and engage with potential customers in a more personalized and targeted manner. In order for businesses to stay in the industry, they should think of different marketing strategies to promote their products and services, differentiate themselves from competitors and to attract more buyers. It consists of actions in web browsers, social media pages, blogs, apps, or any other form of contact through the Internet (Rock Content, 2020).

Technology advancement also made social media advertisement another means of entertainment and communication for the business to its target market, because aside from it promoting the products and services of the business, it is also giving information and knowledge for the consumers.

This study aims to know the effects of Social Media Advertisement to the Purchase Decision Reference of Marketing Students**.** It is conducted to evaluate how digital advertisements affects the preferences and purchase decision of consumer in terms of buying and also give some recommendations to Apparel businesses on creating useful and effective social media advertisements.

STATEMENT OF THE PROBLEM

This study tries to determine the effects of social media advertisements in Purchase decision reference of the Marketing Students.

Specifically, it seeks to answer the following sub problems in terms of:

1. What is the demographic profile of the respondents as to:

   1.1 Gender:
   1.2 Preferred social media platforms; and
   1.3 Product purchased influenced by social media platforms?

2. How do the researchers assess the social media advertisement for purchase decision reference in terms of:

2.1 Information;
2.2 Entertainment;
2.3 Reward;
2.4 Trust; and
2.5 Satisfaction?

3. Is there a significant relationship between the demographic profile of two groups of respondents in social media advertisement for purchase decision references of marketing students?

METHODOLOGY

This study applied a **descriptive method of research** that aimed to procure information to effectively described and examined the Social Media Advertisement: Purchase Decision Reference of Marketing Management Students.

Descriptive research is defined as a research method used to describe the existing phenomena as accurately as possible (Atmowardoyo, 2018). Descriptive studies look at the characteristics of a population; identify the problems that exist within a unit, organization or population; or look at variations in characteristics or practices in organizations or even countries (Siedlecki, 2020).

Population and Sampling

The research utilized random sampling, a type of probability sampling method that allows for the randomization of sample selection. In this sampling method, all the suitable individuals have the possibility of choosing the sample from the whole sample space. Researchers specify this sampling method for immediate capture of the information with regards a certain issue.

This method is the simplest of all the probability sampling methods because it just takes a single random selection and little prior knowledge of the population. Any research conducted on this sample should have excellent internal and external validity due to the randomization. The researchers use such samples to ensure that results obtained should approximate what would have been obtained if the entire population has been measured. The sample was chosen to be conducted in the population of Marketing Students in Eulogio "Amang" Rodriguez Institute of Science and Technology.

Description of Respondents

The study gathered participants within the population of Marketing Students. The participants were selected through random sampling. These participants assisted the researcher in determining the digital marketing strategy of the Social Media Advertisement: Purchase Decision Reference of Marketing Management Students. The total number of respondents for the research is 100 marketing students.

Research Instrument

The research Instrument that was used in this study is an unstructured survey questionnaire using Google form to gather the necessary data. The draft of the survey questionnaire would be drawn out based on the statement of the problem from this study.

The draft of the questionnaire would be presented to the research adviser. After presentation to the experts, revisions would be made to justify the issues raised for the answer. After being given to one of the professors who participated in the study, input will be included and revised. Clarifications will be made on the aspects that are not clear to them and their comments and recommendations will be considered in the final draft of the survey questionnaire.

Administration of Questionnaire

Researchers constructed unstructured survey questionnaires using Google form to make it accessible and distribute it to randomly selected respondents with consent form. For the safety of the respondents, all personal data and submitted responses will be kept confidential by the researchers.

RESULTS AND DISCUSSION

1. Demographic Profile of the Respondents

Among the 100 respondents, there are more female respondents with a total of 63% than the male respondents which is 37%. In terms of preferred social media platforms, Facebook was the highest with 30.8%, followed by TikTok 22.8%; Instagram with 21.7%; Shopee with 16.3% and lastly Lazada was the least with 8.34%. The highest product that was influenced by social media platforms was Fashion with 31.2%; Essentials rank 2 with 25%; Health and Beauty rank 3 with 18.4%; Electronics rank 4 with 13.6% and the least were Home and Outdoors with 12.8%

2. Assessment of the Social Media Advertisement

Purchase Decision Reference of Marketing Students. The grand mean of the items was 4.506667 and the general verbal interpretation was "Strongly Agree". Trust rank 1 with weighted mean of 4.57; Entertainment rank 2 with 4.516667; Information rank 3 with 4.51;Satisfaction rank 4 with 4.476667; and Reward was the least that rank 5 with 4.46. All items are verbally interpreted as " Strongly Agree".

3. Purchase Decision Reference of Marketing Students in terms of Trust

Among the 5 purchase decision references of the marketing students, Trust ranked 1 with a weighted mean of 4.54 for male and 4.58 for female that made the total weighted mean 4.57 and the general verbal interpretation was "Strongly Agree". Social media advertisements create positive feedback, increase the credibility of the product and make some recommendations to purchase the products.

4. Significant relationship between the demographic profile and social media advertisement for purchase decision reference of Marketing students.

The p-value for male was 0.193 and 0.145 for female that made the overall computed p-value at level 0.05. It was interpreted as not significant; therefore, the hypothesis is accepted.

CONCLUSIONS

Based on significant findings of the study, the following conclusions were drawn:

1. Among the 100 respondents, there are more female respondents than the male respondents. In terms of preferred social media platforms, Facebook was the highest, followed by TikTok, Instagram with, Shopee with and lastly Lazada was the least. While the highest product that was influenced by social media platforms was Fashion, followed by Electronics, Essential and Home & Outdoors with the same frequency and lastly, Health and Beauty.

2. The overall weighted mean of the variables was verbally interpreted as strongly agree trust as ranked 1 followed by entertainment as ranked 2, information as ranked 3, satisfaction as ranked 4, lastly reward as ranked 5. All items are verbally interpreted as "strongly agree".

3. Among the 5 purchase decision references of the marketing students, trust ranked as 1 with the verbal interpretation of "strongly agree". Social media advertisement creates positive feedback, increases the credibility of the product and makes some recommendations to purchase the products.

4. Meanwhile reward ranked as 5 or the least among the purchase decision reference of marketing students with the verbal interpretation as "strongly agree". Rewards can make savings, make the customers feel valuable and also help in purchasing products.

5. The significant relationship between the demographic profile and social media advertisement for purchase decision reference of Marketing students was interpreted as not significant, therefore, the hypothesis is accepted.

RECOMMENDATIONS

Based on the summary of findings and the conclusions drawn therefrom, the following recommendations are proposed:

1. Information

Provide accurate information to ensure that all the information presented in the advertisement is accurate and up to date. Misinformation can harm your brand reputation and credibility. Clearly communicate the purpose of the advertisement and the product or service being promoted to avoid misleading or exaggerated claims that can misinform or confuse the customers. And encourage feedback from the customers regarding advertisements. Listen to their suggestions, concerns, and criticisms.

2. Entertainment

Understand target audience, research and analyze your target audience's preferences, and interests. Partner with social media influencers who align with your brand and have a strong connection with your target audience. They can create entertaining content that integrates your brand naturally and authentically, boosting engagement and credibility. Social media users have short attention spans, so keep the advertisements short and impactful. Use visually stunning graphics, animations, or video clips to grab attention and maintain interest throughout the ads.

3. Reward

Personalize the rewards or incentives to match the preferences and interests of your target audience. Use insights based on the customers to understand their needs, behaviors, and demographics, allowing you to offer rewards that are more relevant and appealing to individual users. Offer exclusive access to new products, services, or content to users who engage with your advertisements. Early access, and limited editions can incentivize users to take-action and feel rewarded for their engagement. Implement referral or loyalty programs that reward users for sharing your ads, referring friends, or making repeat purchases. Offering incentives such as discounts, freebies, or exclusive privileges can motivate users to actively participate and promote your brand.

4. Trust

Actively respond to comments, messages, and inquiries from users on your social media platforms. Engaging in open and respectful conversations shows that you value customer feedback and are committed to addressing their concerns. Offer guarantees and return policies, clearly state your product guarantees and return policies in your advertisements and on your website. This helps alleviate concerns about the purchase process and demonstrates your confidence in the quality of your offerings. Respond promptly and professionally to customer concerns, addressing any issues and resolving them to the best of your ability. Demonstrating accountability and a commitment to customer satisfaction enhances trust.

5. Satisfaction

Focus on showcasing the benefits of your product or service and how it can solve customers' problems or fulfill their desires. Show proofs, reviews, ratings, and endorsements from satisfied customers to build trust and credibility. Proofs can positively influence customers' perceptions and increase their satisfaction.

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STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) OF BACHELOR OF SCIENCE IN OFFICE ADMINISTRATION PROGRAM OF EULOGIO AMANG RODRIGUEZ INSTITUTE OF SCIENCE AND TECHNOLOGY CAVITE CAMPUS: BASIS FOR ENHANCED MARKETING STRATEGIES

Dr. Lyn R. Gondra

INTRODUCTION

The study aimed to assess the Strengths, Weaknesses, Opportunities, and Threats (SWOT) of Bachelor of Science in Office Administration Program of Eulogio Amang Rodriguez Institute of Science and Technology Cavite Campus Particularly on the Enrollment, Curriculum and Instructions, Faculty Profile/Qualification; Physical Facilities and Laboratories, and Administrative Policies. Moreover, the results let to the development of Enhanced Marketing Strategies. The study is anchored on the Management Fashion Theory of Dag Oivind Madsen. This is a useful sensitizing framework since the theory directs attention to the supply and demand side forces that shape the evolution of management ideas throughout its life cycle from initial emergence and growth to maturity and decline.

MATERIALS AND METHODS

This study was primarily a descriptive in nature utilizing survey questionnaire method. The Likert-Scale was used to determine the SWOT Analysis of the Enrollment, Curriculum and Instruction, Faculty Profile/Qualification; Physical Facilities and Laboratories, and Administrative Policies. The ANOVA was used to determine the significant difference on the assessment of the respondents in the SWOT Analysis Bachelor of Science in Office Administration Program of Eulogio Amang Rodriguez Institute Of Science and Technology Cavite Campus.

RESULTS AND DISCUSSIONS

Sub-problem No. 1. How do the students, non-teaching personnel, faculty and administrators assess the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the Bachelor of Science in Office Administration Program of Eulogio Amang Rodriguez Institute of Science and Technology Cavite Campus as to**:**

1.1 Enrollment

1.1.1 Strengths

Table 1 presents the assessment of the four (4) groups of respondents on the Enrollment as to Strengths.

According to the response of the students, the indicator three (3) has the highest weighted mean of 4.30 and interpreted as “Moderately Evident”. While the indicator one (1) has lowest weighted mean of 4.10 and interpretation of “Moderately Evident” The average weighted mean of Students was 4.19 with an interpretation of “Moderately Evident”.

For the non-teaching personnel, the indicator three (3) has the highest weighted mean of 4.93 and interpreted as “Highly Evident” and the indicator two (2) has the lowest weighted mean of 4.20 and interpreted as “Moderately Evident”. The Non-teaching personnel has an average weighted mean of 4.49 and interpreted as “Moderately Evident”.

Table 1
Assessment on Enrollment as to Strengths

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The enrollment system used by the institution for admissions follows organized procedures that are easy to comprehend and understand.	4.10	ME	4.53	HE	4.33	ME	5.00	HE	4.49	ME	3
2	The institution offers an online enrollment system and accommodates electronic payment for different enrollment fees.	4.20	ME	4.27	ME	4.33	ME	5.00	HE	4.45	ME	4
3	The institution provides brochures, pamphlets, etc. to help the students in their recruitment and admission inquiries.	4.30	ME	4.93	HE	4.72	HE	5.00	HE	4.74	HE	1
4	The institution offers several discounts to choose from (e.g., early-bird discounts, academic/honor discounts, sibling discounts).	4.15	ME	4.53	HE	4.56	HE	5.00	HE	4.56	HE	2
	Average Weighted Mean	**4.16**	**ME**	**4.49**	**ME**	**4.51**	**HE**	**4.80**	**HE**	**4.49**	**ME**	

Note: 4.50-5.00	Highly Evident	HE
3.50-4.49	Moderately Evident	ME
2.50-3.49	Slightly Evident	SE
1.50-2.49	Less Evident	LE
1.00-1.49	Not Evident	

With regards to the response of the faculty, indicator three (3) has a highest weighted mean of 4.72 and interpreted as “Highly Evident”. While indicator one (1) and two (2) have the same weighted mean of 4.33 and interpreted as “Moderately Evident”. The average weighted mean of Faculty is 4.51 with an interpretation of “Highly Evident”.

For the administrator, indicator one (1), two (2), three (3), and four (4) have the same weighted mean of 5.00 and interpreted as “Highly Evident”. The average weighted mean of Administrator was 5.00 and interpreted as “Highly Evident”.

It can be also inferred from the data the composite mean of the respondents to indicators, the institution provides brochures, pamphlets, etc. to help the students in their recruitment and admission inquiries; the institution offers several discounts to choose from (e.g., early-bird discounts, academic/honor discounts, sibling discounts); the enrollment system used by the institution for admissions follows organized procedures that are easy to comprehend and understand; and the institution offers an online enrollment system and accommodates electronic payment for different enrollment fees were supported by composite mean of 4.74, 4.56, 4.49. and 4.45 accordingly.

This was supported by the findings of Bester et al., (2016) which stated that the brochures are useful communication mechanism to give data. Researching on internet does help to an extent, but the information will be better conveyed through brochures which are straight to the point and won't have time to navigate through endless pages. While offering credit terms and affordable wide choices of tuition for the monthly payment period will bring good support. According to Preston and Prochaska-Cue (2017) some of the advantages of credit are conveniency, meet emergencies situations, getting something people can't afford now, may get better service on something bought on credit, and established credit history.

The institution is committed to provide high quality education and student services. It demonstrates wide range of student support services and positive feedback from students regarding the impact on educational growth.

1.1.2 Weaknesses

Table 2
Assessment on Enrollment as to Weaknesses

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution offers a minimal number of programs to choose from during enrollment.	3.09	SE	3.27	SE	2.72	SE	5.00	HE	3.52	ME	1
2	The institution experienced lower student retention and completion.	2.99	SE	2.87	SE	2.11	LE	5.00	HE	3.24	SE	2
3	The institution has a lack of signature scholarship programs and an insufficient level of scholarship funds.	2.91	SE	2.80	SE	2.11	LE	5.00	HE	3.21	SE	3
4	The institution has a poor quality of interactions with the students' queries during the enrollment process.	2.62	SE	2.47	LE	2.28	LE	5.00	HE	3.09	SE	4
5	The institution	2.83	SE	2.47	LE	2.44	LE	4.00	ME	2.94	SE	5

Table 2 presents the assessment of the four (4) groups of respondents on the Enrollment as to Weaknesses.

According to the response of the students, the indicator one (1) has the highest weighted mean of 3.09 which interpreted as "Slightly Evident". While the indicator four (4) has the lowest weighted mean of 2.62 and interpreted as "Slightly Evident". The average weighted mean for students was 2.89 with an interpretation of "Slightly Evident".

With regards to non-teaching personnel, the indicator one (1) has the highest weighted mean of 3.27 and interpretation of "Slightly Evident". While the indicator four (4) and five (5) has the same weighted mean of 2.47 with an interpretation of "Less Evident". The average weighted mean for non-teaching personnel is 2.77 with an interpretation of "Slightly Evident".

The response of the faculty to each indicator are the following: the indicator one (1) has the highest weighted mean of 2.72 and interpreted as "Slightly Evident". While the indicator two (WM=2.11) and indictor three (WM=2.11) were having the same interpretation of "Less Evident". The average weighted mean of the faculty was 2.33 and interpreted as "Less Evident".

With regards to the administrator, the indicator one (WM=5.00), indicator two (WM=5.00), indicator three (WM=5.00), and indicator four (WM=5.00) has interpretation of "Highly Evident". While indicator five (WM=4.00) has an interpretation of "Moderately evident". The average weighted mean of Administrator is 4.80 and interpreted as "Highly Evident".

On the other hand, the assessment to the indicator "The institution offers a minimal number of programs to choose from during enrollment" was verbally interpreted as "Moderately Evident" and supported by CM=3.52. Furthermore, the remaining four (4) indicators interpreted as "Slightly Evident". These were: "The institution experienced lower student retention and completion" (CM=3.24); The institution has a lack of signature scholarship programs and an insufficient level of scholarship funds (CM=3.21); The institution has a poor quality of interactions with the students' queries during the enrollment process (CM=3.09); and The institution has no different fee waivers (e.g., High demand major/program, Students with disability, Families with low-income level) offered for qualified enrollees (CM=2.94). Moreover, the weaknesses of enrollment as assessed by the respondents was verbally interpreted as "Slightly Evident" which was supported by average weighted mean of 3.20.

This was supported by the study of Ouano, Torre, Japitan, and Moneva (2019) which talk about the importance of career selection. It is one of the biggest dilemmas and challenge in any student's life and will determine their future plans. For many students, choosing a college or program is a vital decision determining the entire life plan, success, and professional career. The factors affecting their choice is also weight in the choice of program and major. This decision will therefore impart them throughout their lives.

1.1.3 Opportunities

Table 3
Assessment on Enrollment as to Opportunities

Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1 Accommodating the current trend of management information systems to improve functionalities, avoid paperwork, reduce redundant procedures, and have intact information during enrollment.	3.72	ME	4.33	ME	4.33	ME	2.00	LE	3.60	ME	2
2 Offering an academic program during enrollment that is needed and suited to current industries and business establishments locally and internationally.	3.66	ME	4.20	ME	4.22	ME	2.00	LE	3.52	ME	3
3 The opportunities for the admission of foreign students as part of internationalization.	3.45	SE	2.67	SE	2.89	SE	2.00	LE	2.75	SE	5
4 The institution recognizes partnerships or joint agreements with different industrial and business institutions for the enrollment of OJT Students.	3.30	SE	4.07	ME	3.89	ME	2.00	LE	3.31	SE	4
5 Increasing enrollment advertising campaign to nearby cities as a promotional campaign like billboards, tarpaulins, and flyers.	3.87	ME	4.53	HE	4.11	ME	3.00	SE	3.88	ME	1
Average Weighted Mean	**3.60**	**ME**	**3.96**	**ME**	**3.89**	**ME**	**2.20**	**LE**	**3.41**	**SE**	

Table 3 presents the assessment of the four (4) groups of respondents on the Enrollment as to Opportunities.

According to the response of the students, the indicator one (1) has a highest weighted mean of 3.72 and interpreted as “Moderately Evident”. While the indicator three (3) has a lowest weighted mean of 3.45 were interpreted as “Slightly Evident”. The average weighted mean of the students was 3.60 and interpreted as “Moderately Evident”.

With regards to the non-teaching personnel, the indicator five (5) has a highest weighted mean of 4.53 and interpreted as “Highly Evident”. While the indicator three (3) has the lowest weighted mean of 2.67 and interpreted as “Slightly Evident”. The average weighted mean for non-teaching personnel was 3.96 with an interpretation of “Moderately Evident”.

For the faculty, the following are the results: the indicator one (1) has a highest weighted mean of 4.33 and interpreted as “Moderately Evident” and the indicator three (3) has the lowest weighted mean of 2.89 and interpreted as “Slightly Evident”. The average weighted mean of faculty was 3.89 with the verbal interpretation of “Moderately Evident”.

In terms of the response of the administrator, the indicator five (5) has the highest weighted mean of 3.00 and verbal interpretation of “Slightly Evident”. While, the indicator one (1), two (2), three (3), and four (4) have the same weighted mean of 2.00 with an interpretation of “Less Evident”. The average weighted mean of the administrator was 2.20 and interpreted “Less Evident."

As illustrated in the composite mean of indicators. Increasing enrollment advertising campaign to nearby cities as a promotional campaign like billboards, tarpaulins, and flyers (CM=3.88); Accommodating the current trend of management information systems to improve functionalities, avoid paperwork, reduce redundant procedures, and have intact information during enrollment (CM=.3.60); and Offering an academic program during enrollment that is needed and suited to current industries and business establishments locally and internationally (CM=3.52) were all interpreted as “Moderately Evident”. While the institution recognizes partnerships or joint agreements with different industrial and business institutions for the enrollment of OJT Students (CM=3.31) and the opportunities for the admission of foreign students as part of internationalization (CM=2.75) were interpreted as “Slightly Evident”.

The study of Akanwa (2015) revealed that the awareness of cultural diversity and its impact on international students’ performance are critical components influencing learning and academic success, it is equally important to underscore the fact that a students’ prior academic background could serve as a necessary predictor of academic performance. Various resources and support services available to international students are instrumental to their success in universities and colleges. International students do not only need human resources personnel, they also need other support services capable of making their educational experiences successful, engaging, and rewarding.

On the other hand, B&B Press (2022) states that printed materials for promotional campaigns plays a big role in today’s higher educational marketing program. It is effective, actionable and remarkably underrated. Higher education is a competitive landscape with many fierce institutions fighting for the same audience. Promotional campaigns are often the first exposure a student gets from the educational institutions.

Each promotional campaign should tell the story of the institution’s mission. With the enrolment goals, it is important to weave a compelling narrative featuring real stories that could connect with prospective students.

1.1.4 Threats

Table 4
Assessment on Enrollment as to Threats

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	Enormous competition in enrollment campaigns due to the development of the new private and public educational institutions in the area.	3.49	SE	3.60	ME	3.50	ME	4.00	ME	3.65	ME	2
2	Declining enrollment due to the current health and economic status of the area and the country in general.	2.99	SE	3.20	SE	3.22	SE	5.00	HE	3.60	ME	3
3	Unmatched between courses offered during enrollment and societal interests.	2.93	SE	2.87	SE	2.72	SE	2.00	LE	2.63	SE	5
4	Use of a new enrollment management information system for other institutions to accommodate faster and more enrollees.	3.49	SE	3.93	ME	3.11	SE	5.00	HE	3.88	ME	1
5	Uncomfortable and uneased thoughts in giving vital information in online enrollment admissions and inquiries due to societal identity theft issues.	2.83	SE	3.07	SE	1.67	LE	5.00	HE	3.14	SE	4
	Average Weighted Mean	**3.14**	**SE**	**3.33**	**SE**	**2.84**	**SE**	**4.20**	**ME**	**3.38**	**SE**	

Table 4 shows the assessment of the four (4) groups of respondents on the Enrollment as to Threats.

According to the response of the students, the indicator one (1) and four (4) have the same weighted mean of 3.49. While the indicator five (5) has the lowest weighted mean of 2.83. All indicators were interpreted as “Slightly Evident”. The average weighted mean of the students was 3.14 and interpreted as “Slightly Evident.”

With regards to non-teaching personnel, the indicator four (4) has the highest weighted mean of 3.93 and interpreted as “Moderately Evident. While indicator three (3) has a lowest weighted mean of 2.87 with an interpretation of “Slightly Evident”. The average weighted mean was 3.33 with an interpretation of “Slightly Evident”.

The response of the faculty was the following: the indicator one (1) has a highest weighted mean of 3.50 and interpreted as “Moderately Evident”. While the indicator five (5) has the lowest weighted mean of 1.67 and interpreted as “Less Evident”. The average weighted mean of faculty was 2.84 with an interpretation of “Slightly Evident”.

For the response of the administrator, the indicator two (WM=5.00), indicator four (WM=5.00), and indicator five (WM=5.00) got the highest weighted mean which were interpreted as “Highly Evident”. And lastly, the indicator three (3) (WM=2.00) got the lowest weighted mean which were interpreted as “Less Evident”. On the other hand, the average weighted mean of administrator was 4.20 which was interpreted as “Moderately Evident”.

The investigation conducted by Poluborayov (2018) on the informational support for university management stated that the need for informational support of developing and implementing the university development strategy sets out the requirements to the structure and objectives for managing the higher educational institution. The tasks of such systems are to maintain interaction with the external environment, to effectively apply the available resources, to provide informational support of implementing major ensuring business processes, management, and development processes. By this means, the use of new information system by other institution could be their advantages in enrollment and admissions.

Table 5

Summary Table on Strengths, Weaknesses, Opportunities, and Threats as to Enrollment

Enrollment	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
Strengths	4.16	ME	4.49	ME	4.51	HE	4.80	HE	4.49	ME	1
Weaknesses	2.89	SE	2.77	SE	2.33	LE	4.80	HE	3.20	SE	4
Opportunities	3.60	ME	3.96	ME	3.89	ME	2.20	LE	3.41	SE	2
Threats	3.14	SE	3.33	SE	2.84	SE	4.20	ME	3.38	SE	3

The table 5 shows the summary of SWOT analysis of the four (4) groups of respondents as to enrollment. It indicates that Strengths (CM=4.49) which is the highest rank was interpreted as “Moderately Evident”. While Opportunities (CM=3.41), Threats (CM=3.38), and Weaknesses (CM=3.20) were interpreted as “Slightly Evident”.

1.2 Curriculum and Instructions

1.2.1 Strengths

Table no. 6 presents the assessment of the four (4) groups of respondents on the Curriculum and Instruction as to Strengths.

For the response of the students, the indicator one (1) has the highest weighted mean of 4.05. While the indicator three (3) has the lowest weighted mean of 3.83. All responses were interpreted as “Moderately Evident”. The average weighted mean of the students is 3.93 with an interpretation of “Moderately Evident”.

For the non-teaching personnel, the indicator one (1) has highest weighted mean of 4.47. While indicator three (3) and indicator four (4) have the lowest weighted mean of 4.20. All responses are interpreted as “Moderately Evident”. The average weighted mean of the response of the non-teaching personnel was 4.31 which was interpreted as “Moderately Evident”.

Table 6
Assessment on Curriculum and Instruction as to Strengths

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mena	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution utilizes delivery systems and modes of instruction compatible with the objectives of the curriculum and appropriate to the current and future needs of its students.	4.05	ME	4.47	ME	4.61	HE	5.00	HE	4.53	HE	1
2	The institution offers high-quality programs aligned in emerging fields of study that cultivate students' outcomes leading to degrees, certificates, and employability.	3.89	ME	4.40	ME	4.61	HE	5.00	HE	4.48	ME	2
3	The institution established a curriculum program based on the identified educational needs of the students and continuous improvement for student learning and institutional processes.	3.83	ME	4.20	ME	4.67	HE	5.00	HE	4.42	ME	4
4	The institution utilized a validated program examination, and output-based learning system and performs a systematic evaluation to measure student learning outcomes.	3.90	ME	4.20	ME	4.72	HE	5.00	HE	4.46	ME	3
5	The institution has a curriculum that is designed to equip the students to be professionally or socially aligned in a local or international context.	3.98	ME	4.27	ME	4.67	HE	4.00	ME	4.23	ME	5
	Average Weighted Mean	**3.93**	**ME**	**4.31**	**ME**	**4.66**	**HE**	**4.80**	**HE**	**4.42**	**ME**	

On the other hand, the faculty response to indicator four (4) has the highest weighted mean of 4.72 and the indicator one (1) and indicator two (2) also have the same weighted mean of 4.61. All responses are interpreted as “Highly Evident”. The average weighted mean of the faculty was 4.66 and interpreted as “Highly Evident”.

For the response of the administrator, the indicator one (1), two (2), three (3) and four (4) have the same weighted mean of 5.00 with an interpretation of “Highly Evident”. While indicator five (5) has weighted mean of 4.00 and interpreted as “Moderately Evident”. The weighted average mean of administrator was 4.80 which was interpreted as “Highly Evident”.

Furthermore, the strengths as to Curriculum and Instruction based from the composite mean of the four (4) groups of respondent indicator number one (1) The institution utilizes delivery systems and modes of instruction compatible with the objectives of the curriculum and appropriate to the current and future needs of its students was equivalent to 4.53 and interpreted as "Highly Evident".

Furthermore, the rest of the remaining indicators was interpreted as "Moderately Evident" and having a rating of 4.48, 4.42, 4.46, and 4.23 accordingly.

It was supported by the study of Flake (2017) that Curriculum provides direction for instruction since instruction is the method of delivering academic curriculum. Instruction may exist without curriculum but would serve no direct purpose. Curriculum and instruction must be compatible and maintain a close relationship to maximize student learning. Additionally, it represents an articulation of what students should know and be able to do and supports teachers in knowing how to achieve the needs of students.

1.2.2 Weaknesses

Table 7
Assessment on Curriculum and Instruction as to Weaknesses

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The delivery of instructions is not easy to comprehend by students.	3.10	SE	2.40	LE	1.72	LE	2.00	LE	2.30	LE	1
2	The students are not given diagnostic feedback on ways they can improve.	2.72	SE	2.27	LE	1.67	SE	1.00	NE	1.91	LE	5
3	The institution did not assess the learning process to identify the skills and knowledge that need to acquire by the students.	2.73	SE	1.93	LE	1.50	LE	2.00	LE	2.04	LE	3
4	The curriculum did not match the internal needs of the students for knowledge growth and skills development.	2.56	SE	1.87	LE	1.28	NE	2.00	LE	1.93	LE	4
5	The curriculum did not outshine students in particular areas of the learning process to demonstrate confidence, hands-on skills, and technological advancement.	2.61	SE	2.13	LE	1.50	LE	2.00	LE	2.06	LE	2
	Average Weighted Mean	**2.74**	**SE**	**2.12**	**LE**	**1.53**	**LE**	**1.80**	**LE**	**2.05**	**LE**	

As presented in Table 7, the assessment of the four (4) groups of respondents on the Curriculum and Instruction as to Weaknesses.

The response of the students shows that the indicator one (1) has the highest weighted mean of 3.10. While the indicator four (4) has the lowest weighted mean of 2.56. All responses have interpretation of “Slightly Evident”. The average weighted mean of the students was 2.74 which was interpreted as “Slightly Evident”.

For the non-teaching personnel, the indicator one (1) has the highest weighted mean of 2.40. While the indicator four (4) has the lowest weighted mean of 1.87. All responses are interpreted as “Less Evident”. The response of non-teaching personnel has an average weighted mean of 2.12 which was interpreted as “Less Evident”.

On the other hand, the response of the faculty to indicator one (1) has the highest mean of 1.72. While the indicator four (4) has the lowest mean of 1.28. All indicators have verbal interpretation of “Less Evident”, except for indicator four (4) which was interpreted as “Not Evident”. The response of the faculty has an average weighted mean of 1.53 and interpreted as “Less Evident”.

For the response of the administrator, the indicator one (1), three (3), four (4), and five (5) have weighted mean of 2.00 and interpreted as “Less Evident”. While indicator two (2) has a weighted mean of 1.00 which was interpreted as “Not Evident”. The response of the administrator was supported by the average weighted mean of 1.80 which was interpreted as “Less Evident”.

With regards to the composite mean of Students, Non-teaching Personnel, Faculty, and Administrator, all indicators were interpreted as “Less Evident”. Supporting with the following: The weaknesses of curriculum and instructions on the delivery of instructions is not easy to comprehend by students (CM=2.30); The curriculum did not outshine students in particular areas of the learning process to demonstrate confidence, hands-on skills, and technological advancement (CM=2.06); The institution did not assess the learning process to identify the skills and knowledge that need to acquire by the students (CM=2.04); The curriculum did not match the internal needs of the students for knowledge growth and skills development (CM=1.93); and the students are not given diagnostic feedback on ways they can improve (CM=1.91).

In the study conducted by Sowell (2017), instruction-giving has a direct effect on learning; a lesson or activity becomes chaotic and fails when students do not understand what they are supposed to do. Nonetheless, good instruction-giving is a challenge for teachers. As stated also by Barile (2022) giving clear instructions to students can ensure that they fully comprehend what they need to do to achieve in your classroom. It will ease students' nerves, assuage their insecurities, and help them confirm your expectations so that they can be happy and successful in school.

1.2.3 Opportunities

It can be gleaned from Table 8 the assessment of the four (4) groups of respondents on the Curriculum and Instruction as to Opportunities.

The response of the students showed that indicator one (1) and indicator three (3) have the highest weighted mean of 3.60. On the other hand, the indicator two (2) has the lowest weighted mean of 3.26 with an interpretation of “Slightly Evident”. The average weighted mean of the response of students was 3.50 which was interpreted as “Moderately Evident”.

The response of non-teaching personnel showed that the indicator three (3) and four (4) were the highest weighted mean of 4.07. While the indicator five (5) has the lowest weight mean of 3.67. All indicators are interpreted as “Moderately Evident”. The average weighted mean of the non-teaching personnel was 3.87 or interpreted as “Moderately Evident”.

Table 8
Assessment on Curriculum and Instruction as to Opportunities

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	Different external school activities (like program competitions, extracurriculars, and sports) that highlight the outcome of the programs are participated by the students.	3.60	ME	3.80	ME	4.00	ME	5.00	HE	4.10	ME	3
2	The reports of the evaluation and assessment of the students are sent to external stakeholders such as parents, and others who are keenly involved in the development of the programs and the students.	3.26	SE	3.73	ME	4.00	ME	5.00	HE	4.00	ME	4
3	The practice of external trends in teaching such as blended learning modalities as a replacement for the traditional learning approach.	3.60	ME	4.07	ME	4.44	ME	5.00	HE	4.28	ME	1
4	External education and training are given to personnel and faculty to ensure the integrity and quality of programs and services offered.	3.54	ME	4.07	ME	4.11	ME	5.00	HE	4.18	ME	2
5	The institution enhances the curriculum anchored to an international trend of programs.	3.51	ME	3.67	ME	3.94	ME	4.00	ME	3.78	ME	5
	Average Weighted Mean	**3.50**	**ME**	**3.87**	**ME**	**4.10**	**ME**	**4.80**	**HE**	**4.07**	**ME**	

For the response of the faculty, it showed that the indicator three (3) has the highest weighted mean of 4.44. While the indicator five (5) has the lowest mean of 3.94. All indicators are interpreted as “Moderately Evident”. With regards to the average weighted mean the students has 4.10 and interpreted as “Moderately Evident”.

