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Algorithms for the Constitutional Exercise of Religious Liberty in Academic Institutions, Regulatory Examinations, and Labor Sector: Lessons From Legal Cases of Seventh-Day Adventists

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Abstract

The Philippine Constitution considers the right of each Filipino to exercise religious liberty. In the Philippines, the majority of its people attend church on Sunday. This norm poses a threat to the religious principles of minor religions in the country, like the Seventh-day Adventist (SDA), where Saturday (Sabbath) is considered the day of worship. Many of the predicaments of the religious members go unheeded and pushing members to compromise on their faith due to disruptions of school, professional goals, and employment. Hence, this study determined the problems encountered by SDAs, evaluate the experiences of its members, and consequently develop algorithms that aid the Adventists to uphold their constitutional exercise in the respective areas of the academe, licensure, and labor. A qualitative case study design was used in this research. Data gathering was done online using an interview. Two court cases were analyzed in this study and thematic analysis was used to generate themes. The participants were interviewed corresponding to court cases filed by members of the SDA Church. Documents gathered include court proceedings and judgments, respective agency memorandums, orders, and resolutions. Themes generated from the interviews suggest that the problems and cases filed for the exercise of religious liberty were divided into the academe, licensure, and labor sectors. The different cases and documentation of favorable records for its members are discussed in this paper. Hence, this study is exigent as it proposed algorithms to provide framework or guidelines for the cause of action when encountering predicaments on standing firm on the Sabbath.

Keywords: *algorithms, Sabbath, religious liberty*

The characteristics and the core values of the denomination, Seventh-day Adventist (SDA) Church, are revealed on its name. *Seventh-day* refers to Saturday which is the seventh day of the week and is considered to be the principal day of worship, and *Adventist* conveys the anticipation of the second coming of Jesus (General Conference SDA, 2020). Thus, keeping the Sabbath is of utmost importance for the members because it symbolizes their relationship with God, the sign of their sanctification, and a token of allegiance (General Conference SDA, 1988; Higashide, 2010).

The United Nations (2015) affirms the right of any person to worship. It is recognized as one of the basic liberties of man and has been recorded to be a subject of official repression and punishment since the beginning of governments. This right encompasses the right to freedom of thought, conscience and religion as well as the freedom to change one's religion or belief, and freedom, either alone or in community with others and in public or private, to manifest religion or belief in teaching, practice, worship, and observance (United Nations, 1948). Along with universal declaration, the Philippines parallels this in the Philippine Constitution (1987) through a declaration of the separation of the church and the state in Article 2, Section 6. This emphasizes that all Filipinos are free to exercise their religion, thus upholding the right to religious liberty. Using this principle, the government acknowledges and respects the religious liberty of the SDA Church's right to observe Saturday as the day of rest. Despite this, there is still existing conflict between the religious freedom of SDAs in observing Sabbath and the educational institution's academic discretion as well as employer's management prerogative.

The Public Affairs and Religious Liberty Department of the Seventh-day Adventist (PARL) notes that many SDA members encounter problems regarding Sabbath-keeping (Religious Freedom Report, 2010-2011). These problems may be generalized based on these areas: (a) Academe; (b) Examinations; and (c) Employment. In the academe, SDA students face challenges in keeping their Sabbath when they are compelled to attend classes, take examinations, and perform curricular activities on Sabbath contrary to their belief so that they can continue with their studies and graduate. Upon taking Licensure examinations, fresh graduates are further confronted with debacle when examinations, conducted by the PRC, Civil Service Commission, DEPED, and other government agencies, are held during Saturdays. Further, in workplaces, several employees are required under the pain of termination if they fail to work on Saturdays.

Cornelio (2013) suggests that research must be done in terms of understanding religious groups, especially religious minorities, in the Philippines on their everyday experiences on religious freedom. Further studies will elucidate the practice of religious liberty in the country where the majority of its citizens are Catholics and observe Sunday as their day or worship. The right of SDA members to observe the Sabbath is a legitimate exercise of the constitutional right of freedom of religion. There are legal frameworks upon which religious liberty on Sabbath observance stands: international declarations, Philippine constitutional law, and Philippine statutory law and regulations. A discourse on how the right to observe the Sabbath can be justified, and thus protected by the law, necessitates an examination of how these frameworks.

Studies on religious liberty have been focused mainly on institutions or the separation between the church and the state and have neglected to see the cultural dimension. To recognize the religious beliefs and practices of other religions has not yet been well documented in the Philippines (Cornelio, 2013).

In this study, the Supreme Court case of Valmores vs. Achacoso (2017) was analyzed and discussed as it is the first jurisprudential yardstick on the constitutional religious liberty of Sabbath observance in the Philippines. Hence, this study identified the pertinent facts of the case that prompted the petitioner Valmores to commence the case for mandamus before the Supreme Court and determine the legal implications of the case on the constitutional exercise of religious liberty.

Considering this, the study answered the following research questions: (a) What are the common problems encountered by Sabbath-keepers in the Philippines? (b) How do the participants deal with the difficulties encountered in keeping the Sabbath? (c) What algorithms can be developed to aid the constitutional exercise of religious liberty in Academic institutions, regulatory examinations, and the labor sector? Likewise, the study of pertinent cases will provide a benchmark on amicable solutions and the legal treatment of religious freedom rights in the Philippines on Sabbath-keeping for Seventh-day Adventists.

Methodology

Research Design

This paper employed a qualitative analysis using the case study research design. The case study approach allows in-depth, multi-faceted explorations of complex issues in their real-life settings which is very useful in the fields of business, law, and policy. A descriptive case study enabled the evaluation of the constitutional provisions on religious liberty and the Philippine Supreme Court Decision in the case of Valmores vs. Achacoso (2017) and other relevant cases on Sabbath observance.

Samples, Sampling and Data Collection

Two court cases were analyzed in this study, the case of Valmores vs. Achacoso (2017) and the case of Rolan Clamor vs. DDT Konstract Inc (2017). As the counsel on record of the case of Valmores vs. Achacoso, a copy of all pertinent documents from the start to the development of the case was gathered and submitted by Mr. Valmores. Aside from the document analysis of these two cases, interviews were done online. The clients consented to the use of their files, affidavits, and other documents used in their respective cases. Likewise, government memorandums, orders, and court decisions were taken from their respective government agencies and were used as supplementary data in this study.

Data Analysis

Explanation building analysis (Yin, 2003) was implored by placing focused analysis based on the research questions provided and dividing them into facets whereby cases that deal with religious liberty are filed. Thematic and content analysis were used in the study.

Results and Discussion

Problems on Religious Liberty of Seventh-Day Adventists

The results revealed that the reoccurring themes among correspondents may be divided into three main categories. Results taken from this study are, likewise, recognized and parallel that of the World Report of the Public Affairs and Religious Liberty Department of the SDA Church acknowledges that in the Philippines, Sabbath-keeping can present difficulties for (a) students who are required to take classes and examinations on Saturdays; (b) fresh graduates in their licensure and proficiency examinations; and (c) professionals maintaining employment.

Hence, there are three general categories where SDAs find difficulty in exercising their religious liberty of observing and keeping the Sabbath. To supplement the first objective and to address the second objective of the study, further discussions of SDA members' problems, their corresponding actions, and the implication of cases filed are divided into the abovementioned categories. This study discusses the history and approved memorandums, cases, and other documents or activities that deal with the exercise of religious freedom of SDAs in the Philippines.

Religious Liberty in the Academic Institution. Recognizing the difficulties of SDA students, the 'Aangat Tayo' Partylist which advocates religious liberty through its representative Congresswoman Daryl Grace Abayon requested the Department of Education (DepEd) and Commission on Higher Education (CHED) for the issuance of memorandum recognizing the religious liberty of the SDA students.

Religious Liberty in the DepEd. DepEd is the executive department of the Philippine government whose responsibility is ensuring access to, promoting equity in, and improving the quality of basic institutions. Its agency's scope includes the pre-school, primary, and secondary schools within the county (RA No. 9155).

The DepEd Secretary Jesli A. Lapus issued a memorandum that directs undersecretaries, assistant secretaries, bureau directors, and other DepEd personnel to respect religious liberty (DepEd Memorandum No.3, 2010). This memorandum further provides that: (a) All officials of the department should ensure that constitutional rights (i.e., religious liberty are respected); (b) DepEd Personnel belonging to the SDA Church are not required to attend seminars, examinations, training, and other professional development activities held on Saturdays since the day is their Day of Rest or Church Day following their religious belief.

However, the said memorandum only pertains to DepEd personnel belonging to the SDA Church, hence Congresswoman Daryl Abayon requested the issuance of a clarificatory memorandum. The DepEd through Education Secretary Br. Armin A. Luistro (FSC) issued Order No. 105 (2010) which reiterated the constitutional right of DepEd personnel and students to free exercise of religion. This order recognizes that some public elementary and secondary schools conduct special or make-up classes for the suspension of class during typhoons or for any other reasons every Saturday for a particular duration of time.

Likewise, the said practice has led to some complaints of discrimination and non-compliance with the previously issued DepEd Memorandum No. 3 (2010). In this, the order further provides the following provisions to be followed: (a) DepEd personnel and students belonging to any religious group, where Saturday is their day of rest or "church day," should not be required to attend seminars, examinations, special classes, training, and other school activities on Saturdays; (b) There should be no diminution or deduction in the salaries (in the case of teachers) or no effect in the grades (in the case of students) for those teachers and students who incur absences on Saturdays due to the exercise of their right to religious worship; and (c) An arrangement should be made by the concerned teacher/ personnel with the school head for the performance of functions or by the concerned students with the teacher for the completion of school requirements, without prejudice to their right to free exercise of religion.

Religious Liberty in the CHED. The CHED of the Philippines is the government agency under the Office of the President of the Philippines for administrative purposes. It covers both public and private higher education institutions as well as degree-granting programs in all post-secondary educational institutions in the country (RA No. 7722).

Hon. Patricia B. Licuanan, the Chairperson of the CHED issued a memorandum on the subject of remedial work for teachers, personnel, and students to be excused due to compliance with religious obligations. The Memorandum directed all higher educational institutions (HEI) to respect the religious liberty of the SDA students (CHED Memorandum, 2010). The said memorandum reiterates the rights indicated in the Philippine constitution.

Being under this country, the commission is obligated to ensure that all HEIs render proper respect and compliance to this constitutional right. The commission also clarifies that in implementing the aforementioned policy, HEIs shall be enjoined to (a) excuse students from attendance/participation in school or related activities if such schedule conflicts with the exercise of their religious obligations, and (b) allow faculty, personnel, and staff to forego attendance during academic and related work and activities scheduled on days which would conflict with the exercise of their religious freedom. Instead, the affected students, faculty, personnel, and staff may be allowed to do remedial work to compensate for absences, within the bounds of school rules and regulations without their grades being affected, or with no diminution in their salaries or leave credits or performance evaluation/assessment, provided they submit a certification or proof of attendance/participation duly signed by their pastor, priest, minister or religious leader for periods of absence from classes, work or school activities.

Religious Liberty in Regulatory Examination

Professional Regulation Commission (PRC). The PRC is commission attached to the Department of Labor and Employment and is mandated to standardize and oversee the practice of professionals who comprise the highly-skilled manpower of the Philippines (RA No. 8981). In regulating and accessing professionals, PRC conducts examinations in different areas of expertise before issuing licenses.

Cong. Harlin Abayon, a Seventh-day Adventist and a staunch advocate of religious liberty, moved for the inclusion of a provision in the PRC Modernization Act of 2000 which safeguards the examinee's rights to a Sabbath free examination.

Section 7 of the PRC Modernization Act provides the powers, functions, and responsibilities of the Commission. Section 7 states that the commission is to administer and conduct the licensure examinations of the various regulatory board following the rules and regulations promulgated by the Commission, determine and fix the places and dates of examinations, use publicly or privately owned buildings and facilities for examination purposes, and conduct more than one licensure examination provided that if one examination is given in a year, this shall be held only on weekdays.

Religious Liberty in Employment Laws

Religious Liberty in the Labor Code of the Philippines. The Labor Code of the Philippines (RA No. 442) recognizes the rights of workers to a one-day per week rest day. The general rule provides that the employer determines the date of the rest day, however, if the preference of the employee is based on religious grounds then the choice of the employee prevails.

In most business organizations, Sundays and Saturdays are the days of the weekend that policies of employers consider as appropriate to allow the labor force to stop work and enjoy some needed rest (Bryson & Forth, 2007; Hsu, 2002). Aside from having economic benefits for enhanced productivity for the workweek ahead by engaging in recreational and meaningful activities, the rationale for the weekly rest day also means that workers can freely exercise the right at least once a week (Rong, 2010) This arrangement is favorable to SDA employees who attend church services on a Saturday. Despite the foregoing provision of the Labor Code, many SDA employees still undergo difficulty in observing the Sabbath.

Religious Liberty in the Department of Labor and Employment (DOLE). DOLE is the executive department of the Philippines which formulates policies and implements programs and services in the field of labor and employment. This department is guided by the Labor Code.

The Labor Code of the Philippines or Republic Act No. 442, Book Three, Title I, Chapter II on Weekly Rest Periods, Article 91 thereof provides the right to a weekly rest day. This provision indicates that the weekly rest day shall be the duty of every employer, whether operating for profit or not, to provide each of his employees a rest period of not less than twenty-four (24) consecutive hours after every six (6) consecutive normal workdays. Likewise, the employer will also determine and schedule the weekly rest day of the employees subject to a collective bargaining agreement and such rules and regulations as the Secretary of Labor and Employment may provide. However, the employer should respect the preference of employees as to their weekly rest day when such preference is based on religious grounds.

How do the participants deal with the difficulties encountered in keeping the Sabbath?

Factual Antecedents of the Case of Valmores vs. Achacoso. Valmores is a member of the SDA Church. He is a bonafide baptized church member of the SDA Church at Balongis, Balulang, Cagayan De Oro City. He was born, nurtured, and raised in an Adventist family. He later enrolled at the Mindanao State University College of Medicine in his desire to obtain a medical degree.

On June 23, 2014, Dr. Giovani Cabildo, Histology instructor moved the Histology class from a weekday schedule to Saturday. In several instances, schedules were moved from weekdays to Saturdays.

Valmores wrote a letter to Dr. Achacoso at the Dean's office explaining his adherence to his religious conviction and sought to be excused from classes and examinations which were scheduled on Saturdays.

In a meeting, Dr. Achacoso, the Dean of the College of Medicine, apprised Valmores of the possible adverse consequences if ever he chose not to take an examination on Saturdays including flunking the course and dismissal from the College of Medicine. Yet, Valmores adhered to his religious beliefs and refused to attend his classes on Saturday. A letter of request was sent to the respondent, Dr. Achacoso, by the church pastors of the SDA Church and Prof. Juliet Mendoza, the Head of the PARL of their local church requesting an audience with her on the aforementioned matter and to explain the attendance of petitioner every Sabbath to church. Valmores sent a follow-up letter reiterating his appeal and religious beliefs. In the said letter, he manifested his willingness to undertake make-up classes or an equivalent undertaking to satisfy the requirement of the course in conformity with the CHED Memorandum.

A certification issued by Pastor Hanani P. Nietes, Director of the Public Affairs and Religious Liberty, dated September 15, 2014, was submitted to respondent Dr. Achacoso's office attesting to the fact that Mr. Valmores is SDA and that members of the said church upheld the observance of the Saturday Sabbath as a day of worship. The certification was issued in support of his request for exemption from all Sabbath classes, exams, and other non-religious activities. Instead of favorably addressing the concern and requests of the petitioner, respondent Dr. Achacoso callously inquired from him whether he wants to continue his degree in the College of Medicine. The petitioner addressed in a letter dated September 19, 2014, the query about his decision to continue his studies with MSU-College of Medicine and formally manifested his desire to continue his studies in the MSU College of Medicine.