On the other hand, the administrator response showed that the indicator one (1), two (2), three (3), and four (4) have the same weighted mean of 5.00 which was interpreted as “Highly Evident”. While indicator five (5) has the lowest weighted mean of 4.00 and interpreted as “Moderately Evident”. The average weighted mean of all the indicators as responded by the administrator was 4.80 and interpreted as “Highly Evident”.

All indicators are interpreted as “Moderately Evident” based on the composite mean of the indicators. The practice of external trends in teaching such as blended learning modalities as a replacement for the traditional learning approach (CM=4.28); External education and training are given to personnel and faculty to ensure the integrity and quality of programs and services offered (CM=4.18); Different external school activities (like program competitions, extracurricular, and sports) that highlight the outcome of the programs are participated by the students (CM=4.10); The reports of the evaluation and assessment of the students are sent to external stakeholders such as parents, and others who are keenly involved in the development of the programs and the students (CM=4.00); and The institution enhances the curriculum anchored to an international trend of programs (CM=3.78).

The study of Alvarez, Jr. (2020) revealed that maximizing the use of Learning Management System in blended learning gives freedom to utilize the resources towards enhancing learning interactions. For instance, it can provide additional learning resources or activities beyond the minimum standards for instruction and assessment purposes.

On the other hand, blended learning in the Philippines is still considered new and young. However, this growing demand for blended learning possesses problems and challenges that are noteworthy to investigate, specifically in emerging higher education institutions, which hinder effective and efficient delivery of teaching and learning.

1.2.4 Threats

The Table 9 shows the assessment of the four (4) groups of respondents on the Curriculum and Instruction as to Threats.

Table 9
Assessment on Curriculum and Instruction as to Threats

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	Increasing competition from other private institutions of higher education in terms of new curricula and programs offered.	3.31	SE	3.53	ME	2.78	SE	3.00	SE	3.15	SE	3
2	The curriculum program did not match the skills and knowledge required by fast-emerging industries and business establishments.	3.03	SE	2.33	SE	1.67	LE	2.00	LE	2.26	LE	4
3	The curriculum program did not match the different social patterns, interests, and lifestyles of the community.	3.02	SE	2.07	LE	1.39	LE	2.00	LE	2.12	LE	5
4	A higher prioritization of innovation and technology that are given, performed, and used by different external institutions are included in their curriculum.	3.44	SE	3.53	ME	2.78	SE	4.00	ME	3.44	SE	1
5	The community challenges and students' preparedness regarding global health concerns are arises and be part of institutional instructions.	3.43	SE	3.20	SE	3.22	SE	3.00	SE	3.21	SE	2
	Average Weighted Mean	**3.24**	**SE**	**2.93**	**SE**	**2.37**	**LE**	**2.80**	**SE**	**2.84**	**SE**	

It depicts with the response of the students that the indicator four (4) has the highest weighted mean of 3.44. On the other hand, the indicator three (3) has the lowest weighted mean of 3.02. All indicators were interpreted as "Slightly Evident". All the indicators have an average weighted mean of 3.24 and interpreted as "Slightly Evident" also.

With regards to the responses of non-teaching personnel, the indicator one (1) and four (4) has the same highest weighted mean of 3.53 which were interpreted as “Moderately Evident”. While the indicator three (3) has the lowest weighted mean of 2.07 with an interpretation of “Less Evident”.

As it showed in the assessment of faculty, the indicator five (5) has the highest weighted mean of 3.22. While the indicator three (3) has the lowest weighted mean of 1.39, with an interpretation of “Less Evident”.

For the administrator response, the indicator four (4) has the highest weighted mean of 4.00 which was interpreted as “Moderately Evident”. On the other hand, indicator two (2) and three (3) have the same lowest weighted mean of 2.00 and interpreted as “Less Evident”.

With regards to the composite mean per indicator, a higher prioritization of innovation and technology that are given, performed, and used by different external institutions are included in their curriculum (CM=3.44); the community challenges and students' preparedness regarding global health concerns are arises and be part of institutional instructions (CM=3.21); and increasing competition from other private institutions of higher education in terms of new curricula and programs offered (CM=3.15) are interpreted as “Slightly Evident”. On the other hand, the curriculum program did not match the skills and knowledge required by fast-emerging industries and business establishments (CM=2.26); and the curriculum program did not match the different social patterns, interests, and lifestyles of the community (CM=2.12) are interpreted as “Less Evident”.

This was supported by the study of Aldosemani, Shepherd, and Bolliger (2018), which claims that Information and Communications Technology (ICT) is not confined to its functions of delivering high quality data, but it also offers a platform for using variety of instructional tools that is significant for distance learning, such as in the case of blended- based approach. This also explains that the capability of blended-based instruction to access wide array of course materials contribute to increase learners’ rates of information retention. Also, in the study of Chen, Castillo, and Ligon (2015) state that Information and Communication Technologies (ICT) has been identified as one of the crucial factors that affect teaching effectiveness and student learning worldwide. Many international organizations, and many governments emphasized the importance of ICT and try to incorporate ICT into education systems. Technological sophistication and advancement have long been recognized as critical elements of economic and social development.

Table 10
Summary Table on Strengths, Weaknesses, Opportunities, and Threats as to Curriculum and Instruction

Curriculum and Instructions	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
Strengths	3.93	ME	4.31	ME	4.66	HE	4.80	HE	4.42	ME	1
Weaknesses	2.74	SE	2.12	LE	1.53	LE	1.80	LE	2.05	LE	4
Opportunities	3.50	ME	3.87	ME	4.10	ME	4.80	HE	4.07	ME	2
Threats	3.24	SE	2.93	SE	2.37	LE	2.80	SE	2.84	SE	3

The table 10 shows the summary of SWOT analysis of the four (4) groups of respondents as to curriculum and instructions. It indicates that Strengths (CM=4.42) which is the highest rank is interpreted as “Moderately Evident”, Opportunities (CM=4.07) is interpreted as “Moderately Evident”, Threats (CM=2.84) is interpreted as “Slightly Evident”, While, and Weaknesses (CM=2.05) are interpreted as “Less Evident”.

1.3 Faculty Profile/Qualification

1.3.1 Strengths

Table 11 described the assessment of the four (4) groups of respondents on the Faculty Profile/Qualification as to Strengths.

Table 11
Assessment on Faculty Profile/Qualifications as to Strengths

	Indicators	Students	V.I.	Non-teaching	V.I.	Faculty	V.I.	Admin	V.I.	C.M.	V.I.	Rank
1	The institution has quality instruction featuring competitive faculty members with at least a Master's or Doctorate Degree that is well-matched to the program assigned.	3.88	ME	3.67	ME	4.33	ME	4.00	ME	3.97	ME	5
2	The institution provides a sufficient number of qualified and responsible full-time faculty members for the student's progress toward achieving student learning outcomes.	3.91	ME	3.67	ME	4.56	HE	4.00	ME	4.03	ME	4
3	The institution provides faculty that are innovative, Information and Communication Technology (ICT) literate, and equipped with 21st-century skills.	4.06	ME	3.80	ME	4.61	HE	4.00	ME	4.12	ME	3
4	The faculty of the institution demonstrates up-to-date knowledge and/or awareness of current industrial and economic trends and issues of the subject and encourages students to learn beyond what is required.	4.03	ME	3.93	ME	4.72	HE	4.00	ME	4.17	ME	2
5	The faculty of the institution use instructional materials (audio/video materials: film-showing, computer-aided instructions, etc.) to reinforce learning activities.	4.11	ME	4.13	ME	4.72	HE	4.00	ME	4.24	ME	1
	Average Weighted Mean	**4.00**	**ME**	**3.84**	**ME**	**4.59**	**HE**	**4.00**	**ME**	**4.11**	**ME**	

Based on the responses of all the students, the indicator five (5) has the highest weighted mean of 4.11. While the indicator one (1) has the lowest weighted mean of 3.88. All the responses were interpreted as “Moderately Evident”. The average weighted mean of students was 4.00 and interpreted as “Moderately Evident”.

With regards to the non-teaching personnel, the indicator five (5) has the highest weighted mean of 4.13. And both indicator one (1) and two (2) have the lowest weighted mean of 3.67. All indicators are interpreted as “Moderately Evident”. The average weighted mean of all the indicators was 3.84 and interpreted as “Moderately Evident”.

In line with the responses of faculty, the indicator four (4) and five (5) have the highest weighted mean of 4.72. On the other hand, the indicator one (1) has the lowest weighted mean of 4.33 and interpreted as “Moderately Evident”. The average weighted mean of all the indicators was 4.59 and interpreted as “Highly Evident”.

As for administrator, all indicators have the same weighted mean of 4.00 and interpreted as “Moderately Evident”. The average weighted mean for all the indicators was 4.00 and interpreted as “Moderately Evident”.

With regards to the composite mean of the four (4) groups of the respondent, all indicators are interpreted as “Moderately Evident”. This is supported by the following: The faculty of the institution use instructional materials (audio/video materials: film-showing, computer-aided instructions, etc.) to reinforce learning activities (CM=4.24); The faculty of the institution demonstrates up-to-date knowledge and/or awareness of current industrial and economic trends and issues of the subject and encourages students to learn beyond what is required (CM=4.17); The institution provides faculty that are innovative, Information and Communication Technology (ICT) literate, and equipped with 21st-century skills (CM=4.12); The institution provides a sufficient number of qualified and responsible full-time faculty members for the student's progress toward achieving student learning outcomes (CM=4.03); and the institution has quality instruction featuring competitive faculty members with at least a Master’s or Doctorate Degree that is well-matched to the program assigned (CM=3.97).

Furthermore, in the study of Padhi (2021) audio visual aids are the best tool for making teaching effective and the best dissemination of knowledge. To make the lesson interesting and understandable, it is necessary that the education should have a relationship with maximum organs of perception. Audio-visual aids help in stimulating the sensory organs like ears and eyes and facilitate quick comprehension of the message by the audience. These may be used for literate as well as illiterate people.

1.3.2 Weaknesses

The Table 12 indicates the assessment of the four (4) groups of respondents on the Faculty Profile/Qualification as to Weaknesses.

In line with response of the students, the indicator one (1) has the highest weighted mean of 2.68 and interpreted as “Slightly Evident”. The indicator five (5) has the lowest mean and interpreted as “Less Evident”. The average weighted mean of the students was 2.53 and interpreted as “Slightly Evident”.

With regards to the response of non-teaching personnel, the indicator one (1) has the highest weighted mean of 2.80 and interpreted as “Slightly Evident”. And indicator five (5) has the lowest weighted mean 1.87 and interpreted as “Less Evident”. The average weighted mean of the non-teaching personnel was 2.23 and interpreted as “Less Evident”.

For the response of the faculty, the indicator one (1) has the highest weighted mean of 1.39, and indicator four (4) has the lowest weighted mean of 1.28. All indicators are interpreted as “Not Evident”. The average weighted mean of the faculty was 1.32 and interpreted as “Not Evident”.

In accordance with the response of administrator, the indicator one (1) has the highest weighted mean of 2.00 with the interpretation of “Less Evident”. While all the remaining indicators have a weighted mean of 1.00 which all interpreted as “Not Evident”. The average weighted mean of the administrator’s response was 1.20 and interpreted as “Not Evident”.

Table 12
Assessment on Faculty Profile/Qualifications as to Weaknesses

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The faculty demonstrates the difficulty in comprehending and handling complex student relationships and empathizing with others.	2.68	SE	2.80	SE	1.39	NE	2.00	LE	2.22	LE	1
2	The faculty demonstrates a lack of creativity, teaching styles, and strategies that help lessons be fresh and interesting.	2.61	SE	2.20	LE	1.28	NE	1.00	NE	1.77	LE	3
3	The faculty demonstrates insensitivity to students to attend and absorb content information.	2.50	SE	2.33	LE	1.33	NE	1.00	NE	1.79	LE	2
4	The faculty has a poor structure of learning context to enhance the attainment of collective learning objectives of the course.	2.43	LE	1.93	LE	1.28	NE	1.00	NE	1.66	LE	4
5	The faculty has poor knowledge of current industrial and business trends to incorporate into the learning process.	2.41	LE	1.87	LE	1.33	NE	1.00	NE	1.65	LE	5
	Average Weighted Mean	**2.53**	**SE**	**2.23**	**LE**	**1.32**	**NE**	**1.20**	**NE**	**1.82**	**LE**	

The table also depicts the assessment of the respondents on the weaknesses of faculty profile. The data shows that the composite mean per indicators is all interpreted as “Slightly Evident” as supported by the following: The faculty demonstrates the difficulty in comprehending and handling complex student relationships and empathizing with others (CM=2.22); The faculty demonstrates insensitivity to students to attend and absorb content information (CM=1.79); The faculty demonstrates a lack of creativity, teaching styles, and strategies that help lessons be fresh and interesting (CM=1.77); The faculty has a poor structure of learning context to enhance the attainment of collective learning objectives of the course (CM=1.66); and the faculty has poor knowledge of current industrial and business trends to incorporate into the learning process (CM=1.65).

The study of Farhah, Saleh, and Safitri (2021) states that a good relationship between teachers and students can positively influence the subjective well-being of teachers. From the study of Mucaj, Ibrahimi and Gjoka (2021) it is revealed that individual features of teachers and students affect the quality of their relationship. Teacher’s behavior and students’ individual perceptions impact the overall quality of the academic relationship.

1.3.3 Opportunities

The Table 13 presents the assessment of the four (4) groups of respondents on the Faculty Profile/Qualification as to Opportunities.

The response of the students shows that the indicator three (3) has the highest weighted mean of 3.62 and interpreted as “Moderately Evident”. While the indicator one (1) with the lowest weighted mean of 3.36 were interpreted as “Slightly Evident”. The average weighted mean for the student’s response was 3.48 and interpreted as “Slightly Evident”.

For the non-teaching personnel, the indicator four (4) has the highest weighted mean of 3.60 and interpreted as “Moderately Evident”. On the other hand, indicator two has the lowest weighted means of 3.33 and interpreted as “Slightly Evident”. The average weighted mean of non-teaching personnel was 3.47 and interpreted as “Slightly Evident”.

Table 13
Assessment on Faculty Profile/Qualifications as to Opportunities

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution provides opportunities to participate in a faculty exchange program with other institutional satellite branches.	3.36	SE	3.47	SE	2.33	SE	4.00	ME	3.29	SE	4
2	The institution supports faculty by focusing on local and international study and research.	3.46	SE	3.33	SE	2.67	SE	3.00	SE	3.11	SE	5
3	The institution supports faculty with opportunities such as a Master's Degree or Doctorate Degree for continued professional development based on identified local and international teaching and learning needs.	3.62	ME	3.40	SE	3.50	ME	4.00	ME	3.63	ME	2
4	Integrate faculty subject to outside industrial practices and circumstances for the intent of students' learning.	3.43	SE	3.60	ME	3.44	SE	4.00	ME	3.62	ME	3
5	Faculty are encouraged to attend outside seminars/webinars and join outside educational organizations for knowledge enhancement.	3.53	ME	3.53	ME	3.67	ME	4.00	ME	3.68	ME	1
	Average Weighted Mean	**3.48**	**SE**	**3.47**	**SE**	**3.12**	**SE**	**3.80**	**ME**	**3.47**	**ME**	

For the faculty responses, the indicator five (5) has the highest weighted mean of 3.67. And indicator one (1) with the lowest weighted mean of 2.33 were all interpreted as “Slightly Evident”. The average weighted mean of faculty was 3.12 with the interpretation of “Slightly Evident”.

In line with the assessment of administrator, the indicator one (1), three (3), four (4), and five (5) have the same weighted mean of 4.00 which was interpreted as “Moderately Evident”. While indicator two (2) has a weighted mean of 3.00 and interpreted as “Slightly Evident”. The average weighted mean for administrator was 3.80 and interpreted as “Moderately Evident”.

The indicator on opportunities were rated “Moderately Evident” on Faculty are encouraged to attend outside seminars/webinars and join outside educational organizations for knowledge enhancement (CM=3.68); The institution supports faculty with opportunities such as a Master’s Degree or Doctorate Degree for continued professional development based on identified local and international teaching and learning needs (CM=3.63); Integrate faculty subject to outside industrial practices and circumstances for the intent of students' learning (CM=3.62). On the other hand, the institution provides opportunities to participate in a faculty exchange program with other institutional satellite branches (CM=3.29); and the institution supports faculty by focusing on local and international study and research (CM=3.11) are interpreted as "Slightly Evident".

As pointed out by Adawi (2017), communication, management and presentation skills are improved through facilitating and attending seminars and for those attendees of seminar, who are not fans of reading, it offers a great way of gaining information. Seminars have been investigated for their effectiveness in different fields: education, medicine, business, and at different levels: school, university, or professionals. Seminars can have positive effects on different individuals and for different fields taking objectives of seminars and the particular field into account. Learning in the classroom is very different from learning in authentic natural and social environments, as the latter provides opportunities for using various learning strategies, enables integration of knowledge from different fields and is performed in a positive educational climate (Andjelkovic & Prnjat, 2017).

1.3.4 Threats

As shown in Table 14 the assessment of the four (4) groups of respondents on the Faculty Profile/Qualification as to Threats.

Table 14
Assessment on Faculty Profile/Qualifications as to Threats

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	There is a high career growth offered by local and international educational institutions and private corporations that leads to faculty turnover.	3.27	SE	3.67	ME	2.83	SE	3.00	SE	3.19	SE	1
2	There is growing competition from other people with more educational attainment, experience, and knowledge in the teaching profession which resulted in faculty turnover.	3.06	SE	3.60	ME	2.56	SE	3.00	SE	3.05	SE	3
3	There are attractive salary offers from other educational institutions and private corporations.	3.23	SE	3.40	SE	2.89	SE	3.00	SE	3.13	SE	2
4	There are negative public perceptions of faculty members of the institution.	2.87	SE	2.87	SE	1.67	LE	3.00	SE	2.60	SE	5
5	There are scholarships offered by other institutions locally and abroad that resulted in faculty turnover.	3.09	SE	3.53	ME	1.78	LE	3.00	SE	2.85	SE	4
	Average Weighted Mean	**3.10**	**SE**	**3.41**	**SE**	**2.34**	**LE**	**3.00**	**SE**	**2.97**	**SE**	

For the assessment of the students, the indicator one (1) has the highest weighted mean of 3.27. While the indicator four (4) has 2.87 lowest weighted mean. These are all interpreted as “Slightly Evident”. The average weighted mean of the students was also interpreted as “Slightly Evident” with a value of 3.10.

For the non-teaching personnel, the indicator one (1) has the highest weighted mean of 3.67. While the indicator three (3) with a weighted mean of 3.40 and indicator four (4) with a weighted mean of 2.87 are both interpreted as “Slightly Evident”. The average weighted mean of the non-teaching personnel was 3.41 and interpreted as “Slightly Evident”.

For the faculty assessments, the indicator three (3) has the highest mean of 2.89. On the other hand, Indicator five (5) has a weighted mean of 1.78 and indicator four (4) has a weighted mean of 1.67. These are both interpreted as “Less Evident”. The average weighted mean of faculty assessment was 2.34 and interpreted as “Less Evident”.

With regards to the assessment of the administrator, all indicators have a weighted mean of 3.00 and interpreted as “Slightly Evident”. The average weighted mean was also 3.00 and interpreted as “Slightly Evident”.

Moreover, the composite mean of the respondents on faculty profile and qualification are the following: There is a high career growth offered by local and international educational institutions and private corporations that leads to faculty turnover is (CM=3.19); There are attractive salary offers from other educational institutions and private corporations (CM=3.13); There is growing competition from other people with more educational attainment, experience, and knowledge in the teaching profession which resulted in faculty turnover (CM=3.05); There are scholarships offered by other institutions locally and abroad that resulted in faculty turnover (CM=2.85), There are negative public perceptions of faculty members of the institution (CM=2.60); and all are interpreted as “Evident”.

As stated in the study of Toropova, Myrberg, and Johansson (2019) increasing teacher turnover rates and a subsequent shortage of qualified teachers is a growing concern internationally. Teacher turnover comprises interrelated notions of teacher migration and attrition, where migration describes teachers moving to other schools, while attrition pertains to teachers leaving the profession altogether. However, regardless the type of turnover, there are always negative consequences for a particular school from which a teacher is departing. Raising teachers’ salaries across-the-board is very costly and target larger salary increases to key groups in short supply such as new teachers to maximize cost-effectiveness.

Table 15
Summary Table on Strengths, Weaknesses, Opportunities, and Threats as to Faculty Profile/Qualification

Faculty Profile/Qualification	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
Strengths	4.04	ME	3.84	ME	4.59	HE	4.00	ME	4.11	ME	1
Weaknesses	2.53	SE	2.23	LE	1.32	NE	1.20	NE	1.82	LE	4
Opportunities	3.48	SE	3.47	SE	3.12	SE	3.80	ME	3.47	ME	2
Threats	3.10	SE	3.41	SE	2.34	LE	3.00	SE	2.97	SE	3

The Table 15 shows the summary of SWOT analysis of the four (4) groups of respondents as to Faculty Profile/Qualification. It indicates that Strengths (CM=4.11) which is the highest rank is interpreted as "Moderately Evident", Opportunities (CM=3.47) is interpreted as "Moderately Evident", Threats (CM=2.97) is interpreted as "Evident", While, and Weaknesses (CM=1.82) are interpreted as "Slightly Evident".

1.4 Physical Facilities and Laboratories

1.4.1 Strengths

It can be depicted from Table 16 the assessment of the four (4) groups of respondents on the Physical Facilities and Laboratories as to Strengths.

Table 16
Assessment on Physical Facilities and Laboratories as to Strengths

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution supports the quality of its instructional programs by providing libraries, laboratories, and other learning support services that are sufficient in quantity to facilitate educational offerings.	4.02	ME	4.27	ME	4.11	ME	5.00	HE	4.35	ME	3
2	The institution assures the physical facilities and laboratories are constructed and maintained to assure access, safety, security, and a healthful working environment.	4.11	ME	4.40	ME	4.17	ME	5.00	HE	4.42	ME	2
3	The institution has IT facilities and infrastructure such as computers, networks, backup, and security.	4.12	ME	4.07	ME	4.56	HE	5.00	HE	4.43	ME	1
4	The institutions have facilities for extracurricular activities for students and faculty enhancement.	3.97	ME	3.40	SE	4.56	HE	5.00	HE	4.23	ME	5
5	The institution effectively distributes and utilizes physical and technological resources to support the development, maintenance, and enhancement of its facilities and laboratories.	4.01	ME	3.67	ME	4.44	ME	5.00	HE	4.28	ME	4
	Average Weighted Mean	4.04	ME	3.96	ME	4.37	ME	5.00	HE	4.34	ME	

For the assessment of the students, indicator three (3) has the highest weighted mean of 4.12. And the indicator four (4) has the lowestt weighted mean of 3.97. All the indicators are interpreted as "Moderately Evident". The average weighted mean of the assessment of students was 4.04 and interpreted also as "Moderately Evident".

In line with the response of non-teaching personnel, the indicator two has weighted men of 4.40, indicator one (1) has 4.27, indicator three (3) has 4.07, and indicator five (5) has 3.67. All these indicators are interpreted as "Moderately Evident". On the other hand, indicator four (4) has the lowest weighted mean of 3.40 with the interpretation of "Slightly Evident".

With regards to the assessment of faculty, the indicator three (3) and four (4) has the highest weighted mean of 4.56 and interpreted as “Highly Evident”. While the indicator one (1) has the lowest weighted mean of 4.11. These were interpreted as “Moderately Evident”. The average weighted mean of the faculty was 4.37 which interpreted as “Moderately Evident”.

For the assessment of administrator, all indicators have weighted mean of 5.00 which interpreted as “Highly Evident”. The average weighted mean was also 5.00 and interpreted as “Highly Evident”.

Meanwhile, in terms of composite mean, The institution has IT facilities and infrastructure such as computers, networks, backup, and security (CM=4.43), The institution assures the physical facilities and laboratories are constructed and maintained to assure access, safety, security, and a healthful working environment (CM=4.42), The institution supports the quality of its instructional programs by providing libraries, laboratories, and other learning support services that are sufficient in quantity to facilitate educational offerings (CM=4.35), The institution effectively distributes and utilizes physical and technological resources to support the development, maintenance, and enhancement of its facilities and laboratories (CM=4.28), and The institutions have facilities for extracurricular activities for students and faculty enhancement (CM=4.23). All were interpreted as “Moderately Evident.

As pointed out by Zurainan, Nazir, and Sabri (2021) providing good facility in physical and non-physical aspects can help teachers and students improve their learning process and increase student academic achievement. The campus services, the advancement of technology, and the facilities provided are variables that can measure the satisfaction of students in universities which also could lead towards students' academic achievement. Students' academic productivity highly depends on the facilities available, and services provided to the students by the university.

1.4.2 Weaknesses

As the results from the Table 17 the assessment of the four (4) groups of respondents on the Physical Facilities and Laboratories as to Weaknesses.

For the assessment of students, the indicator one (1) has the highest mean of 3.12. While the indicator two (2) has the lowest weighted mean of 2.83. All indicators are interpreted as “Slightly Evident”. The average weighted mean for all indicators was 2.98 which interpreted as “Slightly Evident”.

As the non-teaching personnel is concern, the indicator one (1) has the highest weighted mean of 2.80 and indicator three (3) has the lowest weighted mean of 1.93. These are interpreted as “Less Evident”. The average weighted mean for the assessment of non-teaching personnel was 2.40 and interpreted as “Less Evident”.

For the faculty, the indicator one (1) has the highest mean of 2.00, indicator four (4) has 1.94, indicator two (2) and five (5) has 1.72, and indicator three (3) has 1.44. All indicators were interpreted as “Less Evident”. The average weighted mean was 1.77 and interpreted as “Less Evident”.

On the other hand, with the assessment of administrator the indicator one (1) has weighted mean of 2.00 which was interpreted as “Less Evident”. While the rest of all indicators have weighted mean of 1.00 which interpreted as “Not Evident”. The average weighted mean for the assessment was 1.20 which also interpreted as “Not Evident”.

Table 17
Assessment on Physical Facilities and Laboratories as to Weaknesses

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution has no updated laboratory tools and equipment to support the learning objectives of institutions or programs.	3.12	SE	2.80	SE	2.00	LE	2.00	LE	2.48	LE	1
2	Lack of access to an adequate, relevant online database, e-library, up-to-date books, and academic materials.	2.83	SE	2.40	LE	1.72	LE	1.00	NE	1.99	LE	4
3	Lack of several classrooms, chairs, and CR in the institution.	2.84	SE	1.93	LE	1.44	LE	1.00	NE	1.80	LE	5
4	Lack of evaluation and maintenance of physical facilities and laboratories in supporting institutional programs.	3.05	SE	2.53	SE	1.94	LE	1.00	NE	2.13	LE	2
5	Unmatched or slow adoption of technological advancement and equipment of current industries compared to the use of institutions for learning programs.	3.04	SE	2.33	LE	1.72	LE	1.00	NE	2.02	LE	3
	Average Weighted Mean	**2.98**	**SE**	**2.40**	**LE**	**1.77**	**LE**	**1.20**	**NE**	**2.09**	**LE**	

Furthermore, the composite means of the four (4) groups of respondents to all indicators were interpreted as "Slightly Evident". The institution has no updated laboratory tools and equipment to support the learning objectives of institutions or programs (CM=2.48), Lack of evaluation and maintenance of physical facilities and laboratories in supporting institutional programs (CM=2.13), Unmatched or slow adoption of technological advancement and equipment of current industries compared to the use of institutions for learning programs (CM=2.02), Lack of access to an adequate, relevant online database, e-library, up-to-date books, and academic materials (CM=1.99), and Lack of several classrooms, chairs, and CR in the institution (CM=1.80).

According to the study of Zurainan et al. (2021) facilities management is one of the important aspects that need to be considered in every educational institution. Good laboratory practices (GLP) in universities must be implemented to ensure occupational safety among faculty, students, researchers, and laboratory technicians. Studies on GLP and safety awareness in the Philippines among higher educational institutions (HEIs") showed lack of facilities to ensure safety.

It was also supported by Akomolafe, and Adesua (2016) that physical facilities in any school system range from the school buildings, classroom, library, laboratories, toilet facilities, and learning materials to other infrastructures that would likely motivate students towards learning. They also pointed out that modern laboratories, particularly in academia, often have contiguous spaces that include wet laboratories, computer laboratories, instruments, write-up spaces, office areas, and other spaces with varying degrees of chemical use and hazards.

Maintaining a positive safety culture and at the same time meeting the safety and comfort needs of laboratory personnel are challenging under these circumstances.

1.4.3 Opportunities

Table 18 presents the assessment of the four (4) groups of respondents on the Physical Facilities and Laboratories as to Opportunities.

Table 18
Assessment on Physical Facilities and Laboratories as to Opportunities

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.
1	Best practices in a comprehensive facility maintenance program that could be externally acquired by the institution by benchmarking.	3.46	SE	3.00	SE	3.61	ME	3.00	SE	3.27	SE	1
2	Collaborative agreement to local government unit for the use of their facilities as an extension of the institution during events and activities.	3.24	SE	3.20	SE	3.06	SE	3.00	SE	3.13	SE	2.5
3	Collaboration projects with local government unit in planning and building new physical facilities for recreational and event activities for both the institution and community of the common geographic area.	3.26	SE	3.20	SE	3.06	SE	3.00	SE	3.13	SE	2.5
4	Partnership with different industrial institutions for training and extensions of more equipped and complete facilities for students.	3.18	SE	3.07	SE	2.94	SE	3.00	SE	3.05	SE	4
5	The use of national markings for disability, CR for LGBTQ+, precaution and keep right signages, pedestrian crosswalk, social distancing, and others.	3.27	SE	2.80	SE	2.94	SE	3.00	SE	3.00	SE	5
	Average Weighted Mean	**3.28**	**SE**	**3.05**	**SE**	**3.12**	**SE**	**3.00**	**SE**	**3.11**	**SE**	

With regards to the assessment of students, the indicator (1) has the highest weighted mean of 3.46, and indicator four (4) has the lowest weighted mean of 3.18. All indicators are interpreted as “Slightly Evident”. The average weighted mean was 3.28 and interpreted as “Slightly Evident”.

In line with the non-teaching personnel, the indicator two (2) and three (3) have the highest weighted mean of 3.20. While the indicator five (5) has the lowest weighted mean of 2.80. All indicators were interpreted as “Slightly Evident”. The average weighted mean for the assessment of non-teaching personnel was 3.05 which interpreted as “Slightly Evident”.

For the faculty, the indicator one (1) has the highest mean of 3.61 and interpreted as “Moderately Evident”. While the indicator four (4) and five (5) have the lowest weighted mean of 2.94. All the indicators were interpreted as “Slightly Evident”. The average weighted mean for the assessment was 3.12 and interpreted as “Slightly Evident”.

With regards to the administrator, all indicators have weighted mean of 3.00 which interpreted as “Slightly Evident”. The average weighted mean was also 3.00 and interpreted as “Slightly Evident”.

With regards to the composite mean of the respondents, it also interpreted as "Slightly Evident" with the following composite mean: for Best practices in a comprehensive facility maintenance program that could be externally acquired by the institution by benchmarking was 3.27; for Collaborative agreement to local government unit for the use of their facilities as an extension of the institution during events and activities was 3.13; for Collaboration projects with local government unit in planning and building new physical facilities for recreational and event activities for both the institution and community of the common geographic area was 3.13; for Partnership with different industrial institutions for training and extensions of more equipped and complete facilities for students was 3.05; and for The use of national markings for disability, CR for LGBTQ+, precaution and keep right signage, pedestrian crosswalk, social distancing, and others was 3.00 that supported by the average weighted mean of 3.11 and interpreted as "Slightly Evident".

According to Finch and Zhang (2018) the concept of sustainable buildings continues to attract international attention in the wake of growing environmental demands. It should not be one of a 'products' but a 'process' subject to continuous improvement throughout its life.

The Department of Education and Early Childhood Development of Victoria State Government (2015) states that by developing a relationship with local councils, schools can become key hubs for the wider community, enabling more efficient delivery of community services and the use or development of public infrastructure. Having these extra resources within the school environment can help teachers deliver more informed or engaging curriculum to children and young people.

1.4.4 Threats

The Table 19 shows the assessment of the four (4) groups of respondents on the Physical Facilities and Laboratories as to Threats.

Table 19

Assessment on Physical Facilities and Laboratories as to Threats

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The availability of attractive physical facilities and complete laboratory tools and equipment of other educational institutions are exhibited and used as a competitive edge.	3.30	SE	3.33	SE	3.44	SE	4.00	ME	3.52	ME	1
2	There are rapid and continuous changes in industries that need to cope with using the institutional facilities, laboratories, and equipment.	3.50	ME	3.27	SE	3.33	SE	3.00	SE	3.28	SE	2
3	Some educational institution has adequate online databases, e-library sources, up-to-date books, and academic materials to support the learning of the students.	3.63	ME	2.87	SE	3.22	SE	2.00	LE	2.93	SE	4
4	Some educational institution has the right number of people for continuous maintenance activities of their physical facilities and laboratories.	3.41	SE	3.27	SE	3.11	SE	2.00	LE	2.95	SE	3
5	Some institutions with friendly facilities suited for the disabled such as accessible toilets, elevators, staircase steps with a tactile floor, and others.	3.41	SE	2.80	SE	2.94	SE	2.00	LE	2.79	SE	5
	Average Weighted Mean	3.45	SE	3.11	SE	3.21	SE	2.60	SE	3.09	SE	

For the assessment of the students, the indicator three (3) has the highest weighted mean of 3.63 and were interpreted as “Moderately Evident”. While the indicator one (1) has the lowest weighted mean of 3.30 and interpreted as “Slightly Evident”. The average weighted mean for the assessment was 3.45 which was interpreted as “Slightly Evident”.

In accordance with the non-teaching personnel, the indicator one (1) has the highest weighted mean of 3.33 and indicator five (5) has the lowest weighted mean of 2.80. All indicators were interpreted as “Slightly Evident”. The average weighted mean for all indicators was 3.11 which interpreted as “Slightly Evident”.

For the faculty, indicator one (1) has the highest weighted mean of 3.44, and indicator five (5) has the lowest weighted mean of 2.94. All indicators were interpreted as “Slightly Evident”. The average weighted mean for all indicators was 3.21 and interpreted as “Slightly Evident”.In line with the administrator, the indicator one (1) has the highest weighted mean of 4.00 which interpreted as “Moderately Evident”. While the indicator three (3), four (4), and five (5) have the lowest weighted mean of 2.00 which interpreted as “Less Evident”. The average weighted mean for all indicators was 2.60 which interpreted as “Slightly Evident”.

With regards to the composite mean of all indicators on threats, it was interpreted as “Evident”. The availability of attractive physical facilities and complete laboratory tools and equipment of other educational institutions are exhibited and used as a competitive edge (CM=3.52), There are rapid and continuous changes in industries that need to cope with using the institutional facilities, laboratories, and equipment (CM=3.28), Some educational institution has the right number of people for continuous maintenance activities of their physical facilities and laboratories (CM=2.95), Some educational institution has adequate online databases, e-library sources, up-to-date books, and academic materials to support the learning of the students (CM=2.93), and Some institutions with friendly facilities suited for the disabled such as accessible toilets, elevators, staircase steps with a tactile floor, and others (CM=2.79).

According to Sudhir Memorial Institute of Liluah, Howrah, West Bengal (2021) laboratory is considered as one of the most important sections in the school and institutes. It provides various practical experience starting from the theory of physics, chemistry to biology. Computer laboratory is also one of the important sections and 99% of the school including public and private schools are using it. It is also mandatory at the time of digitization.

Also, Zurainan et al. (2021) stated that facilities management must be considered as an important part of acquiring higher academic achievement especially in maintaining the effectiveness of the facility system.

Table 20
Summary Table on Strengths, Weaknesses, Opportunities, and Threats as to Physical Facilities and Laboratories

Physical Facilities and Laboratories	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
Strengths	4.04	ME	3.96	ME	4.37	ME	5.00	HE	4.34	ME	1
Weaknesses	2.98	SE	2.40	LE	1.77	LE	1.20	NE	2.09	LE	4
Opportunities	3.28	SE	3.05	SE	3.12	SE	3.00	SE	3.11	SE	2
Threats	3.45	SE	3.11	SE	3.21	SE	2.60	SE	3.09	SE	3

The Table 20 shows the summary of SWOT analysis of the four (4) groups of respondents as to Faculty Physical Facilities and Laboratories. It indicates that Strengths (CM=4.34) which is the highest rank is interpreted as “Moderately Evident”, Opportunities (CM=3.11) is interpreted as “Evident”, Threats (CM=3.09) is interpreted as “Evident”, While, and Weaknesses (CM=2.09) are interpreted as “Slightly Evident”.

1.5 Administrative Policies

1.5.1 Strengths

The Table 21 shows the assessment of the four (4) groups of respondents on the Administrative Policies as to Strengths.

Table 21
Assessment on Administrative Policies as to Strengths

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The institution practices scholarship grants for those qualified students and faculty members.	4.14	ME	3.73	ME	4.28	ME	5.00	HE	4.29	ME	4
2	The institution uses and makes governing policies on academic freedom and responsibility, student academic honesty, and specific institutional beliefs.	4.11	ME	3.93	ME	4.56	HE	5.00	HE	4.40	ME	3
3	The institution established standard rules to guide acceptable behavior, and help create a conducive learning environment.	4.03	ME	4.33	ME	4.44	ME	5.00	HE	4.45	ME	1
4	The institution has guidelines requiring acts of discrimination, especially against handicaps and disabilities to be reported and remedied promptly.	4.00	ME	3.67	ME	4.11	ME	5.00	HE	4.19	ME	5
5	The institution has specific codes of conduct for staff, faculties, administrators, and students.	4.13	ME	4.20	ME	4.56	HE	5.00	HE	4.47	ME	2
	Average Weighted Mean	**4.08**	**ME**	**3.97**	**ME**	**4.39**	**ME**	**5.00**	**HE**	**4.36**	**ME**	

For the assessment of students, the indicator one (1) has the highest weighted mean of 4.14, and indicator 5 has the lowest weighted mean of 4.00. All indicators were interpreted as “Moderately Evident”. The average weighted mean of all indicators was 4.08 which also interpreted as “Moderately Evident”.

With regards to the non-teaching personnel, the indicator three (3) has the highest weighted mean of 4.33, and indicator four (4) has the lowest weighted mean of 3.67. These are all interpreted as “Moderately Evident”. The average weighted mean of all indicators was 3.97 which also interpreted as “Moderately Evident”.

In line with the faculty assessment, the indicator two (2) and indicator five (5) have highest weighted mean of 4.56, both were interpreted as “Highly Evident”. On the other, indicator four (4) has the lowest weighted mean of 4.11. These are interpreted as “Moderately Evident”. The average weighted mean for all indicators was 4.39 which interpreted as “Moderately Evident”.For the administrator, all indicators have weighted mean of 5.00 which was interpreted as “Highly Evident”. The average weighted mean for the assessment was also 5.00 and interpreted also as “Highly Evident”.

In line with the composite mean, all indicators were interpreted as “Moderately Evident”. The institution established standard rules to guide acceptable behavior, and help create a conducive learning environment (CM=4.45), The institution has specific codes of conduct for staff, faculties, administrators, and students CM=4.47), The institution uses and makes governing policies on academic freedom and responsibility, student academic honesty, and specific institutional beliefs (CM=4.40), The institution practices scholarship grants for those qualified students and faculty members (CM=4.29), and The institution has guidelines requiring acts of discrimination, especially against handicaps and disabilities to be reported and remedied promptly (CM=4.19) respectively.

This was supported by the study of Badarna and Ashour (2016) which states that the school administration is considered one of the most important areas of administration and the greatest one in the community, which its role is no longer limited to implement educational policies and objectives but has become responsible for raising the generations and qualifying them in a rapidly changing era.

Likewise, Qaralleh (2020) states that the school has the major responsibility to provide security and safety in the school environment to which members of the school community belongs and to free that environment from all the factors that lead to the emergence of violence and quarrel.

1.5.2 Weaknesses

Presented in Table 22 is the assessment of the four (4) groups of respondents on the Administrative Policies as to Weaknesses.

In the assessment of students, the indicator two (2) has the highest weighted mean of 3.19 and indicator four (4) has the lowest weighted mean of 2.60. All indicators together with the average weighted mean of 2.94 were interpreted as “Slightly Evident”.

For the non-teaching personnel, the indicator three (3) has the highest weighted mean of 2.53 which interpreted as “Slightly Evident”. While the indicator five has the lowest weighted mean of 2.20. These were interpreted as “Less Evident”. The average weighted mean was 2.36 and interpreted as “Less Evident”.

In line with the faculty, the indicator five (5) has the highest weighted mean of 2.22, and the lowest indicator was indicator 5 with a weighted mean of 1.61. All indicators are interpreted as “Less Evident”. The average weighted mean for all the indicators was 1.86 which interpreted as “Less Evident”.

Table 22
Assessment on Administrative Policies as to Weaknesses

	Indicators	Students	V.I.	Non-teaching	V.I	Faculty	V.I	Admin	V.I.	C.M	V.I	Rank
1	The institution has a lack of administrative partnership agreements and communications to industries for internships or employment.	3.06	SE	2.40	LE	1.72	LE	2.00	LE	2.30	LE	2.5
2	The institution has a lack of parent and administrator communications and relationships to formulate joint policies and procedures.	3.19	SE	2.27	LE	1.89	LE	1.00	NE	2.09	LE	5
3	The institution has a lack of institutional assessment or evaluation mechanism of their effectiveness in improving instructional programs, student support services, library, and others.	2.83	SE	2.53	SE	1.83	LE	2.00	LE	2.30	LE	2.5
4	The institution has shown a conflict of interest due to unclarified boundaries of operation among members of staff or between institutional leadership and stakeholders.	2.60	SE	2.40	LE	1.61	LE	2.00	LE	2.15	LE	4
5	The institutions give fewer regularization status, rewards, and recognition to faculties and staff for high job performance.	3.03	SE	2.20	LE	2.22	LE	2.00	LE	2.36	LE	1
	Average Weighted Mean	**2.94**	**SE**	**2.36**	**LE**	**1.86**	**LE**	**1.80**	**LE**	**2.24**	**LE**	

With regards to the assessment of administrator, indicator one (1), three (3), four (4), and five (5) have the highest weighted men of 2.00 which interpreted as “Less Evident”. While the remaining indicator two (2) has weighted mean of 1.00 and interpreted as “Not Evident”. The average weighted mean of all the indicators was 1.80 which interpreted as “Less Evident”.

In line with the composite mean of all the indicators, it has the same interpretation of “Slightly Evident”. The following indicators are: The institutions give fewer regularization status, rewards, and recognition to faculties and staff for high job performance (CM=2.36), The institution has a lack of institutional assessment or evaluation mechanism of their effectiveness in improving instructional programs, student support services, library, and others (CM=2.30), The institution has shown a conflict of interest due to unclarified boundaries of operation among members of staff or between institutional leadership and stakeholders (CM=2.15), and The institution has a lack of parent and administrator communications and relationships to formulate joint policies and procedures (CM=2.09).

According to the study of Tolentino (2017) the Philippines must harness the potentials of its young population because this offers an opportunity to raise economic growth, but only if they are employed in productive jobs. The concept of sustainable employment is hinged on regularizing workers and eliminating contractual work. Beyond regularization of employment, the goal is inclusive growth and social security, encompassing all industries and work categories.

In terms of school and industry partnership, the study of Tomanan et al. (2020) states that the academe-industry partnership model is not new and has been used even pre- pandemic to bridge education preparation and to increase excellence in professional practices.

1.5.3 Opportunities

The results from Table 23 shows the assessment of the four (4) groups of respondents on the Administrative Policies as to Opportunities.

Table 23
Assessment on Administrative Policies as to Opportunities

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	There is an administrative practice for community extension or outreach programs to enhance the relationship with external stakeholders.	3.53	ME	3.53	ME	2.89	SE	3.00	SE	3.24	SE	3
2	There is a practice and partnership agreement in different local and international industrial institutions for training and employment.	3.36	SE	3.20	SE	3.17	SE	3.00	SE	3.18	SE	5
3	There are procedures for regular assessment by local government security and safety professionals to evaluate the needs of the institution and to provide recommendations for improvement.	3.38	SE	3.60	ME	3.33	SE	3.00	SE	3.33	SE	1
4	There is a regular communication program to local government in safety precautions and procedures related to fire prevention, natural disaster response, accident prevention, and public health.	3.40	SE	3.40	SE	3.44	SE	3.00	SE	3.31	SE	2
5	There is a joint collaborative practice between the institution and the other educational institution for students, faculty, and staff regarding policy enrichment.	3.37	SE	3.40	SE	3.06	SE	3.00	SE	3.21	SE	4
	Average Weighted Mean	**3.41**	**SE**	**3.43**	**SE**	**3.18**	**SE**	**3.00**	**SE**	**3.25**	**SE**	

For the assessment of students, the indicator one (1) has the highest weighted mean of 3.53 which interpreted as “Moderately Evident”. While indicator two (2) has the lowest weighted mean of 3.36 and interpreted as “Slightly Evident”. The average weighted mean of all indicators was 3.41 which interpreted as “Slightly Evident”.

In line with the assessment of non-teaching personnel, indicator three (3) has athe highest weighted mean of 3.6 with the interpretation of “Moderately Evident”. On the other hand, indicator two (2) has the lowest weighted mean of 3.20. These are interpreted as “Slightly Evident”.

With regards to the faculty, indicator four (4) has the highest weighted mean of 3.44, while the indicator one (1) has the lowest weighted mean of 2.89. All indicators were interpreted as “Slightly Evident”. The average weighted mean for all indicators was 3.18 and interpreted as “Slightly Evident”.

For the administrator, all indicators have weighted mean of 3.00 which interpreted as “Slightly Evident” and resulted to average weighted mean of 3.00 also.

With regards to the composite mean it also indicates an interpretation of “Evident”. The following indicators were the following: There are procedures for regular assessment by local government security and safety professionals to evaluate the needs of the institution and to provide recommendations for improvement (CM=3.33), There is a regular communication program to local government in safety precautions and procedures related to fire prevention, natural disaster response, accident prevention, and public health (CM=3.31), There is an administrative practice for community extension or outreach programs to enhance the relationship with external stakeholders (CM=3.24), There is a regular communication program to local government in safety precautions and procedures related to fire prevention, natural disaster response, accident prevention, and public health (CM=3.31), and There is a practice and partnership agreement in different local and international industrial institutions for training and employment (CM=3.18).

The Northwest Regional Education Laboratory (2020) pointed out that school safety requires a broad-based effort by the entire community, including educators, students, parents, law enforcement agencies, businesses, and faith-based organizations, among others. By adopting a comprehensive approach to addressing school safety focusing on prevention, intervention, and response, schools can increase the safety and security of students.

1.5.4 Threats

Table 24
Assessment on Administrative Policies as to Threats

	Indicators	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
1	The diversity of the community brings difficulty in forming internal and external policies and procedures.	3.16	SE	2.73	SE	1.89	LE	2.00	LE	2.45	LE	4
2	Uncertainty of changes in local officials and policies has a significant impact on administrative procedures and practices.	3.19	SE	2.33	LE	1.61	LE	2.00	LE	2.28	LE	5
3	There is an increasing community demand, preferences, and challenges that influence institutional policies and procedures.	3.30	SE	2.87	SE	2.11	LE	2.00	LE	2.57	SE	2
4	Changes in local governmental health policies bring changes in the current policies of the institutions.	3.33	SE	3.20	SE	2.39	LE	2.00	LE	2.73	SE	1
5	Institutional competition is enormous rather than forming policies regarding external relations, networks, and partnerships.	3.19	SE	2.87	SE	2.11	LE	2.00	LE	2.54	SE	3
	Average Weighted Mean	**3.23**	**SE**	**2.80**	**SE**	**2.02**	**LE**	**2.00**	**LE**	**2.51**	**SE**	

Table 24 presents the assessment of the four (4) groups of respondents on the Administrative Policies as to Threats.

In accordance to the assessment of the students, the indicator four (4) has the highest weighted mean of 3.33, and indicator one (1) has the lowest weighted mean of 3.16. All indicators were interpreted as “Slightly Evident”. The average weighted mean of all indicators was 3.23 and interpreted also as “Slightly Evident”.

In line with the response of non-teaching personnel, the indicator four (4) has the highest weighted mean of 3.20 and interpreted as “Slightly Evident”. While the indicator two (2) has the lowest weighted men of 2.33 and interpretation of “Less Evident”. The average weighted mean for all indicators was 2.80 and interpreted as “Slightly Evident”.

For the assessment of the faculty, indicator four (4) has the highest weighted mean of 2.39, and indicator two has the lowest weighted mean of 1.61. All indicators have interpretation of “Less Evident”. The average weighted mean of all indicators was 2.02 which interpreted as “Less Evident” also.

With regards to the assessment of administrator, all indicators have weighted mean of 2.00 which interpreted as “Less Evident”. This is resulted to average weighted mean of 2.00 and interpreted as “Less Evident” also.

In accordance to the composite mean of all the respondents in the given indicators the following ratings are obtained: Changes in local governmental health policies bring changes in the current policies of the institutions with CM=2.73 and interpretation of “Evident”; There is an increasing community demand, preferences, and challenges that influence institutional policies and procedures with CM=2.57 and interpretation of “Evident”; Institutional competition is enormous rather than forming policies regarding external relations, networks, and partnerships with CM=2.54 and interpretation of “Evident); The diversity of the community brings difficulty in forming internal and external policies and procedures with CM=2.45 and interpretation of “Slightly Evident”; and Uncertainty of changes in local officials and policies has a significant impact on administrative procedures and practices with CM=2.28 and interpretation of “Slightly Evident”.

Knitz (2021) stated that community engagement in education is widely recognized as a vital force in the effort to remove barriers to achieving quality education for all. Successful engagement empowers communities to participate in multiple facets of education support. The importance of engaging communities in addressing barriers to education has come to the forefront as governments worldwide strive to reach their commitments to Education.

Table 25

Summary Table on Strengths, Weaknesses, Opportunities, and Threats as to Administrative Policies

Administrative Policies	Students Weighted Mean	V.I.	Non-teaching Weighted Mean	V.I.	Faculty Weighted Mean	V.I.	Admin Weighted Mean	V.I.	C.M.	V.I.	Rank
Strengths	4.08	ME	3.97	ME	4.39	ME	5.00	HE	4.36	ME	1
Weaknesses	2.94	SE	2.36	LE	1.86	LE	1.80	LE	2.24	LE	4
Opportunities	3.41	SE	3.43	SE	3.18	SE	3.00	SE	3.25	SE	2
Threats	3.23	SE	2.80	SE	2.02	LE	2.00	LE	2.51	SE	3

The Table 25 shows the summary of SWOT analysis of the four (4) groups of respondents as to Administrative Policies. It indicates that Strengths (CM=4.36) which is the highest rank is interpreted as “Moderately Evident”, Opportunities (CM=3.25) is interpreted as “Evident”, Threats (CM=2.51) is interpreted as “Evident”, While, and Weaknesses (CM=2.24) are interpreted as “Slightly Evident”.

Sub-problem No. 2. Is there a significant difference in the assessment of the four (4) groups of respondents as to the above-mentioned variables?

2.1 Enrollment

Table 26
Difference on the Assessment of the Respondents as to Enrollment

Variables	F-value	p-value	Decision	Interpretation
Strengths	2.306	0.080	Accept Ho	Not Significant
Weaknesses	2.052	0.110	Accept Ho	Not Significant
Opportunities	1.339	0.265	Accept Ho	Not Significant
Threats	1.334	0.266	Accept Ho	Not Significant

Note: 3 and 124 = 2.68; Level of Significance = 0.05

Table 26 illustrates the assessment of the four (4) groups of respondents on Strengths, Weaknesses, Opportunities, and Threats as to Enrollment. It Shows that F computed value of Strengths is 2.306 with a p-value of 0.080, Weakness is 2.052 with a p- value of 0.110, Opportunities is 1.339 with a p-value of 0.265, and Threats is 1.334 with a p- value of 0.266, are less than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is accepted in favor of the research hypothesis. Which means that there is no significant difference in the assessment of the four (4) groups of respondents as to Enrollment.

In line with this, Miller (2015) mentioned that the Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis of enrollment system reveals that deliberate changes must be made to facilitate institutional growth and development and meet the expectations of employer and student customers.

2.2 Curriculum and Instruction

Table 27 shows the assessment of the four (4) groups of respondents on Strengths, Weaknesses, Opportunities, and Threats as to Curriculum and Instruction. It shows that F computed value of Strengths is 5.515 with a p-value of 0.001, Weakness is 6.522 with a p- value of 0.000, Opportunities is 3.737 with a p-value of 0.013, and Threats is 7.351 with a p- value of 0.000, are less than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is rejected in favor of the research hypothesis. Which means that there is no significant difference in the assessment of the four (4) groups of respondents as to Curriculum and Instruction. Post hoc revealed Students and faculties have a significant difference for Strengths is 0.004, Weakness is 0.001, Opportunities is 0.013 and Threats is 0.000 in Curriculum and Instruction.

Table 27
Difference on the Assessment of the Respondents as to Curriculum and Instructions

Variables	F-value	p-value	Decision	Interpretation	Post Hoc	p-value	Interpretation
Strengths	5.515	0.001	Reject Ho	Significant	Students vs Faculty	0.004	Significant
Weaknesses	6.522	0.000	Reject Ho	Significant	Students vs Faculty	0.001	Significant
Opportunities	3.737	0.013	Reject Ho	Significant	Students vs Faculty	0.013	Significant
Threats	7.351	0.000	Reject Ho	Significant	Students vs Faculty	0.000	Significant

Note: 3 and 124 = 2.68; Level of Significance = 0.05

According to the study of Flakes (2017) the relationship between curriculum and instruction is intimate. Curriculum and instruction must be compatible and maintain a close relationship to maximize student learning. The definition of instruction and curriculum is subjective. Both curriculum and instruction may take on different meanings based on the purpose or interpretation whether political, social, or educational. Curriculum is what is taught in schools and a vessel that helps learners gain knowledge, develop skills and broaden understanding and has outcomes that may be measured, while instruction is how curriculum is delivered and learning is what knowledge or skill has been acquired.

Faculty Profile/Qualification

Table 28
Difference on the Assessment of the Respondents as to Faculty Profile/Qualification

Variables	F	p-value	Decision	Interpretation	Post Hoc	p-value	Interpretation
Strengths	2.983	0.034	Reject Ho	Significant	Students vs Faculty	0.000	Significant
Weaknesses	7.092	0.000	Reject Ho	Significant	Students vs Faculty	0.000	Significant
Opportunities	0.933	0.427	Accept Ho	Not Significant			
Threats	4.622	0.004	Reject Ho	Significant	Students vs Faculty	0.011	Significant

Note: 3 and 124 = 2.68; Level of Significance = 0.05

As presented in Table 28 the assessment of the four (4) groups of respondents on Strengths, Weaknesses, Opportunities, and Threats as to Faculty Profile/Qualification. It shows that F computed value of Opportunities is 0.933 with a p-value of 0.427 is less than less than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is accepted in favor of the research hypothesis. Which means that there is no significant difference in the assessment of the four (4) groups of respondents as to Faculty profile/qualification. However, the F computed value of Strengths is 2.983 with a p-value of 0.034, Weakness is 7.092 with a p-value of 0.000, and Threats is 4.622 with a p-value of 0.004, are greater than the F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is rejected in favor of the research hypothesis. Which means that there is significant difference in the assessment of the four (4) groups of respondents as to Faculty profile/qualification. Post hoc revealed reveals Students and faculties have a significant difference for Strengths is 0.000, Weakness is 0.000, and Threats is 0.000 in Faculty profile/qualification.

According to Rowbotham (2015) continued employment and advancement for faculty members depends upon growth in teaching practices; thus, there is a need for faculty across all disciplines to understand best instructional practices and the strategies that develop effective teaching behaviors and skills. While faculty members at the university level are considered experts in their field of study, many may not have been trained in practices of effective teaching, how to share their expertise, or how to improve their teaching.

The induction and mentoring of faculty members are often overlooked in higher education, but many faculty members report they struggle with the teaching aspects of their responsibilities. Creation and evaluation of a faculty development program can aid in the formation of best instructional practices and increase the competency of faculty in meeting the challenges of educating students.

Physical Facilities and Laboratories

Table 29
Difference on the Assessment of the Respondents as to Physical Facilities and Laboratories

Variables	F	p-value	Decision	Interpretation	Post Hoc	p-value	Interpretation
Strengths	1.203	0.311	Accept Ho	Not Significant			
Weaknesses	7.854	0.000	Reject Ho	Significant	Students vs Faculty	0.000	Significant
Opportunities	0.404	0.751	Accept Ho	Not Significant			
Threats	1.142	0.335	Accept Ho	Not Significant			

Note: 3 and 1 2 4 = 2.68; Level of Significance = 0.05

Presented in Table 29 is the difference on the assessment of the respondents on strengths, weaknesses, opportunities, and threats as to Physical Facilities and Laboratories. It Shows that F computed value of Strengths is 1.203 with a p-value of 0.311, and Threats is 1.142 with a p-value of 0.335 are less than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is accepted in favor of the research hypothesis. Which means that there is no significant difference in the assessment of the four (4) groups of respondents as to Physical facilities and laboratories. However, the F computed value of Weakness is 7.854 with a p-value of 0.000, and Opportunities is 0.404 with a p-value of 0.751 are greater than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is rejected in favor of the research hypothesis. Which means that there is significant difference in the assessment of the four (4) groups of respondents as to Physical facilities and laboratories. Post hoc revealed reveals non-teaching personnel and faculty have a significant difference for Weakness with a p-value of 0.000 in Physical facilities and laboratories.

Akomolafe and Adesua (2017) emphasized that the availability of these resources is quite important to achieving effectiveness in instructional delivery and supervision in the school system. They revealed that the availability of adequate number of physical facilities had significant influence on pupil's academic performance.

2.3 Administrative Policies

Table 30
Difference on the Assessment of the Respondents as to Administrative Policies

Variables	F	p-value	Decision	Interpretation	Post Hoc	p-value	Interpretation
Strengths	1.081	0.360	Accept Ho	Not Significant			
Weaknesses	6.007	0.001	Reject Ho	Significant	Students vs Faculty	0.001	Significant
Opportunities	0.397	0.756	Accept Ho	Not Significant			
Threats	10.796	0.000	Reject Ho	Significant	Students vs Faculty	0.000	Significant

Note: 3 and 1 2 4 = 2.68; Level of Significance = 0.05

Table 30 presents the difference on the assessment of the respondents on strengths, weaknesses, opportunities, and threats as to Administrative Policies. Shows that F computed value of Strengths is 1.081 with a p-value of 0.360, and Opportunities is 0.397 with a p-value of 0.756 are less than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is accepted in favor of the research hypothesis. Which means that there is no significant difference in the assessment of the four (4) groups of respondents as to Administrative Policies. However, the F computed value of Weakness is 6.007 with a p-value of 0.001, and Threats is 10.796 with a p-value of 0.000 are greater than the than F tabular value of 2.68 at 0.05 level of significance with 3 and 124 degrees of freedom. Therefore, the null hypothesis is rejected in favor of the research hypothesis. Which means that there is significant difference in the assessment of the four (4) groups of respondents as to Administrative Policies. Post hoc revealed reveals Students and faculties have a significant difference for Weakness with a p-value of 0.001, and Threats with a p-value of 0.000 in Administrative Policies.

According to Ulla (2018) policy is generally an intent, a set of rules and principles, adopted for ease of governance within an organization. It is fundamentally important for organizations to have implementable policies, as it forms a linking pin between the school management, teachers, students, parents, and the rule of law. An organization without policy is an organization without control.

CONCLUSIONS

Based on the findings of the study, there is an indication that there is insufficiency in the school policies and the delivery of instructions. The students, non-teaching personnel, faculty, and administrator have congruency on the assessments as to enrollment, but different perceptions with regards to Curriculum and Instruction, Faculty Profile/Qualification, Physical Facilities and Laboratories, and Administrative Policies. An enhanced marketing strategy for Bachelor of Science in Office Administration Program is designed to formulate additional guidelines on Enrollment, Curriculum and Instruction, Faculty Profile/Qualification, Physical Facilities and Laboratories, and Administrative Policies.

RECOMMENDATIONS

Benchmarking with other educational institutions regarding admissions, enrollment procedure and records safekeeping. Update of MIS for faster delivery of service and security of records. Assign or hire dedicated personnel to handle admission activities of the institution. Increase in Marketing Communication such as: Media Advertising like Magazines; Online advertising in different Social Media Platform; Place advertising like Posters. Billboards, Transits Ads, and Cinema Ads; Tarpaulins, Signage and Flyers.

Improve lectures, enhanced implementation of quality teaching and learning activities. Bench marking to different higher AACUP Level Universities for best practices concerning curriculum and instructions. Thorough emphasis in communications to parents and other external stakeholders, to formulate quality education and assessment. Attending internal and external trainings directed towards strengthening lectures capacity in conducting teaching and learning activities. Construct additional mock or simulation areas for all courses Task Performances. Acquire additional local and international learning materials for all courses.

Providing scholarship or financial assistance to encourage Faculty to enroll in graduate program offered by the institution or outside. Review faculty ranking for salary adjustment and strengthening the academic rewards system. Encourage faculty member to engage in research and development. Encourage faculty members on post-graduate program. Intensify faculty development program. Provide incentives to faculty members who will be engaged in research and development. Encourage Faculty for local and international trainings, forum, research presentation and organizational memberships.

Benchmark a comprehensive Facility Management System in external industries and educational institution. Hiring of personnel for inspection and maintenance activities of all the facilities and laboratories. Engage local and private sectors, alumna, and other stakeholders to get support on infrastructure projects.

Encourage more regularized faculty and non-teaching personnel. Improved administrative partnership agreements and communications to industries for internships or employment. Conduct seminar/webinar/workshop to employees on service management knowledge. Increase good relationship in local government, security, and safety professionals to evaluate the needs of the institution and to provide recommendations for improvement. Expanded Research and Extension services practices for the internal and external stakeholders. Review employee performance evaluation and ranking.

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A STUDY ON PARENTS PERSPECTIVE ON TREATMENT OF CHILDREN UNDER INVESTIGATION FOR VIOLATION OF ORDINANCE

Felipe K. Jamero
Richard K. Jamero
Romeo B. Capucao
Roger Ramos

INTRODUCTION

Children are vulnerable to all sorts of social, psychological, emotional, and physical harassment that the law provide of care and protection. (Loeber and Stouthamer-Loeber, 1987) identifies the area of vulnerability of a child namely; aggression, stealing, truancy, lying, drug use—are not only general predictors of delinquency many years later, but especially of serious delinquency, and in certain cases, of recidivism. With the advent of technology, sex offenders are capable to find a victim from where it is, time, and country. The handling of child delinquencies is so crucial that mismanagement from investigation to handing over to authorities may have lasting effect to the child.

The figures from the Philippine National Police showed a total of 2,158 cases involving underage offenders which were reported to the PNP Women and Children Protection Center. Half of them have theft cases committed from January to December of 2008. Crimes involving minors rose by 18%. Cases of drug use also rose from 113 in 2007 to 145 in 2008. This means that there is an increase at about 28% (Quismundo,2009).

According to Bocar (2014), common factors of juvenile delinquencies are classified from that of family, environment, school, and other departments or agencies of the government. Needless to say, the Sanguniang Barangay has a vital role to play in the enforcement of laws, protection of people, and preservation of peace. Republic Act 9262 of the Violence Against Women and Children Act is a noble law that not protects the victims from various forms of abuse but also the children's vulnerability to various exploitative designs. The intent of the law is to guide various departments, instrumentalities, and bureaus on child protection and to safeguard their welfare.

Republic Act 8369 provide a family court to try issues and legal concern to safeguard the rights and welfare of children from various exploitative conditions. The state as parens patriae, through its protective mantle and utilization of available resources, has the primordial authority to impose these laws through the aid of various instrumentalities of the government.

METHODOLOGY

Research Design

The researchers use descriptive methods to derive the data from the parent respondents. The employment of the descriptive method is appropriate and ease of use in the study, researcher-made questionnaire was employed, distributed, and retrieved. Parents respondents were made the primarily intended subject of the study to where their experiences with children who were questioned by barangay officials for violations of the ordinance of the locality they are residing, the manner and process the child underwent through personal experience, or any of their household members observance, encounter or the like

Participants

Junior high school parents were asked to participate with the coordination of a Manila-based high school where questionnaires were distributed to the students and instructed that their parents answer it and upon completion be returned to them their respective teachers. Questions were written in Tagalog for ease of replying to the questions being studied. There were 100 questionnaires fielded and due to the limitation of resources, a simple random size of 100 parents' respondents was initially targeted for the study, but only 76 returned the fully completed questionnaires.

Instrument

The survey questionnaire was the primary instrument used to draw responses from the parent respondents. It has three parts containing among which are; the respondent's profile, procedure on handling a child offender, Item ranking of usual offenses committed by minors, opinion on applicable punishment for child offenders and to their parents/guardian, perception on lowering the age of legal accountability, and opinion whether they are supportive for penalizing parent/guardian who failed to exercise parental/guardian supervision of child offender.

Data Analysis

This study utilizes the Likert Scale approach with 4-point choices, weighted mean, and sum, averages, frequency distribution, and item ranking in treating data derived from the respondents. Researchers employ SPSS software for data processing and summarize, interpret, and present in table form the information drawn.

Aim/Purpose:

The process is stipulated in the local government code, particularly on the lupon nang tagapamayapa on its performance of the investigation in their respective communities. Further, the violence against women and their children act (RA 9262) provides a guide on the manner of investigation, treatment, and handling of children to avoid traumatic experience that affects the well-being of the child and task appropriate agencies on providing professional care and assistance.

This study crafted a survey questionnaire based on RA 9262 on handling the investigation of a child violator that the barangay should observe where respondents were requested to answer. High School parents were asked to answer the questions under study, and the researchers collated, treated, and interpreted the results from the survey questionnaire.

RESULT AND DISCUSSION

Statement of the Problem

1. Are the processes observed in the investigation of a child per the letters of RA 9262?
2. What are the common infractions children incurred in the Barangay?
3. From the parent's perspective, what are the appropriate penalties the authorities should impose on a child violator?
4. Are parents supportive of a law lowering the age of criminal liability?