Mr. Valmores wrote a letter dated December 4, 2014, to respondent Dr. Giovanni Van Cabildo, as the History Laboratory examination for the locomotor module was moved to Saturday and sought for a special examination for the module. The said letter was also furnished to the office of the respondent, Dr. Achacoso.

Despite the foregoing letters, requests, follow-ups, no consideration, or action was given by the respondent, Dr. Achacoso and Dr. Cabildo. Hence, Mr. Valmores and Pastor Nietes sought the assistance of the Regional Office of the CHED in compliance with the doctrine of exhaustion of administrative remedy. Dr. Roy Roque U. Agcopra, CHED Region X, wrote an endorsement letter dated January 6, 2015, which was forwarded to the University President of MSU, Marawi City, calling the attention of Dr. Achacoso to observe and uphold the provisions of CHED Memorandum (2010) concerning the case of Mr. Valmores. The said endorsement further advised furnishing the Region X Commissioner of the action that will be taken.

Ever mindful of the foregoing Memorandum and enshrined the constitutional right of religious freedom, the President of the Mindanao State University, Dr. Macapado Abaton Muslim sent the respondent a copy of the CHED Memorandum containing side notes instructing Dr. Achacoso to enforce in the memorandum. The counsel of Valmores, sent a letter dated March 25, 2015, to the respondent, Dr. Achacoso, as no written and formal response was received from her. Hence, Valmores filed a Petition for Mandamus before the Supreme Court.

The Supreme Court, in a decision promulgated on July 19, 2017, ruled that the Dean Christina Achacoso had violated Valmores' right to freedom of religion. First, it emphasized the well-entrenched importance of religion in the Philippine Society. Second, the Supreme Court recognizes that religion has transcended a mere rubric and has permeated into every sphere of human undertaking. Thus, religious freedom, to a limited extent, has come under the regulatory power of the State. Third, the decision upholds the constitutionality of the CHED Memorandum and underscores the crystal-clear policy which is to uphold the student's rights to religious liberty and enjoyment of worship. Fourth, the Supreme Court acknowledged that the religious liberty of Mr. Valmores was violated. He was made to choose between observing the Sabbath and finishing his education is a patent infringement of religious freedom. Fifth, the Supreme Court upheld the religious freedom of students above the academic liberties of educational institutions.

Factual Antecedents of the case of Rolan Clamor vs. DDT Konstract Inc. Rolan Clamor was hired in 2012 as a mason of DDT Konstract Inc. and worked continuously therein for five (5) years. He was initially assigned at SMDC Light at Boni, Mandaluyong City.

As a faithful SDA, he worships God on a sabbath. It was fortunate that the project manager assigned at SDMC Light understood his religious conviction. After his work with SMDC Light, the petitioner transferred Mr. Clamor to SM San Mateo. He worked at the site as a mason for the finishing works therein. Then he was transferred by the company to Somerset 2 in Alabang.

When there was an urgent need for a mason in Pasay Sure, the company transferred him temporarily for few months thereat. Mr. Clamor was then assigned at Silk Residences located at Santol, Sta. Mesa, Manila on February 1, 2016, where he worked for another year.

In the first week of February 2017, the administrative officer of the company, Mr. Carlito Prieto, called him in the office and confronted him with his absences on Saturdays. He explained that he is SDA and his religious conviction directs him to worship on Sabbaths. Mr. Prieto checked his dates of absences and indeed all were Saturdays. Despite the respondent's explanation, Mr. Prieto transferred him to SM Keppel in Ortigas, Pasig City, and a few days thereafter he was told not to report for work due to his absences during Saturdays.

During the National Labor Relations Commission (NLRC) proceedings, the company denied terminating Mr. Clamor due to Saturday absences. Instead, the company claims that Mr. Clamor is a project employee and hence his employment ended upon the end of the project.

The National Labor Relations Commission ruled that Mr. Clamor was illegally dismissed and the company was mandated to award his monetary claims including back wages which represents the salary during the period of his termination until the NLRC issued the decision.

Algorithms on Exercising Religious Liberty

Based on previous cases and lessons learned from the data, the proponents deemed to provide an algorithm indicating guidelines for problem resolution for SDAs when confronted with the same religious concerns.

Referring to the predicaments and precedent cases given above, the exercise of religious freedom of SDAs has been taken into account including their problems faced within different areas. However, there have been no clear guidelines as to how a member of such a predicament would do.

An algorithm is a step-by-step list of instructions for solving any given problem when it arises. This method is often used in computer science (Miller & Ranum, 2013), chemistry (Surif et al., 2013), and other sciences. In this study, three algorithms are shown to solve problems in the fields of academe (Fig. 1), licensure (Fig. 2), and employment (Fig. 3).

HEIs to mold the graduates have been considered to play an active role in the economic, social, and cultural development of regions as well as the country. The extent of its effects may vary based on the characteristics of the institution, its location, and the policy frameworks of which it follows (Arbo & Benneworth, 2007). Thus, the policies and the experiences of the students have undergone under these HEIs impact their world view and shape their lives as responsible citizens thereafter (Bean & Wilson, 2019). When religious exercises are respected by HEIs, it provides evidence that by due process and proper communication, all misunderstandings and discord may be resolved.

Figure 1 shows that when one encounters a problem, the best solution is to resolve it through a personal request first towards the professor or concerned channels citing the DepEd memorandum or CHED Order with the Supreme Court Case won by Mr. Valmores. When personal requests are denied, the aid of a church pastor, the PARL Director, and then the party list with a higher influence must be called for attention. If requests are denied, an agent of law must be sought to provide a legal action and file for mandamus before the regional trial court (RTC).

The last hurdle for new candidates to practice their chosen profession, licensing examinations are to be faced to standardize technical knowledge and competent abilities of the working professionals (Hertz & Chinn, 2000).

Following precedent cases with PRC, Figure 2 simplifies the process to follow when encountered with Sabbath-keeping problems and taking licensure examinations. When encountering problems concerning the testing days, a personal request must first be made to PRC citing section 7 of the Modernization act of 2000. If the request has failed, one must seek assistance from the PARL director and the party list. When it has not yet recognized, it is best to seek legal assistance to draft a letter then file a mandamus to the RTC.

Religion and religious practices are often limited in the study, discussion, and awareness when it comes to employment (Carr-Hill & Lintott, 2002). However, despite this limited inclusion in studies, religion plays as a fundamental and core characteristic of a person's identity in his day to day activities at home, in society, and workplace (Etherington, 2019). The exercise of their religious freedom is significant for individuals' growth and job satisfaction.

When encountering Sabbath problems, a suggested course of action is presented in Figure 3. A personal request must be made to the employer for compromise or change of work schedule citing Article 91 of the Labor Code. When denied, similar preliminary procedures with that of academic and licensure must be taken into action. From these steps, the final resort would be to file a Single Entry Approach System before the NLRC of the DOLE.

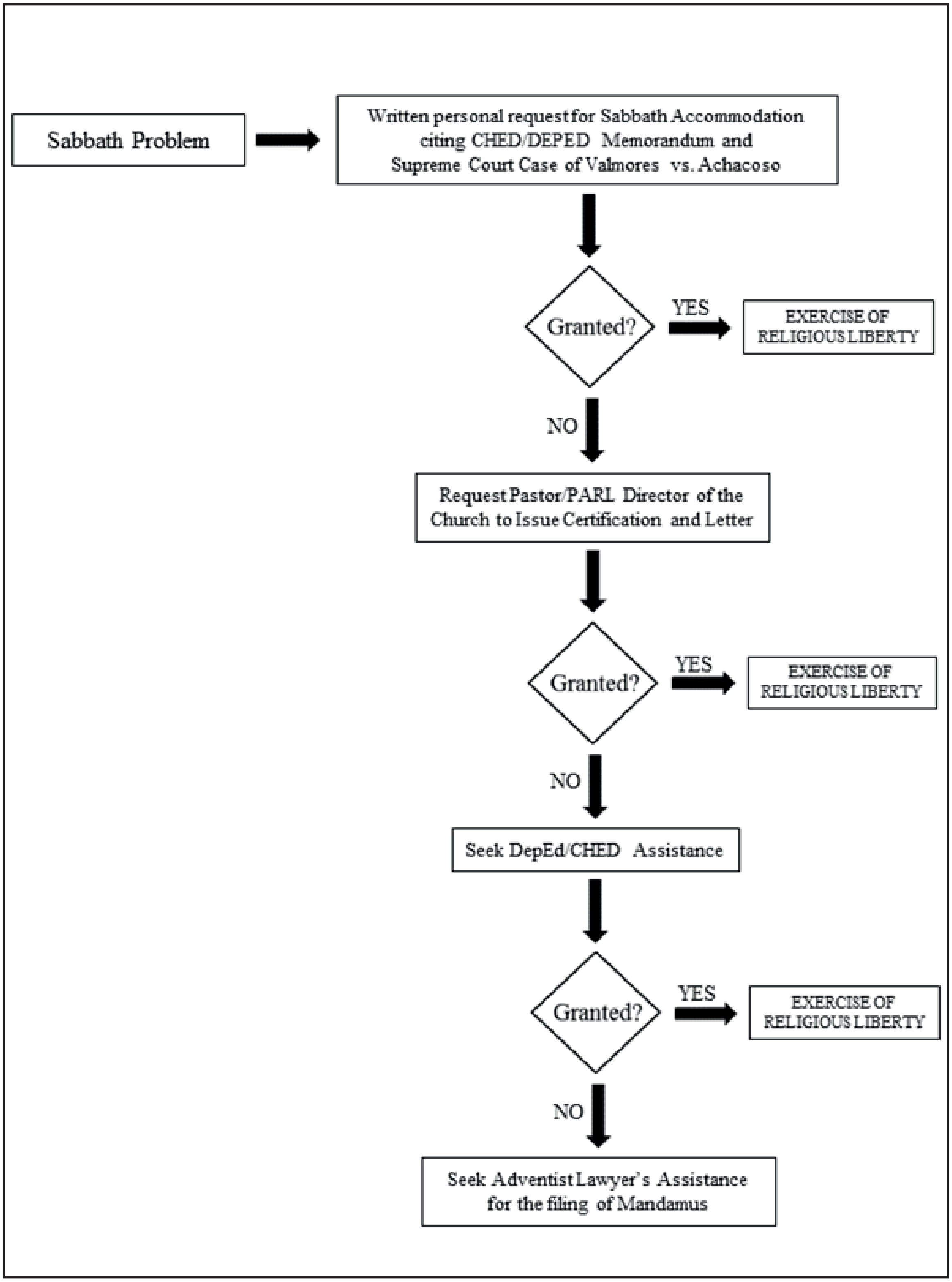

Figure 1. Algorithm of SDA members confronted with a Sabbath problem in academic institutions.

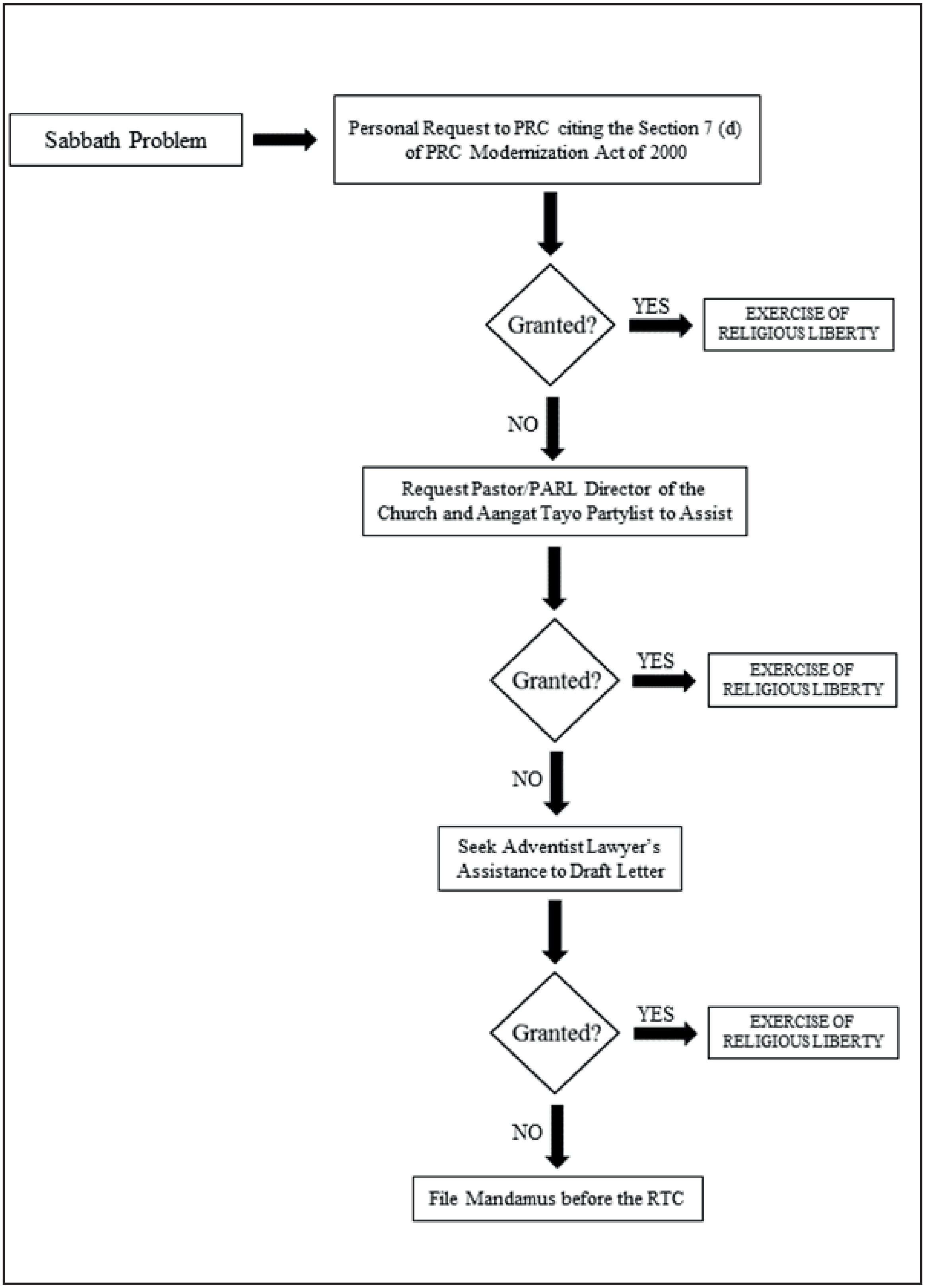

Figure 2. Algorithm of SDA members confronted with Sabbath problem for licensure examinations.