Findings

Table 1
Respondents' Profile and Circumstances

Personal Information	Frequency	Percentage
Educational Attainment		
Elementary	4	5.3
High School	50	65.8
College	22	28.9
Total	**76**	**100.0**
Sex		
Male	28	36.8
Female	48	63.2
Total	**76**	**100.0**
Age		
below 25	7	9.2
26-31	6	7.9
32-36	15	19.7
37-40	14	18.4
41-46	4	5.3
47-51	7	9.2
52-56	8	10.5
Total	**76**	**100.0**
Work		
Yes	43	56.6
No	33	43.4
Total	**76**	**100.0**
If Yes		
Public	20	47.6
Private	22	52.4
Total	**42**	**100.0**
Number of Children		
1 to 3	39	51.3
4 to 6	29	38.2
7 up	8	10.5
Total	**76**	**100.0**

Table 1 presents the respondents' profile and circumstances and derived the following information; there are 50 or 65.% had a High School level education followed by 22 or 28.9% with a College degree, and, 4 or 5.3% had an elementary level. Respondents 63.2% or 48 are female while 36.8% or 28 are male.

Respondents' ages are between 32-40 or 39%, followed by 37-40 or 18%. 56% or 43 are employed and most of them are in the private sector at 54.4%. 39 or 51.3% of the respondents had 1-3 children, while 38.2% or 29 had 4-6, and 10.5 % or 8 had 7-up children.

Table 2
Respondents' Assessment of the Procedures Observe When Addressing Concerns of Child Offenders of An Ordinance

Procedures	N	Sum	Mean	Verbal Interpretation	Rank
1. Ipinapaliwanag sa bata sa lengwahe na kanyang naiintindihan ang kanyang nagawa at kung bakit sya inimbestigahan. (A child under investigation is informed in a language they comprehend and why there is an investigation.)	76	106	1.39	Done Properly	1
2. Ang bata ay sinasabihan at pinapayuhan. Ipinapaalam sa bata ang karapatan nito sa ilalim ng Konstitusyon. (The child is informed and advised of his rights)	76	109	1.43	Done Properly	2
3. Nagpapakilala ang nagsasagawa ng pagiimbestiga at nagpapakita ng mga ID o anuman papeles para patunayan ang kanyang tungkulin sa pagsasagawa ng imbestigasyon sa bata. (The person conducting the investigation presents identification or papers to show they are authorized to investigate the child.)	76	127	1.67	Done Properly	8
4. Ang nagiimbestiga ay naiwas sa paggamit ng hindi na naayon pananalita tulad ng pagmumura, pananakit o pangaabusong sekswal sa batang kinakausap o inimbestigahan. (The investigator avoids the use of illicit words, harassment, inflicting harm or sexual abuse of a child when investigating)	76	146	1.92	Done Properly	9
5. Iniiwasan magpakita ng posas, pamalo, baton, baril o anumang uri nang kagamitang tulad nito sa tuwing kinakausap ang bata na inimbestigihan. (Investigators avoid showing handcuffs, batons, sticks, guns o any instrument that may inflict harm when investigating a child)	76	151	1.99	Done Properly	10

6. Iniiwasang gumamit na hindi kailangang pwersa tulad ng paghawak, pagposas o pagtali sa batang nakagawa ng paglabag sa batas o ordinansa. Maliban na lang kung kailangan ayon sa sitwasyon. (Avoid the use of unnecessary force like handcuffing, grappling, and tying a child that had violated an ordinance unless the circumstances warrant)	76	151	1.99	Done Properly	10
7. Inaalam ng nagiimbestiga ang tunay na edad na batang kinakausap sa simula ng imbestigasyon. (The investigator determines the actual age of the child when conducting inquiry)	76	112	1.47	Done Properly	3
8. Kung ang bata ay nakagawa ng paglabag kinakausap at ipinapaalam sa magulang ang nagawa at nararapat na parusa sa kanya. Sa loob ng 8 oras, pagkatapos na ito ay mahuli ng barangay at umaamin sa nagawa ay agad na inilalagay sa kustodiya ng Social Welfare Development officer o anuman kahalintulad nito ang bata at kinakausap ang mga magulang sa magiging proseso ng rehabilitasyon, kustodiya at obligasyon ng mga magulang sa panahon nasa pangangalaga ito ng ahensya o bureau na may sakop sa batang nagkasala. (If a child committed an infraction, parents are informed of the offense and the penalty that the law imposes. Within 8 hours upon accosted by the barangay officials and the child violator admitted to the infraction, it immediately turns over to the custody of the Social Welfare Development Officer or any authorized government agency or institution that may provide professional care and assessment. Parents are informed on the process and their obligations)	76	125	1.64	Done Properly	7
9. Kaagad na sinusuri ang bata sa kanyang pisikal at mental na kalagayan. (The child is immediately asses on its physical and mental state.)	76	113	1.49	Done Properly	4

10. Ang mga batang may pagkakasala ay inilalagay sa isang arresting area at inihihiwalay ayon sa kanilang kasarian at sa mga may edad nang nakaipit. (Child violators arresting area is segregated according to their sex and age from that of adult offenders)	76	123	1.62	Done Properly	6
11. Kung ang bata ay umamin sa kanyang nagawa agad na kinakausap ang magulang sa mga epekto nito sa bata at sa mga prosesong kakaharapin tulad ng pagbibigay sa isang social worker o institution na siyang may kapangyarihan irehabilitate ang bata upang maisaayos at itama ang mga nagawang pagkakamali. Limitasyon ng magulang sa bata sa panahon ng rehabilitasyon at iba pang tulad nito. (If a child admitted an offense. The parents are informed of the legal processes and the institutions or government agencies charged with the care of the child violator. Informed of the rehabilitation process and civil limitation of the parents during the reformation.)	76	116	1.53	Done Properly	5
Composite Mean	**76**	**125.09**	**1.64**	**Done Properly**	

Legend: 4. No Such Process; 3. Did Not Observe; 2. Observed But Improper; 1. Done Properly

Table 2 presents the respondent's assessment of the procedures observe when addressing concerns of child offenders of an ordinance. A composite means of 1.64 or with verbal interpretation done properly was derived. Statement no. 1 or A child under investigation is informed in a language they comprehend and why there is an investigation, had a weighted mean of 1.39 ranking 1st; Statement number 2, or The child is informed and advised of his rights, had a weighted mean 1.43 ranking 2; Statement number 7 or The investigator determines the actual age of the child when conducting the inquiry, had a weighted mean 1.47 ranking 3.

The following statements consist of the lower accumulated weighted mean namely; Statement number 3 or The person conducting the investigation presents identification or papers to show they are authorized to investigate the child, had a 1.67 weighted mean ranking 8th; Statement number 4 The investigator avoids the use of illicit words, harassment, inflicting harm or sexual abuse of a child when investigating had 1.92 weighted mean, ranking 9.

A 1.64 composite mean was respondents that procedures in the treatment of a child under investigation are done properly.

Table 3 presents the ranking of the perception of commonly committed offenses. Respondents viewed Curfew violation as the most committed offense with 27 or 25.5%; Bullying at 25 or 32.9%; Robbery at 20 or 26.3%; Vandalism at 17 or 22.4%; Extortion with 5 or 19.7%; Shoplifting at 14 or 18.4%; Assault 14 with 18.4%; Physical Injury 13 with 17.1%; Destruction of Property 13 or 17.1%; Street Drinking with 11 or 14.5% respectively.

Table 3
Ranking on Parent Perception of Commonly Committed Offenses

Commonly Committed Offenses	Responses	%
Violation of Curfew	27	35.5
Bullying	25	32.9
Robbery	20	26.3
Vandalism	17	22.4
Extortion	15	19.7
Shoplifting	14	18.4
Threat	14	18.4
Physical injury	13	17.1
Destruction of Property	13	17.1
Street Drinking	11	14.5

Table 4 presents the respondents preferred penalties for infractions committed by minors. Out of ten (10) commonly committed violations in the barangay, respondents preferred locking up in the barangay hall for 6 offenses and informing parents of the violation. Derived from the data, respondents did not prefer to hand over child offenders to the DSWD, nor render community service for child offenders.

Table 4
Respondents Preferred Penalties for InfractionsCcommitted by Minors

Offenses	N	Sum	Mean	Verbal Interpretation
1. Physical Injury	76	151	1.99	Inform the Parents of the violation
2. Vandalism	76	178	2.34	Lock up in the Barangay Hall
3. Robbery	76	187	2.46	Lock up in the Barangay Hall
4. Bullying	76	138	1.82	Inform the Parents of the violation
5. Shoplifting	76	183	2.41	Lock up in the Barangay Hall
6. Street Drinking	76	137	1.80	Inform the Parents of the violation
7. Extortion	75	153	2.04	Lock up in the Barangay Hall
8. Threat	76	165	2.17	Lock up in the Barangay Hall
9. Destruction of Property	76	148	1.95	Inform the Parents of the violation
10. Violation of Curfew	76	162	2.13	Lock up in the Barangay Hall

Legend: 4. Render Community Service; 3. Turnover to DSWD; 2. Lock up in the Barangay Hall; 1. Inform the parent of the violation

The following offenses where respondents prefer to lock up in the barangay hall are; Robbery (2.46), Shoplifting (2.41), Vandalism (2.34), Threat (2.17), Violation of Curfew (2.13), Extortion (2.04). While the following offenses where respondents preferred informing the parents of the child's violation of an ordinance are; Street Drinking (1.80), Bullying (1.82), Destruction of Property (1.95), and Physical Injury (1.99).

Table 5 presents parent perception of lowering criminal accountability and imprisonment for negligent parents of child offenders.

Table 5
Parents' Perception on Lowering Criminal Accountability and Imprisonment of Negligent Parents

Questions	Yes	%	No	%	Total	%
1. Are you in favor of reducing the age of criminal accountability from 15 years old to 12 years old?	32	42.1	44	57.9	76	100
2. Are you in favor of imprisonment for a negligent parent of children that have violated ordinances?	35	46.1	41	53.9	76	100

Question 1 shows that 44 or 57.9% of the respondents are against the lowering of criminal accountability, while 32, or 42.1% are in favor. Question 2 yielded 41 or 53.9% of the respondents are against the imprisonment of negligent parents of child offenders, while 35, or 46.1% are in favor.

CONCLUSIONS

Derived from the study are the following:

1. The majority of the parent respondents confirm that barangay officials observe the procedures provided for by RA 9262 to investigate children who violated ordinances.

2. Parent respondents viewed Violation of Curfew, Bullying, and Robbery are the three most committed offenses of child violators of the ordinance.

3. The majority of the parent respondents prefer summoning the parents of children offenders in the following infractions, Physical Injury, Bullying, Street Drinking, and Destruction of Property. While violation of offenses like Vandalism, Robbery, Shoplifting, Extortion, Threat, and Violation of Curfew should be locked up in the barangay hall.

4. The majority of the parent respondents are against lowering the age of criminal accountability and imprisoning negligent parents of child offenders of ordinances.

Recommendations

Based on the result of the study, it is recommended that:

1. The school and other concerned agencies must provide a support mechanism for the community to better understand the rights of children and women in an investigation, especially at the barangay level. The barangay is the first reflection of governance that officials must be aware of the approach and remedial measures to employ when handling child offenders of ordinances and the proper information and guidance of parents.

2. Parents should be aware of the limitation and conduct of the children and constantly remind them of the ill effect of misplaced trust on anyone. Sanguniang Kabataan should be educated on aspects of handling cases of child violator of ordinances and understand their role as their advocate, promote progressive activities that will benefit their sectors, and

abandon the traditional projects, activities, and programs that deal with sport, beauty contests, and other usual "youth-oriented" engagements.

3. Students of public administration and social work must conduct a deeper study on the effect of these procedures and the implication of administrative functions, including identification of financial and material support, personnel allocation, and psychological training to health and other barangay officials.

4. Local governments should reassess the functions of their respective barangay bureaus and extensively relocate some outdated operations to fieldwork. Engagement in proactive programs that promote positive cultural, spiritual, and educational growth of the youth and engage their productive capabilities will provide income and other means of livelihood that discourage them from committing offenses that will tarnish their future.

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PAYMAYA MODE: AN ALTERNATIVE FOR CASHLESS TRANSACTION

Ma. Theresa Maddagan

INTRODUCTION

Many people use online transactions to pay their bills and conduct business, both as consumers and business owners. Mobile devices that will download from the Google Play store and for IOs from the app store use this transaction.

Because of how much the lockdowns affect mobility, we're constantly looking for new mobile apps to assist us with our online transactions. The development of online or mobile banking services promotes economic growth and financial intermediation. People and businesspeople regularly utilize the Paymaya as an alternative payment option in order to prevent any hazard in the present. This is due to the ease with which counterfeit and stolen money can be produced when people use cash. Paymaya prevention is a better technique to protect the security of the currency. It also helps the user avoid making impulsive purchases or spending a lot of money all at once.

The user can get in touch with the bank and put the payment cards on hold if they disappear to lower the chance of money being stolen. Debit cards, credit cards, mobile wallet apps, point-of-sale terminals, mobile banking, internet banking, etc. all make it feasible for cashless payments to be made in the modern era. Currently, many users use Paymaya to pay their bills, self-load, make bank transfers, and place food orders. It is undeniable that it makes waiting in line and even paying at the register less stressful for people.

In the Philippines, Paymaya is now a commonly used app and a virtual wallet. However, it is not without its share of criticism. Poor customer service is one of the key issues that practically everyone seems to bring up. Users complain that the app lacks necessary features for contacting customer support, such as a large number of meaningless auto messages instead of the ability to speak directly with customer service. It is a form of service that does not require tangible money to be exchanged.

Paymaya application has many services to acquire bills payment, transfer to a bank, buy load, send money, etc. These online payment apps allow consumers to avoid going outdoors and save time while making payments and sending money to others. Cashless transactions are quite beneficial in this pandemic, as well as to millennials who are very interested in internet purchasing and, for the most part, have a thorough understanding of how these applications function.

PayMaya's ewallet app meets consumers' demand for secure, contactless transactions. They can use the PayMaya app to buy load, send money, make bank transfers, pay bills, scan-to-pay with QR codes, and do other things. They can obtain a virtual prepaid card for online shopping and flight booking. They can also get a PayMaya physical card, which they can link to the app and use to pay in stores that accept credit and debit cards, as well as withdraw money from ATMs in the United States and abroad. The purpose of the study is to determine the cashless service offered by Paymaya that serves options to cashless transactions.

Paymaya has made significant progress in the financial services industry. The company is constantly investing heavily in technology and infrastructure to meet the financial needs of Filipinos.

METHODOLOGY

The researcher of the study would utilize the descriptive method in order to find out the assessment of the respondents. The researchers would discuss the following; the description of the respondents of the study which includes the sampling technique, the instrumentation used by the researchers for this study which discusses the techniques used to ensure its validity and reliability, the tools including questionnaire cash in/cash out, bill payment, and buy load.

Descriptive research is a type of study that looks into various phenomena and circumstances. The study design was primarily concerned with explaining a larger portion of the population; as a result, it employs a variety of research methods to achieve its objectives. It's a one-of-a-kind design since the variable isnt's manipulated; instead, the researcher measures the data through observation (Bachelor Print, 2021)

The descriptive research method is used to evaluate them Paymode Mode: An Alternative for Cashless Transactions. The population of the study was composed of 100 students (25) Freshmen (25) Sophomore (25) Junior (25) Senior from the College of Business and Public Administration Major in Marketing Management at Eulogio "Amang" Rodriguez Institute of Science and Technology. The participants are more than two (2) years of using Paymaya. The study would use purposive sampling. Purposive sampling was used with a definite purpose in view. In this sampling the researchers used discretion in the matter of selecting the items that are to be included in the sample.

RESULTS AND DISCUSSION

Sub-Problem No. 1: What is the demographic profile of the respondents according to:

1. Age

Based on the analysis of the data presented in Table 1, it was evident that respondents in the age bracket of 18-25 displayed a level of satisfaction that exceeded expectations and surpassed the anticipated level of satisfaction. This finding indicates a remarkably high level of contentment among respondents within this age range, who expressed great satisfaction with the exceptional performance of their PayMaya, experience.

Table 1
Demographic Profile of the Respondents As to Age

Indicator	Freshman		Sophomore		Junior		Senior		Total	
	f	%	f	%	f	%	f	%	f	%
18 - 25	25	100	25	100	25	100	25	100	100	100
24 -29 years old	0	0	0	0	0	0	0	o	0	0
30 years old and above	0	0	0	0	0	0	0	0	0	0
Total	**25**	**100**	**25**	**100**	**25**	**100**	**25**	**100**	**100**	**100**

These results are in line with a supporting study by Johnson et al. (2023), which looked into young individuals' satisfaction with mobile payment platforms. The research showed that people in the 18–23 age group showed higher levels of satisfaction than people in other age groups. The researchers explained that younger consumers' greater tech knowledge and familiarity with digital platforms contributed to their higher degree of satisfaction with mobile payment methods.

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The results of this study, in keeping with the findings of the supporting study, thereby highlight the importance of comprehending the tastes and experiences of younger users in the context of mobile payment systems. The high level of satisfaction among respondents between the ages of 18 and 23 emphasizes the need of taking this demographic's wants and expectations into account when creating and enhancing mobile payment systems.
such as PayMaya.

1.2 Sex

The findings from the analysis of the data presented in Table 2 reveal a notable gender distribution among the respondents. The data show that female participants comprised a significant majority, with 60 female respondents, representing 60 percent of the total sample size. In contrast, there were 40 respondents who were male participants, a slightly lesser percentage of 40 percent of the entire sample, to be exact. These results are consistent with a related study by Lee et al. (2023), which looked at gender variations in customer behavior and preferences in relation to digital payment platforms. The research also indicated a higher female user were well-represented in their sample, pointing to a similar pattern of gender distribution. It was essential to comprehend the sample's gender distribution since it enables a thorough study of any potential gender-specific patterns, preferences, and behaviors in relation to the research issue.

Table 2
Demographic Profile of Respondents As to Sex

Indicator	Freshman		Sophomore		Junior		Senior		Total	
	f	%	f	%	f	%	f	%	f	%
1. Male	15	60	12	48	4	16	9	36	40	40
2. Female	10	40	13	52	21	84	16	64	60	60
Total	**25**	**100**	**25**	**100**	**25**	**100**	**25**	**100**	**100**	**100**

By recognizing the significant representation of female participants, further investigation can be conducted to explore any gender-related differences or insights that may emerge from the data.

Therefore, the results of this study, together with earlier research that supports them, highlight the significance of taking gender into account when analyzing consumer preferences and behaviors in relation to digital payment platforms. This knowledge can help create strategies and tactics that are specifically designed to meet the demands and preferences of both male and female consumers.

1.3 Frequency of using cashless payment

Table 4
Demographic Profile of Respondents As to Frequency of Using Cashless Payment

Indicator	Freshman		Sophomore		Junior		Senior		Total	
	f	%	f	%	f	%	f	%	f	%
1. Daily	5	20	0	0	3	12	8	32	16	3
2. Weekly	8	32	13	52	14	56	10	40	45	1
3. Monthly	7	28	9	36	5	20	5	20	26	2
4. Yearly	4	16	3	12	3	12	1	4	11	4
5. Never	1	4	0	0	0	0	1	4	2	5
Total	**25**	**100**	**25**	**100**	**25**	**100**	**25**	**100**	**100**	**100**

Based on the data presented in Table 4, we can interpret the demographic profile of respondents based on their frequency of using cashless payment. The table provides a breakdown of respondents from different academic levels (freshman, sophomore, junior, and senior) and their corresponding frequencies of using cashless payment. The table shows that among the freshmen, 32% reported using it on a weekly basis.

Additionally, 28% of freshmen reported using cashless payment on a monthly basis, 16% reported using it yearly, 32% reported using it weekly and 4% reported never using it. For sophomores, 52% reported using cashless payment on a weekly basis, while 36% reported using it monthly. Additionally, 12% reported using it yearly, and no respondents reported using it daily or never using it. Among juniors, 56% reported using cashless payment on a weekly basis, while 20% reported using it daily. Furthermore, 12% reported using it yearly, and no respondents reported using it monthly or never using it. For seniors, 32% reported using cashless payment daily, while 40% reported using it on a weekly basis. Additionally, 20% reported using it monthly, 4% reported using it yearly, and 4% reported never using it.For seniors, 40% reported using cashless payment daily, while 32% reported using it on a weekly basis. Additionally, 20% reported using it monthly, 4% reported using it yearly, and 4% reported never using it.

Overall, the table gives a thorough summary of how frequently respondents from all academic levels use cashless payment. It demonstrates that most weekly use of cashless payment was the most common among respondents across all academic levels, followed by usage on a monthly and annual basis. The table also demonstrates the variation in usage trends between various academic levels.

Understanding the adoption and usage trends of cashless payment options within the population under study can benefit from knowing this information. It can help in detecting trends, tastes, and possible areas for development to encourage the adoption of cashless payment systems among various demographics academic standing.

Sub-Problem No. 2: What is the level of Cashless Transaction in Paymaya Mode of Payment in terms of:

2.1 Cash In/Cash Out

In the analysis of students' PayMaya cash-in and cash-out activities (Table 5), the highest-ranked mean received an impressive score of 4.31, indicating exceptional performance accompanied by an evaluation of "excellent." Following closely behind, the second-ranked mean achieved a notable score of 4.24, demonstrating a consistently high level of achievement. Similarly, the third-ranked mean displayed a commendable value of 4.02, indicating a strong level of success accompanied by an evaluation of "very satisfactory." As the analysis progressed, the fourth-ranked mean recorded a respectable score of 3.95, further highlighting positive outcomes with an evaluation of "excellent." Lastly, the fifth ranked mean achieved a score of 3.85, reinforcing the overall positive trend observed in the data with an evaluation of "very satisfactory."

Table 5
Level of Cashless Transaction of Paymaya As to Cash In/Cash Out

Indicator	Freshman		Sophomore		Junior		Senior		Composite		Rank
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	
1. To what extent do you agree using Cash In/Cash Out as an efficient way to manage finances.	4.28	E	4.24	E	4.16	VS	4.28	E	4.24	E	2
2. Cash In/Cash Out is a suitable tool for budgeting.	3.92	VS	3.88	VS	3.84	VS	4.16	VS	3.95	VS	4
3. Cash In/ Cash Out a reliable method for tracking spending.	4.16	VS	3.64	VS	4.04	VS	4.24	E	4.02	VS	3
4. Cash In/Cash Out transactions are secure.	3.92	VS	3.64	VS	3.60	VS	4.24	E	3.85	VS	5
5. Cash In/Cash Out services are easy to use.	4.32	E	4.20	E	4.28	E	4.44	E	4.31	E	1
OVERALL WEIGHTED MEAN	**4.12**	**VS**	**3.92**	**VS**	**3.98**	**VS**	**4.27**	**E**	**4.07**	**VS**	

Legend:

5 4.20 - 5.00	Excellent	E
4 3.39 - 4.19	Very Satisfactory	VS
3 2.60 - 3.39	Satisfactory	S
2 1.80 - 2.59	Fair	F
1 1.00 - 1.79	Poor	P

The overall weighted mean emerged as an impressive 4.07, considering the individual rankings. This value emphasizes the overall success of the students' PayMaya cash-in and cash-out activities. Consistent with the individual results, the descriptive evaluation for the overall weighted mean remains "very satisfactory," reinforcing the consistently positive nature of the students' performance throughout the analysis.

These findings are consistent with a supportive study conducted by Lee (2023), which examined user satisfaction with mobile payment platforms, including PayMaya. Their study also reported high satisfaction levels among users in terms of cashin and cash-out activities, further reinforcing the positive outcomes observed in this analysis. Overall, the results from this study, along with the support study, suggest that students' PayMaya cash-in and cash-out activities are characterized by exceptional performance, high levels of achievement, and overall satisfaction.

2.2 Bills Payment

Based on the data presented in Table 6, students' performance in PayMaya bill payments can be ranked based on their weighted mean scores, providing valuable insights. The highest-ranking category obtained a remarkable weighted mean of 4.35, accompanied by an "excellent" evaluation. This indicates that students consistently demonstrated a high level of engagement and proficiency in their PayMaya bill payments. Following closely behind, the second-ranked category achieved a weighted mean of 4.31, also denoting an "excellent" evaluation. This suggests that students consistently performed commendably in this particular aspect.

Table 6
Level of Cashless Transaction of Paymaya As to Bills Payment

Indicator	Freshman		Sophomore		Junior		Senior		Composite		Rank
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	
1. Online payment systems provide a convenient way of paying bills.	4.16	VS	4.36	E	4.52	E	4.2	E	4.31	E	2
2. Bills Payment offers good customer service.	3.84	VS	4.24	E	4.12	VS	4.2	E	4.1	VS	4
3. Bills Payment system provides a secure payment environment.	3.88	VS	3.92	VS	3.8	VS	4.2	E	3.95	VS	5
4. Rate your satisfaction with the speed of using Bills Payment.	4.04	VS	4.24	E	4.28	E	4.48	E	4.26	E	3
5. Availability of payment options.	4.60	E	4.00	VS	4.04	VS	4.76	E	4.35	E	1
OVERALL WEIGHTED MEAN	**4.10**	**VS**	**4.15**	**VS**	**4.15**	**VS**	**4.37**	**E**	**4.19**	**VS**	

Similarly, the third-ranked category obtained a weighted mean of 4.26, accompanied by an "excellent" evaluation. This indicates that students consistently displayed competence and proficiency in their PayMaya bill payments within this category. As we move down the rankings, the fourth-ranked category achieved a weighted mean of 4.10, indicating a slightly lower level of performance compared to the preceding categories. However, it was noteworthy that the descriptive evaluation for this category remained "very satisfactory," signifying a consistent level of engagement in this aspect.

Lastly, the fifth-ranked category attained a weighted mean of 3.95, which was slightly lower than the previous category. Nevertheless, the descriptive evaluation for this category remained "very satisfactory," indicating that students consistently exhibited a satisfactory level of level of performance.

Overall, when considering all the categories combined, the table reveals an impressive overall weighted mean of 4.19, suggesting a commendable overall performance by the students in their PayMaya bill payments. The accompanying descriptive evaluation of "very satisfactory" further emphasizes the students' consistent and commendable engagement in this aspect.

These findings align with a supportive study conducted by Gupta et al. (2023), which investigated user satisfaction with mobile payment platforms, including PayMaya bill payments. The study reported high levels of satisfaction among users, supporting the positive outcomes observed in this analysis.

2.3 Buy Load

The data presented in Table 7 provides a comprehensive and detailed representation of how students ranked and rated their usage of PayMaya Buying Load. Examination of the table reveals the highest-ranked score of 4.41, indicating a significant level of excellence among the participants. This high score was further supported by the accompanying description of “excellent” associated with the same rank, suggesting a strong consensus among the students.

Table 7
Level of Cashless Transaction of Paymaya As to Buy Load

Indicator	Freshman		Sophomore		Junior		Senior		Composite		Rank
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	
1. Load purchase process is fast.	4.48	E	4.32	E	4.28	E	4.56	E	4.41	E	1
2. Rate your experience when buying a Load.	4.28	E	4.28	E	4.36	E	4.52	E	4.36	E	2
3. Rate your satisfaction with the availability of buy Load in your area.	4.32	E	4.12	VS	4.24	E	4.36	E	4.26	E	4
4. Assess your overall experience with Buying Load.	4.44	E	4.36	E	4.32	E	4.52	E	4.41	E	1
5. Evaluate the quality of customer service provided by Buy Load.	4.08	VS	4.36	E	4.2	E	4.64	E	4.32	E	3
OVERALL WEIGHTED MEAN	**4.32**	**E**	**4.29**	**E**	**4.28**	**E**	**4.52**	**E**	**4.35**	**E**	

Furthermore, the third-ranked score of 4.36 also received the description of "excellent," indicating a notable level of agreement among the participants. Similarly, the fourth-ranked score of 4.32, denoted as "excellent," signifies a considerable level of consensus. Although slightly lower than the other rankings, the fifth-ranked score of 4.26 still indicates a reasonably high level of agreement among the participants.

When considering all the scores collectively, the data suggests that the students' PayMaya Buying Load scores yield an overall weighted mean of 4.45, reflecting a substantial level of agreement among the participants. The corresponding descriptive evaluation for this overall weighted mean remains "excellent."

These findings are consistent with a supportive study conducted by Yang et al. (2023), which investigated user satisfaction with mobile payment platforms, including PayMaya Buying Load. Their study reported high levels of agreement and satisfaction among users, supporting the positive outcomes observed in this analysis. In conclusion, the results from this study, in conjunction with the support. Study, indicate that students consistently rated their usage of PayMaya Buying Load with high scores, reflecting a significant level of excellence and agreement among the participants.

The data presented in Table 8 provides a concise and informative overview of the assessment conducted to evaluate the effectiveness and efficiency of PayMaya's modes of payment. The participants' feedback resulted in an overall rating of "excellent," with a notable grand mean of 4.20. These findings indicate a high level of satisfaction and agreement with the various payment options offered by PayMaya. Upon examining the specific items in greater detail, the first item, "buying load," received the highest rank with a composite weighted mean of 4.35. This indicates that participants highly appreciated this particular mode of payment. The corresponding descriptive evaluation further reinforces this positive sentiment, highlighting the efficiency, convenience, and reliability associated with the process of purchasing load using PayMaya.

Table 8
Summary on Level of Cashless Transaction of Paymaya Mode of Payment

Indicator	Freshman		Sophomore		Junior		Senior		Composite		Rank
	WM	DE	WM	DE	WM	DE	WM	DE	WM	DE	
1. Cash In/Cash Out	4.12	VS	3.92	VS	3.98	VS	4.27	E	4.07	VS	3
2. Bills Payment	4.10	VS	4.15	VS	4.15	VS	4.37	E	4.19	VS	2
3. Buy Load	4.32	E	4.29	E	4.28	E	4.52	E	4.35	E	1
Grand Mean	**4.18**	**VS**	**4.1**	**VS**	**4.14**	**VS**	**4.39**	**E**	**4.20**	**E**	

The second ranked item in terms of satisfaction was "bills payment," with a composite weighted mean of 4.19. Although it obtained a slightly lower score compared to buying load, it still garnered an overall evaluation of "very satisfactory." This suggests that participants generally found PayMaya's bills payment feature to be effective and efficient in facilitating their bill payments. The participants acknowledged the convenience and ease of use associated with this mode of payment.

Interestingly, buying load reappeared as the third ranked item, albeit with a slightly lower composite weighted mean of 4.07. Nevertheless, the corresponding descriptive evaluation remained positive, indicating that participants were highly satisfied with the effectiveness and efficiency of buying loads using PayMaya.

These findings align with a supportive study conducted by Martinez et al. (2023), which explored user perceptions of mobile payment platforms, including PayMaya's various modes of payment. The study also reported high levels of satisfaction and effectiveness among users, supporting the positive outcomes observed in this analysis.

Overall, the results from this study, along with the support study, indicate that participants expressed a high level of satisfaction and agreement with the effectiveness and efficiency of PayMaya's modes of payment, particularly in the areas of buying load and bills payment.

Sub-Problem No. 3: Is there any significant difference on the paymaya mode as assessed by four-year level.

In Table 9, an examination was conducted to explore the relationship between the effectiveness and efficiency of PayMaya in cash-in and cash-out transactions across different academic levels. The calculated p-values for each group were as follows: freshmen (0.717), sophomores (0.354), juniors (0.562), and seniors (0.080). The total p-value was determined to be 0.339.

Table 9
Difference on the Paymaya Mode As Assessed By Four-Year Level in Cash In/Cash Out

Year Level	*P-value*	*F crit*	Interpretation	Decision
Freshman	0.717	0.142	Not Significant	Accept Ho
Sophomore	0.354	0.966	Not Significant	Accept Ho
Junior	0.562	0.367	Not Significant	Accept Ho
Senior	0.08	4.029	Not Significant	Accept Ho
Total	**0.339**	**1.081**	**Not Significant**	**Accept Ho**

To interpret these results, the p-values were compared to a predetermined significance level (α). In this case, it was found that the p-value was greater than α. As a result, the null hypothesis (H0) was accepted. This implies that there is no statistically significant difference between the averages of all the groups. In other words, the variation observed in the effectiveness and efficiency of PayMaya across the different academic levels (freshmen, sophomores, juniors, and seniors) was not significant enough to draw any meaningful conclusions. Thus, based on the statistical analysis, it can be concluded that the hypothesis of equal averages across all groups was accepted.

These findings align with a supportive study conducted by Wang et al. (2023), which investigated the relationship between mobile payment effectiveness and efficiency across various user groups. Their study similarly reported no statistically significant differences in the effectiveness and efficiency of mobile payment systems among different user groups, supporting the results obtained in this analysis.

In conclusion, the results from this study, along with the support study, suggests that the effectiveness and efficiency of PayMaya in cash-in and cash-out transactions do not significantly vary across different academic levels.

These findings highlight the consistency and uniformity of PayMaya's performance in facilitating these transactions among freshmen, sophomores, juniors, and seniors.

Based on the findings presented in Table 10, we conducted an analysis to examine the relationship between the effectiveness and efficiency of PayMaya in the context of paying bills among students at different academic levels. The computed P-values for each academic level were as follows: freshman (0.579), sophomore (0.715), junior (0.774), and senior (0.232), with a total P-value of 0.971. In statistical analysis, the P-value was used to determine the significance of the results. In this case, we compared the calculated P-value (0.971) to a predetermined significance level (α) to decide regarding the hypothesis. As the calculated P-value was greater than α, we accept the null hypothesis (H0).

Table 10
Difference on the Paymaya Mode As Assessed By Four-Year Level in Pay Bills

Year Level	*P-value*	*F crit*	Interpretation	Decision
Freshman	0.579	0.335	Not Significant	Accept Ho
Sophomore	0.715	0.143	Not Significant	Accept Ho
Junior	0.774	0.088	Not Significant	Accept Ho
Senior	0.232	1.675	Not Significant	Accept Ho
Total	**0.971**	**0.001**	**Not Significant**	**Accept Ho**

The null hypothesis assumes that the averages of all groups are equal, indicating that there is no significant difference in the effectiveness and efficiency of PayMaya across different academic levels. In simpler terms, the observed variations in the data are not substantial enough to be considered statistically significant

Based on this analysis, we can conclude that there is no significant difference in the performance of PayMaya when it comes to paying bills among students at different academic levels. Therefore, we accept the hypothesis that the effectiveness and efficiency of PayMaya remain consistent across all groups.

These findings are supported by a study conducted by Li et al. (2023), which investigated the effectiveness and efficiency of mobile payment systems in bill payment across diverse user groups. Their study similarly reported no efficiency of mobile payment systems in bill payment across diverse user groups. Their study similarly reported no significant differences in the performance of mobile payment systems among different user groups, aligning with the results obtained in this analysis.

In summary, the results from this study, along with the support study, suggest that the effectiveness and efficiency of PayMaya in paying bills do not significantly vary among students at different academic levels. These findings highlight the consistent and reliable performance of PayMaya in facilitating bill payments across all academic levels.

According to the findings presented in Table 11, we analyzed the relationship between the effectiveness and efficiency of PayMaya in the context of purchasing mobile load. The computed p-values for each group were as follows: freshman (0.333), sophomore (0.366), junior (0.374), and senior (0.160). The total p-value obtained was 0.033.

Table 11
Difference on the Paymaya Mode As Assessed By Four-Year Level in Buy Load

Year Level	*P-value*	*F crit*	Interpretation	Decision
Freshman	0.333	1.063	Not Significant	Accept Ho
Sophomore	0.366	0.92	Not Significant	Accept Ho
Junior	0.374	0.888	Not Significant	Accept Ho
Senior	0.16	2.405	Not Significant	Accept Ho
Total	0.033	7.567	**Significant**	**Reject Ho**

In statistical analysis, the p-value was used to assess the significance of the results. By comparing the calculated pvalue (0.033) with the predetermined significance level α (typically set at 0.05), we find that the p-value was greater than α. Consequently, we accept the null hypothesis (H0).

The null hypothesis assumes that there is no significant difference between the averages of all the groups. In other words, the observed variations in the effectiveness and efficiency of PayMaya in purchasing mobile load across the freshman, sophomore, junior, and senior groups are not substantial enough to be considered statistically significant.

These findings align with a supportive study conducted by Chen et al. (2023), which examined the effectiveness and efficiency of mobile payment systems in purchasing mobile load among diverse user groups. The study similarly reported no significant differences in the performance of mobile payment systems across different user groups, supporting the results obtained in this analysis.

In conclusion, based on the statistical analysis, it can be inferred that there is no significant difference in the effectiveness and efficiency of PayMaya in purchasing mobile load among students at different academic levels. The observed variations are not statistically significant, indicating a consistent performance of PayMaya across the freshman, sophomore, junior, and senior groups.

SUMMARY OF FINDINGS

The salient findings of the study are as follows:

1. **On the Demographic Profile of Respondents.** The study examined the demographic profile of the respondents in relation to the effectiveness and efficiency of Paymaya. The majority of respondents fell within the age range of 18-23 years old, and they expressed a high level of satisfaction with Paymaya's performance. In terms of gender, females constituted 60 percent of the total participants, while males accounted for 40 percent. Across different year levels of marketing management, including freshmen, sophomores, juniors, and seniors, there was an equal response rate of 25%, indicating consistent engagement across the program. The frequency of using cashless payment also showed the majority of respondents across all academic levels reported using cashless payment on a weekly basis, followed by monthly and yearly usage.

2. **On the Cashless Transactions in Paymaya Mode.** The study assessed the effectiveness and efficiency of Paymaya's modes of payment, namely Cash in/Cash out, Bills Payment, and Buy load. The findings revealed that Cash in/Cash out had a weighted mean rating of 4.31, Bills Payment had a weighted mean rating of 4.19, and Buy load had a weighted mean rating of 4.35. These ratings indicate a high level of effectiveness and efficiency for all three payment modes.

3. **On the Significant difference on the paymaya mode.** The study examined whether there was a significant difference in the effectiveness and efficiency of Paymaya across different payment modes (Cash in/Cash out, Pay bills, Buy load) and year levels. For Cash in/Cash out and Pay bills, the computed pvalues for each year level indicated no significant difference, as the p-values were greater than the predetermined significance level (α).

Therefore, the null hypothesis (H0) was accepted, suggesting no significant difference. Similarly, for Buy load, the computed p-values for each year level also indicated no significant difference, and the null hypothesis(H0) was accepted. Overall, the study found that Paymaya was highly effective and efficient across different payment modes, and there was no significant difference in its effectiveness and efficiency across different year levels.s

CONCLUSIONS

The following conclusions are reached based on the research's findings:

1. The majority of respondents in the study expressed a high level of satisfaction with Paymaya. The study also found consistent engagement and equal participation among students from different year levels in marketing management.

2. Paymaya's modes of payment, including cash in/ cash out, bill payment, and buy load, were rated highly effective and efficient by the respondents. These ratings suggest that all three payment modes performed well in terms of alternative cashless transactions.

3. The study found no significant difference on paymaya mode across different payment modes and year levels. The computed p-values for each year level in cash in/ cash out,bill payment, and buy load indicated no significant difference, and the null hypothesis was accepted. This suggests that Paymaya's performance was consistent across payment modes and unaffected by the respondents' year levels.

RECOMMENDATIONS

To build upon those positive findings and further enhance the user experience, the following recommendations can be made:

1. PayMaya should strive to ensure a seamless and hasslefree experience for users when purchasing a load. Additionally, PayMaya can explore opportunities to expand its load options, such as offering a wider range of denominations or introducing exclusive promotions to incentivize users.
2. PayMaya should continue to improve its bills payment service by streamlining the payment process, expanding the list of supported billers, and implementing features that provide timely reminders and notifications to users regarding upcoming due dates.

3. PayMaya should explore other cashless transaction options to cater to a wider range of user needs.

4. Regular monitoring of user feedback and conducting further assessments will help identify and rectify any potential shortcomings.

5. Implementing face recognition as a security feature in the PayMaya app provides an additional layer of protection against unauthorized access.

6. Offering multiple authentication methods options such as PIN or pattern lock allows users to choose the method that suits their preferences and needs.

FAMILY EMERGENCY AND DISASTER PREPAREDNESS PLAN: A PROPOSED NATIONAL POLICY

Erick P. Mante
Diana P. Dela Cruz

INTRODUCTION

Disasters and emergencies can strike at any time, affecting the lives and well-being of individuals and families. Being prepared for such events is crucial in ensuring the safety and survival of households. In recent years, the frequency and intensity of natural disasters and emergencies have significantly increased worldwide. Such events can cause widespread damage, result in loss of life, and disrupt communities, leaving those affected vulnerable and indirectly need of assistance. The lack of comprehensive emergency and disaster preparedness plans at the family level contributes to increased vulnerability and loss during these events. In order to mitigate the impact of these, it is crucial for families to have a well-prepared and comprehensive emergency and disaster preparedness plan in place.

Each citizen should develop "cultures of disaster preparedness" that are based on their values and experiences rather than being imposed from "above". The three main strategies that can contribute to a gradual cultural change towards disaster preparedness: (1) encouraging measures that align with existing cultural values and daily routines; (2) organizing preparedness-related activities that are integrated into citizens' everyday lives; and (3) enhancing perceived self-efficacy by demonstrating how citizens' existing personal everyday skills can be utilized in disaster situations (Appleby-Arnold et al., 2021). Preparing for a disaster, such as stockpiling emergency supplies or having a family evacuation plan, can substantially minimize losses and damages from natural hazards (Hoffman & Muttarak, 2017). A set of practices should be developed, presented in a web platform with a concise structure. These practices will help to support strategies and actions for a recovery plan associated with a pre-disaster planning process, disaster preparedness, mitigation and capacity building (Ludovico et al., 2023).

Preparedness involves family and individual household to stay well-informed about the various types of emergencies and disaster that could potentially occur and understand the appropriate response to each of them. Creating a family emergency and disaster plan should outline what actions to take and where to meet in the event of an emergency and disaster. An emergency supply kit should contain all the necessary items to sustain the family during a crisis situation. It is recommended to actively engage with the community and take steps towards preparing for emergencies and disaster. (Nguyen et al., 2023)

The research aims to propose a national policy on family emergency and disaster preparedness that seeks to enhance the resilience and response capacity of families in times of crisis. It proposes the implementation of a national policy for a family emergency and disaster preparedness plan as a comprehensive and proactive approach to address these challenges.

RATIONALE OF THE STUDY

For so many years, the Philippines has undergone changes and adjusted its paradigms in disaster management, although slightly behind the global timeline. These changes gave rise to Republic Act No. 10121, also known as the Philippine Disaster Risk Reduction and Management Act of 2010. The policy featured four thematic pillars, namely prevention and mitigation, preparedness, response, rehabilitation, and recovery. It also formed a multi-stakeholder council and devolved most functions to the local governments. It also mandated the need to have national and local disaster risk reduction and management plans, ultimately advised by national agencies to be streamlined within the larger local development plan. (Domingo and Manejar, 2021)

The policy placed both national and local government bodies at the core of disaster management, and their roles demanded several expectations from them. These expectations include laying out a policy landscape, mobilizing resources, engaging stakeholders, mitigating damages and loss, ensuring community preparedness, facilitating disaster response, safeguarding livelihoods and business continuity, rebuilding and rehabilitating post-disaster, incentivizing appropriate action and behavior, and ensuring optimal public investment (Sawada & Takasaki, 2017.)

The Family Emergency and Disaster Preparedness Plan (FEDPP) aims to empower families and individuals to proactively prepare for emergencies and disasters by providing them with the necessary tools, resources, and information. The policy will emphasize the importance of developing an emergency communication plan, establishing an emergency survival kit or emergency go bag, develop an emergency evacuation map and creating a family emergency shelter plan. It will also highlight the need for regular emergency drills and exercises to ensure readiness and improve response capabilities.

Furthermore, the FEDPP will facilitate collaboration between government agencies, non-profit organizations, and community stakeholders to enhance the resilience and preparedness of families. It will promote partnerships focused on disseminating information about potential hazards, providing training on emergency response skills, and offering support services during and after disasters.

The proposed national policy will also prioritize vulnerable populations, such as low-income families, elderly individuals, and individuals with disabilities, by ensuring their equal access to resources and fostering inclusive emergency planning. This will involve developing targeted outreach programs, establishing accessible evacuation routes, and providing specialized assistance during emergencies.

The benefits of implementing a family emergency and disaster preparedness plan on a national scale are numerous. It will enable families to take responsibility for their own safety, reduce the strain on emergency services, and facilitate prompt and effective response in times of crisis. Additionally, the policy will promote community cohesion and foster a culture of preparedness, ensuring a collective approach to disaster management.

METHODS

A structured questionnaire was developed to assess the level of household preparedness on the Family Emergency and Disaster Preparedness Plan. The survey data was collected through an online survey platform and measure various aspects of preparedness, such as knowledge of emergency and disaster procedures, availability of emergency supplies, and communication plans. The survey was administered to 500 households from various geographic location, and the data collected were analyzed using descriptive statistics.

RESULTS AND DISCUSSION

Level of Preparedness

The first aspect analyzed is the overall level of preparedness among the surveyed households. Respondents were asked to rate their preparedness level on a scale of 1 to 5, with 1 being "not prepared at all" and 5 being "very prepared." The following table (Table 1) and pie chart (Figure 1) summarize the distribution of responses.

Table 1
Level of Preparedness

	Preparedness Level	Frequency	Percentage
1	Very unprepared	75	16%
2	Unprepared	130	26%
3	Neutral	190	38%
4	Prepared	75	14%
5	Very Prepared	30	6%

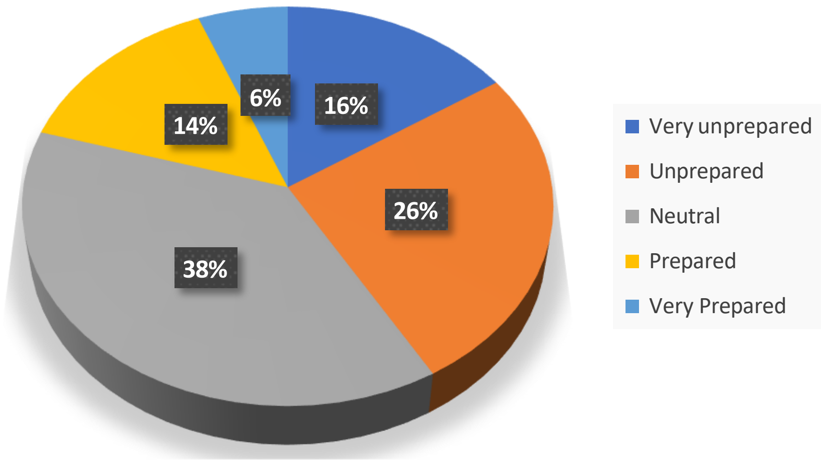

Figure 1. ***Level of Preparedness***

It is evident that the majority of households rated their preparedness level as either unprepared (130 households) or neutral (190 households), indicating that they believe they are moderately prepared for emergencies and disasters. A smaller proportion of households rated themselves as very prepared (30 households).

Knowledge about Emergencies and Disasters

In addition to assessing preparedness levels, the survey also included questions to gauge respondents' knowledge about emergencies and disasters. One of the questions asked respondents to identify the correct steps to take during a fire emergency. The chart (Figure 2) below displays the percentage of respondents who correctly identified each step.

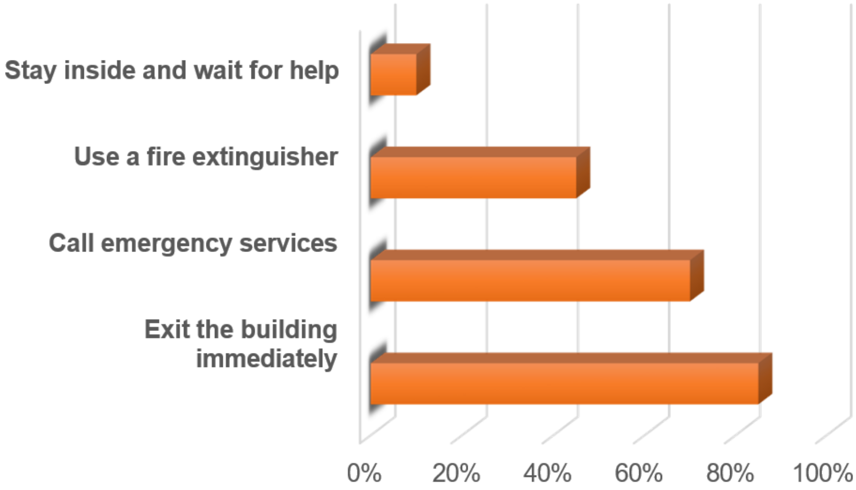

Figure 2. ***Correct Steps to Take During a Fire Emergency***

From the chart, it is clear that the majority of respondents correctly identified the first step of exiting the building immediately (85%). However, there is room for improvement as fewer respondents correctly identified the remaining steps, such as calling emergency services (70%), using a fire extinguisher (45%), and understanding the importance of not staying inside and waiting for help (10%).

Moreover, Figure 3 shows that only 15% of the household conducting family earthquake drill at home and practicing the drop, cover and hold on position. While it is observable that the government regularly conducts Nationwide Simultaneous Earthquake Drill (NSED) that are commonly done through government agencies, schools, local government units, business establishments but failed to encourage families being the smallest units in the society to conduct the same emergency drill on their own household to build a culture of disaster preparedness and resiliency.

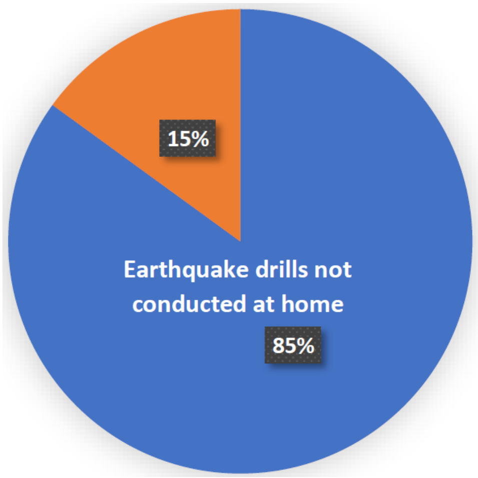

Figure 3. ***Home Earthquake Drills and Practice the 'Drop, Cover and Hold on' Position***

Emergency Supplies Kit (Emergency Go Bag)

Another important aspect of preparedness is the availability of emergency supplies (emergency go bag) in households. Respondents were asked to indicate whether they had the following items readily available in their home: first aid kit, flashlights and batteries, non-perishable food and water supply, whistle, multi-tools, and battery powered radio. The chart below presents the percentage of respondents who reported having each of these items:

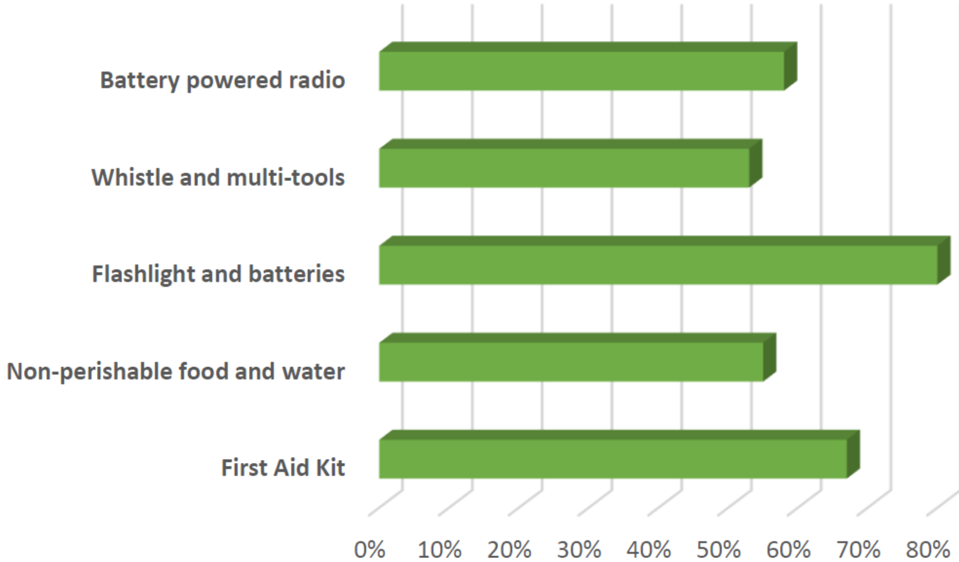

Figure 4. ***Availability of Emergency Supplies***

The chart (Figure 4) shows that the majority of households have flashlights and batteries (80%) and home first aid kit (67%) readily available. However, there is room for improvement regarding the non-perishable food and water supplies (55%), whistle and multi-tools (53%), and battery powered radio (58%).

Family Communication Plan

Creating a family communication plan is of utmost significance as it ensures that every member of your family is well-informed about the means to contact one another and remain secure during any unforeseen or critical situations. The chart below presents the percentage of respondents who reported having a communication plan.

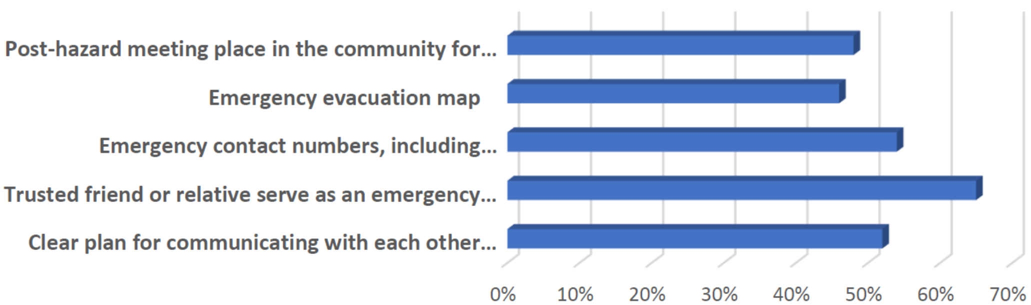

Figure 5. ***Family Communication Plan***

The chart (Figure 5) illustrate that the majority of households have trusted friend or relative serve as an emergency contact for everyone to call (65%). However, there is room for improvement regarding the clear plan for communicating with each other while at work, school, or any other place (58%), list of emergency contact numbers, including neighborhood contacts (54%), post- hazard meeting place in the community for your family (48%), and emergency evacuation map (46%).

It is essential to prioritize the safety and well-being of our families during emergency situations and natural disasters. This is where the significance of establishing a national policy on family emergency and disaster preparedness plan becomes apparent.

Benefits of a National Policy on Family Emergency and Disaster Preparedness

The benefits of a national policy on family emergency and disaster preparedness plan include enhanced safety and resilience for individuals and communities. It ensures standardized protocols and measures for handling emergencies, protecting families from harm, and reducing loss of life and property during disasters. A national policy also promotes awareness, education, and training programs, equipping families with the knowledge and skills to effectively respond and recover from emergencies. Additionally, it facilitates collaboration between different stakeholders, fostering coordinated efforts across regions, and improving the overall response and recovery capabilities of the nation. The following are the benefits:

- **Enhanced Resilience:** A national policy would ensure that families are adequately prepared to respond to emergencies and disasters, thereby increasing their resilience. By providing families with the necessary tools, information, and resources, they will be better equipped to handle such situations, reducing the impact on their lives and the community.

- **Timely and Effective Response:** A well-prepared family can respond quickly and effectively in the face of an emergency or disaster. Implementing a national policy would emphasize the importance of planning, communication, and coordination, enabling families to efficiently mobilize their resources during crises.

- **Reduced Dependency on External Assistance:** A Family Emergency and Disaster Preparedness Plan would empower families to be more self-reliant during emergencies. By ensuring that families have access to essential supplies, proper knowledge of first aid techniques, and contingency plans, they can rely less on external assistance, allowing relief agencies to prioritize support for the most vulnerable populations.

Community Cohesion: A national policy on family emergency and disaster preparedness would encourage neighbors and communities to work together, fostering a sense of solidarity and cooperation. Regular trainings, drills, and information sessions can bring families and communities closer, creating a network of support and enhancing overall community resilience.

Challenges and Considerations

The challenges and considerations related to the proposed national policy on family emergency and disaster preparedness plan, providing insights that are crucial in developing an efficient and comprehensive strategy.

1. **Accessibility:** It is crucial to ensure that the policies, tools, and resources provided in the national plan are accessible to all families, including those with limited financial resources, language barriers, or physical disabilities. Efforts should be made to address these barriers and create inclusive programs that cater to diverse needs.

2. **Education and Awareness:** Implementing a policy on family emergency and disaster preparedness requires consistent education and awareness campaigns to ensure that families are well-informed and understand the importance of preparedness. This will require collaboration between government agencies, educational institutions, and community-based organizations.

3. **Integration with Existing Systems:** A national policy should be integrated with existing emergency management systems, ensuring seamless coordination and cooperation between various stakeholders at the local, regional, and national levels. Close collaboration with emergency response agencies, healthcare providers, and community organizations is essential for effective implementation.

4. **Sustained Funding:** Adequate funding is crucial for the successful implementation and sustainability of a national policy on family emergency and disaster preparedness. Continued investments in research, training, infrastructure, and public awareness campaigns are needed to ensure the long-term effectiveness of such a policy.

As nations face the increasing challenges posed by natural disasters and emergencies, the development of a comprehensive family emergency and disaster preparedness plan becomes essential. By addressing the challenges and considering the critical factors highlighted, policymakers can craft a national policy that promotes effective risk assessment, public education, resource allocation, and collaboration, ultimately leading to enhanced family resilience and a prompt and coordinated response during times of crisis

CONCLUSION

Implementing a national policy on family emergency and disaster preparedness is imperative to enhance the resiliency of individuals, families, and communities in the face of emergencies and disasters. The benefits of such a policy, including increased resilience, timely response, reduced dependency, and community cohesion, outweigh the challenges and considerations associated with its implementation. By providing families with the necessary tools, knowledge, and resources, a national policy can significantly contribute to reducing the impact of emergencies and disasters on individuals and communities.

The national policy will emphasize the importance of education and training at the family level, including the development of emergency plans, communication strategies, and acquiring essential supplies. It will also stress the need for collaboration between government agencies, NGOs, and community organizations to ensure effective coordination and response during emergencies. Additionally, the policy will commend the use of technology, such as mobile applications and online resources, to enhance family preparedness.

RECOMMENDATION

The proposed national policy will outline a roadmap for the implementation and evaluation of family emergency and disaster preparedness programs. It will identify the roles and responsibilities of various stakeholders, establish mechanisms for monitoring and evaluation, and outline strategies for continuous improvement. The policy will also address the financial and resource implications of implementing such programs and explore potential funding sources.

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PERCEPTION OF MOTHERS IN HOME CARE PRACTICES IN GMA, CAVITE: BASIS FOR COUNSELLING PROGRAM

Rowee M. Marfil
Melvin E. Eballe

INTRODUCTION

The researchers conducted this study to determine mothers' abilities in terms of home care practices in child rearing, family awareness, home management, and design and sewing and textiles to allow them to develop their capabilities to explore large roles outside of their home and use this opportunity to get a job that they are comfortable with. The home environment which includes parenting practices is an important setting in the family and develops children's health behavior. This study aimed to determine the perception of mothers in home care practices in GMA, Cavite, Philippines

Roldan A. (2020) Home care practices enable families to effectively navigate this new way of living. Teaching children proper Home Economics (HE) skills in the areas of household resource management, consumer education, food preparation and preservation, hygiene and sanitation, nutrition, entrepreneurship, and clothing; will enhance their ability to cope with these changes. Home care practices incorporated various scientific disciplines as they sought to professionalize women's work and make it more effective in freeing them from their household chores.

According to Ibrahim (2010), because childcare is primarily the duty of women, the mother's understanding of childcare determines the kind and quality of care provided to the kid. The mother's degree of education influences her understanding and how she handles childcare and other home care difficulties. One's experience indicated a large gap in the mother's awareness of home care practices and difficulties.

The major goal of home care practices has always been to empower individuals to gain control over their life. Home care has effectively remained aware of emerging demands, concentrating on the competencies required for the welfare of the family and the local community.

METHODOLOGY

The descriptive research methodology utilized in the study allowed the researchers to investigate all of the intricacies of the many factors that came into play in the investigation. The study established the profile of the respondents in terms of age, educational level, economic condition, and community. A Google form survey questionnaire was used to learn about mothers' perceptions of home care methods in the areas of child-rearing, family awareness, house management and design, and sewing and textiles. Purposive sampling was utilized in the study to pick respondents from selected barangays in the municipality of General Mariano Alvarez, Cavite.

The frequency and percentage are used to determine the profile of the respondents in terms of age, educational attainment, economic status, and community. The use of weighted mean to know the perception of mothers in home care practices. This study used the chi-square in determining the significant relationship between the perception of mothers in home care practices in terms of child-rearing profile, the perception of mothers in home care practices in terms of home management and design, sewing and textile and profile variables

RESULTS AND DISCUSSION

Table 1
The Demographic Profile of the Respondents

	Frequency	Percentage
Age		
42-64	15	30
20-41	35	70
Education		
High school	23	46
College undergraduate	20	40
College Graduate	7	14
Economic status		
Lower class	12	24
Middle class	38	76

Table 1. revealed that most age of mothers in the bracket are 20-41 years of age which is 70% of the population and 15% are ages 42-64 years of age. Most of the respondents are high school graduates which has a frequency of 23 or 46%, College Undergraduates a frequency of 20 or 40%, and College Graduates 7 or 14% of the population. Additionally, 38 of 76 % of the respondents belong to Middle-class status and 12 or 24% belong to the lower class.

Table 2
The Perceptions of Mothers in Home Care Practices

Perception	Mean	Interpretation
Child-rearing	4.58	Strogly Agree
Family Awareness	4.63	Strogly Agree
Home Management and Design	4.40	Agree
Sewing and Textiles	3.95	Agree

Table 2 shows the perceptions of mothers in Home Care practices. The table shows that Child-Rearing has a computed mean of 4.58, and Family Awareness has a computed mean of 4.63 both are Interpreted as Strongly Agree. However, Home Management and Design has a computed mean of 4.60, and Sewing and Textiles has 3.95 as mean which are both interpreted as Agree.

Table 3
Relationship Between Assessment of Perception the of Mothers in Home Care Practices in Terms of Child Development

Profile-Variables	p-value	Conclusion	Interpretation
Age	0.174	Accept Ho	Not significant
Educational Attainment	0.926	Accept Ho	Not significant
Economic Status	0.071	Accept Ho	Not significant

Table 3 illustrates the respondent's profile as to Age, Educational Attainment, and Economic Status supported by computed p-value of 0.174, 0.926, and 0.071 all are greater than at 0.05 level of significance. Thus, the null hypothesis is accepted, therefore there is no difference in the assessment of the respondents on the perceptions of mothers in home care practices in terms of Child development.

Table 4
Relationship Between Assessment of Perception the of Mothers in Home Care Practices in Terms of Family Awareness

Profile-Variables	p-value	Conclusion	Interpretation
Age	0.152	Accept Ho	Not significant
Educational Attainment	0.143	Accept Ho	Not significant
Economic Status	0.096	Accept Ho	Not significant

Table 4 illustrates the respondent's profile as to Age, Educational Attainment, and Economic Status supported by computed p-value of 0.152, 0.143, and 0.096 all are greater than at 0.05 level of significance. Thus, the null hypothesis is accepted, therefore there is no difference in the assessment of the respondents on the perceptions of mothers in home care practices in terms of family awareness.

Table 5
Relationship Between Assessment of Perception the of Mothers in Home Care Practices in Terms of Home Management and Design

Profile-Variables	p-value	Conclusion	Interpretation
Age	0.916	Accept Ho	Not significant
Educational Attainment	0.573	Accept Ho	Not significant
Economic Status	0.498	Accept Ho	Not significant

Table 5 illustrates the respondent's profile as to Age, Educational Attainment, and Economic Status supported by computed p-value of 0.916, 0.573, and 0.498 all are greater than at 0.05 level of significance. Thus, the null hypothesis is accepted, therefore there is no difference in the assessment of the respondents on the perceptions of mothers in home care practices in terms of home management and design.

Table 6
Relationship Between Assessment of Perception the of Mothers in Home Care Practices in Terms of Sewing and Textiles

Profile-Variables	p-value	Conclusion	Interpretation
Age	0.808	Accept Ho	Not significant
Educational Attainment	0.944	Accept Ho	Not significant
Economic Status	0.238	Accept Ho	Not significant

Table 6 illustrates the respondent's profile as to Age, Educational Attainment, and Economic Status supported by computed p-value 0.808, 0.944, and 0.238 all are greater than at 0.05 level of significance. Thus, the null hypothesis is accepted, therefore there is no difference in the assessment of the respondents on the perceptions of mothers in home care practices in terms of Sewing and Textiles

CONCLUSION AND RECOMMENDATION

In light of the findings, the perception of mothers in terms of child-rearing, family awareness, home management and design, and sewing and textiles have shown no significant relationship to the profile variable. Training about sewing and textiles and making an output that turned out as livelihood. A seminar for time management in doing the household chores for an organization for children and counseling on family care is suggested. Further the barangay may consider the implementation of livelihood program that will enhance the skills of the mothers, and lastly Encourage the Mothers to undertake Technical Education And Skills Development Authority (TESDA) trainings and certification.

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EFFECTS OF COLLEGE FACULTY WORK ORIENTATION ON THEIR ACADEMIC JOB SATISFACTION

Joseph T. Moraca

INTRODUCTION

The significant event of the 21st century is the birth of modern ideas and technologies, specifically electronic digital computer development. Much more with the emergence of the new normal education, this pandemic brings impact and already affecting the educational enterprise in significant ways. From the traditional concept of the teaching process, the modular study today has become one of the various media to develop and equip individuals with the knowledge and skills as they output to build a happy life and better opportunities. Within the new normal, the situation presents a unique challenge to every teacher and educational leader's decision-making process and the manner of handling such a situation. Hence, sustaining the delivery of quality instruction to every school is indeed a challenge for the college faculty to respond to the issues, problems, and trends that are arising and will arise in the future due to the COVID-19 pandemic, which may also affect their work orientation and academic job satisfaction. Thus, the researcher studied college faculty' work practice and attitudes toward teaching during the COVID-19 pandemic.

According to Karalis (2020), what is worth studying after returning to normality, are the implications that have arisen for the day after, that is, what adjustments need to be made, the extent of the situation, and to define the basic dimensions of education and to learn in formal education systems and organizations amid educational disruptions. Moreover, Villanueva (2018) posited that the presence of Alternative Education in the secondary program recognizes the need for attractive student options. It also acknowledges the student's potential and capacities to prepare them for the world of work. College faculty are no longer young to acquire the basic knowledge as well as the values involved in the exercise of such skills. The desire to produce valuable articles for personal, school, home, or market use is easily aroused among college faculty when they are provided with stimulating experiences and are rewarded for satisfactory performance. Simply stated, values are what people prize in life. One's values provide a major basis for his decisions. Moreover, this is one of the tasks that help college faculty develop a sense of values concerning family and community life and sound ways of expressing these values. It is likewise concentrated on developing desirable work attitudes, basic work skills, and habits through learning situations relevant to everyday chores at home, school, and community.