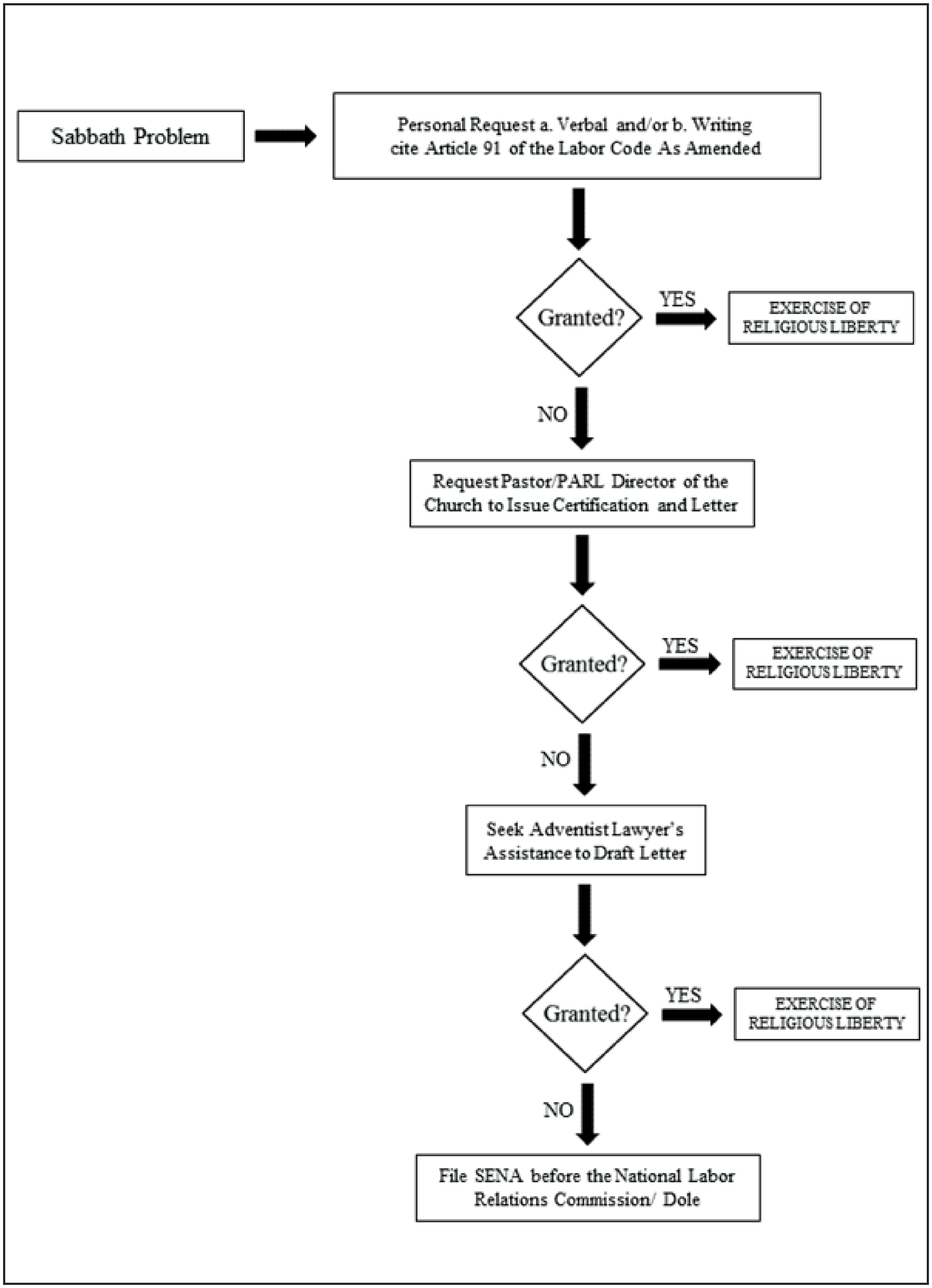

Figure 3. Algorithm of SDA members confronted with a sabbath problem in employment.

Conclusion and Recommendation

The study provided an understanding of the resolution of problems on the exercise of religious freedom among SDAs. First, common problems that are encountered among Sabbath-keepers are divided into categories which they commonly fall under. In each of these areas, documents and other pertinent information were gathered for cases involving religious liberty. From these, implication and sample cases are made and analyzed.

Respective government agencies, as indicated by filed cases, memorandum, and circulars, have continued to uphold the right of religious liberty, especially for Sabbath-keepers. Problems arise from the involved personnel or companies where church members directly are subjected to their discretion. Based on the problems that arise, the algorithms suggest stage by stage process on how to deal with these difficulties in keeping the Sabbath. As much as possible, reminders of the circulars must be submitted to concerned individuals before taking legal action. These steps are necessary, regardless of the lengthy process, to exhaust administrative remedies.

Several legal cases were won by SDAs who stood by their faith in keeping the Sabbath. These cases are jurisprudential references that provide additional support for Sabbath-keepers in similar situations in their assertion of their religious liberty.

It is recommended that the proposed algorithms of SDA members generated from this study will be used by future researchers. Furthermore, the effectiveness of the algorithms should be tested for future use.

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A Training Program on the Implementation of 5S in Selected Micro Businesses

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Abstract

The implementation of 5S *(Seiri–Sort, Seiton-set in order, Seiso-shine, Seiketsu-standardize,* and *Shitsuke-Sustain)* is found helpful to improve the processes and strategies of business services, however, it has been an issue in the workplace. This study determined the implementation of 5S in selected micro-businesses. Convenience sampling was utilized in the study. The questionnaire consisted of 20 items that can determine the implementation of 5S in 30 selected micro-businesses. Of the 30 service business, 12 were food businesses and 18 were service businesses. Descriptive statistics were used for data classification such as percentages and frequency count. The results showed that the majority (>80%) of the business respondents had *sorted (Seiri)* their supplies, equipment, and other items. The implementation of *Set in order (Seiton)* varied among business respondents. Color coding and other visual controls were least (10%) implemented. Further, the business respondents implemented *Shine* (Seiso), except that only 53.33% of the employees have cleaning schedules. The *Standardize (Seiketsu)* was implemented by 100% of the business respondents particularly on the clear rules and responsibilities by management and encouragement to maintain a high standard in the workplace. Only 6.67% of the business respondents claimed that their staff is conversant with the 5S program. Finally, *Sustain (Shitsuke)*, was the least implemented among the 5S. Around 66.67% or less of the business companies are implementing it. Based on the result, a training program of 5S in the selected micro-business particularly on two 5S, Sustain and Standardize was implemented.

Keywords: *5S, workplace management, productivity, organized environment*

Gupta and Chandna (2019) stated that 5S is the Japanese concept used in the manufacturing and service industries for applying the best manufacturing technique as well as a 360-degree industry creation to make product almost defect-free. Paulise (2020) cited 5S implementation as the first tools that can help eliminate waste, maintain an environment that is effective, safe, and clean. It can be applied internationally in all different industries, from small companies to international corporations, whether in the private or public sectors. The 5S was originally designed by Hiroyuki Hirano for manufacturing companies in Japan according to Creative Safety Supply (2017). 5S is also identified as 5 pillars. If correctly implemented and actively followed, it will lead to lower costs, improved quality, improved safety, higher productivity, and greater employee satisfaction. 5S was initially introduced by Japanese manufacturing firms. The manufacturing sector was implemented in the 1980s as the reason behind Japanese economic growth. Moreover, 5S was ultimately applied to settings that were not made, such as offices (Kanamori et al., 2016).

5S is a method for *arranging, ordering, sweeping, standardizing, and continuous development* of the work environment. 5S is not only about housekeeping, but it is also one of lean manufacturing's powerful working tools. The system gets its name from five operations that began with the letter S, originating from five Japanese words. The terms are *Seiri, Seiton, Seiso, Seiketsu, and Shitsuke*, respectively, which mean *Sort, Set in Order, Cleaning, Standardize, and Maintain* when translated (Agrahari et al., 2015). The 5S approach offers a framework for developing an organizational culture and continuing to work on the requirements for quality improvement. 5S is being introduced as a performance and quality-oriented business model appropriate for the service industries. The effectiveness of the 5S program can be traced to a good partnership and active participation of all the organization's staff members (Marshettiwar & Sangode, 2018). Rashmi et al. (2018) cited that 5S Organizational activities affect the behavior of workers, their actions, their attitude towards their jobs, and their desire to work at the company. A successful 5S training system makes workers more open to all sorts of ways they can become more efficient. 5S is an effective tool and can be used in various industries, whether micro, small, medium, or large. A 5S method can be implemented in any place of business. This may be a hospital supply/store, a telephone company repair vehicle, a CSR desk/work area in a call center, an airline's baggage claim room, or a laptop computer.

Review of Literature

The 5S *(Seiri –Sort, Seiton-set in order, Seiso-shine, Seiketsu-standardize, and Shitsuke-Sustain)*

5S is an important workplace management method t was first developed in Japan. It is a technique of organizational management that helps to improve the working environment, human capacity, and efficiency (Kobarne, 2016). The original purpose of the 5S is to make the place of work orderly to improve safety and efficiency, reducing the rate of product defects (Vikas, 2014). 5S stimulates a healthier work environment by distinguishing, decreasing, or excluding the waste. It also enhances teamwork, since everybody in the organization is part of this system from the shop floor level to the topmost person (Joshi, 2018). The strong foundation of effective implementation of 5S in an organization is by taking part in the top management.

5S Technique

***Seiri* (Sort)**. It focuses on the classifying the needed and not needed tools, equipment, and materials in the company (Adere, 2018). Sorting can also be described as holding only the items needed and excluding those that are not essential, ordering resources per requirement, and storing them in convenient locations. The issues that arise in the process will be minimized when sorting is implemented in the workplace.

***Seiton* (Set in order)**. It is organizing the materials that are either useful or not useful and then labeling each material to the different work areas (Chourasia & Nema, 2016). The function of *seiton* is to have easy access to the essential resources whenever needed and after being used, these resources are placed at their respective locations. An important advantage of seiton is the clear visibility of everything needed for the job (Agrahari, 2015) first in, first out of practice, use of marks or color codes for easy identification, use of file or document indexes, and so on).

***Seiso* (Shine).** Seiso can be seen as sweeping, too. To put it another way, office sanitation and all the necessary equipment being used. Seiso's main goal is to keep things orderly and organized. Employees should leave the office clean at every end of a shift, and ensure that all resources are kept at their respective locations. By doing this step, the workplace and equipment are assured that they are ready for the next change to be used. Maintaining the cleanliness of the workstation with the sorted and set in order materials (Chourasia & Nema, 2016).

***Seiketsu* (Standardize)**. Every company has its own established procedures for its activities related to everyday work. Whenever a standard operating procedure is provided, discipline is developed. It helps them achieve the organization's goals and objectives by implementing *seiketsu*, because the required quality of work output is always being met. Monitoring the *standardized* procedure and best practices of the sort, set in order, and shine daily activities (Chourasia & Nema, 2016).

***Shitsuke* (Sustain)**. The last method is to sustain once the 4S's have been implemented. *Shitsuke* is also known for self-discipline, or sustain. It is shitsuke to keep consistency in the process of doing work. Joshi (2018) reiterated among business proprietors to keep this new way in mind and don't make a gradual decline back to the old ways establishing an action plan for these procedures, performing self-audit, etc.

Baird (2020) stated that even today, after 35 years, most organizations struggle in the last stage of 5S (Sustain). They misunderstood the benefits of 5S and did not attach a 5S practice with their overall strategy. Standardize and Sustain are the last two stages used to continuously improve best practices. It can sustain the program through training, developed scoring, and reward system. Rhaffor, Azizula, Jamiana, and Shukora (2019) cited that 5S is important to support upon implementation for improvement in manufacturing such as Just-in-time (JIT) or Lean Production, cellular manufacturing, Total Quality Management (TQM), or Six Sigma initiatives. Patel, Tomar, and Nagila (2017) also stated that the "implementation of 5S within the organization in a small team can contribute as a participation program. Involving the managerial heads to ground level workers is a requirement for efficient and effective results. The benefits of 5S implementation can help an organization to use effective work area, better working space, losing tools will be stopped, reducing accidents, pollution, employees will be disciplined, the moral and awareness of employees will be improved, internal communication and human relation will grow" (p.17-18). Chavan and Pant (2017) said that all employees, without exemption must view the 5S program because it is a tool for controlling daily work in the organization. 5S concept implementation is a great contribution to have a safer and better workplace. It can give improvements in compliance and efficient workflow (pp.24-25). The 5S implementation is not sufficient, monitoring by conducting a survey checklist and controlling the standard made to sustain and maintain the systematic methods (Joshi, 2015). Gupta and Verma (2015) mentioned that there should be a 5S Audit to avoid 5S enforcing. Training is needed to enhance the perception of 5S practice and adopt its lifestyle instead of management tools. The top management level, total involvement of staff, and all level within the company is the key to 5S practice to be implemented.

Organizations have been constantly exploring and innovating their management strategies concerning their methods. One method called the 5S was conducted with numerous research that was theoretically proven to be effective and implemented in large companies around the globe. Vikas (2014) stated that the 5S is not new and has been here for a long time. For every organization, the 5S approach is helpful because it allows everyone to have a better life (da Silveira, 2006). It promotes management of the workplace, increases productivity, and a better environment for the organization. In addition, where the workplace is pleasant, employee satisfaction increases.

Based on the gathered literature, among the 5S, the least practiced and implemented are *standardize* and *sustain*. Moreover, much international literature was published but very sparse at the national level.

Hence, this study aims to promote and raise awareness in Silang, Cavite about the beneficial factors of the 5S method in small business enterprises.

Specifically, the study answered the following questions:

1. What is the rate of implementation of the 5S among micro-businesses?
2. What training program can be developed based on the result of the study?

Research Methodology

Research Design

The researcher used a quantitative method particularly descriptive design due to the nature of business and effectiveness in gathering relevant information. Through convenient sampling, 50 business owners who live in Silang, Cavite, Philippines were selected, but because the researcher aimed to obtain equal and varied information, only 30 were included. Twelve of these are food-related businesses (eatery, bakery, etc.), eight are related services (laundry, barber, etc.) and ten are different businesses (apartment, gym, pet shop, etc.). The response rate was 60 percent (30 of 50), 13 (43.33 percent) of which were males, and 17 (56.66 percent) were females. The respondents ‘ median age is 32 and ranges from 27-40 years old. 6.66% of respondents without formal education, 30% have primary education, 56.66% have secondary education, and 6.66% have tertiary education. A five-part survey questionnaire was used to gather data and frequencies and percentages were utilized to interpret the data gathered.

Results and Discussion

The 5S implementation in the micro-business was measured. The result showed that the *materials, equipment*, and other items were sorted by more than 80% of the respondents. Setting in order implementation has different styles per company. Color coding and visual checks are applied at least10%. Shine was applied except that 53.33% had cleaning plans.

In terms of standardization, the management explicitly sets out rules and obligations with 100% being applied. Just 6.67 percent of the business respondents, however, claimed their workers are familiar with the 5S program. Finally, *maintenance* is the least implemented among the 5s as declared by 66.67% of the respondents. It was the least implemented among the 5S.

Table 1
Seiri (Sort)

Items	Frequency (N = 30)	Percentage (%)
1. Supplies, equipment, and other items are properly sorted and stored	28	93.33
2. Items not frequently used are appropriately stored	26	86.67
3. Frequently used items are properly stored	29	96.67
4. Only necessary items are found in the workplace	24	80.00
5. Both items needed and not needed are clearly distinguished in the workplace	25	83.33

Table 1 shows that 80-93.33% *sorted* their supplies, equipment, and other items are sorted and stored properly. Items that are needed and not needed are distinguished. Patel et.al. (2017) cited that the sorted tools, equipment, and materials in the workplace are stored while unnecessary items are noted and placed in a red tag area. The scrap and useful items are segregated properly in the workplace.

Table 2
Seiton (Set in Order)

Items	Frequency (N = 30)	Percentage (%)
1. There are safety signs showing possible hazards in the workplace	20	66.67
2. Color coding and other visual controls are used for easier identification	3	10.00
3. The use of visual control such as labeling is very visible in the workplace	15	50.00
4. There are good storage facilities	24	80.00
5. Important items are well documented, identified, and stored correctly	25	83.33

Table 2 presents that *setting in order* through color coding and other visual controls for easier identification was the least (10%) implemented. Only 50% of the respondents used visible visual control such as labeling in the workplace. Moreover, 66.67 - 83.33% have safety signs showing possible hazards, good storage facilities, proper documentation and identification, and stored correctly in the workplace. Patel et al. (2017) stated that tools, equipment, and materials are systematically organized and set to its volume and quantity for easy and efficient access to everyone in the workplace. Colors and labeling must be used to indicate different locations and areas.