Furthermore, Romero (2017) studied the work habits and values of Secondary College faculty. She found a significant relationship between college faculty' characteristics like civil status, age, highest educational attainment, teaching experience, and relevant work habits and values seminars. While Valcos (2018) evaluated the work values of Teaching and Non-Teaching Staff in a Catholic school, the findings were used as the basis for a values formation program. Work values of teaching and non-teaching were measured in terms of environmental, family, intellectual-achievement oriented, interpersonal, managerial, material, occupational, organizational, religious, and various scales. He found that good working conditions provide an optimum environment where the faculty can do their best work, and that faculty members prefer to stay longer with their families after working in school to attend to their needs. Activities like attending seminars or workshops related to instruction also are essential in improving the academic capability of the school staff. Regarding the college faculty' perception of work, occupational work values registered the highest while interpersonal and religious work values need to be developed or improved. He recommended that the school administrators may provide seminars, workshops, symposia, and values orientation programs to faculty members. According to him, a values formation program for faculty will address the signs of the time. Another is the inclusion of a statement of work value of the Public Schools should incorporate to the faculty manual to promote healthy values. In an eagerness to know the work values of college faculty, a study of Public-School college faculty using the Work Value Inventory Test (WVIT) by Donald Super and found out that all work values included in the WVIT were important to the college faculty except management, security, prestige, and variety which they considered as moderately important.

In light of these ideas, college faculty focus on academic and scientific knowledge in learning. Its major role is the attainment of the well-being of individuals and families, the improvement of life, and the preservation of values significant in life. Specifically, it is designed with the following objectives: To enable the students to acquire the new normal situation, to develop intellectual occupation or career; to enhance individual self-reliance and productivity in meeting human needs; and to develop desirable attitudes and values which will contribute to effective personal, family and community living. The main objective of this study was to determine the effects of college faculty' work orientation on their academic job satisfaction in state universities and colleges at national capital region. The findings of this study hope to provide the basis for school policymakers in terms of arriving at critical issues faced by college faculty as front liners in education, especially on their work status and job fulfillment.

This study draws theoretical support from Maslow's Hierarchy of Needs theory which states that humans are motivated to fulfill their needs in a hierarchical order. This order begins with the most basic needs before moving on to more advanced needs. According to this theory, the ultimate goal is to reach the fifth level of the hierarchy: self-actualization. There are five primary levels to Maslow's hierarchy of needs. These levels begin from the most basic needs to the most advanced needs. Maslow initially believed that a person needed to satisfy one level to begin pursuing other levels completely. A more modern perspective is that these levels overlap. As people reach higher levels, they are more motivated toward these levels. However, though their main focus is on higher levels, they will continue to pursue lower levels of the hierarchy but with less intensity. In this study, job satisfaction may be the ultimate goal of college faculty in their work orientation, affecting their status as individuals and people who belong to an organization.

This study used the IV-DV model. The college faculty work orientation (IV) was assessed regarding job, career, calling, socially embedded, and busyness. Meanwhile, academic job satisfaction (DV) was assessed in authority, supervision, policies, facilities, work, interpersonal relationships, commitment, salary, and workload. The solid line with the arrowhead indicates the assumed relationship between the independent and dependent variables.

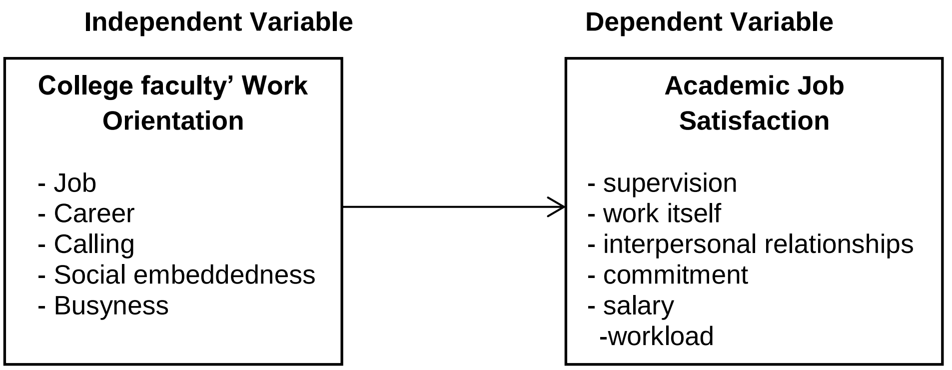

Figure 1. ***Conceptual Model of the Study***

The main problem of this study is “How may the effects of the college faculty’ work orientation on their academic job satisfaction be determined?” Specifically, this study sought answers on the following questions: 1. How may the college faculty’ work orientation be described in terms of: (a)job; (b). career; (c). calling; (d). social embeddedness; and, (e). busyness? 2. What is the level of college faculty’ academic job satisfaction in terms of: (a). supervision; (b) work itself; (c). interpersonal relationships; (d). commitment; (e). salary; and (f). workload? 3. Does the college faculty’ work orientation exert significant effects on their academic job satisfaction? and 4. What management implications may be drawn from the findings of the study?

METHOD

This study employed descriptive-correlational design. Descriptive-correlational research is a resign design that is used not only to describe the variables but also the relationship that naturally occur between or among them. In addition, descriptive research collects information from the variable which served as the basis for quantitative. Descriptive research does not manipulate data or any variables, but only observe and describe them as to frequencies, trends, and categories. Correlational research on the other hand makes use of correlational coefficient to determine the extent or relationship or correlation between variables (Descriptive Research and Correlational Research, 2021).

Guided by the universal sampling technique, the respondents of this study consisted of 577 academic plantilla holder among state universities and colleges at national capital region during the academic year 2020-2021.

Table 1
Respondents of the Study

SUC’s	Number of College faculty	
	Population	Percentage
SUC A	150	26
SUC B	169	29
SUC C	45	7.79
SUC D	79	13.69
SUC E	134	23.52
Total	**577**	**100**

To gather the necessary information for this study, the researcher used the Work Orientation Questionnaire developed and validated by Willner et al. (2020) and the Academic Job Satisfaction Questionnaire developed by Al-Rubaish et al. (2011) to determine the level of academic job satisfaction of college faculty. The Work Orientation Questionnaire measures the five factors of college faculty’ work orientation, namely, job, career, calling, socially embedded, and busyness which consists of 25 items. This instrument is reliable, as evidenced by .82. Meanwhile, the Academic Job Satisfaction Questionnaire measures the eight factors of job satisfaction: supervision, work itself, interpersonal relationships, commitment, salary, and workload, which consists of 45 items. It is reliable, as evidenced by Cronbach's alpha of 0.78.

The data-gathering procedure of this study will be conducted with utmost consideration to the privacy of the respondents. Permission to conduct the study in the SUCs will be sought through written correspondence with the university administrators. As for the respondents their participation will be oriented about the study and their consent sought before they take part in it. They will be asked to sign a written consent before they participate in the survey and focus group discussion. In order to ensure the confidentiality and liabilities of the respondents to this study, the following steps will be observed: (1) any information collected from you during your participation in this survey will be anonymous. You will not be identified as no name/s are required for participation in this study, and all identifying information will be de-identified in the recording and interpretation process. The data and information collected will only be accessed by the researcher. (2) Participation in this study is on a voluntary basis, even if you decided to participate in the survey, you may withdraw anytime. No adverse action will be taken against you for withdrawing your participation as respondents. Any information that you may not wish to reveal will be highly observed by the researcher. If you wish to terminate your participation in this study, please inform the researcher immediately, so that your responses can be separated and destroyed right at that point. During the data gathering, the respondents are given the prerogative to refrain from answering questions and their request for this will be granted and respected. All the data that will be gathered from the informants will be treated with the utmost confidentiality. Furthermore, the researcher will ensure the protection of the participants' identities and rights in accordance with the Data Privacy Act of 2012.

RESULTS

This study assessed the college faculty' work orientation regarding a job, career, calling, socially embedded, and busyness.

Table 2
College Faculty' Work Orientation in Terms of Job

Indicators	Mean	Interpretation
If I had enough money, I would not look for work	2.00	Not oriented
If I could receive a salary for staying home all day, I wouldn't work.	3.00	Neutral
My main reason for working is to earn a living that will allow me to lead my life outside of work	4.50	Oriented
My primary motivation for working is financial—to support my family and my lifestyle.	5.00	Highly oriented
When I'm not at work, I don't think about it much.	3.50	Oriented
Average	**3.60**	**Oriented**

It may be gleaned in Table 2 that the college faculty' work orientation in the job got an oriented rating, as evidenced by a 3.60 rating. The highest mean score noted that the primary motivation for the college faculty to work is financial to support their families and lifestyle. The findings imply that the college faculty are realistic about their orientation to the job – that they work because they need to provide for their families, and most of them are the breadwinners. Meanwhile, the lowest score was noted because college faculty did not believe that if they had enough money, they would not look for work. This means that college faculty are giving justice to the salary they receive for their work. They are aware that they need to work since they are given a salary for it, and they need to give their total commitment to doing their jobs faithfully.

Table 3
College Faculty' Work Orientation in Terms of Career

Indicators	Mean	Interpretation
I would like to advance in the professional hierarchy of my field and receive additional duties and responsibilities	5.00	Highly oriented
I hope to gain influence and power in my future workplace	5.00	Highly oriented
I hope to advance to a higher-level job 5 years after I start working.	4.50	Highly oriented
I expect to be better positioned in my professional field one day	5.00	Highly oriented
I hope to achieve a senior position at my future workplace	4.50	Highly oriented
Average	**4.80**	**Highly oriented**

Table 3 revealed that the college faculty' work orientation in terms of career got a highly oriented rating, as shown by the 4.80 mean percentage score. They would like to advance in the professional hierarchy of their field and receive additional duties and responsibilities (5.00), and they hope to gain influence and power in their future workplace (5.00). The findings indicate that the college faculty are highly oriented that they work and hope for their promotion someday. This is concerning the previous findings that provide financial support for the family. College faculty are working at the expense of their service to the organization. The same is true when they want to be promoted since promotion entails a higher salary, fringe benefits, and self-fulfillment. However, they do not have a clear vision of when they will be promoted and where to serve in a higher position in the field.

Table 4
College Faculty' Work Orientation in Terms of Calling

Indicators	Mean	Interpretation
I enjoy talking about my future work with others	5.00	Highly oriented
I view my future work as my life's mission	5.00	Highly oriented
My work will be one of the most important things in my life	5.00	Highly oriented
My work will make the world a better place	5.00	Highly oriented
My work will give my life meaning	5.00	Highly oriented
Average	**5.00**	**Highly oriented**

Data analysis showed that the college faculty' work orientation in calling got a highly oriented rating with a 5.00 means percentage score. The findings imply that college faculty are perfectly oriented with regard to a deeper meaning of their work. They think that their work will make them happier and more contented in life. Also, they believe that work is important as it would make a change in society and transform the lives of the learners as future leaders.

Table 5
College Faculty' Work Orientation in Terms of Social Embeddedness

Indicators	Mean	Interpretation
My future job will be an opportunity for me to be part of a group or team	5.0	Highly oriented
I would like to be socially connected to the people I work with	5.0	Highly oriented
I intend to put in effort to feel part of the organization I work in.	5.0	Highly oriented
I am looking for a workplace that will be like a family for me.	5.0	Highly oriented
I would like to establish relationships with my coworkers that extend beyond the workplace	5.0	Highly oriented
Average	**5.0**	**Highly oriented**

It may be perused in Table 5 that the college faculty' work orientation in terms of social embeddedness got a highly oriented rating, as evidenced by a 5.0 mean percentage score. The findings indicate that besides the personal impact of work in their lives, college faculty also know that work has social embeddedness or social impact. Collaboration, unity, professional networks, and friendship are also essential. Because they work in an organization, they must relate themselves with their coworkers, build rapport with their school heads and learners, and let the organization hone their talents, skills, and experience work meaningfully.

Table 6
College Faculty' Work Orientation in Terms of Busyness

Indicators	Mean	Interpretation
On days when I am not working, time seems to move very slowly	4.00	Oriented
It is hard for me to imagine how I would spend my time without work	4.00	Oriented
I dislike having nothing to do, so I would prefer to work	4.00	Oriented
When I am home during vacation, I get bored quickly	4.00	Oriented
Without work my life would be empty and dull	4.00	Oriented
Average	**4.00**	**Oriented**

With a closer look at Table 6, one could deduce that the college faculty' work orientation in busyness got an oriented rating, as evidenced by the 4.00 mean percentage. The findings indicated that the college faculty have a good attitude towards work since it is very important for them to utilize their time at work as they used to function all the time. It means that work has already been part and parcel of their lives. College faculty' job satisfaction was assessed in authority, supervision, policies and facilities, work, interpersonal relationships, commitment, salary, and workload.

Table 7
College Faculty' Job Satisfaction in Terms of Supervision

Indicators	Mean	Interpretation
My immediate supervisor treats staff fairly	3.50	Satisfied
I can trust my immediate supervisor	3.58	Satisfied
My immediate supervisor does a good and efficient job	4.65	Highly Satisfied
My immediate supervisor uses positive feedback with staff	4.55	Highly Satisfied
No administrative tension with my immediate supervisor	4.60	Highly Satisfied
Average	**4.17**	**Highly Satisfied**

With a closer look at Table 8, one could deduce that the college faculty' job satisfaction in terms of supervision got a highly satisfied rating, as evidenced by a 4.17 mean percentage score. This means that college faculty believe in the credibility and competencies of their immediate supervisor as they are being given positive feedback and just treatment.

Table 8
College Faculty' Job Satisfaction in Terms of Work Itself

Indicators	Mean	Interpretation
I have freedom of decision how to accomplish my assigned	4.50	Highly Satisfied
I have freedom of choice when performing my duties	4.53	Highly Satisfied
Flexible work procedures	4.56	Highly Satisfied
Clear job position, scope and responsibilities	3.50	Satisfied
I have sufficient professional authority and autonomy at work	4.60	Highly Satisfied
Average	**4.34**	**Highly Satisfied**

It may be gleaned in Table 10 that the college faculty' job satisfaction in work itself got a high level of satisfaction as it garnered a 4.34 mean percentage score. This means that the college faculty have the freedom to decide how to accomplish assigned task

Table 9
College Faculty' Job Satisfaction in Terms of Interpersonal Relationship

Indicators	Mean	Interpretation
Sense of friendship and team spirit with colleagues	4.64	Highly Satisfied
Work relations are satisfactory	4.78	Highly Satisfied
Good interpersonal communication and cooperation	4.68	Highly Satisfied
Coordinated and integrated activities	4.89	Highly Satisfied
Chances for socialization with colleagues during work	4.59	Highly Satisfied
Average	**4.71**	**Highly Satisfied**

One could deduce in Table 11 that the college faculty' job satisfaction in terms of interpersonal relationships got a higher level of satisfaction, as shown by the 4.71 mean percentage. This implies that college faculty can build a friendship with their colleagues since a good working environment entails harmonious relationships with the people in the organization. In this view, they are highly satisfied with their co-workers journeying together by findings support despite the many tasks.

Table 10
College Faculty' Job Satisfaction in Terms of Commitment

Indicators	Mean	Interpretation
I am ready to put extra efforts to accomplish my work	4.89	Highly Satisfied
I am aware of quality concepts while performing my duties	4.90	Highly Satisfied
I have a high degree of loyalty to this school	4.89	Highly Satisfied
I have clear achievable goals and standards for my position	4.96	Highly Satisfied
Average	**4.91**	**Highly Satisfied**

It may be perused in Table 12 that the college faculty' job satisfaction in terms of commitment got a highly satisfied rating as revealed by a 4.91 mean percentage score. College faculty are not an issue because they are committed to doing their job and accomplishing goals despite the hardships, challenges, and difficulties they encounter, especially during the pandemic. They do every single detail to continue learning and produce excellent outcomes unconditionally.

Table 11
College Faculty' Job Satisfaction in Terms of Salary

Indicators	Mean	Interpretation
My salary is fair and sufficient	4.40	Satisfied
In general, I am satisfied with my job	4.45	Satisfied
The school has clear policies regarding salaries and allowances	4.49	Satisfied
My salary is higher than other college faculty in private school	4.69	Highly Satisfied
Average	**4.51**	**Highly Satisfied**

A closer look at Table 13 showed that the college faculty' job satisfaction in terms of salary got a high level of satisfaction as it got a 4.51 mean percentage score. Despite college faculty' aim for a higher salary, they still believe that salary is sufficient and fair as the government releases clear salary policies. Compared to private school college faculty, their salaries are higher

Table 12
College Faculty' Job Satisfaction in Terms of Workload

Indicators	Mean	Interpretation
My required workload reduces the quality of performance	4.20	Satisfied
My work does not make me stressed	3.50	Satisfied
I can accomplish my assigned workload	3.60	Satisfied
I get the necessary information to accomplish my work	4.18	Satisfied
Average	**3.87**	**Satisfied**

Table 14 presented that the college faculty' job satisfaction in terms of workload got a satisfactory rating as it got a 4.51 mean percentage score. The findings imply that the college faculty' workload is determined based on their capacity while considering the spirit of justice and equality. Although some are stressed, they can still accomplish their work with passion, commitment, and colleague support.

Effects of College faculty' Work Orientation on their Job Satisfaction

In this study, it was stated in the null hypothesis that college faculty' work orientation does not significantly affect their job satisfaction. To determine this, the data were subjected to multiple correlations and regression analysis, and the data gathered were summarized in Table 15.

Table 15
Regression Analysis of College Faculty' Work Orientation on Their Job Satisfaction

Variables	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	7.689	0.292		26.344	0
Job	0.017	0.022	0.05	0.757	0.450
Career	0.389	0.068	0.012	1.185	**0.045**
Calling	0.437	0.024	0.122	1.834	**0.038**
Social Embeddedness	0.687	0.028	0.345	2.457	**0.015**
Busyness	0.018	0.026	0.045	0.699	0.485

r-squared = .079
r-value = .689
f-value = 4.643
p-value = .000
alpha = 0.05

Results of the regression analysis indicate that the five variables of the college faculty' work orientation significantly affect their job satisfaction to a different extent, as shown by the non-zero coefficients. With a closer look at the obtained B coefficients, one could deduce that three variables yielded B coefficients of 0.389 (career) and 0.437 (calling), and 0.687 (social embeddedness with associated probability less than the significance level set at 0.05. This means that the career, calling, and social embeddedness significantly affect college faculty' job satisfaction that for every unit improvement on variables mentioned, job satisfaction can be expected to increase by 0.389, 0.437, and 0.687, respectively. The rest of the variables also affect the college faculty' job satisfaction but not significantly.

Analysis of the sustained Beta coefficients would reveal that the five (5) variables of college faculty' work orientation, career, calling, social embeddedness, and busyness appeared to be the best predictors of job satisfaction.

The analysis of the variance of the regression of college faculty' work orientation on their job satisfaction revealed an F-value of 4.643 with a p-value of 0.000. Since the associated probability of the obtained F-value is higher than alpha (0.05), the null hypothesis is rejected. This means that college faculty' orientation exerts significant combined effects on their job satisfaction.

Furthermore, the R can denote multiple correlation coefficients between the different variables as a predictor of the dependent variable. It could be noted that the R is .689, which indicates a level of prediction, while the R-square figure is a statistical measure of the closeness of the data in the regression line as the coefficient of determination or simply the coefficient of multiple determination for multiple regression. It can be indicated that the explanatory powers of the dependent variable of 0.689 imply that changes in their job satisfaction account for 69% of the variation in the work orientation of college faculty.

Management Implications Derived from the Findings of the Study

Based on the findings of the study, the following are some bases for policymakers:

1. School administrators are challenged to exercise more active involvement and participation in planning and implementing school activities, decision-making, and responding to urgent demands. They are also challenged to tap their college faculty to build their confidence, inspire them in decision-making processes, and deepen school administrator-teacher relations through coaching and proper mentoring.

2. School policy makers may also pay attention to the following issues and concerns regarding college faculty' job satisfaction: workload and promotion. It is indeed a struggle for college faculty in public schools that while they do administrative work, which adds to their workload, they do not have the opportunity and avenues for job promotion and or delays in processing reclassifications.

3. Findings revealed that work orientation in terms of career, calling, and social embeddedness are the best predictors of college faculty' job satisfaction. In this view, school administrators are challenged to rationally explicate to college faculty about the integral role of college faculty, which would probably help resolve the issue of additional workloads, as well as the offering of rewards contingent on completion of work assignments and obligations.

DISCUSSION

It can be noted that the overall assessment of the college faculty' work orientation got an oriented rating, as evidenced by a 4.48 mean percentage score. This was specified through the following indicators: job (3.60), career (4.80), calling (5.00), social embeddedness (5.00), and busyness (4.00).

The college faculty' job satisfaction got a satisfied rating, as evidenced by the 4.33 mean percentage score. This was specified through these indicators: supervision (4.17), work itself (4.34), interpersonal relationships (4.71), commitment (4.91), salary (4.51), and workload (3.87).

Results of the regression analysis indicate that the five variables of the college faculty' work orientation significantly affect their job satisfaction to a different extent, as shown by the non-zero coefficients. With a closer look at the obtained B coefficients, one could deduce that three variables yielded B coefficients of 0.389 (career) and 0.437 (calling), and 0.687 (social embeddedness with associated probability less than the significance level set at 0.05. This means that the career, calling, and social embeddedness significantly affect college faculty' job satisfaction that for every unit improvement on variables mentioned, job satisfaction can be expected to increase by 0.389, 0.437, and 0.687, respectively. The rest of the variables also affect the college faculty' job satisfaction but not significantly. Analysis of the sustained Beta coefficients would reveal that the five (5) variables of college faculty' work orientation, career, calling, social embeddedness, and busyness appeared to be the best predictors of job satisfaction.

The analysis of the variance of the regression of college faculty' work orientation on their job satisfaction revealed an F-value of 4.643 with a p-value of 0.000. Since the associated probability of the obtained F-value is higher than alpha (0.05), the null hypothesis is rejected. This means that college faculty' orientation exerts significant combined effects on their job satisfaction.

Based on the findings of the study, the following are some management implications. (1). SUC's administrators are challenged to exercise more active involvement and participation in planning and implementing school activities, decision-making, and responding to urgent demands. They are also challenged to tap their college faculty to build their confidence, inspire them in decision-making processes, and deepen school administrator-teacher relations through coaching and proper mentoring. (2). Higher education policy makers may also pay attention to the following issues and concerns regarding college faculty' job satisfaction: workload and promotion. It is indeed a struggle for college faculty in public schools that while they do administrative work, which adds to their workload, they do not have the opportunity and avenues for job promotion and or delays in processing reclassifications. Lastly, Findings revealed that multifactor leadership in intellectual stimulation and contingent rewards are the best predictors of college faculty' intensified work, retention, and satisfaction. In this view, school administrators are challenged to rationally explicate to college faculty about the integral role of college faculty in school-based management, which would probably help resolve the issue of additional workloads, as well as the offering of rewards contingent on completion of work assignments and obligations.

CONCLUSIONS

Based on the results of the study, the following conclusions were drawn:

1. The college faculty' work orientation is generally high. The higher level of assessment was attributed to career, calling, and social embeddedness. An indication that college faculty have good thoughts regarding the importance of their promotion, personal contentment, and collaboration in the workplace.

2. College faculty' job satisfaction was also high, especially regarding interpersonal relationships, commitment, and salary. The findings indicate that despite college faculty' rants about the salary increase, they believe the passion and commitment ignite them to continue and stay in the organization. A good interpersonal relationship with colleagues could give them opportunities to learn and share.

3. From the five (5) variables of college faculty' work orientation, career, calling, social embeddedness, and busyness appeared to be the best predictors of job satisfaction. The results suggest that college faculty' work orientation leads one towards a heightened sense of satisfaction in the workplace.

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ASSESSING THE APPRECIATION AND RECOGNITION OF EARIST-MANILA AS EMPLOYEE RETENTION STRATEGIES

Dr. Hernan M. Oliveros

INTRODUCTION

Employees stand as the cornerstone of a company's prosperity, evolving into invaluable assets with each passing moment within the organization. Recognizing the pivotal role they play, a robust retention program emerges as a linchpin for organizational triumph, not only fortifying employee morale and motivation but also cultivating a reservoir of seasoned professionals. Elevating retention practices transcends the mere preservation of staff; it acts as a catalyst for a cascade of benefits, from curbing turnover rates and streamlining hiring processes to fostering a cadre of high-caliber, seasoned workforce. By conscientiously directing attention towards refining these practices, organizations can effectively mitigate turnover challenges, thereby ensuring the sustained expansion and enrichment of their workforce.

The EARIST Faculty Manual (2018-2019) is the institutional handbook that serves as a guide and reference for members of the institution. It typically contains essential information about policies, procedures, guidelines, and other important details relevant to the institution's operation. It meticulously delineates the suggestions and incentive awards system, strategically designed as retention strategies with the overarching goal of enhancing institutional well-being. This structured approach aims to cultivate a culture of creativity, innovation, efficiency, integrity, and productivity in public service. Within this framework, the institute formulated criteria for screening candidates eligible for Institute Level Awards. Noteworthy is the inclusive nature of these awards, as nominees are drawn from both academic and non-academic personnel, irrespective of their position or role within the various services and offices. This deliberate inclusivity ensures that recognition and incentives are bestowed upon deserving individuals, fostering a sense of equity and motivation across the entire spectrum of the institution. In this Faculty Manual, faculty and staff is not only expected to be outstanding scholars in their respective fields. They ought to embody the values that the institution upholds which, apart from academic freedom and rigorous scholarship, also include excellence, accountability, resourcefulness, integrity, service-oriented, and teamwork.

Robbins (2019) believed recognition is appropriate and necessary when it’s earned and deserved, while appreciation is important all the time. Jamal (2021) stated that the rewards system and job satisfaction of employees nowadays is the problem of every company. Pick (2023) explained that to increase employee retention, you must first understand the psychology behind Appreciation and Recognition. Royall et al, (2021), explained that an inclusive workplace is one that gives its employees a sense of value and makes them feel as though they are an important component of the company because its success depends on their contribution.

In today's difficult global economy, work related stress is high, stress along with other health impairing factors can affect work productivity, satisfaction, safety, absenteeism, turnover, and even workplace violence, which is why organizations are increasingly turning to occupational health psychology to develop, maintain, and promote the health of employees (Pfister, 2019). The dissatisfaction among some employees regarding the institution's recognition practices, leading to instances where they choose to leave the company. The sources of discontent vary, ranging from strained relationships with coworkers to issues within the workplace environment. In some cases, employees disengage due to overwhelming workloads, inadequate salary and rewards, and a sense of being undervalued for their contributions to the company and institutions. Despite the faculty and staff being well- informed about the rewards and recognition practices outlined in the faculty manual, there is a noticeable gap in actual acknowledgment. Peer motivation for professional development is lacking, often complicated by varying work environments. Although training opportunities for career improvement exist, employees still express a feeling of being undervalued. Additionally, there's a prevailing fear of potential layoffs.

So, this study aims to use appreciation and recognition instrument used by EARIST Administration to assess the level of retention of staff and faculty members in the Eulogio "Amang" Rodriguez Institute of Science and Technology (EARIST). This research would like to assess the institutional programs in recognizing excellent employees of the institution. In addition, encountered problems by the employees will be included in this research.

METHODOLOGY

Research Design

The descriptive research method is usually defined as a type of quantitative research, though qualitative research can also be used for descriptive purposes. The research design should be carefully developed to ensure that the results were valid and reliable. Description research is to find a piece of valid and reliable information by providing facts for which were scientific about the nature of objects and persons. Hence, the researcher wants to find out the truth.

Population and Sampling

The respondents of the study are composed of were seventy-two (72) full-time faculty employees in various departments and twenty-eight (28) full-time staff in different offices a total of one-hundred (100) staff and faculty personnel of Eulogio "Amang" Rodriguez Institute of Science and Technology (EARIST-Manila). The study made use of purposive-convenience sampling. Purposive sampling relies on the judgment of researchers when choosing the best-fit participants that were relevant to the research context. Purposive sampling allows the researcher to gather subjective information, resulting in more informative and precise research results. The sampling unit being studied is not a representation of the population but rather for researchers wanting to pursue qualitative or mixed-methods research design.

Table 1
Faculty Respondent As to Educational Attainment

Educational Attainment	Faculty		Staff		Total	
	f	%	f	%	f	%
Doctorate Degree	24	33.33	3	10.71	27	27
Doctorate with earned units	6	8.33	2	7.14	8	8
Master's Degree	9	12.50	3	10.71	12	12
Master's with earned units	28	38.89	5	17.86	33	33
Bachelor's Degree	5	6.94	15	53.57	20	20
Total	**72**	**100**	**28**	**100**	**100**	**100**

As represented in Table 1, distributions of respondents as to educational attainment are as follows: 33 or 33.00 percent are masters with earned units, 27 or 27.00 percent have doctorate degree, 20 of 20.00 percent have bachelor's degree, 12 or 12.00 percent have master's degree, and 8 or 8.00 percent are doctorate with earned units. most respondents in terms of Faculty members are master's with earned units and staff are obtained bachelor's degree.

Research Instrument

The research instruments utilized to gather data had included stated below:

A survey questionnaire developed by the researcher was used to evaluate appreciation and recognition by the Faculty and Staff of EARIST. It was composing of two parts: Part I was designed to gather the demographic profile of the respondents. The Part II was designed to allow respondents to express how essential they view employees' appreciation and recognition.

After perusing the literature, a draft survey questionnaire was presented and submitted to the adviser and panelists for comments and suggestions. The revised questionnaire was then distributed to two respondents to test run the questionnaire. The suggestions, corrections and recommendations were collated and reflected in the questionnaire for modification purposes.

The study adopted content validity which indicated whether the test items represented the content that the test was designed to measure. The pilot study assisted in determining accuracy, clarity, and suitability of the instruments. It helped identify inadequate and ambiguous items such that those that failed to measure the variables were modified or disregarded completely and new items added. Validation through pre-survey will be administered to faculty and staff employees who were involved in the study. The conducted survey questionnaire started from May 14, 2023 to May 25, 2023 for Academic Year 2022-2023.

Data Gathering Procedures

The following approach and course of action were observed in gathering the needed data for the study. The researcher secured a letter of approval from the operation authority of the EARIST-Manila Campus in conducting the survey to the faculty and staff. The data were collected and compile and evaluate the accumulated data and information with the support and assistance of the statistician and the adviser. Analyze and interpret the results of the data with the help of an adviser. Present the results of the data in graphical and descriptive form of presentation.

The data collection started with the acquisition of necessary permissions. A formal letter of approval was obtained from the operational authority of the EARIST-Manila Campus, granting permission to conduct a survey among the faculty and staff.

Subsequently, data gathering ensued, and the collected information underwent a thorough process of compilation and evaluation. The researcher collaborated with a proficient statistician and sought guidance from the adviser throughout this phase. The accumulated data were rigorously analyzed, and results were interpreted in collaboration with the adviser, ensuring a comprehensive and accurate understanding.

To enhance the clarity of presentation, the study utilized graphical and descriptive formats, effectively conveying the findings. This multi-faceted approach, incorporating methodical data collection, expert collaboration, and clear presentation, strengthened the integrity and comprehensibility of the study's outcomes.

According to LaMarca (2011), Likert scales are more advantageous and universal methods for survey collection that are easily understood. since it does not require the participant to provide a simple and concrete yes or no and it does not force them to take a stand on a specific topic but allows them to respond with a degree of agreement thus making it easier to answer with a manner of choosing to agree, disagree or to be neutral. Moreover, the responses are easily quantifiable and subjective to computation.

The concept of the boundary of the numerals will be used as follows.

Employee recognition and appreciation practices

Scale	Range	Verbal Interpretation	Symbol
5	4.20-5.00	Strongly Agree	SA
4	3.40-4.19	Agree	A
3	2.60-3.39	Neutral	N
2	1.80-2.59	Disagree	D
1	1.00-1.79	Strongly Disagree	SD

Problem Encountered in the Employee Appreciation and Recognition

Scale	Range	Verbal Interpretation	Symbol
5	4.20-5.00	Highly Encountered	HE
4	3.40-4.19	Encountered	E
3	2.60-3.39	Moderately Encountered	ME
2	1.80-2.59	Least Encountered	LE
1	1.00-1.79	Not Encountered	NE

RESULTS AND DISCUSSIONS

The assessment of the established practices in recognizing employees of EARIST-Manila as to recognition and appreciation rated as Agree with an overall weighted mean of 4.19 is tabulated in Table 2. Four (4) items rated as Strongly Agree, namely: fully understands the reward and recognition practices of the institution with a composite weighted mean of 4.25 as rank 1; provides employee evaluation of an employee's work performance to recognize and appreciate their contribution in the organization with a composite weighted mean of 4.24 as rank 2; and ensures that recognition and appreciation are equally received by every employee; and appreciates and recognizes employee's achievement with both the composite weighted mean of 4.21 as rank 3 and 4. One (1) item rated as Agree which is recognized appropriately when they perform well at their regular duties with a composite weighted mean of 4.04 as rank 5.

As to assessments of the groups of respondents on the established practices in recognizing employees of EARIST-Manila as to recognition and appreciation are as follows: staff rated as Strongly Agree with an overall weighted mean of 4.25, and faculty rated as Agree with an overall weighted mean of 4.12.

It only shows that the school has fulfilled the objectives for rewards and recognition practices which is to encourage, recognize and retain the employees. As stated in the EARIST Faculty Manual (2018), the institution shall encourage creativity, innovativeness, efficiency, integrity, and productivity in the public service by recognizing and rewarding the employees for their suggestions, inventions and other personnel efforts that contribute to the improvement and accomplishment of the institutions.

Table 2
Established Practices in Recognizing Employees of EARIST-Manila As to Recognition and Appreciation

Indicators	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. Ensures that recognition and appreciation are equally received by every employee.	4.06	A	4.36	SA	4.21	SA	3.5
2. Provides employee evaluation of an employee's work performance to recognize and appreciate their contribution in the organization.	4.18	A	4.29	SA	4.24	SA	2
3. Recognizes appropriately when they perform well at their regular duties.	4.04	A	4.04	A	4.04	A	5
4. Appreciates and recognizes employee's achievement.	4.10	A	4.32	SA	4.21	SA	3.5
5. Fully understands the reward and recognition practices of the institution.	4.24	SA	4.25	SA	4.25	SA	1
Overall Weighted Mean	**4.12**	**A**	**4.25**	**SA**	**4.19**	**A**	

Legend:

Range	*Scale*	*Verbal Interpretation*	*Symbol*
5	*4.20-5.00*	*Strongly Agree*	*SA*
4	*3.40-4.19*	*Agree*	*A*
3	*2.60-3.39*	*Neutral*	*N*
2	*1.80-2.59*	*Disagree*	*D*
1	*1.00-1.79*	*Strongly Disagree*	*SD*

In support of the results of the findings, Jamal (2021) proved the rewards and recognition systems are a huge help to the organization to form job involvement, boost morale participation in decision-making, task significance and recognition that creates a positive and cooperative atmosphere and commitment of employees. In this regard, the recognition and rewards practice should not only come up with monetary rewards but also develop new strategies to promote productivity and commitment of individual.

Table 3
Established Practices in Recognizing Employees of EARIST-Manila As to Job Security

Indicators	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. The security that the job provides guarantees a long-term stay in the workplace.	4.29	SA	4.39	SA	4.34	SA	1
2. Faculty and staff have the fear of being laid off.	3.40	A	3.54	A	3.47	A	5
3. Career mobility is encouraged within the organization to help improve the skills set of every employee.	4.10	A	4.04	A	4.07	A	2
4. There is no problem in regard to regularization.	3.88	A	3.93	A	3.91	A	4
5. Experience being rewarded for doing the job well that leads to staying in the workplace even more.	3.90	A	4.07	A	3.99	A	3
Overall Weighted Mean	**3.91**	**A**	**3.99**	**A**	**3.95**	**A**	

As shown in Table 3, the assessment of the established practices in recognizing employees of EARIST-Manila as to job security rated as Agree with an overall weighted mean of 3.95. One (1) item rated as Strongly Agree which is the security that the job provides guarantees a long-term stay in the workplace with a composite weighted mean of 4.34 as rank 1. Four (4) items rated as Agree, such as: career mobility is encouraged within the organization to help improve the skills set of every employee with a composite weighted mean of 4.07 as rank 2; experience being rewarded for doing the job well that leads to staying in the workplace even more with a composite weighted mean of 3.99 as rank 3; there is no problem in regard to regularization with a composite weighted mean of 3.91 as rank 4; and faculty and staff have the fear of being laid off with a composite weighted mean of 3.47 as rank 5.

As to assessments of the groups of respondents on the established practices in recognizing employees of EARIST-Manila as to job security rated as Agree, these are: staff with an overall weighted mean of 3.99, and faculty with an overall weighted mean of 3.91.

It determines that the job security as established practices in recognizing employees is acknowledged for the following purposes: Long-term Job Security, Career Mobility and Skills Set Improvement, Recognition Experiences for doing their job well, Guaranteed Regularization and the fear of being laid-off.

Ertürk (2022) confirmed that Job Satisfaction is influenced by many elements, including pay, incentives, working environment, career chances, loyalty to the company, and work-life balance that impacts the employee's performance and productivity. In connection with, the importance of being recognized leads employees to be loyal and stay in the institution with a long-term vision. Also, encouraging career mobility enhances every employee's skills set that is essential for them to be sufficient and effective to continuously improve and be beneficial in the institution.

Table 4
Established Practices in Recognizing Employees of EARIST-Manila As to Training and Development

Indicators	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. Provides sufficient necessary material and equipment to perform the work properly.	3.82	A	4.29	SA	4.06	A	4
2. Understands the broader professional goals of individual employees and provides training and development opportunities that support those endeavors.	4.00	A	4.25	SA	4.13	A	2
3. Provides training that helps increase the motivation level of employees.	3.89	A	4.32	SA	4.11	A	3
4. Provides training that design learning goals to enhance current work assignments and cultivate a career ready improvement	4.07	A	4.21	SA	4.14	A	1
5. There is an equal opportunity for all the employees to attend the training.	3.79	A	4.00	A	3.90	A	5
Overall Weighted Mean	**3.91**	**A**	**4.21**	**S A**	**4.06**	**A**	

As unveiled in Table 4, the assessment of the established practices in recognizing employees of EARIST-Manila as to training and development rated as Agree with an overall weighted mean of 4.06. All items rated as Agree, namely: provides training that design learning goals to enhance current work assignments and cultivate a career ready improvement with a composite weighted mean of 4.14 as rank 1; understands the broader professional goals of individual employees and provides training and development opportunities that support those endeavors with a composite weighted mean of 4.13 as rank 2; provides training that helps increase the motivation level of employees with a composite weighted mean of 4.11 as rank 3; provides sufficient necessary material and equipment to perform the work properly with a composite weighted mean of 4.06 as rank 4; and there is an equal opportunity for all the employees to attend the training with a composite weighted mean of 3.90 as rank 5. As to assessments of the groups of respondents on the established practices in recognizing employees of EARIST-Manila as to training and development are as follows: staff rated as Strongly Agree with an overall weighted mean of 4.21, and faculty rated as Agree with an overall weighted mean of 3.91.

It identifies that the training and development practices in recognizing employees were provided, namely: create goals for learning to enhance current work, training and development opportunities that support them, and necessary material and equipment. In addition, this boosts motivation, and commitment to the organization. Diwakar (2019) reiterated that job-related training helps employees better understand the professional goals that support their job, enhance their work tasks, and develop a career that will make them more confident.

As depicted in Table 5, the assessment of the established practices in recognizing employees of EARIST-Manila as an inclusive workplace environment rated as Agree with an overall weighted mean of 4.10. One (1) item rated as Strongly Agree which is someone who encourages and motivates them to enhance their professional development at work with a composite weighted mean of 4.27 as rank 1. Four (4) items rated as Agree, such as: provides an environment for free and open expression, ideas, opinions, and beliefs with a composite weighted mean of 4.13 as rank 2; fosters a workplace that allows employees to be themselves at work without fear with a composite weighted mean of 4.12 as rank 3; able to engage with diverse groups of people and get networking opportunities with a composite weighted mean of 4.04 as rank 4; and the opinion of the employees is greatly valued and respected with a composite weighted mean of 3.96 as rank 5.

Table 5
Established Practices in Recognizing Employees of EARIST-Manila As to Inclusive Workplace Environment

Indicators	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. The opinion of the employees is greatly valued and respected.	3.99	A	3.93	A	3.96	A	5
2. Able to engage with diverse groups of people and get networking opportunities.	3.96	A	4.11	A	4.04	A	4
3. Fosters a workplace that allows employees to be themselves at work without fear.	4.06	A	4.18	A	4.12	A	3
4. Provides an environment for free and open expression, ideas, opinions, and beliefs.	4.14	A	4.11	A	4.13	A	2
5. Have someone who encourages and motivates them to enhance their professional development at work	4.15	A	4.39	S A	4.27	SA	1
Overall Weighted Mean	**4.06**	**A**	**4.14**	**A**	**4.10**	**A**	

As to assessments of the groups of respondents on the established practices in recognizing employees of EARIST-Manila as an inclusive workplace environment rated as

Agree, these are: staff with an overall weighted mean of 4.14, and faculty with an overall weighted mean of 4.06.

It reveals that inclusive work environment practices in recognizing employees were offered, specifically: peer motivation for professional development, an environment with provision in freedom of expression, a workplace that helps employees be themselves, engagement with diverse groups and employees feeling valued and respected.

Zhenjing et al. (2022) pointed out that workers are more willing to integrate their extraordinary use of skills, abilities, and knowledge to achieve success in a welcoming and supportive workplace environment. It has been observed that the workplace environment stimulates employee commitment and employee achievement-striving ability which further improves employee performance. Furthermore, employees will be more productive and motivated at work if they are surrounded by supportive and encouraging people to accomplish their work tasks.

As summarized in Table 6, the overall assessment of the established practices in recognizing employees of EARIST-Manila rated as Agree with the grand mean of 4.08. All items rated as Agree, namely: recognition and appreciation with a composite weighted mean of 4.19 as rank 1; inclusive workplace environment with a composite weighted mean of 4.10 as rank 2; training and development with a composite weighted mean of 4.06 as rank 3; and job security with a composite weighted mean of 3.95 as rank 4.

Table 6
Summary on the Established Practices in Recognizing Employees of EARIST- Manila

Criteria	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	V I	
1. Recognition and Appreciation	4.12	A	4.25	SA	4.19	A	1
2. Job Security	3.91	A	3.99	A	3.95	A	4
3. Training and Development	3.91	A	4.21	SA	4.06	A	3
4. Inclusive Workplace Environment	4.06	A	4.14	A	4.10	A	2
Grand Mean	**4.00**	**A**	**4.15**	**A**	**4.08**	**A**	

Generally, the assessments of the groups of respondents on the established practices in recognizing employees of EARIST-Manila rated as Agree, such as: staff with the grand mean of 4.15, and faculty with the grand mean of 4.00.

It only shows that the faculty and staff have observed the established practices with regards to retention strategies in particular with Appreciation and Recognition, Job Security, Training and Development and Inclusive Workplace Environment.

As reflected in Table 7, the computed t-values are as follows: recognition and appreciation with 0.09890, job security with 0.06361, training and development with 0.23530, and inclusive workplace environment with 0.06558 were lower than the critical value of 1.86 with 8 degrees of freedom with 0.05 level of significance. Hence, there is no significant difference in the established practices in recognizing employees of EARIST-Manila as assessed by faculty and staff. Hence, the hypothesis is accepted.

Table 7
Comparative Assessment on the Employee Appreciation and Recognition Categories As Assessed By the Faculty and Staff

Indicator	Faculty		Staff		d f	t-value	Critical value	Decision	Interpretation
	W M	SD	W M	SD					
1. Recognition and Appreciation	4.12	0.007	4.25	0.016	8	0.09890	1.86	Accept Ho	Not significant
2. Job Security	3.91	0.110	3.99	0.094	8	0.06361	1.86	Accept Ho	Not significant
3. Training and Development	3.91	0.014	4.21	0.016	8	0.23530	1.86	Accept Ho	Not significant
4. Inclusive Workplace Environment	4.06	0.007	4.14	0.027	8	0.06558	1.86	Accept Ho	Not significant

Legend: level of significance – 0.05

Table 8
Problems Encountered on the established Retention Programs in Recognizing Employees of EARIST-Manila

Indicators	Faculty		Staff		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. Provides limited career / promotion opportunities.	3.86	E	3.75	E	3.81	E	1
2. Displayed favoritism / unfair treatment.	3.44	E	3.75	E	3.60	E	2
3. Employees felt disrespected at work.	3.17	ME	3.36	ME	3.27	ME	10
4. Tendency of administrators to neglect appreciation and recognition.	3.33	ME	3.46	E	3.40	E	5
5. Lack of appreciation and recognition resulting in employee turnover.	3.25	ME	3.39	ME	3.32	ME	8
6. Lack of communication between changes or decisions from administrators to faculty and staff causes confusion among information.	3.53	E	3.57	E	3.55	E	3
7. Workplace conflict is one of the reasons for employee turnover.	3.33	ME	3.39	ME	3.36	ME	6.5
8. Poor training leads to a number of challenges in the workplace that can also lead to increased employee frustration and demotivation at work.	3.28	M E	3.43	E	3.36	ME	6.5
9. The scarcity of job opportunities is a factor that employees retain to the institution.	3.14	ME	3.46	E	3.30	ME	9
10. A full work schedule causes employees to not attend training and seminars that are required in expertise enhancement.	3.40	E	3.57	E	3.49	E	4
Overall Weighted Mean	**3.37**	**ME**	**3.51**	**E**	**3.44**	**E**	

Legend:

Range	*Scale*	*Verbal Interpretation*	*Symbol*
5	*4.20-5.00*	*Highly Encountered*	*HE*
4	*3.40-4.19*	*Encountered*	*E*
3	*2.60-3.39*	*Moderately Encountered*	*ME*
2	*1.80-2.59*	*Least Encountered*	*LE*
1	*1.00-1.79*	*Not Encountered*	*NE*

As displayed in Table 8, the assessment of the problems encountered on the established practices in recognizing employees of EARIST-Manila rated as Encountered with an overall weighted mean of 3.44. Five (5) items rated as Encountered, these are: provides limited career / promotion opportunities with a composite weighted mean of 3.81 as rank 1; displayed favoritism / unfair treatment with a composite weighted mean of 3.60 as rank 2; lack of communication between changes or decisions from administrators to faculty and staff causes confusion among information with a composite weighted mean of 3.55 as rank 3; a full work schedule causes employees to not attend training and seminars that are required in expertise enhancement with a composite weighted mean of 3.49 as rank 4; and tendency of administrators to neglect appreciation and recognition with a composite weighted mean of 3.40 as rank 5. Five (5) items rated as Moderately Encountered, namely: workplace conflict is one of the reasons for employee turnover; and poor training leads to a number of challenges in the workplace that can also lead to increased employee frustration and demotivation at work with both the composite weighted mean of 3.36 as rank 6 and 7; lack of appreciation and recognition resulting in employee turnover with a composite weighted mean of 3.32 as rank 8; the scarcity of job opportunities is a factor that employees retain to the institution with a composite weighted mean of 3.30 as rank 9; and employees felt disrespected at work with a composite weighted mean of 3.27 as rank 10.

As to assessments of the groups of respondents on the problems encountered on the established practices in recognizing employees of EARIST-Manila are as follows: staff rated as Encountered with an overall weighted mean of 3.51, and faculty rated as Moderately Encountered with an overall weighted mean of 3.37.

CONCLUSION

The established retention practices in Recognition and Appreciation, Job Security, Training and Development and Inclusive Workplace Environment were agreed. Consequently, the four sub-variables were ranked from highest to lowest as appreciation and recognition appears to top, inclusive workplace environment as the second, training and development as the third and job security as the least. This indicates that for the faculty and staff, it is more important for them to be appreciated and recognized along with having a workplace that has an inclusive environment than having job security because even if job security is guaranteed, the employees themselves have the right to decide whether they will stay in the institution or not.

Faculty and staff have similar assessments as to Appreciation and Recognition for retention strategies. The hypothesis is accepted if there is no significant difference in the established program in EARIST-Manila.

The identified problems by the faculty and staff in the established retention practices are divided into two results. Among the ten (10) presented problems, there are five (5) issues that rank the most encountered by the faculty and staff. These implies that the institution provides limited career/ promotion opportunities; displayed favoritism/ unfair treatment; lack of communication between changes or decisions from administrators to faculty and staff causes confusion among information; a full work schedule causes employee to not attend training and seminars that are required in expertise enhancement; and tendency of administrators to neglect appreciation and recognition. While the remaining five (5) issues presented are moderately encountered, which means the faculty and staff experience it however, it is less likely to be affected by the way employees want to be recognized and appreciated.

RECOMMENDATIONS

Based on the findings and conclusion the following recommendations are drawn: Update the EARIST Faculty Manual with the elevated and more precise appreciation and recognition practices that will meet the needs of both the faculty and staff to continue the existing system in which can provide a more specific and aligned policies and programs that is being performed in the institution regarding the necessity of the academic and non-academic personnel.

Establish an intervention program to improve the retention practices that are beneficial to both the faculty and staff for them to be more motivated and productive in the workplace.

An employees' engagement and commitment may emerge from the cooperative efforts of the institution and their co-employees in identifying the problems that cause employees to be demotivated at work. The institution should work out a specific plan of action to identify the work-related issues evolving in any area or field. Such supervision promotes a healthy environment in which continuous improvement becomes an essential part of recognizing the efforts and contributions of the employees.

Explore ways in which they can help the institution to be more connected with their employees to provide an efficient system like workshops, conferences and team building that supports career growth opportunities, engagement, and collaboration, and foster a culture of recognition and appreciation method fairly for everyone.

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ANALYSIS OF THE COMPETITIVENESS OF THE CULTURAL CENTER OF THE PHILIPPINES (CCP): BASIS FOR A STRATEGIC INTERVENTION

Jhon Ven Saint L. Pasahol

INTRODUCTION

Competitiveness is a multidimensional concept whose understanding was lifted from economics, management, history, politics, and culture. With the integration of culture, science, and technology backgrounds in the digital era, cultural and creative industries demonstrate a country's economic growth through revenue generation, exports, and employment and have become major drivers of the economic prosperity and have become a critical strategy for enhancing the core competitiveness of national economies.

The market dynamic makes the cultural industry maintain its position and improve its share in several related competitive markets. The more creative the nation is, the more possibilities exist to survive in this global world. The cultural center carries out multi-functional programs for its market-—for the retention, cherishing, and transference of national culture and the strengthening of national image. It is recognized that culture has an enormous impact on the economy and development and is considered central to any form of development in the pursuit of economic prosperity.

The competitiveness of a country or an industry is a complex concept that cannot be measured directly and requires extensive efforts for data collection. This study analyzes the competitiveness of the Cultural Center of the Philippines. The CCP was created in April 1966 by Executive Order No. 30 as a trust for the benefit of the Filipino people to preserve and promote Philippine culture in all its varied aspects.

Its constitutional provision on arts and culture can also be found in the 1987 Philippine Constitution in Article XIV (Education, Science, and Technology, Arts, Culture & Sports). It provides that the state shall, among others foster . . . popularize the nation's historical and cultural heritage as it constitutes the cultural treasure of the nation.

The CCP has produced and presented music, dance, theater, visual arts, literary, cinematic, and design events from the Philippines and worldwide for over 50 years. Its corporate strategic plan includes being the country's artistic cultural tourism, ecological, and commercial center. Unlike other cultural complexes worldwide that limit their facilities and services to artistic and cultural programs, the CCP Complex development will blend commerce, industry, the arts, tourism, and culture and be an urban ecological oasis catering to Filipinos from all walks of life. Likewise, it will be designed to be a tourism landmark that Filipinos can all be proud of.

The sources of competitive advantage that give its marketplace strategy potency include resources and capabilities, organization, mindset, and its place in the industry's ecosystem (involved in delivering a specific product or service through competition and cooperation). However, the focus of the study determines the competitive advantage of the CCP in its Leadership, Diversity Management, Cultural Relevance, Digital Communication, Ethical Marketing, Business Innovations, and Project Management. Furthermore, it also looks into the problems encountered to develop a strategic intervention.

A comprehensive understanding of the interaction between the cultural industry's competitiveness and economic growth is crucial. In its 50th of existence, as a former employee of the CCP, it is an honor and grateful to the system and a way of gratitude to contribute in its little way by analyzing the competitiveness of the CCP and proposing a strategic intervention. This study aims to determine the competitive advantage of the cultural industry (CCP).

Statement of the Problem

This study determines the competitive advantage of the Cultural Center of the Philippines that resulted in the proposed strategic intervention.

Specifically, it answers the following sub-problems:

1. How do the administrators, employees, and stakeholders assess the competitive advantage of the Cultural Center of the Philippines in terms of:

    1.1 Leadership;
    1.2 Diversity Management;
    1.3 Cultural Relevance;
    1.4 Digital Communication;
    1.5 Ethical Marketing;
    1.6 Business Innovations; and
    1.7 Project Management?

2. Is there a significant difference in the assessments of the three groups of respondents?

3. What are the problems encountered in reference to the following:

    3.1 Social Impact;
    3.2 Stakeholder;
    3.3 Internal Process;
    3.4 Learning & Growth; and
    3.5 Finance?

4. Is there a significant relationship between the competitive advantage and the problems encountered of the Cultural Center of the Philippines?

5. Based on the findings, what strategic intervention may be proposed?

6. How suitable, acceptable, and feasible is the proposed strategic intervention? is there a significant difference?

RESEARCH METHOD

This is a descriptive correlational study designed to determine the competitive advantage with the strengths, weaknesses, opportunities, and threats of the Cultural Center of the Philippines.

A correlational (or causal) study identifies the antecedents of a present condition. This study investigates the relationship between the competitive advantage and problems encountered by the Cultural Center of the Philippines. It also recognizes trends and patterns in data but does not go so far in its analysis to prove causes for these observed patterns.

Research Locale

The study was conducted in the Cultural Center of the Philippines with 520 population comprising Administrators (30), Stakeholders (250), and Employees (240).

Respondents of the Study

The respondents of the study comprising 15 Administrators, 75 Employees, and 210 Stakeholders.

Research Instrument

The main instrument used in the study is a researcher-made survey checklist which was developed through several readings from literature and studies. The survey instrument underwent several revisions before it was administered to the target respondents. The survey instrument was validated by the experts. The survey questionnaire consists of the following parts:

Part I focuses on the profile of the respondents in terms of Type of respondents, Age, Sex, and Civil Status.

Part II determines the competitive advantage of the Center in terms of leadership, diversity management, cultural relevance, digital communication, ethical marketing, business innovation, and project management.

Part III deals with the problems encountered about Social Impact, Stakeholders, Internal Processes, Learning & Growth, and Finance) of the Center.

Part IV is the assessment of the proposed output as to its Suitability, Acceptability, and Feasibility.

Statistical Tools Used

The following statistical tools for the interpretation of results according to sub-problems were used:

1. **Percentage**. This is used to get the percentages on the profile of the respondents.

2. **Weighted Mean.** This was used to determine the responses of the three groups of respondents in each variable presented.

3. **Analysis of Variance (F-Test).** It is used for unpaired small samples to reject or accept the hypothesis and to present significant differences in the responses of the respondents. This was used to compare the responses of the administrators, employees, and stakeholders.

4. Post-Hoc Pairwise Means Comparison. Post-hoc pairwise comparisons are commonly performed after significant differences showed in the results of F statistics. **Tukey-Kramer** was used to look into where the differences lie.

5. Pearson Correlation Moment r. This was used to determine if there exists a relationship between the competitive advantages and problems encountered.

SUMMARY OF FINDINGS

The salient findings of the study were as follows:

1. On the competitive advantage of the Cultural Center of the Philippines in terms of Leadership, Diversity Management, Cultural Relevance, Digital Communication, Ethical Marketing, Business Innovation, and Project Management

The administrators, employees, and stakeholders' respondents' assessment on Cultural Center of the Philippines' competitive advantage rated Excellent with a grand mean of 4.41.

2. On the significant comparison

The obtained computed F value of 66.2802 with 2 and 18 degrees of freedom is greater than the critical value of 3.55 at a 0.05 level of significance. Hence, the statistical decision was to reject the null hypothesis and verbally interpreted as significant.

3. On the problems encountered by the Cultural Center of the Philippines in terms of Social Impact, Stakeholders, Internal Process, Learning and Growth, and Finance

The problems encountered by the Cultural Center of the Philippines posited a Highly Evident with a grand mean of 4.49.

4. On the significant relationship between the competitive advantage and the problems encountered

The computed t-value of 5.7696 at 0.05 level of significance with degrees of freedom of 10 is greater than the critical value of 2.228. Therefore, the null hypothesis was rejected and interpreted as significant. Since the null hypothesis has been rejected, there is a significant relationship between the competitive advantage and the SWOT analysis of the Cultural Center of the Philippines.

5. On the proposed strategic intervention

Based on the findings of the study, a strategic intervention is proposed and presented in a matrix form with Key Areas, Objectives, Strategies & Activities, Time Frame, Person-In-Charge, Fund Source, and Performance Measures.

6. On the suitability, acceptability, and feasibility

The employees and stakeholders rated the proposed intervention as Suitable, Acceptable, and Feasible, as supported by composite mean values of 3.95, 4.08, and 4.00, respectively, with a mean value of 4.01. Hence, no significant difference is posited on the assessment by the two groups of respondents.

CONCLUSIONS

Based on the findings of the study, the following conclusions were:

1. The competitive advantage analysis of the Cultural Center of the Philippines was highly apparent and observed by the administrators of the Cultural Center of the Philippinese.

2. The stakeholders differ in their valuation in the analysis of the competitiveness of the Cultural Center of the Philippines in terms of leadership, diversity, cultural relevance, digital communication, ethical marketing, business innovation, and project management.

3. The problems encountered by the Cultural Center of the Philippines relative to stakeholders, learning & growth, and its financial aspects were not manifested as described by the stakeholders, employees and administrators.

4. There is sufficient evidence that competitive advantage depends how administrators addressed the problems encountered of the Cultural Center of the Philippines or vice versa.

5. The strategic intervention was developed and illustrated in a matrix form for easy reference by the implementor.

6. The proposed intervention can be considered by CCP management due to its suitability, acceptability, and feasibility.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations follows:

1. CCP administrators may adopt the proposed strategic intervention as it addresses the weakest link of the competitive advantage.

2. Since there is a differing perception by the stakeholders, CCP administrators should consider address the sentiments of their stakeholders.

3. Since no problems were identified, massive collaboration with the LGUs should be undertaken to involve the majority of the municipalities in the different regions.

4. Dissemination of the output should be considered by the management as it reflects the views and opinions of the employees, stakeholders, and other officials from the different department of the CCP.

5. Continuous coordination with the education sector and LGU should be intensified and a higher number of localities be declared as creative cities.

6. It is highly recommended for future researchers that further studies should be carried out to see whether there are any similarities, differences, and even research gaps in the findings.

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INSTRUCTIONAL PRACTICES AND EFFECTIVENESS CORRELATES TO INSTITUTIONAL ACADEMIC PERFORMANCE IN SELECTED STATE UNIVERSITIES AND COLLEGES IN METRO MANILA: BASIS FOR A PROPOSED INTERVENTION MEASURE

Dr. Allan Q. Quismundo

INTRODUCTION

In this world that is rapidly changing because of the inception of the industrial revolution 4.0, the mechanical engineering profession recognizes that there should be a transformation in the instructional practices of the institutions that offers engineering program.

All of these falls to the knowledge and instructional practice of the educators/faculty members of the engineering program. The researcher is compelled to investigate the mechanical engineering program's instructional practices. The researcher is confident that the outcomes of this study will help the country's mechanical engineering program to improve and upgrade in order to keep up with the world's rapidly changing requirements. Hence, this study.

The following research questions are raised:

1. How do the Dean/Department Heads, Faculty and students assess the practices of Bachelor of Science in Mechanical Engineering faculty members in selected State Universities and Colleges in Metro Manila in terms of:

    1.1 Classroom management and discipline;

    1.2 Curriculum instruction;

    1.3 Methodology and strategies in teaching;

    1.4 Evaluation;

    1.5 School-community linkages;

    1.6 Communication skills;

    1.7 Human relations skills;

    1.8 Mastery of the subject matter; and

    1.9 Research and extension?

2. Is there a significant difference among the assessment of the three (3) groups of respondents on the aforementioned variables?

3. What is the performance of the B.S. Mechanical Engineering in the Licensure Examinations for the last three (3) years?

4. Is there a significant relationship between the competence of faculty and the licensure examination performance?

5. What are the facilitating and hindering factors encountered by the respondents?

6. Based on the findings of the study, what intervention program may be proposed?

REVIEW OF LITERATURE

According to Lacson (2018), 21st century teacher has many characteristics that distinguish him from the traditional teacher.

First, teachers must think globally: Regardless of whether he/she teaches in a local or international school, everyone agrees that the world has shrunk. As educators, we must foster a new generation of global thinkers and doers. As a result, in addition to familiar facts and daily experiences, the instructor must offer instances and narratives from around the world.

Second, teachers must teach sensitivity to cross-cultural differences and diversity: Although students appear to work locally, they are unconsciously connected to students all over the world. Many students are likely to work in far-flung locations with various cultural contexts. They will have an advantage in future competitive workplaces because of their capacity to manage cultural differences.

Third, teachers must be digitally savvy: Regardless of their subject area, resource pools, or school settings, all teachers must regularly enhance their skills, particularly computer ones. With the advancement of technology, they must raise their game.

Fourth, teachers must form partnerships and alliances outside of the classroom: topic specialists must be enlisted to teach the curriculum so that it is successful and applicable in the real world. Listening to an educationist lecture via a video clip, for example, may be beneficial, but it is not a substitute for inviting an educationist into the classroom. Students benefit from opportunities such as meeting real-life educators, scientists, and topic experts with whom they can ask direct questions.

Fifth, inside the four walls, teachers must exchange learning: Teachers, learn just as much from students as students learn from teachers. The value and necessity of collaborative learning in the classroom must be accepted by the teachers. It pushes the boundaries of traditional classrooms by allowing students to learn at their own pace. It endows new meaning to teaching-learning process and help teachers to accept that learning never stops.

The Philippine Professional Standards for Teachers (2017) described the following 7 domains that are required by teachers to be effective in the 21st Century in the Philippines: Content knowledge and Pedagogy; Learning Environment; Diversity of Learners; Curriculum and Planning; Assessment and Reporting; Community Linkages and Professional Engagement; and Personal Growth and Professional Development, these standards describe the expectations of teachers increasing levels of knowledge , practice and professional engagement. At the same time the standards allow for teachers' growing understanding applied with sophistication across a broader and more complex range of teaching/learning situation.

Enumerated on the CHED memorandum order no.86 S. 2017 entitled "Policies, Standards and Guidelines for requirements common to all Bachelor of Science in Engineering and Bachelor of Engineering Program" the duties of an engineering faculty which shall be the announced policy and practice of the school/college of engineering/engineering technology wherein its faculty members are required to: follow a written course syllabus for each course; use library and audio-visual resources in teaching; participate in scheduled departmental meetings; participate in professional engineering /engineering technology society meetings, conferences and conventions; administer effective assessment measures to evaluate student achievement; follow the established grading system, which should have been explained to the students at the beginning of each course; improve teaching efficiency using innovative methods; and participate in service training programs for faculty members.

Understanding the trend in licensure performance of the candidate engineers may shed light on the status of the program as well as the need of the students for them to pass their respective board examinations. The analysis of variance of their performances in the licensure examinations can statistically prove whether their performance remained the same or may have increased/decreased during the four-year evaluation period. Being able to identify their performance per subject area as well as the variation of their overall performances may give direction to the school administrators and faculty members of the college on how to guide their students toward a better performance in the licensure examination.

Continuing to learn is universally accepted and expected by professionals and other stakeholders across all profession. However, despite changes in response to research findings about how professionals learn, many professional development and training (PD&T) practices still focus on delivery content rather than enhancing learning. In exploring reasons for the continuation of didactic practices in professional development, this article critiques the usual conceptualization of professional development through a review of recent literature across professions.

Indeed, the term *lifelong learning* has become a mantra, referred to in most political and academic polemics about the future of society and the role of professional in this future. The need for continuing professional development and training (PD&T) to maintain high-quality practice is widely identified as an implicit responsibility of professionals today, reinforced by explicit requirements of professional standards and registration procedure (Murphy & Quinn 2017).

There is a significant body of educational research into professional learning (PL) that can inform PD&T practice. Given the important of PD&T research and the considerable resources invested into this practice, it is crucial for educational researcher to critically examine assumptions about PD&T when undertaking research in this area. The intent of this paper is to critique the way that PD&T is usually conceptualized, in both research and practice. Such conceptualization influences the focus and outcomes of PD&T research as well as the way that the practice of PD&T is supported and implications for enhancing the support of professionals as they continue to learn through their professional life.

The intention in scanning the extensive range of current literature is to add quantitative weight to the assertion that, despite decades of research into effective PL, little has changed in PD&T research and practice across most professions. The lack of change is not surprising when a scan of this literature reveals that the discourse of PD is focused on the development of professional through delivering programs rather than understanding more about the experience of PL to support it more effectively. It is perhaps, understandable that the conventional conceptualization of PD&T and the implicit assumptions underlying this notion, are rarely questioned. It is certainly difficult to step outside of the taken-for-granted notion that well-designed PD programs with good facilitators will result in PL and change in the quality of professional practice. Arguably, as educational researcher, one must question this notion.

Most of these terms, other than the nebulous and overused *lifelong learning*, imply that something is done to the professional. That is, professionals need “training” or “developing” through knowledge being “delivered” to them in courses. Not only does this approach tend to simply a transmission model of teaching and learning, but it also moves the emphasis from the “knowledge-deficient” professional to be “knowledge-possessing” provider. As van der Sluis (2019), highlights, in drawing comparisons between PD&T and third world community development, such a perspective also determines what knowledge is legitimized, often underlying “local and context-sensitive knowledge.”

Reframing PD&T as CPL moves the focus away from training, education or development toward PL. It also avoids the separation between moment-to-moment workplace learning and PD&T programs that is apparent in the literature (Barru, 2018). The implication of this separation is that learning at work is different from learning through attending a PD&T workshop. Although the activities may differ, if the professional learns either or both experiences, then this separation is artificial; a convention reinforced by prevailing discourse. A focus on CPL can refer to any experience where professionals consider they have learned.