Table 3
Seiso (Shine)

Items	Frequency (N = 30)	Percentage (%)
1. There are schedules in cleaning the workplace	28	93.33
2. Cleaning materials are sufficient enough to clean the work area	23	76.67
3. Each employee has his or her own cleaning schedules	16	53.33
4. There are staff assigned to clean particular areas of the workplace	23	76.67
5. There is a staff assigned to oversee the cleanliness of the work area	29	96.67

Table 3 shows the *Shine* result. Only 53.33% of the employees have their own schedules. Moreover, 76.67% have has assigned staff to clean the area and the cleaning materials; 96.67% have assigned staff to oversee the cleanliness of the work area. Patel et al. (2017) cited that *shine* aims for keeping the workstations, offices, stores, outlet, passageways, etc. in the organizations clean and neat in daily activity.

Table 4
Seiketsu (Standardize)

Items	Frequency (N = 30)	Percentage (%)
1. Rules and responsibilities are clearly spelt out by the management	30	100.00
2. The different areas of the workplace are distinctly labelled	24	80.00
3. All staff are conversant with 5S program	2	6.67
4. Standardization procedures are being introduced from time to time	20	67.00
5. Staff are encouraged to maintain high level of standard in the workplace	30	100.00

Table 4 presents that 100% of the rules and responsibilities are spelled out by the management and the staff are encouraged to maintain a high level of standard in the workplace. The least implemented among the items is *all staff is conversant with the 5S program* (6.67%). Patel et al. (2017) mentioned that continuous implementation of the sort, set in order, and shine is needed to establish a standard of the best practice in the organizations. All activities must be standardized to ensure waste elimination and to improve the workplace.

Table 5
Shitsuke (Sustain)

Items	Frequency (N = 30)	Percentage (%)
1. Areas of improvement and noted are acted upon	20	66.67
2. 5S checklist is provided in the workplace	2	6.67
3. There are regular auditing department to ensure compliance to 5S	2	6.67
4. There are seminars and trainings conducted from time to time	10	33.33
5. Staff is assigned to oversee the compliance	20	66.67

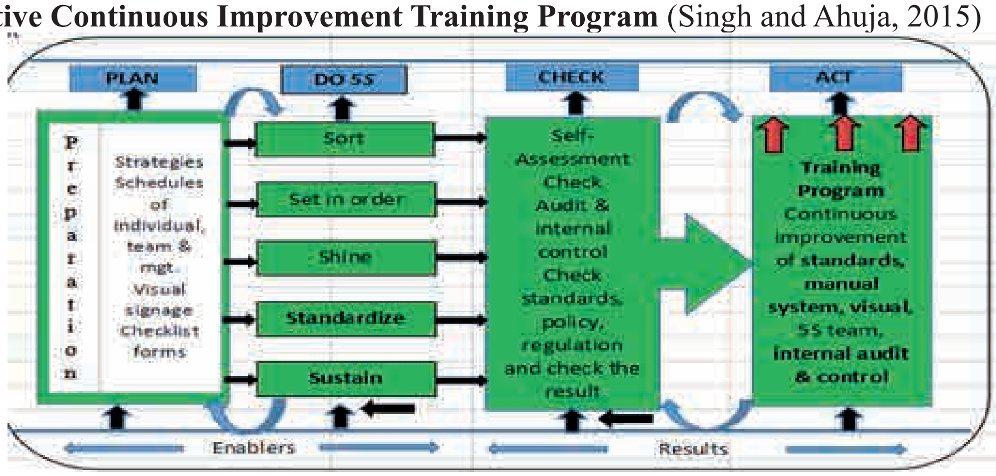
Table 5 shows that the areas of improvement and noted are acted upon and staff is assigned to oversee the compliance is 66.67%. Only 33.37% for seminars and training conducted in their workplace. The least (6.67%) implemented is the 5S checklist, regular auditing to ensure compliance of 5S. Chavan and Pant (2017) cited that *sustain* is a way of life and a new way to operate in the organization.

The findings showed that respondents have a *positive response to seiri (sort)*, respondents have a neutral response to *seiton (set in order)*, a s*omewhat positive response to seiso (shine)*, a *somewhat positive response towards seiketsu (standardize)*, and a *somewhat negative response towards shitsuke (sustain)*. Hence, it would be beneficial to initiate awareness with regards to the importance and beneficial factors of implementing the 5S in the workplace.

5S Internal Audit & Control Training Program

The objectives of the program are to impart the 5S methods and create 5S activities that help the working team to have the valuable experience and result in 5S activities. The training program encourages workers to actively participate in 5S activities. The issues that the program address pertain to the standardization of visual control, schedules of employees, staff awareness of the 5S program, and sustenance of the 5S practices. It was implemented through the PDCA cycle approach and internal control system. This program aimed to evaluate the company's current level of compliance and help it become more effective, productive, and profitable by reorganizing the operations management system process.

Creative Continuous Improvement Training Program (Singh and Ahuja, 2015)



Review the policy, standards of 5S, Checklist audit form, visual management checklist, train the staff for executing the standardized goals and to sustain it.

Singh and Ahuja (2015) illustrated the following for 5S

- Plan - Preparation, create strategies for the implementation of 5S. Individual Team & Management, visual signage, color coding, labeling, the checklist of 5S, red tags, and forms.
- Do - sort, set in order, shine, standardize, and sustain.
- Check - assessment/ check the schedules, output, policies, regulations, standards, and results of 5S
- Act - Internal control training program (COSO) (all level of management) training of staff and management for internal audit & control.

Food & non- food items - right labeling with color-coding (Nerona, Park, Bogobog, & Tamondong, 2018)

Colour coding	Category
	Sauce and condiments/recipe mix
	Powdered seasoning/condiment mixes soup
	Hot and cold beverages
	Deserts and snacks
	Canned goods - vegetables and fruits
	Noodles and pasta products
	Sandwich spreads, cheese, salads
	Non-food stuff
	Herbs and spices

Nerona, et. al. (2018) cited that the research team developed color-coded labels to instruct the workers in the proper stacking and faster positioning of the products on each rack. Copies of the same labels were fixed on the wall near the entrance for the storeroom users to get a fast and simple guide. This kind of visual management helps in the area of lot standardization, security, and training.

5S Standard Color Code

	SAFETY (GREEN)	Safety equipment, first aid, safety posters, recycle containers, exits, OSHA compliance, Finished goods
	EQUIPMENT & INVENTORY (BLUE)	Machines, inventory lines & signs, inspection points, notices, work in progress
	STANDARDS (YELLOW & ORANGE)	Machines guards, aisle walkways, operation standards, handrails & guardrails, cautions, warnings, OSHA compliance
	DEFECTS & FIRE (RED)	Scrap containers, firefighting equipment locations, sprinkler piping, red tags for unused items
	TOTAL PROCESS MGT. (WHITE)	Repair tools, total process management materials, cleanliness
	RACKS & STORAGE (GRAY)	Racks, warehouse, mold skids, raw materials

INDIVIDUAL ROTATION SCHEDULES				
DAYS	SWEEPING GARBAGE REMOVAL			
	AM	PM	AM	PM
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				

5S AUDIT CHECK SHEET

Department: ______________________ Completed By: ______________________

Supervisor: ______________________ Date: ______________________

0 = No Compliance 1 = Very Little Compliance 2 = Some Compliance 3 = Significant Compliance 4 = Total Compliance

Determine what's required and take the rest out.		0	1	2	3	4	Comments/Actions to be taken
SORT	Did the department eliminate all the unnecessary items (tools, devices, boxes, etc.)?						
	Does the inventory or the in-production inventory contain any unneeded parts?						
	Is it the most appropriate place for the devices and equipment?						
	Should the closets, storage cabinets and shelves contain only important items?						
	Is the quarantine area handled appropriately? – (Updated completely?)						
	SUB TOTAL						
A place for everything in place, and everything. No quest!		0	1	2	3	4	Comments/Actions to be taken
SET IN ORDER	Are racks and other storage areas clearly marked with place indicators and all footprints?						
	In which appropriate, are shadow boards and other storage systems utilized?						
	Are the walkways and areas of work clearly defined and unhindered?						
	Are personal belongings (coats, shoes, magazines, etc.) kept in lockers?						
	Security Equipment-Is all safety equipment installed and in place?						
	SUB TOTAL						
Cleaning and trying to find ways to keep things clean.		0	1	2	3	4	Comments/Actions to be taken
SHINE	Floors-Have they been kept clean, tidy and in good repair condition?						
	Machines & Equipment-Are they free from pollution, noticeable spillages and leaks?						
	Bins-Are they handled properly and are they filled regularly?						
	Is anyone in charge of routine inspection / maintenance?						
	Do operators sweep up and clean machines and equipment daily, without being told?						
	SUB TOTAL						
Keeping and making expectations clear.		0	1	2	3	4	Comments/Actions to be taken
STAND-ARDIZE	Is control of stocks created, apparent and in use?						
	Is everyone easily aware of their responsibilities and the flow of their departments?						
	Is information clear and in use for doing regular routine work?						
	Are ideas for change being produced and acted on regularly?						
	Are the criteria transparent and up-to-date for first 3S?						
	SUB TOTAL						
Maintain high quality, and try to change continuously.		0	1	2	3	4	Comments/Actions to be taken
SUSTAIN	Do checklists exists and are they used?						
	5S Board-Is this up to date and subject to daily review?						
	Have recommendations for change been acted on from last month?						
	Training-Is anyone properly trained to execute their role in the job?						
	Education-Can anybody explain the benefits of 5S in the area?						
	SUB TOTAL						SCORE DIFFERENCE (+/-)
Q25. Education - Ask 4 employees benefits of 5S (-1 point for each person that cannot explain)							
Difference (+/-) - Compare this months score to previous month to see if improvements are being made							

INTERNAL CONTROL SYSTEM (Committee of Sponsoring Organizations of the Treadway Commission (COSO), 2018)

Zhang (2016) stated that internal controls play a critical role not only in public companies but also in private companies because internal controls establish safeguards to an organization's assets and minimize the opportunities of committing fraud and allowing errors to go undetected in an organization's daily operations. Wahba (2018) stated that internal control is the buzz word for now day's corporate world. Professionals should continuously strive to maintain an efficient and effective internal control environment.

Internal control is a process employed by the board, manager, and other personnel to prevent fraud, ensure reliable financial reporting, and stay in compliance with laws and regulations. Everyone in the organization is responsible for the internal controls impacting their area (Kenkel & Fitzwater, 2015).

Advantages are leading to an efficient and growing firm.

- It ensures the utilization of the company's resources.
- It minimizes the risk of errors and misuse of resources.
- It prevents any financial misstatement by detecting it immediately. Problems arises can resolve in a timely way. Having strong internal control can prevent employees from doing fraud (Brent, 2019).

However, if internal control is not planned well and executed properly, it may cause the company's auditor to become relax and rely only on the internal control system (Brent, 2019).

Conclusions and Recommendations

There are various approaches, methods, and plans available out there for the management of the workplace. 5S is just one of the effective methods used by several companies because of its success in increasing productivity, quality, and a safer workplace environment. This research suggests the beneficial factors that organizations can obtain upon implementation of the 5S. On the other hand, the method's efficacy can vary from organization to organization. It may work for a particular company but might not fit with another. Organizations have the right to choose any strategy and play it out. To figure out what works for a given business would require countless time and effort.

The researcher suggests that focusing on 5S implementation would be helpful, not only in small firms but also in entities that are finding innovative ways to improve their processes and strategies for increasing profitability, performance, and a better working environment. This would also increase employee satisfaction and retention through the application of such methods. Collaboration during the implementation process is recommended. It is concluded that Training is the 5S key to success. 5S implementation is not possible without sufficient training and the 5S is not regularly practiced by employees.

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Work Attitude and Management of Stress: Their Relation to Work Performance Among Institute Workers of a Tertiary Hospital

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Abstract

The work performance of the employees in any organization plays an important role in upholding its mission and vision. Research information found that there is a lack of data and work performance research among health care professionals and employees in the Philippines. It is significant to know the variables that affect the work performance of the institute workers. The researchers want to know whether the work attitude of employees and the ability of employees to manage their stress, significantly affect their work performance. The objective of this study is to identify the relationship between attitude and management of stress on employee's work performance. This descriptive study utilized a thirty-item questionnaire which was developed by the researchers. The data was collected from 51 employees working in a tertiary hospital. Data were analyzed using mean, standard deviation, correlation, and regression. The employee attitude in this organization is positive. The stress management of the workers is also good and the work performance of the employees is high. The results revealed that work attitude and stress management were positively related to work performance. According to regression analysis, 34.7 % (R2) of the variance of the work performance was explained by the work attitude. This study provided data that potential researchers can use to conduct similar studies in other hospitals or organizations, utilizing a larger population size that will add to the knowledge base on work performance.

Keywords: *work performance, work attitude, stress management*

Job-related attitudes and work performance are fundamental research issues in any organization. Their relationships are essential in every organization for maintaining the efficiency of a business enterprise Rahiman & Kodikal, 2017). Job performance can be defined as all the behaviors employees engage in while at work (Fogaça, Rego, Melo, Armond, & Coelho, 2018).

Aside from job-related attitudes, job stress has an impact on employees' job performance.

Job stress is affected due to several factors like overwork, workload, low salaries, lack of incentives, motivation at work, and recognition (Vijayan, 2017).

According to (Civan et al, 2018), stress, which is considered to be one of the most critical problems of the current age and affects the quality of life of living things, is the "war or runaway" reaction that an individual develops against a stimulus that threatens his/her adaptation to the environment. Stress, which is considered to be the social and psychological plague of today. It is evaluated as a condition that occurs with the individuals being forced physically and mentally and feeling under pressure and tension (Armağan & Kubak, 2013).

Attitude and stress management practices play an important role in every workplace. The degree of stress and how people cope with it varies; the same with an attitude towards work- interaction with colleagues, the job, specifically the work environment, is something more personal and subjective. Different temperaments and personalities have different work attitudes.

Work performance is a matter of concern to the administrative heads. As work performance is a measure of how effectively the organization is being led, it is a major concern for human resources and administrative positions. An organization participating in a proper system of good governance must integrate principles and stress management as part of its leadership strategy to achieve higher work performance in the face of the changing world economy. As work attitude and stress affect the performance of the employee's work, each organization should be concerned. Since the employees are considered the most important resource in each organization, each organization's development is linked to each member or staff's work performance. The behavior and values of workers at work are expressed in the quality of daily work (Omisore & Adeleke, 2015).

The purpose of this research study was to investigate the relationship of work attitude and stress management to work performance of institute workers in a tertiary hospital. The study is beneficial in understanding the work attitude, stress management and work performance of the institute workers

Specifically, this study answered the following questions:

1. What is the extent of work attitude and stress management of the institute workers of a tertiary hospital?
2. What is the work performance of the institute workers of a tertiary hospital?
3. Are work attitude and stress management singly or collectively related to work performance?

Review of Literature

Work Attitude

Attitude is personal, and it varies from person to person because it reflects the different feelings of an individual about things, people, or events. Attitude may be positive or negative which arises from a lot of factors that affect or influence a person which in turn may affect the worker's job performance. According to the study of Hettiararchchi and Jayarathna (2014) in Tertiary and Vocational Education Sector in Sri Lanka, there was a significant impact of work-related attitudes on the work performance of the employees of tertiary and vocational education sector in Sri Lanka. The study further stated that those with positive attitudes in their jobs are inclined to maintain their positive outlooks. While those employees who have a negative attitude are inclined to stay negative.

Another study conducted by Malini and Atchyuthan (2014) of non-Academic staff (skilled labors) of the University of Jaffna in Sri Lanka found out that there is a positive relationship between work-related attitudes as shown in job satisfaction, organizational commitment, and job involvement concerning job performance of the non-academic staff in the University of Jaffna.

Attitude can be contagious as it affects the persons interacting within the organization. Attitudes help develop the prevailing workplace environment that determines employee morale, productivity, and team-building abilities (Clark, 2016).

Carmeli as cited in Wu (2011).) stated that employees with a high level of emotional intelligence are generally aware of, and manage, their emotions in terms of retaining a positive mental state, a situation that leads to improved job performance. The 'positive mental state' may also mean a positive attitude.

Stress Management

Another thing to consider that may greatly affect job performance is the management of stress in the workplace. In the study on the relationship between manager-induced undermining behavior and employee performance was investigated by Ülbeği et al. in 2019. The results revealed that job stress has a negative effect on employee performance.

According to Düğenci as cited in Altindag (2020) "the stress level, at which individuals' performance is the best, is the optimal positive stress level" (p.43). The positive side of stress has a positive effect. The individual becomes motivated, fight time pressure, fast in making decisions, and contribute faster and higher to their performance. When individuals cannot cope with personal and environmental dangers, then stress transforms into negative stress, therefore negatively affect performance.

The study conducted by Yadav and Sikarwar (2018) serves an important contribution to factors of work performance. It was found in their study that the three important factors contributed to job stress were role expectation conflict, co-worker support, organizational climate, and work stress. Due to this, employees were able to improve their contextual performance and counter-productive behavior at the workplace resulting in better employee performance.

Work Performance

It is a fact that hospitals around the world are on the pillar of genuine patient care and quality treatment facilities, which is why the priority must be given to non-performance or poor work performance. Poor work performance has been a prevalent problem throughout the world. For example, in a study conducted by the American Institute of Stress (AIS, 2017), 40% of all American workers perceive their jobs as being extremely stressful, affecting their organizational work performance. Similar findings were noted in the UK, where pressure is perceived as a factor that can contribute to workers' poor work performance. Additionally, it has been demonstrated that as employees experience stress, the performance of employees is also noted to decrease (Nabirye, 2010).

A study conducted by Dieleman and Harnmeijer (2006) in Switzerland indicated that the work performance was low owing to the inadequate number of hospital staff, an unsuitable training level for workers in the execution of the operation. It was also reported that decreased work performance is attributed when uncertain requirements, lack of employee skills, shortage of resources or equipment, and lack of motivation are present.

Also, a report on work performance in Malaysia showed that stress caused 86.40% of nurses' work performance to fluctuate due to lack of pre-employment and post-employment training and lack of hospital equipment. In addition to work performance among nurses experiencing high-stress levels, it was found to be very low. Therefore, nurses who receive ambiguous work requirements appear to initiate unfavorable work performance compared to those who have a clearer understanding of the job and what is required of them, leading them to lower work performance (Long, Kowang, Ping, & Muthuveloo, 2014).

A study on employee work performance in India, conducted by Kundu (2015), revealed that employees who are physically present during work hours but do not initiate work activity are considered to exhibit poor work performance. Unsupportiveness of a director or supervisor, lack of training or instruction, improper coaching methods, and expressing disappointment and anger to employees in a judgmental or threatening manner can lead to the poor performance of their work.

Many studies focused on teachers' work performance (Pilarta, 2015) and corporate staff (Angeles, Saludo, Virtus & Tun, 2015). In addition, Adim, & Akintokunbo (2018) found that there is a lack of data and work performance research among health care professionals and employees in the Philippines. The findings of the study revealed that stress management has a significant relationship with employee efficiency and effectiveness. The study thus concluded that stress management bears positive and significant influence on employee performance.

Methodology

Research Design

The quantitative research method was used in this study as deemed the best way to answer the questions and the purposes of the study. The type of study was correlational. This study was purely based on primary data.

Population and Sampling Technique

Fifty-one hospital workers from a tertiary hospital participated in the survey. Respondents were purposively selected to represent all the workers of the particular institute.

Of the 51 respondents, 29 % are male and 71 % are females. In terms of education of respondents, 7.8 % are undergraduate, 86 % are college graduates and 6 % have post-graduate education. Additionally, 84 % are staff, 7.8% holds the position of a supervisor, and 7.8 % are managers. For tenure, 53% are 2 years, and below, 20% are between 3 to 5 years, 9.8 % are between 6 to 10 years, and 18% are 11 years and above.

Instrumentation

Survey questionnaires were developed, content validated and distributed to the respondents. The researchers used a 5-point Likert scale consisting of five choices of answers: *strongly disagree (1), disagree (2), undecided, agree (3), and agree (4) and strongly agree (5)*. The item in the questionnaires was based on the literature and related studies.

Data Gathering Procedure

After content validation, the researchers distributed the questionnaire to the respondents to measure the work attitudes, stress management, and work performance. The data for the study were collected within 1 and ½ weeks.

Ethical Consideration

Before giving questionnaires, the researcher obtained full consent from the research respondents whether they are willing and without the compulsion to be research respondents in the study, protected the research respondents' privacy, and kept the research data confidential.

Analysis of Data

Collected data were analyzed using the Statistical Packages for Social Sciences (SPSS) version 23. The statistical methods used in the analysis were regression analysis and correlation analysis.

Results and Discussion

Employee Work Attitude

Table 1 presents the work attitude of the among institute workers of a tertiary hospital in Alabang. Overall, the work attitude of the employee in a tertiary hospital is positive (M =4.47, SD = .37). The items *"I know my work is important to my department"* and *"I work hard on my job"* were rated the highest by the hospital workers (M=4.65, SD= .483; M=4.61, SD =.493, respectively). An employee with a positive attitude can fine-tune to the organizational environment, leading to holistic development in the performance and productivity of the entire organization (Rahiman, & Kodikal, 2017).

Table 1
Work Attitude

	Mean	Std. Deviation	Scaled Response	Interpretation
As far as I know now, I plan to still work in this hospital next year.	4.39	.723	Agree	Positive
I am satisfied with the amount of job security I have.	4.14	.749	Agree	Positive
I am satisfied with the respect I receive from the people I work with.	4.43	.575	Agree	Positive
I trust my colleagues.	4.47	.578	Agree	Positive
In general, I like working here.	4.49	.505	Agree	Positive
I am concern to what will happen in my department.	4.37	.692	Agree	Positive

{table continues on the next page}

I work hard on my job.	4.61	.493	Strongly Agree	Positive
I know my work is important to my department.	4.65	.483	Strongly Agree	Positive
My work is generally interesting.	4.59	.572	Strongly Agree	Positive
I am happy to be part of this team.	4.55	.541	Strongly Agree	Positive
Employee Work Attitude	4.4686	.36959		Positive

Disagree & Strongly Disagree (1-2.5) = Negative   Neutral 2.51-3.5

Agree and Strongly agree (3.51 – 5.00) - Positive

Management of Stress among Institute Workers of a Tertiary Hospital

Stress has become a widespread phenomenon, which occurs in various forms in every workplace or society (Bamba, 2016). Stress happens when one realizes the pressures or situation wider than they can handle. If a person cannot handle it any more for a longer period without any interval, then mental, physical, or behavioral problems can occur. This study determined the extent of how workers manage their stress at work.

Table 2 shows the descriptive results on the management of stress among institute workers of a tertiary hospital. The result of this survey revealed that the hospital workers' management of stress was *good* (*M* = 3.91, *SD* = .41/0 Specifically, they rated high on the following items "To cope with stress, I think of wonderful thoughts"; "I follow my timetable to meet the deadlines", and "When I am with my loved ones, I worry less about my concerns at work"

Table 2

Management of Stress among Workers

	Mean	Std. Deviation	Scaled Response	Interpretation
To cope with stress, I think of wonderful thoughts.	4.31	.616	Agree	Good
I follow my timetable to meet the deadlines.	4.27	.603	Agree	Good
I have more important things to focus on aside from usual problems at work.	3.98	.883	Agree	Good
Job pressures interfere with my family or personal life.	3.22	1.286	Undecided	Fair
When I am with my loved ones, I worry less about my concerns at work.	4.00	.849	Agree	Good
I find it difficult to express my feelings to my superiors.	3.53	.966	Agree	Good
I exercise whenever I am stressed at work.	3.02	1.241	Undecided	Fair
I meditate to calm myself whenever I am in a stressful situation.	3.84	.857	Agree	Good
I eat out whenever I am stressed at work.	3.82	1.178	Agree	Good

{table continues on the next page}

I love shopping whenever I am stressed at work.	3.10	1.404	Undecided	Fair
Stress Management	3.7098	.40657		Good

Strongly Disagree 1-1.49 (Very poor) Disagree 1.5-2.49 (Poor) Undecided 2.5-3.49 (Fair)
Agree 3.5 -4.49 (Good) Strongly Agree 4.5-5 (Very Good)

Work Performance of among Institute Workers of a Tertiary Hospital

Employee's work performance has been defined as work performance in terms of quantity and quality expected from each employee (Khan et al, 2011). This study determined the work performance of the institute workers in ah hospital. Table 3, the respondents of the study perceived that their work performance is high. The highest-rated item is "I consult with supervisors and co-workers as necessary", in which the respondents have strongly agreed. However, the respondents are undecided on this item "The quality of my work decreased when I am stressed".

Table 3
Work Performance of among Institute Workers of a Tertiary Hospital

	Mean	Std. Deviation	Scaled Response	Interpretation
The quality of my work decreased when I am stressed.	3.14	1.132	Undecided	Good
I can still focus on my work even in a not so favorable circumstance.	4.00	.693	Agree	Good
My work performance is mostly at its optimum level.	4.12	.553	Agree	Good
I do my work diligently.	4.31	.547	Agree	Fair
I do my best and consider the stakeholders when I do my work.	4.35	.627	Agree	Good
I arrive for work on time.	4.22	.757	Agree	Good
I collaborate with other department members as necessary and effective.	4.33	.554	Agree	Fair
I arrive for meetings on time.	4.16	.703	Agree	Good
I can propose solutions to problems.	4.18	.623	Agree	Good
I consult with supervisors and co-workers as necessary.	4.57	.500	Strongly Agree	Fair
Work Performance	4.14	.439	Agree	Good

Strongly Disagree 1-1.49 (Very low) Disagree 1.5-2.49 (Low) Undecided 2.5-3.49 (Average)
Agree 3.5 -4.49 (High) Strongly Agree 4.5-5 (Very High)

Correlations of Work Attitude, Management of Stress, and Work Performance

Based on the correlation analysis, it was found that there was a positive relationship between work attitude and work performance. The Pearson correlation between these variables was .589 (p=0.000). Furthermore, the relationship between the management of stress and work performance is positively correlated (r=.383. p=.005). This means that a better attitude among hospital workers and good management of stress implies high work performance.

The result is agreed with the study of Ülbeği et al. (2019) job stress has a negative effect on employee performance, however, if an individual knows how to manage their stress their work performance is still high

Table 4
Correlations of Work Attitude, Management of Stress, and Work Employee

		Employee Attitude	Stress Management	Work Performance
Employee Attitude	Pearson Correlation	1	.404**	.589**
	Sig. (2-tailed)		.003	.000
	N	51	51	51
Stress Management	Pearson Correlation	.404**	1	.383**
	Sig. (2-tailed)	.003		.005
	N	51	51	51
Work Performance	Pearson Correlation	.589**	.383**	1
	Sig. (2-tailed)	.000	.005	
	N	51	51	51

**. Correlation is significant at the 0.01 level (2-tailed).

Predictors of Work Performance

The result of the regression analysis revealed that work attitude significantly predicted the work performance of the institute workers of a tertiary hospital. The variance accounted for (R-squared) is .347. This means that 34.7% of the variance in work performance is accounted for by the significant predictor which is work attitude. The regression equation Y(predicted work performance) = 1.01+ .7 X(work attitude) was generated in this study. Employees with a high level of work attitude strongly identified with and care about the kind of work they do (Hettiararchchi & Jayarathna, 2014). However, work stress is not a significant predictor of work performance. According to Altindag (2020) stress that causes social negativities brings about many negative psychosocial results such as a decrease in their productivity and performance. However, the result of the regression this study did not support this claim.

Table 5
Predictor of Work Performance

Model		Unstandardized Coefficients		Standardized Coefficients			
		B	Std. Error	Beta	t	Sig.	R Square
1	(Constant)	1.010	.615		1.643	.107	.347
	Work Attitude	.700	.137	.589	5.103	.000	
	R = .589	F(1,49)=26.04	p = .000				

a. Dependent Variable: Work Performance

Conclusion and Recommendations

This study determined the *positive* employee attitude of the institute workers of a tertiary hospital. The stress management of the workers was *good* and the work performance is *high*. The study was able to reveal that only work attitude significantly influences the work performance of the institute workers of a tertiary hospital. A better attitude implies high performance.

The following are recommended to increase the work performance of the institute workers of a tertiary hospital.

1. Create programs that will enhance the work attitude of the institute workers of a tertiary hospital.
2. Workers should be appreciated and rewarded for eliciting a positive work attitude.
3. Maintain an open communication within the department and good camaraderie among workers to enhance the work performance.
4. Conduct further studies to a wider population comparing the demographic profile.

Among the limitation of this study was the focus on the role of work attitude and stress management among workers in a specific institute only. Due to this reason, caution should be practiced in claiming the generalizability of the results. This study did not include other variables like knowledge and skills. The differences in work performance by gender, age, marital status, and tenure were not analyzed due to sampling size limitation.

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The Expansion of a Music Center in Puerto Princesa City

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Abstract

The study examined the feasibility of expanding a music center in Puerto Princesa City, Palawan. It considered different aspects of business such as marketing, operations, financial perspective, and human resources. Studies from different authors were reviewed to support this study. Validated questionnaires were distributed to high school and elementary students for their parents to answer. A total of 620 parents participated in the survey which was chosen using systematic random sampling. The target market for this music center is elementary and high school students who want to have lessons in piano, violin, voice, and guitar. The investigation revealed that there is a market share of 84 % for the proposed expansion of a music center even though there are two competitors in the target business location. The instruments, human resources, and music instruction produced better services at lower costs. The total cost of investment is P 2, 500, 000.00, and the calculated Net Present Value (NPV), Internal Rate of Return (IRR), and Benefit-cost Ratio (BCR) are acceptable. The payback period is in the fourth year of operation. Further studies should be explored having more services to the music center to provide a wider range of services that students can choose from.

Keywords: *music, broadway music. Classical music, Kundiman music, sacred music*

Music is an influential instrument by which people interconnect with one another by encompassing a universal language that mankind appreciates and relates with and crosses boundaries of different civilizations which stimulate individuals to unleash their ability to be creative, imaginative, and artistic (Ehrlin & Gustavsson, 2015). It was also found to be helpful in the development of students' cognitive skills (Gojmerac, 2018). Studies in the past found out that music served as an inspiration for children to achieve better performance in school (Foley, 2017). This was supported by DiDomenico (2017) mentioning that music aids students to improve in academics. An example of this is the use of rhythms and beats that students would tap as they hear and follow the pulse of a certain song. This process involves patterns that students follow which eventually help them in Mathematics (Geist, Geist, & Kuznik, 2012 as cited by Foley, 2017). Thus, according to Ralling (2014), there should be a platform to offer this kind of assistance. The research of Joseph (2015) added that music promotes the cultivation of kinship among students. They learn and accept other languages, people, and cultures which makes them reasonable and well-adjusted to their surroundings. However, the importance of guiding students to enjoy and experience music instruction lies within the hands of their teachers whatever genre they may teach like (Westerlund, 2008 as cited by Foley,2017) classical, sacred, or Broadway music which the proposed music center will cater.