The second shift in reframing PD&T is to consider PL as a holistic experience rather than as a combination of interrelated "factors." It is widely accepted that learning is dependent on an interaction among the learner, the context, and what is learned (Jing, 2017), yet many research and practice approaches attempt to control or deal with these factors separately.

Although research that analyzes separate factors in PD&T can be useful, it often reinforces perceived dichotomies within this area. Learning is conceived as formal or informal, individual or group-based, specific to a context or transferable. For example, it is acknowledged that a link exists between formal learning from PD programs and informal learning at work, yet research often ignores this nexus or fails to illuminate it by focusing on one or the other. Similarly, PL is acknowledged to be sociocultural, yet research often has a focus on either individual narratives or the collaborative learning of a community of practice. Context is acknowledged as an integral feature of PL, but research and practice often separate the learner from the context in which learning occurs or specifically examine features of the context.

METHODOLOGY

The variables in this study were the assessment by the students, faculty members, and college deans on the instructional practices, as well as the three-year performance in the BSME licensure examinations of the said schools.

The study was descriptive and normative in nature since it was concerned with determining the who, what, when, where, and why of the existing condition and presenting information from specific techniques and instruments of data collection (Thomas & Brubacker, 2008).

The questionnaire was presented in a checklist form with the first set focusing on the demographic profile of the respondents and the assessment on the level of competencies of the BSME faculty members and the second set was the problems encountered.

Weighted mean was employed to interpret the respondents' assessment of the competencies pertaining to knowledge, skills, and attitude and effectiveness in terms of mastery of subject matter, quality of instruction, classroom management, communication skills, and evaluation skills, as affected by faculty development and training program. One-way ANOVA was used to test significance of differences of means of the assessments of the respondents. Tukey's Honestly Significant Difference was used to determine the minimal differences between means of the significantly different results of the study, after ANOVA. Spearman – Rank correlation was used to measure the association between the assessment of the respondents and the results of the licensure examination.

Participants

The participants in this study were the students, faculty members, and college deans of selected institutions of higher learning in Metro Manila offering Bachelor of Science in Mechanical Engineering.

RESULTS

Summary of Assessment as to the Practices of the BSME Faculty Members

Indicators	STUDENT		FACULTY		DEAN		Composite		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
1. CLASSROOM MANAGEMENT & DISCIPLINE	4.18	VG	3.85	VG	4.14	VG	4.06	VG	8
2. CURRICULUM AND INSTRUCTION	4.14	VG	3.95	VG	4.37	E	4.13	VG	7
3. METHODOLOGY AND STRATEGIES IN TEACHING	4.33	E	4.02	VG	4.29	E	4.21	E	4
4. EVALUATION	4.23	E	4.01	VG	4.24	E	4.16	VG	6
5. SCHOOL-COMMUNITY LINKAGES	4.07	VG	3.87	VG	4.16	VG	4.04	VG	9
6. COMMUNICATION SKILLS	4.37	E	4.26	E	4.44	E	4.36	E	1
7. HUMAN RELATIONS SKILLS	4.22	E	4.08	VG	4.30	E	4.20	E	5
8. MASTERY OF SUBJECT MATTER	4.27	E	4.08	VG	4.34	E	4.23	E	2.5
9. RESEARCH AND EXTENSION	4.29	E	4.09	VG	4.30	E	4.23	E	2.5
Overall Weighted Mean	4.23	E	4.02	VG	4.29	E	4.18	VG	

Based on the results shown in the above table, it denotes that the Level of Competencies of the Engineering Faculty Members was interpreted as very good, with an overall composite weighted mean of 4.18, interpreted as very good.

Comparison of Assessments of the Groups of Respondents on the Practices of the BSME Faculty Members

Source of Variation	SS	df	MS	F	CV	Decision	VI
CLASSROOM MANAGEMENT & DISCIPLINE							
Between Groups	0.72	2	0.0473	7.6471	3.3158	Reject	S
Within Groups	1.42	30					
CURRICULUM AND INSTRUCTION							
Between Groups	0.34	2	0.0237	7.0941	3.4028	Reject	S
Within Groups	0.57	24					
METHODOLOGY AND STRATEGIES IN TEACHING							
Between Groups	0.34	2	0.0287	5.9438	3.6823	Reject	S
Within Groups	0.43	15					

EVALUATION							
Between Groups	0.17	2	0.0266	3.1471	3.8853	Failed to Reject	NS
Within Groups	0.32	12					
SCHOOL-COMMUNITY LINKAGES							
Between Groups	0.31	2	0.0320	4.8586	3.5546	Reject	S
Within Groups	0.58	18					
COMMUNICATION SKILLS							
Between Groups	0.17	2	0.0108	7.6609	3.3541	Reject	S
Within Groups	0.29	27					
HUMAN RELATIONS SKILLS							
Between Groups	0.40	2	0.0207	9.6682	3.2043	Reject	S
Within Groups	0.93	45					
MASTERY OF SUBJECT MATTER							
Between Groups	0.37	2	0.0091	20.0551	3.3541	Reject	S
Within Groups	0.25	27					
RESEARCH AND EXTENSION							
Between Groups	0.30	2	0.0128	11.6862	3.2849	Reject	S
Within Groups	0.42	33					

Level of significance = 0.05

The three groups of respondents had insignificant differences on the Level of Competencies of the Engineering Faculty Members as to Evaluation, but had differences in their assessments as to “Classroom Management and Discipline”, “Curriculum and Instruction”, “Methodology and Strategies in Teaching”, “School-Community Linkages”, “Communication Skills”, “Human Relations Skills”, “Mastery of Subject Matter”, and “Research and Extension”.

Post-Analysis of the Assessment of the Respondents on the Practices of the BSME Faculty Members

		Difference	df	q	MS	T	Differences of Means
CLASSROOM MANAGEMENT & DISCIPLINE							
Student	Faculty	0.33	30	3.49	0.047	0.14	FALSE
Faculty	Administrator	0.29					FALSE
Administrator	Student	0.04					TRUE
CURRICULUM AND INSTRUCTION							
Student	Faculty	0.24	24	3.53	0.024	0.11	FALSE
Faculty	Administrator	0.24					FALSE
Administrator	Student	0.00					TRUE
METHODOLOGY AND STRATEGIES IN TEACHING							
Student	Faculty	0.31	15	3.7	0.029	0.16	FALSE
Faculty	Administrator	0.26					FALSE
Administrator	Student	0.05					TRUE

SCHOOL-COMMUNITY LINKAGES							
Student	Faculty	0.20	18	3.61	0.032	0.15	FALSE
Faculty	Administrator	0.29					FALSE
Administrator	Student	0.09					TRUE
COMMUNICATION SKILLS							
Student	Faculty	0.11	27	3.49	0.011	0.07	FALSE
Faculty	Administrator	0.18					FALSE
Administrator	Student	0.07					TRUE
HUMAN RELATIONS SKILLS							
Student	Faculty	0.14	45	3.44	0.021	0.07	FALSE
Faculty	Administrator	0.22					FALSE
Administrator	Student	0.08					FALSE
MASTERY OF SUBJECT MATTER							
Student	Faculty	0.19	27	3.49	0.009	0.06	FALSE
Faculty	Administrator	0.26					FALSE
Administrator	Student	0.07					FALSE
RESEARCH AND EXTENSTION							
Student	Faculty	0.18	33	3.49	0.013	0.07	FALSE
Faculty	Administrator	0.20					FALSE
Administrator	Student	0.02					TRUE

In the ANOVA test carried out for the assessment of the respondents on the Level of Competencies of the Engineering Faculty Members in terms of "Classroom Management and Discipline", "Curriculum and Instruction", "Methodology and Strategies in Teaching", "School-Community Linkages", "Communication Skills", and "Research and Extension", a statistically significant difference at the level of $p<0.05$ was found between the assessment of faculty only.

However, in the post-assessment of the respondents, only the subcategories "Human Relations Skills" and "Mastery of Subject Matter" showed true statistically significant difference of assessments by the three groups of respondents.

Passing Percentage of Selected NCR SUCs on the Mechanical Engineering Licensure Examinations (Pre-pandemic)

Batch	SUC 1	SUC 2	SUC 3	SUC 4	Average Rating	National Passing %
March, 2017	16.67	76.32	38.46	55.56	46.75	48.72
September, 2017	26.67	82.79	43.84	91.28	61.15	29.52
February, 2018	35.29	48.84	15.38	41.67	35.30	45.45
August, 2018	26.19	80.35	40.98	88.08	58.90	48.59
February, 2019	13.51	41.18	43.59	50.00	37.07	35.63
August, 2019	48.11	88.19	69.23	85.88	72.85	43.07
Average	**27.74**	**69.61**	**41.91**	**68.75**	**52.00**	**41.83**

SUC 2, from year 2017 to 2019, constantly went above the National Passing Percentage (NPP). In addition, SUC 4 only went below the national passing percentage in the February 2018 ME licensure examinations.

SUC 3 failed to reach the national passing percentage thrice during the same period, crediting to its result on March 2017 with a rating of 38.46% compared to the NPP of 48.72%, February and August 2018 with a rating of 15.38% and 40.98% compared to 45.45% and 48.59% respectively.

Furthermore, SUC 1, for the years 2017 – 2019, only exceeded the national passing percentage on the August 2019 ME licensure examinations compared to the NPP of 43.07.

The next table shows that the practices of faculty in terms of classroom management and discipline, evaluation, school-community linkages, and human relations skills have a Spearman's correlation coefficient of 0.20, verbally interpreted as having a weak correlation with the licensure examination results. On the other hand, in terms of curriculum and instruction, methodology and strategies in teaching, communication skills, research and extension, and mastery of subject matter, there was a computed correlation coefficient of 0.40, verbally interpreted having a moderate correlation with the Board exam performances.

Relationship Between the Assessment on the Practices of BSME Faculty and the Institutional Mechanical Engineering Licensure Exam Performance

	CLASSROOM MANAGEMENT & DISCIPLINE	CURRICULUM AND INSTRUCTION	METHODOLOGY AND STRATEGIES IN TEACHING	EVALUATION	SCHOOL-COMMUNITY LINKAGES	COMMUNICATION SKILLS	HUMAN RELATIONS SKILLS	MASTERY OF SUBJECT MATTER	RESEARCH AND EXTENSION	Avg. Performance for the Last three years
SUC 1	3.69	3.90	3.93	3.89	3.89	4.18	3.97	3.90	3.97	27.74
SUC 2	4.10	4.32	4.27	4.14	3.97	4.35	4.14	4.32	4.20	69.61
SUC 3	4.29	4.33	4.41	4.41	4.26	4.54	4.35	4.45	4.32	41.91
SUC 4	4.14	4.06	4.25	4.20	4.00	4.33	4.34	4.26	4.42	68.75
Spearman rho	0.20	0.40	0.40	0.20	0.20	0.40	0.20	0.40	0.40	

The next table implies that, in general, the exceeding of the maximum class size, flexibility of instruction delivery, transparency on details pertaining to students grades, counseling, linkages and networking, verbal interaction with faculty members and their participation, their teaching techniques, and research impact to community are regarded as highly encountered hindering factors in delivering quality instruction for favourable licensure exam results, as assessed by the groups of respondents.

Assessment as to Hindering Factors

Indicators	STUDENTS		FACULTY		Composite		Rank
	WM	VI	WM	VI	WM	VI	
1. Exceeding the maximum size of students in lecture classes	4.61	HE	4.02	E	4.32	HE	13.5
2. Exceeding the maximum size of students in professional courses	4.23	HE	4.18	E	4.21	HE	16
3. limited application of techniques in instruction delivery (e.g. Team Teaching, group techniques, programmed instruction, on-the-job training / apprenticeship, and modern information and communications technology)	4.40	HE	4.27	HE	4.34	HE	11
4. Flexibility of instructional processes in delivering instruction	4.09	E	4.63	HE	4.36	HE	9.5
5. Regular information dissemination regarding the basis of rating student performance and grades	4.07	E	4.25	HE	4.16	E	18
6. Knowledge of students in the method for computing their final mark	4.33	HE	4.39	HE	4.36	HE	9.5
7. Lack of academic counseling for students with learning deficiency.	4.31	HE	4.54	HE	4.43	HE	8
8. No Bulletin board of the Course that shows performance of Mechanical Engineering Students on the licensure examination for the last 5 years	4.06	E	4.29	HE	4.18	E	17
9. There's a dedicated office that deals with linkages and networking with Local Government Agencies	4.22	HE	4.67	HE	4.45	HE	6.5
10. There's a dedicated office that deals with linkages and networking to church officials	4.60	HE	4.36	HE	4.48	HE	4
11. Unpleasant and threatening voice of Faculty Members	4.55	HE	4.70	HE	4.63	HE	1
12. Uses of inappropriate terms, words and languages of Faculty Members	4.25	HE	4.64	HE	4.45	HE	6.5
13. Inactive participation of faculty members in school projects and services	4.29	HE	4.33	HE	4.31	HE	15
14. Unavailability of faculty members for academic advising and consultation	4.67	HE	4.25	HE	4.46	HE	5
15. Unvaried teaching techniques and strategies that are unsuitable on the lesson being taught	4.18	E	4.45	HE	4.32	HE	13.5
16. Faculty members are not making sure that the concepts and principles of the lesson is understood by the students	4.56	HE	4.63	HE	4.60	HE	2
17. There are no evidences that the college / university shares its resources with the community	4.37	HE	4.62	HE	4.50	HE	3
18. College / University Research does not impact community development	4.38	HE	4.28	HE	4.33	HE	12
Overall Mean	**4.34**	**HE**	**4.42**	**HE**	**4.38**	**HE**	

Legend:

Highly Encountered (HE)	4.20 – 5.00
Encountered (E)	3.40 – 4.19
Moderately Encountered (ME)	2.60 – 3.39
Slightly Encountered (SE)	1.80 – 2.59
Least Encountered (LE)	1.00 – 1.79

THE INTERVENTION PLAN

Rationale

The recent development in the Philippine educational set – up made it necessary to assess the level of competencies as correlates to Institutional licensure examination performance of the Mechanical Engineering education and eventually gear the program into a globally competitive status. The CHED released CMO 97 Series 27 for the BSME Program assuring quality outputs through Outcomes and topology-based instruction into a new CHED memorandum effective academic year 2018 – 2019. The gap in the level of competencies and effectiveness to Institutional academic performance made it necessary to visit the BSME program and eventually develop an intervention plan that focuses on the weaknesses of the delivery system.

Objectives:

1. Enhance classroom management and discipline by establishing a Class Size Reduction Program;
2. Strengthen Curriculum and Instruction by enhancing the quality of instruction delivery;
3. Supplement policies to improve methodology and strategies in teaching;
4. Strengthen capabilities of faculty members in evaluation of students;
5. Increase linkages and networking;
6. Enhance communication skills of faculty members;
7. Develop interpersonal skills of faculty members;
8. Promote faculty development in enhancing mastery of subject matter; and
9. Increase impact of research and extension to the community.

Key Result Area	Problems Encountered	Strategic Priorities	Project / Activities	Performance Indicators			
				Phase 1	Phase 2	Phase 3	Phase 4
Classroom Management and Discipline	• Exceeding the maximum size of students in lecture classes. • Exceeding the maximum size of students in professional courses.	Class Size Reduction	Establishment of Class Size Reduction Program for BSME	70% of the BSME both in lecture and professional classes do not exceed the maximum class size.	80% of the BSME both in lecture and professional classes do not exceed the maximum class size.	90% of the BSME both in lecture and professional classes do not exceed the maximum class size.	100% of the BSME both in lecture and professional classes do not exceed the maximum class size.
Curriculum and Instruction	• Limited application of techniques in instruction delivery (e.g. Team Teaching, group techniques, programmed instruction, on-the-job training / apprenticeship, and modern information and communications technology). • Flexibility of instructional processes in delivering instruction. •	Enhancing Quality in Instruction Delivery	Attendance and/or participation on seminar-workshop and training of BSME faculty members to enrich instruction delivery	25% of faculty members actively attended and/or participated in seminar-workshop and training on instructional delivery	50% of faculty members actively attended and/or participated in seminar-workshop and training on instructional delivery	75% of faculty members actively attended and/or participated in seminar-workshop and training on instructional delivery	100% of faculty members actively attended and/or participated in seminar-workshop and training on instructional delivery
Methodology and Strategies in Teaching	• Regular information dissemination regarding the basis of rating student performance and grades. • Knowledge of students in the method for computing their final mark.	Supplementing Policy on regular release of subject related information of BSME Students for dissemination	Constitute a policy on regular release of BSME Faculty Members on subject related results of students in an online platform (e.g. Website).	70% of BSME faculty members use the online platform for regular release of student results on a subject.	80% of BSME faculty members use the online platform for regular release of student results on a subject.	90% of BSME faculty members use the online platform for regular release of student results on a subject.	100% of BSME faculty members use the online platform for regular release of student results on a subject.

Key Result Area	Problems Encountered	Strategic Priorities	Project / Activities	Performance Indicators			
				Phase 1	Phase 2	Phase 3	Phase 4
Evaluation	• Lack of academic counseling for students with learning deficiency.	Assessment of Learning Deficiency	Scheduling of Regular formal assessment of academic achievement levels with standardized test in collaboration with the institute councilor.	25% increase in the passing percentage of the ME students on the Board Examination	50% increase in the passing percentage of the ME students on the Board Examination	75% increase in the passing percentage of the ME students on the Board Examination	100% increase in the passing percentage of the ME students on the Board Examination
	• No Bulletin board of the Course that shows performance of Mechanical Engineering Students on the licensure examination for the last 5 years	Interactive Bulletin Board for BSME	Creation of digital interactive bulletin board that shows results and information related to the past licensure examinations				
School-Communities and Linkages	• There's a dedicated office that deals with linkages and networking with Local Government Agencies • There's a dedicated office that deals with linkages and networking to church officials	Offices for linkages and networking	Establishing of Offices for Networking and Linkages for Local Government Agencies and Interfaith Churches	1 MOA / MOU from Local Government Agencies and Interfaith Churches	2 MOA / MOU from Local Government Agencies and Interfaith Churches	3 MOA / MOU from Local Government Agencies and Interfaith Churches	4 MOA / MOU from Local Government Agencies and Interfaith Churches
Communication Skills	• Unpleasant and intimidating voice of Faculty Members • Uses of inappropriate terms, words and languages of Faculty Members	Enhancement of college-level student's communication and teaching skills	Facilitating a Teaching workshop for BSME Faculty members	70% of BSME Faculty members participates on the Teaching Workshop	80% of BSME Faculty members participates on the Teaching Workshop	90% of BSME Faculty members participates on the Teaching Workshop	100% of BSME Faculty members participates on the Teaching Workshop
Human Relation Skills	• Inactive participation of faculty members in school projects and services • Unavailability of faculty members for academic advising and consultation	Development of Interpersonal Skills	Conduct of Human Relation Skill Training for BSME Faculty Members	25% of BSME Faculty Members actively participated on the Human Relation Skill Training	50% of BSME Faculty Members actively participated on the Human Relation Skill Training	75% of BSME Faculty Members actively participated on the Human Relation Skill Training	100% of BSME Faculty Members actively participated on the Human Relation Skill Training
Mastery of Subject Matter	• Unvaried teaching techniques and strategies that are unsuitable on the lesson being taught • Faculty members are not making sure that the concepts and principles of the lesson is understood by the students	Faculty Development	Requiring regular professional development on quality teaching for BSME Faculty Members	70% of BSME Faculty Members shows evidence on actively attending / participating on Professional Development Seminar/ Workshop/ Training	80% of BSME Faculty Members shows evidence on actively attending / participating on Professional Development Seminar/ Workshop/ Training	90% of BSME Faculty Members shows evidence on actively attending / participating on Professional Development Seminar/ Workshop/ Training	100% of BSME Faculty Members shows evidence on actively attending / participating on Professional Development Seminar/ Workshop/ Training
Research and Extension	• There are no evidences that the college / university shares its resources with the community • College / University Research does not impact community development	Impact Research and Extension	Adopting a Community for research and extension	1 MOA / MOU with an adopted community	2 MOA / MOU with an adopted community	3 MOA / MOU with an adopted community	4 MOA / MOU with an adopted community

CONCLUSIONS AND RECOMMENDATIONS

The proposed intervention plan is a very promising activity and undertaking to help the BSME Faculty members increase their level of competency, especially in preparing students for the licensure examinations.

To further enhance delivery of instructions, faculty members are encouraged to strengthen determinations in forging linkages with international, and local industries through their best practices. Also, there is a need for faculty members to further improve instructional capabilities through participation in learning developments in order to cope up with the demands of Industry 4.0. BSME faculty members were encouraged to prioritize research focused on enhancing the students' ability to pass the licensure examinations. The engineering departments of the institutions of higher learning may want to ensure that only competent faculty members, particularly those who have professional development training, will handle review courses.

The school administrators have already set up professional development plans and consistent budgetary allotments for the faculty members, where all of them are given the chance to attend professional development trainings.

Unfortunately, the work-from-home arrangement of almost every school personality in the majority of the year 2021, 2021, and even 2022 posed additional hindering factors in sustaining the goals and activities of the intervention plan. This caused the non-reflection of the benefits of the intervention plans in the post-pandemic results of the licensure examination. It is with high optimism that from 2023 onwards, the activities encompassing the intervention plan will translate to improvements in the mechanical engineering licensure examination results.

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CHALLENGES ENCOUNTERED BY BREAD AND PASTRY BUSINESS IN GENERAL MARIANO ALVAREZ, CAVITE: BASIS FOR ENTREPRENEURSHIP PROGRAM

Apple M. Rapada
Nancy G. Liwanag

INTRODUCTION

In the Philippines, different culture comprises its history as a baking country. It has become a part of growing up for many Filipinos. With the growth and expansion of the bread and pastry business in the country many entrepreneurs are gaining competitors towards their businesses.

Food is the most important thing that the people should have. But eating and choosing the right food is must prevent a disease 0r sickness. We also have to choose the right ingredients for the best quality of a new recipe of bread and pastry. Creating new recipe can also help the people to gain more knowledge and to choose a healthy recipe that will become a product for the people to buy. Cakes are most precious product of a pastry because this kind of product should follow the exact measurements and the right procedures to make it delicious and successful.

According to www.bakeryindia.com " It is a step-in direction for the buyers and sellers to meet, exchange ideas, improve the technology and profitability easy accessibility to information at low cost. It also relates to bakery industry in India. It offers consultancy for setting up bakery plants, solutions to your bakery problems, promoting products and services, software development for specific needs, sales of used machineries and many more demands.

OBJECTIVES

This study focused on determining the challenges encountered by the bread and pastry industry in General Mariano Alvarez Cavite and aimed to create a program that will recommend relevant strategies to attracts and keep customer loyalty. Specifically, the paper sought to answer the following questions: 1) What is the profile of the entrepreneur in terms of: Educational Qualification, Training and Seminars attended, and Years of experience in making bread and pastry? 2) What is the Business profile in terms of: Location, Initial Capital, and Number of employees? 3) How do the Bread and Pastry Entrepreneur assess the challenges in terms of: Pricing, Advertising, Customers, Competitors, and Environmental factors? 4) Is there a significant relationship between: the profile of the entrepreneur and the challenges encountered in the bread and pastry business, and business profile and the challenges encountered in the bread and pastry business?

METHODOLOGY

This study used the survey questionnaire as the main instrument in data gathering. The descriptive method is used to determine the current challenges encountered by the bread and pastry businesses. The study was participated by fifty bakery owners from the 14 barangays in GMA, Cavite.

RESULTS AND DISCUSSION

On the profile of the entrepreneurs, most of the respondents are High School graduate with 20 or 40%. Majority of bakery owners have no seminar or training with a frequency of 30 or 60%. Most of the respondents have 1-5 years' experience with 23 or 40%.

While the business profile of the respondents, most of the bakeries are located in Barangay Poblacion 5. The bakeries started their own business with an initial capital of P10,000 pesos. Since it is a small enterprise the owners had only two employees as helper on their business.

On the assessment of the entrepreneurs on the challenges encountered in the bread and pastry business as to Pricing were assessed as Always with an average weighted mean of 4.32. Also, with the Advertising were assessed as Always with an average of 4.56. Then, as to the Resources the respondents assessed as Always with an average weighted mean of 4.64. Followed by the Customers assessed as Always with an average weighted mean of 4.74. As to the Competitors assessed by the respondents as Sometimes with an average weighted mean of 4.02. Lastly, the Environmental factors as Always with a weighted mean of 4.77.

On the significant relationship between the profile of the entrepreneur and the challenges encountered of bread and pastry business as to the educational qualification has no significant relationship in challenges encountered, as supported by a p-value of 0.789, whereas entrepreneurs' training and seminars attended; and the year of experience has a significant relationship in challenges encountered supported by p-values of 0.032 and 0.042.

And on the significant relationship between the business profile and the challenges encountered of bread and pastry business, there is no significant relationship as to Location supported by p-value of 0.549. While, there is significant relationship between the business profile and the challenges encountered of bread and pastry as to Initial Capital and Number of employees supported by p-value of 0.920 and 0.482.

CONCLUSIONS AND RECOMMENDATIONS

Most of the data of the bakery owners do not have a high level of education, then they had 5 years of experience in running their bakery business, and lastly, most of them do not have training in terms of handling their bakery business. Most of bakeries located near congressional road to expose in commercial areas.

It is concluded that there are challenges faced by the bakery owners as the constant change of the prices of ingredients and resources from the suppliers. And also, they have lack of promotion of their business since they do not have large source of capital.

Based from the findings and conclusions, in order to enhance the entrepreneurial abilities, the bakery entrepreneurs engage in TESDA training such as NC II in bread and pastry to obtain baking skills that will assist the firm to be successful. More trainings and engagement in business skills through participating organizations and communities related to the bakery business.

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VIRTUAL WEBINAR TRAINING: AN ALTERNATIVE MODE FOR BSOA INTERNSHIP

Dr. Chanda R. Tinga

INTRODUCTION

The new normal that is currently being promoted necessitates the use of more innovative technology. Students and lecturers in higher education levels are now expected to become accustomed to using web-based platforms to share their knowledge during regular teaching and learning activities. Because internships can reflect a variety of real-world experiences and integrates them for the future. However, for virtual interns it is often important to find a way that allows them to manage their work life balance due to family or other local obligations. The BSOA students have different issues and challenges during their internship using the webinars. Some of the problems are how they assess the virtual internship program as to learning objectives, topic and content, usefulness, knowledge of subjects, independent learning and management learning. Also, how the BSOA students' virtual internships affect their employability as to; critical thinking, problem-solving, creativity, originality, and strategizing. And lastly, is if there a significant relationship between the virtual internship and BSOA students' employability.

The goal of an internship is to provide you in real world experience so you can put what you're studies into practice. A virtual internship is a great way to gain valuable experience with flexibility. This study also attempts to examine how alternative and effective virtual webinar training to the BSOA intern student. The researcher will determine if virtual internship helps the BSOA intern student to choose their career paths in the future.

STATEMENT OF THE PROBLEM

This study determined the effectiveness of virtual webinar training as an alternative mode for internship of BSOA students in EARIST, Manila.

Specifically, the following are the questions aimed to be answered:

1. How do the BSOA students assess the virtual internship program as to:

   1.1 Learning objectives
   1.2 Topic and content
   1.3 Usefulness
   1.4 Knowledge of subject
   1.5 Independent Learning
   1.6 Management of Learning

2. How virtual internship program affects the BSOA student's employability as to:

   2.1 Critical thinking
   2.2 Problem-solving
   2.3 Creativity
   2.4 Originality
   2.5 Strategizing

3. Is there a significant relationship between the virtual internship and BSOA student's employability?

RESEARCH METHOD USED, RESEARCH LOCALE, RESPONDENTS OF THE STUDY, SAMPLING PROCEDURE, INSTRUMENTATION AND DATA ANALYSIS

1. The study utilized a survey research technique.

2. The study was participated by the BSOA graduateS student of Euglogio "Amang" Rodriguez Institute of Science Technology, SY 2020 – 2021.

3. The purposive sampling technique, a well- accepted method for rigorous selection of respondents was utilized in this study.

4. The researcher used the following instruments to gather data:

   4.1 Survey Questionnaire.

5. Statistical Treatment

The data and information tallied and tabulated were analyzed and interpreted using the following:

5.1 Frequency;
5.2 Percentage;
5.3 Weighted Mean;
5.4 Likert Scale; and
5.5 Ranking.

RESULTS AND DISCUSSIONS

Sub-problem No. 1: How do the BSOA students assess the virtual internship program as to:

Summary of the Virtual Internship Progress

Indicators	WM	VI	Rank
1. Learning Objectives	4.39	E	6
2. Topic and Content	4.42	E	4
3. Usefulness	4.46	E	2
4. Knowledge of Subject	4.41	E	5
5. Independent Learning	4.48	E	1
6. Management Learning	4.44	E	3
Grand Mean	**4.43**	**E**	

This table summarizes the respondent's overall assessment on the virtual internship program rated as Excellent with the grand mean of 4.43. All items rated as Excellent, namely: independent learning with composite weighted mean of 4.48 as rank 1; usefulness with composite weighted mean of 4.46 as rank 2; management of learning with composite weighted mean of 4.44 as rank 3; topic and content with composite weighted mean of 4.42 as rank 4; knowledge of subject with composite weighted mean of 4.41 as rank 5; and learning objectives with composite weighted mean of 4.39 as rank 6.

Sub-problem No. 2: How virtual internship program affects the BSOA student's Employability as to:

Summary of the Virtual Internship Program Affects the BSOA Student's Employability

Indicators	VM	VI	Rank
1. Critical Thinking	4.37	E	3
2. Problem Solving	4.33	E	5
3. Creativity	4.34	E	4
4. Originality	4.43	E	2
5. Strategizing	4.46	E	1
Grand Mean	**4.39**	**E**	

Table summarizes the respondent's overall assessment on the virtual internship program affects the BSOA student's employability rated as Excellent with the grand mean of 4.39. All items rated as Excellent, strategizing with composite weighted mean of 4.46 as rank 1; originality with composite weighted mean of 4.43 as rank 2; critical thinking with composite weighted mean of 4.37 as rank 3; creativity with composite weighted mean of 4.34 as rank 4; and problem solving with composite weighted mean of 4.33 as rank 5.

Sub-problem No. 3: Is there a significant relationship between the virtual internship and BSOA student's employability?

Correlation Between Virtual Internship and BSOA Student's Employability

r-value	VI	Interpretation	Decision
0.86	VSC	Significant	Reject Ho

Legend:

Scale	Verbal Interpretation	Symbol
1.00	Perfect Correlation	PC
0.80 – 0.99	Very Strong Correlation	VSC
0.60 – 0.79	Strong Correlation	SC
0.40 – 0.59	Moderate Correlation	MC
0.20 – 0.39	Weak Correlation	WC
0.01 – 0.19	Negligible Correlation	NC

As reflected in the table, the computed r- value is 0.86 which is Very Strong Correlation. Hence, there is significant relationship between virtual internship and BSOA student's employability. Therefore, the hypothesis is rejected.

The following are the major findings of the study:

1. On the assessment of the BSOA students at the virtual internship program.

The overall assessment on the virtual internship program of the BSOA students rated as Excellent with the grand mean of 4.43. All items rated as Excellent, namely: independent learning with composite weighted mean of 4.48 as rank 1; usefulness with composite weighted mean of 4.46 as rank 2; management of learning with composite weighted mean of 4.44 as rank 3; topic and content with composite weighted mean of 4.42 as rank 4; knowledge of subject with composite weighted mean of 4.41 as rank 5; and learning objectives with composite weighted mean of 4.39 as rank 6.

2. On the virtual internship program affects the BSOA student's employability.

The overall assessment on the virtual internship program affects the BSOA student's employability rated as Excellent with the grand mean of 4.39. All items rated as Excellent, strategizing with composite weighted mean of 4.46 as rank 1; originality with composite weighted mean of 4.43 as rank 2; critical thinking with composite weighted mean of 4.37 as rank 3; creativity with composite weighted mean of 4.34 as rank 4; and problem solving with composite weighted mean of 4.33 as rank 5.

3. On the significant relationship between the virtual internship and BSOA student's employability.

The computed r- value is 0.86 which is Very Strong Correlation. Hence, there is significant relationship between virtual internship and BSOA student's employability. Therefore, the hypothesis is rejected.

CONCLUSIONS

Based on the findings, these are the following conclusion:

1. The BSOA student's assessment in the virtual internship program on learning objectives, topic and content, usefulness, knowledge of subjects, independent learning and management of learning were all excellent and practiced.

2. The sub-variables that affects the BSOA student's employability were critical thinking, problem- solving, creativity, originality, and strategizing are all highly performed.

3. The significant relationship between virtual internship and BSOA student's employability has a very strong correlation. Therefore, hypothesis is rejected.

RECOMMENDATIONS

Based on the findings and conclusions drawn, the following recommendations are offered:

1. Provide the students materials before the webinar. So, they may prepare for the event and participate actively.

2. Significantly promote' students' engagement throughout the webinar as it will assist them in comprehending the content as a whole.

3. Demonstrate strategies to facilitate the students' comprehension of the webinar topic.

4. Accommodate the students to make suggestions on the theme and substance of the webinar that will be beneficial to their future careers.

5. After the webinar, assign the students actual work to strengthen their abilities as future professionals.

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EARIST Research Journal
Volume XXIII, No. 33 ISSN 0119-5212
JANUARY – JUNE 2023

Republic of the Philippines
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INSTITUTE OF SCIENCE AND TECHNOLOGY
Nagtahan, Sampaloc Manila

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