The study calculated break-even analysis to determine at what stage the music center will be profitable. It will be important for this study to know the number of services to sell to cover its costs specifically the fixed costs. It will help the researcher analyze the financial situation of the business where the business will be checked if it is making or losing money. It is also useful to study the relationship between variable cost, fixed cost, and revenue. The formula is a total fixed cost (FC) divided by contribution per unit (P-VC).

Liquidity ratios are also calculated in this study to know if the music center has the capacity to pay its short- term obligations (Hayes, 2019). This is used to determine if a company's credit can be extended or not. This ratio is important because the higher it is, the higher the company's capacity to pay its obligations on time. The formula is current assets divided by the current liabilities.

Return on investment (ROI) is measured in this study to investigate the business' profits in connection to its total assets and indicate how the company is doing financially by comparing the net income to the capital invested as assets (Zamfir et al., 2016).

The same authors quoted that a high return on ROI means the company is effective and efficient in managing its resources. The formula is ROI = Net Income divided by Average Assets.

Net present value is used to determine if a project or investment will yield profit under capital budgeting (Kelton, 2019). The difference of the present value of cash inflows and cash outflows over a period of time is calculated and illustrated in the formula:

$$NPV = (\text{Cash flows})/(1+r)\ i.$$

The internal rate of return is also calculated in this investigation to know the discount rate at which the net present value is equal to zero. The formula of NPV is also used to compute for this ratio where cash inflows divided by1 plus the time period minus the initial investment.

A benefit-cost ratio is used in this proposed expansion to determine and analyze the relationship of relative costs and benefits of the study. If the computed BCR is greater than

1, the proposed business is expected to bring positive NPV to the company and its investors (Hayes, 2019). The same author quoted the formula of BCR as the present value of costs is divided into the present value of benefits.

Since there are a few music centers in Puerto Princesa City, Palawan, and knowing the benefits it can give to the individual, thus this feasibility study is proposed. The primary goal of this research is to decide the suitability and possibility of the expansion of a music center in Puerto Princesa City. The specific objectives of this study are based on the viewpoint of the different functional areas of management such as:

A. Marketing

(a) to describe the nature of music instructions which the music center will offer;
(b) to study and investigate the demand and supply of the proposed music lessons and its market share;
(c) to define plans and methodologies in marketing for the effective implementation of the expansion of the music center.

B. Operations or Technical

(a) to determine the processes involved in operating the music center most competently and efficiently;
(b) to know the essential types of furniture, musical instruments, books, and other materials for instruction, facilities, and installations needed in the building, most suitable area for studying music and proper arrangement for each classroom for the expansion of the music center;
(c) to come up with the ideal capacity for the proposed expansion of the music center and establish the most practical business hours;
(d) to verify the most economical costs to be acquired of the expansion.

C. Organization and Human Resource

(a) to settle on the most appropriate form type of ownership;
(b) to know the necessary government licenses for the expansion of the business;
(c) to determine how many qualified teachers are needed for the expansion;
(d) to create fringe benefits that will motivate the employees to work harder for the music center;
(e) to determine important processes to be done before the project is enacted.

D. Financial Study

(a) to make practical presumptions that will guide the financial aspect of this study;
(b) to set the needed amount as an investment in the expansion of the music center;
(c) to study and analyze the financial aspect of the project that would yield low-interest rates;
(d) to calculate the possible revenues of the project;
(e) to examine the programs of the music center that will guarantee its success.

Methodology

The researcher used both primary and secondary data. Primary data were gathered and collected using a validated questionnaire which was distributed to high school and elementary students for their parents to answer. The questionnaire was validated by seven experts and seven laymen to add significance and reliability of the study. Secondary data were derived by the researcher through reading journals, books, magazines, books, publications, and other related studies. The researcher visited John Laurence Detwiller Memorial Library at the Adventist University of the Philippines to obtain more information about the feasibility of expanding a music center. Records of the population were obtained from the Philippine Statistics Office- Palawan Branch. The list of internet websites cited in this study is found in the list of references. The researcher used descriptive and exploratory methods in the design of the study in evaluating the viability of the expansion of a music center.

The population is made up of children ages 6-17 years old who go to school around San Pedro, Puerto Princesa City, Palawan. The respondents are the parents since they are responsible for financially supporting their children. The reason for the selection of the target customers is based on the present data obtained from the main branch that the majority of the clients are elementary and high school students who enrolled to have music lessons.

Table 1
Population (1990-2019)

Year	Population	household	Inc/Dec	% Inc/Dec
1990	6,740	1, 685	-	-
2000	12,127	3, 031	1, 352	29%
2005	18,052	4, 513	1, 482	20%
2010	20,451	5, 112	599	6%
2015	22,089	5, 222	410	4%
2016	25, 928	6, 482	1, 260	11%
2017	29, 768	7, 442	960	7%
2018	33, 608	8, 402	960	7%
2019	37, 448	9, 362	960	5%

The table shows the population of Barangay San Pedro, Puerto Princesa City. The average number of households is four composed of a father, mother, and two children. Of the 9,362 number of households, half of the family are adults and half are children which resulted in a population of 4, 681. The sample size was computed from the number of households using the following formula with a margin of error of five percent (5%). Where: n = sample size, N = population, e = margin of error. The formula is:

$$n=\frac{N}{1+Ne^{2}}$$

Using the formula above, the sample size computed to represent the population was three hundred eighty-four (384) respondents. The researcher used systematic random sampling in the selection of samples and distributed 620 questionnaires among the parent respondents.

Table 2

Questionnaires Distributed (QD) and Retrieved (QR)

Place	Population	Sample	QD	QR
Pal. State University Laboratory High Sch.	475	40	240	163
San Pedro Central Sch.	1, 609	134	150	100
Santa Monica Elem. Sch.	2, 372	199	230	164
Total	4,456	384	620	427

The researcher asked the permission of the school to conduct the study. After it was approved, questionnaires were distributed and explained to each class the nature of the survey and handed out to the students for the parents to answer at home. Questionnaires were personally retrieved the following day. There were 620 questionnaires distributed and 427 were retrieved and were the basis for the financial analysis of this study.

Results and Discussion

Marketing

The music center will offer lessons in violin, voice, guitar, and piano on a semester basis which will study classical, sacred, *kundiman*, or Broadway music. The music center will have a collection of instrumental and vocal pieces that will suit the skill level of the student. Music books are ordered abroad so that teachers will have a variety of pieces to choose from. The existing package in the main branch offers individual lessons for each instrument and a recital after a student finishes 18 lessons. The proposed lessons will offer the individual and group music lessons in the violin. Guitar and vocal class will feature a master class which will be included in a package on a semester basis. It will also feature individual recitals for advanced students in different instruments. The proposed music center will create a string ensemble for advanced students who will have the opportunity to participate in different events around the community like weddings, holiday presentations, religious or secular concerts as part of their training, build their skills for excellence, and boost their self-esteem.

The study revealed that the total capacity of the competitors is 1, 290. The investigation used 36 lessons which is the assumed number of lessons of students that will be patronized yearly. By multiplying the capacity and the total number of lessons, the result will be 46, 440 lessons in a year. The total quantity of lessons supplied is deducted from the total quantity of lessons demanded to get the market shares in lessons and compare it to the demand of the proposed business in lessons that are shown in Table 3.

Table 3

Market Share of the Number of Lessons (2020-2024)

Year	Total Quantity of Lessons Demanded	Total Quantity of Lessons Supplied	Market Share # of lessons	Demand of the Proposed Business # of lessons
2020	85,032	46, 440	38, 592	51,070.22
2021	92,556	46, 440	46, 116	55,589.13
2022	100,116	46, 440	53, 676	60,129.67
2023	107,640	46, 440	61, 200	64,648.58
2024	115,164	46, 440	68, 724	69,167.50

The market share in peso was derived from the total quantity of lessons supplied multiplied by the price per lesson which is P 13, 932,000.00 which is then compared to the demand of the of the proposed business in peso to properly view if the expansion is viable.

Table 4
Market Share in Peso 2020-2024

Year	Total Demand in Peso	Total Supply in Peso	Market Share in Peso	Demand of the Proposed Business in Peso
2020	P 20,237,616.00	P 13, 932, 000	P 6, 305, 616.00	P 15,321,065.76
2021	P 22,028,328.00	P 13, 932, 000	P 8, 096, 328.00	P 16,676,740.08
2022	P 23,827,608.00	P 13, 932, 000	P 9, 895, 608.00	P 18,038,900.88
2023	P 25,618,320.00	P 13, 932, 000	P 11, 863, 320.00	P 19,394,575.20
2024	P 27,409,032.00	P 13, 932, 000	P 13, 477,032.00	P 20,750,249.52

The proposed music center will be using three upright acoustic pianos that will be placed in each cubicle for music lessons. Each room will be furnished with window-type aircon and a full-size mirror for students to be always aware of their posture during lesson time and will also serve as the whiteboard for theory learning during seat works. Rooms for voice and violin will be equipped with a CD player for the teacher to be used for additional material for music instruction. There will be a 3 in 1 printer for printing, photocopying, and scanning of music sheets and a desk computer to be used for other clerical works of the center which will be placed on the director's table. The music center will also provide a table and chair for the secretary and seats for the waiting area. This will require a total of P 742, 500.00 for equipment.

The revenue for the Proposed Expansion of the Music Center is based on the capacity which is seen in Table 5. In the first year of operation, the number of students will be 80% of the capacity of the music center, increasing by 10% every two years to complete 100% of capacity by the fifth year of operation. The price of the procedure will increase every 2 years as is shown in Table 5.

Table 5
Projected Revenue (From Year 1 to Year 5)

Year	Projected Number of Students who will take 36 lessons	Proposed Price	Capacity in Percentage	Projected Revenue
2020	312	P 300.00	80%	P 2,695,680.00
2021	312	P 300.00	80%	P 2,695,680.00
2022	312	P 350.00	90%	P 3,538,080.00
2023	312	P 350.00	90%	P 3,538,080.00
2024	312	P 400.00	100%	P 4,492,800.00

The capital investment of the expansion of the music center will include the following:

Pre-operating expenses. The pre-operating cost of the expansion of the music center is P291,500.00 which sums up from the expenses of renovating the studio by installing glass partitions on four sides which amounts to P 130, 000.00; painting work for P 20, 000.00; putting of three life-size mirrors for P 13, 500.00; P 70, 000.00 for deposit upon signing of the contract of the lease; giving out of flyers and brochures worth P 8,000.00; and the launching of the music center which will cost P 50, 000.00.

Operating expense/working capital. The working capital to sustain the operation for the first six months is P 1,000,000. 00 which is half of the total operating expenses tabulated in the income statement.

Capital expenditure or fixed assets. The fixed assets needed for the proposed expansion include (a) Set up of three music rooms which include the furnishing of rooms with air-conditioning units, life-size mirror, upright pianos and cd player,(b) Steel cabinets for music sheets and books, (c) Reception area for the clients which includes a sofa and smart tv, and (d) Desktop computer which sums up to the total amount of P 2, 034,000.00.

Operations Process and Flow Chart

The music center will offer music lessons in violin, voice, guitar, and piano to elementary and high school students from beginner to advance level. Services in the studio start when a parent walking in for an inquiry. This phase will take some time to accommodate questions and answer them in detail. This will take about 10-15 minutes to explain what the student will learn, books that will be used, contract regarding absences/ tardiness, clients' financial obligations, and recital expectation when a student finishes one semester of study. The next step is the schedule of the assessment of the student by the teacher. This phase is important to evaluate whether the student is interested to study or not. When a student comes in for an assessment, the teacher talks to the parent about the outcome immediately. The student will then choose the musical instrument to study and enrollment takes place. The client then fills the form and pays for the registration and recital fees. This takes about five minutes to finish the process including the handing out of the copy of the form with the receipt of the payment. The next step is to choose the lesson schedule. Then the student comes to the studio and the lesson takes place. This step will be for one semester and a recital is done after five months of study as a culmination activity.

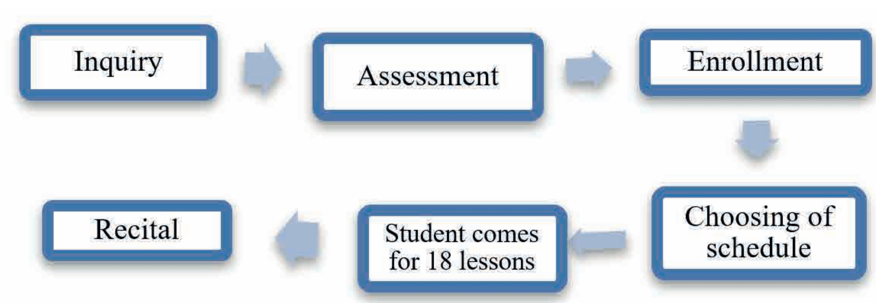

Figure 1. Capacity and scheduling.

Table 6

Cost of Process of Operation

Process	Time	Cost
Inquiry	15 minutes	P18.75
Assessment	15 minutes	-
Enrollment	5 minutes	-
Choosing of schedule	2 minutes	-
Student comes for lesson	30 minutes	P 300.00
Recital	1 hour	P 650.00
TOTAL		P 968.75

The music studio will be open from Sunday to Thursday. On weekdays, business hours start at 10:30 in the morning and closes at 7 in the evening. Business hours on Sundays open from 8 am to 6 pm to accommodate more students. There will be individual and group lessons in different classes. Group lessons will be done according to the skill level of the students which the teacher will assess before class starts. A violin room is reserved for a group lesson that can hold up to 5 students in an hour. Table 7 summarizes the capacity and scheduling of the Proposed Expansion of Music Center from 2020- 2024.

36 students x 4 weeks= 144 students + 72 lessons (Sunday)
216 lessons per week x 52 weeks = 11, 232 lessons per year

Table 7

Capacity and Projected Revenue (Individual Lesson)

Year	No. of Students	No. of Lessons	Cost per Lesson	The Capacity of the Music Center in Percentage	Total Revenue
2021	208	36	P 300.00	80 %	P 1,797,120.00
2022	208	36	P 350.00	80%	P 2,358,720.00
2023	208	36	P 350. 00	90%	P 2,358,720.00
2024	208	36	P 400.00	90%	P 2,695,680.00
2025	208	36	P 400.00	100%	P 2,995,200.00

Table 8

Group Lessons

Year	No. of Students	No. of Lessons	Cost per Lesson	The Capacity of the Music Center in Percentage	Total Revenue
2021	104	36	P 300.00	80 %	P 898,560.00
2022	104	36	P 350.00	80%	P 898,560.00
2023	104	36	P 350. 00	90%	P 1,179,360.00
2024	104	36	P 400.00	90%	P 1,179,360.00
2025	104	36	P 400.00	100%	P 1,497,600.00

Organization and Human Resource

Sole ownership fits the proposed project, which is easier to apply for a business permit and not difficult to run because decisions are done by one person who is not answerable to other persons. Profit is collected by the owner also. However, this kind of ownership has unlimited liability if it has debt. Requirements for the expansion of the music center will have the same documents from the main branch. Sanitary Permit, Department of Trade and Industry certification, Business permit, and Bureau of Internal Revenue registration.

The music center will be run by the director who is the owner and will have one secretary who will work with the teachers to keep running the operations smoothly. The secretary will take care of the enrollment and scheduling of lessons as well as updating the payments from the clients. Teachers will take care of the attendance of the students and be responsible for the makeup lesson in case students are absent due to sickness.

Personnel requirements. There will be five personnel to run the business in its first year of operation. One for each of the secretary, violin teacher, voice teacher, guitar teacher, and piano teacher who will be answerable to the director of the center.

Table 9

Qualification for Teachers/ Secretary

Position	Personal Qualifications	Academic Qualifications	Experience
Secretary	Female with a pleasing personality, dependable, hardworking, honest, able to communicate in English and computer literate	High school graduate or college level	One year of clerical experience
Violin teacher	Proficient in playing and teaching violin, teaches across a wide age range, competent in teaching music theory, patient with students	A Graduate of Bachelor of Education, Major in Music, Arts, PE and Health and have Teacher's Suzuki Training in Violin	With one-year teaching experience
Voice teacher	Teaches across a wide age range, competent in teaching music theory, patient with students	Bachelor of Music, Major in Voice Performance	One-year experience of teaching Voice
Guitar teacher	Proficient in playing and teaching guitar, teaches across a wide age range, competent in teaching music theory, patient with students	Bachelor of Education, Major in Music, Arts, PE and Health	With one-year teaching experience
Piano teacher	Proficient in playing and teaching piano, teaches across a wide age range, competent in teaching music theory, patient with students	Bachelor of Education, Major in Music Education with Emphasis on Playing the Piano	With one-year teaching experience

Compensation package. People working for the music center will be paid according to the regulation of the Department of Labor and Employment and will be compensated depending on their work on their respective jobs. The secretary will be paid P 300.00/ day and will work 5 days a week with SSS, Pag-ibig, Phil Health, and 13th-month salary. Half of its monthly salary is given at the end of the year as a performance bonus that will depend on the evaluation. Teachers will be paid on how many students they will have and will have the chance to a yearly music seminar and training for an upgrade in music teaching which will be paid by the music center.

Table 10
Compensation Package/ Month

Position	Pay	Benefit	Incentives	Total
Secretary	P 300.00/day	SSS, Pagibig, Phil. Health, 13th-month pay	Performance Bonus	P 6, 940.00
Music Teacher	P 200.00/ student/30 minutes	none	Music Seminar	P 32, 000.00

Financial Study

The revenue for the proposed expansion of the Music Center is based on the capacity which is seen in Table 7. In the first year of operation, the number of students will be 80% of the capacity, increasing by 10% every two years to complete 100% of capacity by the fifth year of operation. The price of the procedure will increase every 2 years as shown in Table 11.

Table 11
Projected Revenue From Year 1 to Year 5

Year	Projected Number of Students who will take 36 lessons	Proposed Price	Capacity in Percentage	Projected Revenue
2020	312	P 300.00	80%	P 2,695,680.00
2021	312	P 300.00	80%	P 2,695,680.00
2022	312	P 350.00	90%	P 3,538,080.00
2023	312	P 350.00	90%	P 3,538,080.00
2024	312	P 400.00	100%	P 4,492,800.00

The net present value, internal rate of return, and the benefit-cost ratio was computed using a 10%rate. The basis for this is the annual rate of return that should be the equivalent amount of money invested in publicly traded companies in the Mutual Funds (Pineda, 2019). The net present value of the proposed expansion of the Music Center was computed at a total of P1,665,300.27 which means that in its fifth year of operation, the investment has generated P 1.6 million more than the investment made. The internal rate of return was computed at 10 percent on the fourth year of operation which exceeded the initial investment. The benefit-cost ratio in the fourth year has resulted in a value of more than 1 which means that returns of the investment are higher, and the investment should be accepted.

Table 12
Summary of Financial Condition Using the Principles of Capital Budgeting

Year	Net Present Value Per Year	IRR	BCR as of Year
2020	446,727.27	-76%	0.22
2021	499,453.00	-37%	0.47
2022	846,542.00	-4%	0.88
2023	802,197.00	10%	1.28
2024	1,104,381.00	21%	1.82
	Total NPV= P 1,665,300.27		

Table 13
Summary of Financial Condition Using Breakeven Point, Liquidity Ratio, Working Capital, Return on Investment and Payback Period

Year	Breakeven Point at # of lessons	Liquidity	Cost per Lesson	The Capacity of the Music Center in Percentage	Total Revenue
Ratio	Working Capital	ROI	Payback Period	80 %	P 898,560.00
2020	5,925	214	1,774,478	12%	
2021	5,990	286	2,274,339	12%	
2022	4,826	91	3,094,439	19%	
2023	4,603	108	3,894,377	19%	✓
2024	4,120	77	4,970,051	21%	

The breakeven point of the business in its first year is 5, 925 lessons which mean that the business will cover its company's total costs in its first year of operation based on the capacity of 11, 232 music lessons. The liquidity ratio of the proposed business was computed to be high because it has no long-term debt despite its accounts payable found in Income Statement. The working capital of the music center on its first year is P 1, 774, 478.00 after paying its current debts which exhibits that the company is financially healthy. The proposed expansion of the music center will have a return on investment of 12% in its first year which means that the rate of return of money invested in the business is at 12%. The payback period for the initial investment of P2.5 million and comparison of the cash flow per year and shows that the investment will be paid by the third year of operations.

Conclusion and Recommendation

This paper examined and analyzed the feasibility of expanding the music center in Puerto Princesa City. The expansion was based on the need for the existing music center to reach out to more clients so that services will achieve its capacity. The proposed project will boost the music center with the right marketing, promotion, and management strategies. The expansion will be financially viable at its fourth year of operation with net cash of P 3,931,092.00 and the internal rate of return is at 21% at the end of the fifth year. The researcher concludes that the proposed expansion of the music center will have both quantitative and qualitative benefits for society, its students, and employees.

The researcher recommends that the proposed expansion of the Music Center should be realized by the second quarter of 2020. In addition, further studies should be explored regarding the feasibility of having more services to the music center to provide a wider range of services that students may be able to choose from.

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The Viability of the Expansion of the Dialysis Center of Adventist Hospital Palawan

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Abstract

Dialysis center is one of the services of the Adventist Hospital Palawan that addressed the need of the community. However, the number of patients with kidney disease increases yearly, so it is with dialysis patients. The machines and space in the existing dialysis center of the hospital are not sufficient. For this reason, this study was conducted to examine the viability of expanding the current Adventist Hospital Palawan dialysis center. This market study utilized the physicians as the primary target market, and their patients as the secondary target market. The researcher used the survey questionnaire to gather data from the four adult nephrologists practicing in the locality. Other information used in this study were taken from their medical records. Straight-line depreciation, break-even, payback period, net present value, internal rate of return, benefit-cost ratio, profit margin, return on assets, current ratio, and operating cash flow were the techniques used to identify the profitability of the proposed project. Despite the existence of three dialysis centers in the locality, market demand is higher than the capacity of the existing dialysis center. The total cost of expansion is about 68 million. The payback period is in the fourth year of operation. This study benefits the customers, workers, creditors, owners, community, society, government, and the church. Implementation of the proposed project is best when there are no other ongoing projects to support the operation while earning is for the recovery of the investment. The feasibility of the dialysis center by adding the provision of food to the dialysis patient is recommended for future study.

Keywords: *dialysis center, dialysis patients, kidney disease*

Chronic kidney disease (CKD) is one of the world's major public health issues (Daza et al., 2019). The disease is gradually but progressively diminishing the kidney function which necessitates medical intervention (Bindroo & Challa, 2020). A patient suffering from kidney failure may undergo dialysis treatment for the alleviation of signs and symptoms (Cabrera et al., 2017). Hemodialysis is one of the most common methods of treatment (Stephens, 2018). The procedure is usually done three times a week, lasting around three to four hours per session in both outpatient and inpatient settings (Brazier, 2018). Hemodialysis treatment is purifying the blood by means of filtration through an artificial kidney (Stephens, 2018). The treatment plays an important role in the patients' quality of life because it helps them feel better and continue to live longer (Dąbrowska-Bender et al., 2018).

The number of patients with kidney disease increases yearly with a resultant increase in dialysis patients (Jha et al., 2018). The hemodialysis center is one of the services offered by the Adventist Hospital- Palawan (AHP) that addresses the growing need of the community. It is for this reason that the dialysis center of AHP is operating 24 hours a day. However, the lack of dialysis machines and space are the limitations of the existing dialysis center. Some patients do not get the dialysis treatment they need so they proceed to other dialysis centers for treatment. Disruption of treatment will disable the high-quality care to dialysis patients (Al Salmi et al., 2018). The current situation of the AHP dialysis center inspires the researcher to propose the expansion of the dialysis center.

The proposed project is the expansion of the AHP Dialysis Center from seven (7) to thirty (30) dialysis machines. The location is at the new building of AHP located in San Pedro, Puerto Princesa City. The primary target market is the nephrologist who will manage patients with kidney problems. The secondary target market is the patients that need hemodialysis therapy.

The central problem of this study is the evaluation of the viability of expanding a dialysis center in AHP. The main objective of this study is to determine the viability and feasibility of expanding a dialysis center in AHP. Specifically, objectives from the point of view of the different functional areas of management are as follows:

Marketing

1. To describe the nature of the primary and the secondary products and services of the dialysis center.
2. To determine the demand and supply for the products and services and the proposed dialysis market share.
3. To formulate a marketing plan and strategies for a successful dialysis center in Adventist Hospital-Palawan.

Operations/Production or Technical

1. To determine the processes involved in operating the project in the most effective and economical way.
2. To find out the necessary equipment, machinery, furniture and fixture, building requirements, ideal location, and the most effective layout in the establishment of Adventist Hospital-Palawan dialysis center expansion.
3. To come up with the ideal capacity of the proposed business and establish the most practical business hours.

4. To verify the most economical costs to be incurred in the operation.
5. To establish quality control and other controls in order to be effective and efficient in the operation process.

Organization and Human Resource

1. To decide on the most appropriate form of ownership.
2. To identify the requirements needed in starting the business.
3. To determine the number of qualified people to run the project effectively.
4. To develop a compensation package that will keep and motivate the people to work hard for the organization.
5. To identify the necessary steps to be done before the implementation of the project.

Strategic Management

1. To develop the Mission, Vision, and Objectives, KRA, and PI for the proposed organization.
2. To set a strategic evaluation to review the operations of the proposed organization.
3. To set contingency plans, alternative plans, and exit strategies just in case the assumptions do not work as expected.

Financial

1. To make realistic assumptions that will guide in the preparation of financial statements.
2. To agree on the amount of total investment required to implement the project.
3. To explore the possible sources of financing that would yield low interest.
4. To determine the financial returns of the organization after the preparation of financial statements.
5. To analyze the activities that promise success to the organization.

Socio-Economic Responsibility

1. To examine the operations of the organizations so as to be responsible to the stakeholders.
2. To quantify the contributions to the stakeholders.

The dialysis center is another opportunity for Adventist Hospital-Palawan to expand its services to the community of Puerto Princesa City. With the increasing population of kidney disease patients, the researcher thinks that the expansion of the dialysis center of Adventist Hospital-Palawan might be appropriate to accommodate them. The ultimate recipients of this study are those patients who cannot avail of the regular schedule of dialysis treatment.

The nephrologists practicing in Puerto Princesa City are the primary target market. The nephrologists have their dialysis patients who were the secondary target market of the study. The candidate patient for dialysis is the person who lost 65to 90% of his/her kidney function. The dialysis patient belongs to the low to high socioeconomic status. The age ranges from 18 to 80 years old. Gender is not taken into consideration; males and females can be dialysis patients anytime. The time frame to do research, analyze, and finish this study was within four months from the start. The limitation of the study was the workload and time management of the researcher.

Methodology

Sources of Data and Instrumentation

The researcher considered both primary and secondary data. The survey questionnaire and observation were the sources of primary data. Books, magazines, and journals were sources of secondary data. These are information obtained from John Lawrence Detwiler Memorial Library in the Adventist University of the Philippines.

The researcher observed the current situation of the dialysis industry at AHP by identifying the number of dialysis patients and where do these patients avail of the treatment. The questionnaires were distributed to the nephrologists practicing in the City of Puerto Princesa who were the sources of referrals for the proposed expansion of the dialysis center of AHP. The questionnaire was prepared by the researcher and validated by seven experts and seven laymen.

Research Design

The study uses a descriptive survey method of research. The population of the study was the members of the Palawan Medical Society, specifically the kidney specialist doctors.

A questionnaire-checklist was administered to determine the population of patients with kidney disease, dialysis patients, demand for hemodialysis therapy, the market supply, and the possible demand for the proposed project.

Population and Sampling Techniques

The primary population for this study was the physicians with specialization in the kidney or nephrologists. Patients were the secondary population. The physicians assess and evaluate the status of the kidney of their patients. Through the referral of these doctors for dialysis therapy, we were able to have patients in the dialysis center. Four adult nephrologists are practicing in the locality. One hundred percent of them were respondents of this study. Sampling techniques do not apply because of the limited number of respondents. Table 1 shows the historical population of dialysis patients in the locality.

Table 1
Historical Population of Dialysis Patients From 2014-2019

	2014	2015	2016	2017	2018	2019
Adventist Hospital -Palawan	18	67	93	163	185	224
MMG-Cooperative Hosp.		50	80	100	175	230
Padre Pio Multi-Specialty Clinic				10	15	50
	18	117	173	273	375	504

Source: Medical Record Census

Table 2 shows the yearly increase or decrease in the dialysis patient population in the City of Puerto Princesa. It is composed of dialysis patients in the three existing dialysis centers in the locality. The yearly number of dialysis patients is added and the sum is divided by five years to project the increase of dialysis patients. The result shows that 97 patients are added yearly to the population, which is approximately 19%.

Table 2

Yearly Population Increase of Dialysis Patients from 2014-2019

Year	Population	Average Increase/Decrease	% Increase/Decrease
2014	18		
2015	75	99	20%
2016	106	56	11%
2017	150	100	20%
2018	188	102	20%
2019	240	129	26%
Total		486/5=97	

Source: Medical Record Census

The physicians assess the situation of the patient and make the recommendation/s to undergo dialysis treatment. Without their referrals, there will be no dialysis treatment. Patients will avail of dialysis treatment after the valid explanation of the concerned doctors. Typically, patients do not want to be in dialysis treatment. It has the stigma of death; 100% of the physicians got the questionnaires, and all responded positively.

Data Gathering Procedures

The researcher asked for an appointment from the respondents at their own convenient time. On the appointment date, the questionnaires prepared were given and collected at the same time. The researcher also interviewed willing respondents to confirm the data collected and to know the respondents' view of the proposed expansion of the dialysis center.

Analysis of Data

For evaluating the feasibility of the proposed expansion of the dialysis center, the researcher considered the following techniques:

Break-even point. To determine the number of procedures to be done per year to gain and cover the necessary cost. The formula is:

Break-Even Point (sales in pesos) = Fixed Costs ÷ Contribution Margin

Payback period. To determine the time needed to recover the amount invested in the expansion of the dialysis center. The formula is:

Payback Period =Initial Investment/ Net Cash Flow per period

Straight-line depreciation. To determine the depreciation of the business asset such as machines, buildings, and other fixed assets). The formula is:

Straight-Line Depreciation Expense= DepreciableAmount/Useful Life of the Asset

Capital budgeting. To analyze and compare significant investment and expenditure. The principle of capital budgeting is the Net Present Value (NPV), Internal Rate of Return (IRR), and Benefits-Cost Ratio (BCR)). The net present value is to analyze the profitability of the proposed Dialysis Center. NPV is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. The formula is:

$$\mathbf{NPV=t=1\sum n(1+i)tRt}$$

When financial analysis results in a positive net present value, this means that the projected revenue produced by the proposed projects exceeds the expected costs and is, therefore, a good investment.

Internal Rate of Return is to estimate the profitability of potential investments.Net present value with the discount rate that makes all cash flow equal. If the internal rate of return is higher, the more desirable it is to undertake the proposed project. It uses this formula:

$$\mathbf{0=NPV=t=1\sum T(1+IRR)tCt-C0}$$

A benefit-cost ratio is, to sum up, the relationship between the cost and benefit of the proposed project. The BCR higher than 1.0 is a better investment. The formula is:

Benefit-Cost Ratio = Discounted value of incremental benefits/ Discounted value of Incremental cost

The profit margin measures the extent to which a company is making money by dividing the net income by the net sales revenue. The formula is:

Profit Margin=Net Income/Net Sales.

Return on assets (ROA) is a financial ratio that indicates how much income a company receives with its capital. The formula used to compute return on assets is:

Return on assets=Net income/Total Assets

The current ratio is a liquidity ratio that determines the ability of the company to pay short-term obligations due within a year. The formula is:

Current Ratio=Current Assets/Current Liabilities

Operating Cash Flow is a measure of the amount of cash generated through the normal operations of a company. A higher number will indicate that the proposed center has generated more cash in a period than what is needed to pay off current liabilities (Hargrave,2019). The operating cash flow ratio is using this formula:

Operating cash flow ratio=Operating cash flow/Current Liabilities

Results and Discussion

Marketing Study

The proposed expansion of the dialysis center will offer an upgraded hospital environment with twenty-three (23) brand new hemodialysis machines, brand new chairs, a comfortable waiting area for the patients and watchers, and a happy and friendly atmosphere. It will provide hemodialysis treatment and other services such as diet counseling and kidney disease prevention program. Further, it will implement innovative monthly programs guided by integrated management systems.

The current dialysis center of AHP has seven (7) machines that operate for 24 hours daily to serve the growing population of dialysis patients. Five (5) dialysis machines are being used routinely daily. One (1) is only used for hepatitis reactive patients, and the other one (1) is reserved for emergency cases such as ICU patients needing hemodialysis. The proposed expansion of the dialysis center will increase the number of machines from seven (7)to thirty (30) machines to serve the patients needing dialysis therapy.

The total number of possible patients who will patronize the services of the proposed project is multiplied with the number of dialysis treatments for the year. The product is the demand for the proposed business in units. The demand in units multiplied with the projected prices becomes the total demand in pesos. Table 3 shows the projected demand for dialysis therapy in the City of Puerto Princesa.

Table 3

Projected Demand for the Proposed Product from 2020-2024

Year	Total Demand in units	Total Demand in Peso	The demand for the Proposed Business in units	The demand for the Proposed Business in Peso
2020	93,600	185,796,000.00	71,760	142,443,600.00
2021	108,732	255,329,919.00	83,148	195,252,291.00
2022	123,864	344,091,714.72	94,536	262,619,117.28
2023	138,996	456,789,504.60	105,924	348,103,337.40
2024	154,128	599,211,132.00	117,312	456,079,728.00

Source: Survey questionnaire

There are other two existing suppliers of hemodialysis therapy in the locality: the MMG–PPC Cooperative Hospital and Padre Pio Multi-Specialty Clinic and Diagnostic Center. The MMG–PPC Cooperative Hospital has fifteen (15) dialysis machines which able to render 21,900 dialysis therapies for the whole year in full capacity. Padre Pio Multi-Specialty Clinic and Diagnostic Center have four (4) dialysis machines that can render 5,840 dialysis treatments. With the 93,600 total quantity demand for dialysis treatments, the competitor can supply 34,675 dialysis treatment only; therefore, the market share is around 58,925. The proposed project can provide 54,750dialysis treatments. The market share is enough for the demand of the proposed business in units. Table 4 shows the market share in units.

Table 4
Market Share Units From 2020-2024

Year	Total Quantity Demanded	Total Quantity Supplied	Market Share in units	Demand of the Proposed Business in units
2020	93,600	27,740	58,925	71,760
2021	108,732	27,740	74,057	83,148
2022	123,864	27,740	89,189□	94,536
2023	138,996	27,740	104,321	105,924
2024	154,128	27,740	119,453	117,312

Total demand, supply, and market share are multiplied with the projected prices to convert it in peso. Table 5 shows the value of the market share in peso.

Table 5
Market Share in Peso

Year	Total Demand in Peso	Total Supply in Peso	Market Share in Peso	Demand of the Proposed Business in Peso
2020	185,796,000.00	68,829,875.00	116,966,125.00	142,443,600.00
2021	255,329,919.00	81,425,568.75	173,906,571.96	195,252,291.00
2022	344,091,714.72	96,326,456.50	247,765,258.22	262,619,117.28
2023	456,789,504.60	113,954,186.25	342,835,318.35	348,103,337.40
2024	599,211,132.00	153,263,500.00	464,403,400.75	456,079,728.00

Operations/Production Study

Dialysis therapy is a medical procedure given to the patient whose kidneys failed to function correctly Table 6 shows the process flow of dialysis therapy.

Table 6
Process Flow

Process	Time	Cost
Preparation process by nurse and technician	5 minutes	No cost
Hemodialysis therapy	4 hours	1,985.00 Pesos
Postprocedural process of nurse and technician	10 minutes	No cost
Total	4 hours & 15 min	4,210.00 with supplies(reuse dialyzer) 5,860.00 with supplies(new dialyzer)

The Equipment, Machinery, Furniture, and Fixture (EMFF) necessary in the expansion of the center are 23 hemodialysis machines with the total cost of 27,600,000.00 pesos, 23 dialysis chairs amounting 621,000.00 pesos, and 5 waiting benches with a total cost of 25,000.00 pesos. Constructing a building will cost 2,004,500.00 pesos.

The basis for the capacity of the proposed project is the number of machines. One treatment duration is about four (4) hours and thirty (30) minutes. In a day, one machine can perform four (4) hemodialysis treatments. On Saturdays, the Dialysis Center is closed to give rest to the workers. The 365 days in a year subtracted by 52 Saturdays will make the working days 313. Formula to get the capacity of the proposed project is 30 machines multiplied with 4 treatments per day multiplied with313 working days in a year. Table 7 shows the capacity of the proposed expansion of the dialysis center, its proposed prices, and the projected revenue.

Table 7

The Capacity of the Proposed Dialysis Center

Year	Capacity	Proposed Price	Projected Revenue
2020	37,560 treatments	P1,985.00	P 74,556,600.00
2021	37,560 treatments	P2,348.25	P 88,200,270.00
2022	37,560 treatments	P2,777.98	P 104,340,928.80
2023	37,560 treatments	P3,286.35	P 123,435,306.00
2024	37,560 treatments	P3,887.75	P 146,023,890.00
2019	240	129	26%
Total		486/5=97	

Organization and HR Study

The proposed dialysis center is headed by a medical director, preferably a nephrologist practicing in the hospital. Under the medical director are the physicians attending to dialysis patients. The head nurse is managing the workflow inside the department. Under her management are the 21 nurses, 15 dialysis technicians, one medical record supervisor, and one administrative staff. Table 8 presents the yearly projected compensation package of the AHP dialysis center.

Table 8

Projected Compensation Package

Position	2020	2021	2022	2023	2024
Medical Director	360,000 (10%)	396,000 (10%)	435,600 (10%)	479,160 (10%)	527,076
Head Nurse	408,000 (10%)	448,800 (10%)	493,680 (10%)	543,048 (10%)	597,352.8
Nurse	546,000 (10%)	600,600 (10%)	660,660 (10%)	726,726 (10%)	799,398.6
Dialysis Technician	330,000 (10%)	363,000 (10%)	399,300 (10%)	439,230 (10%)	483,153
Medical Records Supervisor	288,000 (10%)	316,800 (10%)	348,480 (10%)	383,328 (10%)	421,660.8
Administrative staff	288,000 (10%)	316,800 (10%)	348,480 (10%)	383,328 (10%)	421,660.8 (10%)
Total	2,220,000	2,442,000	2,686,200	2,954,820	3,251,302

Strategic Management Study

The proposed expansion of the dialysis center will incline its mission and vision to the hospital's mission and vision. The mission is to share God's love through dialysis therapy.

The vision is to be a Christ-centered and globally competitive health care training facility. The three objectives are the following: (a) to ensure patient safety while administering hemodialysis therapy; (b) to have four patients per day in one hemodialysis machine; and (c) to achieve the 9-10 rating of customer satisfaction. Table 9 shows the key result areas, performance indicators, strategies, activities, and resources proposed expansion.

Table 9

Strategic Framework

Mission: To share God's love through dialysis treatment.				
Vision: To be a Christ-centered and globally competitive health care training facility.				
Objective 1. Ensure patient safety while administering hemodialysis therapy				
KRA	PI	Strategies	Activities	Resources
Patient safety	Machine related injury	Proper handling of equipment	Training Monitoring Calibration	Competent personnel Equipment
	Wrong dialyzer	Placing and using the right dialyzer	Provide patient ID tag Always ask the complete name of the patient and compare it to the patient ID tag and name written in the dialyzer before commencing hemodialysis	Competent personnel ID tag
	Needlestick injury	Proper handling of the needle	Emphasize "no recapping and fishing technique" to personnel Remind and emphasize the use of complete PPE Use of puncture-proof container with a small hole	Competent personnel PPE Puncture-proof container
Nursing care	Medication error	Proper dispensing of medication	Review the 12 R's in giving medications Carry out doctor's order properly Complete and proper endorsement Verify medications with the pharmacist Counter check medication with co-nurse	Competent personnel Sterile supplies Medications PPE

{table continues on the next page}

Objective 2. To have four patients per day in one hemodialysis machine				
KRA	PI	Strategies	Activities	Resources
Marketing	Acquisition of new customer	Form engagement with new customers	Advertise the expansion of the dialysis center to the doctors Improve the service attitude of the worker Make ways to convey company values to the customers	Funds Innovative Programs Competent personnel
Professional growth	Competent dialysis personnel	Updated dialysis Training	Attend conventions/ seminars/trainings about renal health/dialysis	Competent training facility
Objective 3.To achieve the 9-10 rating of customer satisfaction				
KRA	PI	Strategies	Activities	Resources
Happy customers	Customer loyalty	Effective customer-handling skills	Training Greet customers using GPAT Attend to their immediate needs Show helpful attitudes and accept responsibility	Competent personnel
Healthy team	Engaged employee	Creative and innovative programs	Onboard employee Interactive learning Rewarding employees	Motivational speaker/ Budget

Financial Study

This section presents the financial feasibility of the proposed business by discussing the major assumptions, capital investment, and sources of funds, financial statements, and financial analysis.

Major Assumptions

The yearly revenue for the proposed expansion of the dialysis center is based on the capacity of the facility. When patients avail of the regular treatment, the revenue will be as is in the projected ones as shown in Table 7. The price of the procedure is gradually increased based on the inflation rates.

Salaries and wages, employee benefits, advertising and promotion expenses, utilities, maintenance and repairs, and general and other admin expenses comprise the fixed costs of the proposed project. Salaries and wages and employee benefits are projected to increase by 10% every year as shown in Table 8. The summary of advertising and promotion are projected to increase by 10% yearly. Utilities are the summary of the water, electricity, and maintenance costs which is projected to increase by 10% every year. General and other administrative expenses are from the current operation of the dialysis center which is projected to increase by 500% in the first year of operation due to an increasing number of capacity and will gradually increase yearly thereafter by 10%. Projection is from the 3.3% inflation rate and the possible price hike yearly. The variable cost is from the supplies used in every hemodialysis treatment.

Depreciation of dialysis machines and buildings is determined using the straight-line method. The useful life of the dialysis machine is for 15 years and has a salvage value of 120,000 pesos and is estimated to depreciate to 1,656,000 pesos yearly for all 23 purchased hemodialysis machines. The building has a 50-year service life and a zero salvage value. It's estimated to depreciate to 40,089.66 pesos yearly. There will be n¬o withdrawals from the earnings because the owner is using it for a day to day operation of the center.

Capital Investment

The capital investment for the proposed expansion of the dialysis center is approximately 68,407,085.68 pesos and includes the following:

Pre-operating expense. The pre-operating expenses of the proposed expansion of the dialysis center are 57,200.00 pesos.

Operating expense/working capital. The operating expense within the first six months of operation is 38,086,402.68 pesos. It includes the compensation package, the utilities, the supplies, and other general expenses.

Capital expenditure or fixed assets. The capital expenditure of the proposed expansion of the dialysis center is 30,250,483.12 pesos. It includes the 23 hemodialysis machines, the 23 dialysis chairs, the waiting benches, and the cost of the building. Table 10 shows the total investment of the proposed expansion of the dialysis center.

Table 10
Total Investment

Investment	Amount
Pre-operating Cost	57,200.00
Operating Cost	38,086,402.68
Fixed Assets	30,250,483.12
Total	68,394,085.80

Sources of Funds

The funds needed for the proposed project is about 68 million. Construction of the building and purchasing of dialysis machines are to be funded by the loan from the bank. The management of AHP will loan the money for a short-term period. The fund for pre-operating cost and the operating cost is from the current cash flow of the dialysis center.

Financial Statements

The 5-year best-case-scenario statements are the Comparative Statement of Financial Position, Comparative Statement of Comprehensive Income, Comparative Statement of Cash Flow, and Comparative Statement of Changes in Owners' Equity. Table 11 shows the summary of financial operations.

Table 11
Summary of Financial Operations From 2020-2024

Year	Net Income	Net cash	A=L+C/E
2020	16,825,209	37,057,946	81,392,576
2021	22,357,684	52,536,326	103,903,940
2022	29,055,021	76,619,552	133,144,998
2023	37,533,625	114,083,175	170,914,140
2024	47,817,060	156,705,656	219,016,851

Financial Analysis

Capital budgeting is the method used to analyze the financial condition of the expansion of the AHP Dialysis Center. The succeeding tables show the results.

Table 12
Summary of Financial Condition Using the Principles of Capital Budgeting From 2020-2024

Year	NPV	IRR	BCR
2020	1,185,405	-98.15%	0.02
2021	12,792,050	-54.36%	0.22
2022	18,094,084	-23.58%	0.50
2023	25,588,159	-3.22%	0.90
2024	26,465,207	7.65%	1.31
	Total NPV 84,124,905		

Ten percent rate is the basis for computing the net present value, internal rate of return, and the benefit-cost ratio. The net present value is used to analyze the profitability of the proposed dialysis center. The net present value of the proposed dialysis center has a total of 84,124,905.00 pesos at the end of 5 years. A positive NPV is an indicator that an investor may pursue the proposed project. The internal rate of return is gradually increasing from -98% to 7.65% percent in the fifth year of operation. A negative internal rate of return means that the amount of the cash flow after the investment is lower than the initial investment. The benefit-cost is continuously increasing from 0.02 ratio to 1.31 in the fifth year of operation. A project with the BCR of greater than 1.0 expects to have a positive NPV and a higher IRR than the discount rate. The data shows that the project has a balance benefit-cost ratio and a positive NPV in the fifth year of operation.

Table 13
Summary of Financial Condition Using Other Tests From 2020-2024

Year	Liquidity Ratio	Working Capital	Payback Period	Break-even	ROI
2020	104	58,228,409	-62,696,054	1,696	23%
2021	121	86,235,293	-47,217,674	1,853	25%
2022	134	120,939,514	-23,134,448	2,037	28%
2023	145	164,122,339	14,329,175	2,250	30%
2024	153	217,588,599	56,951,656	2,496	33%

The liquidity ratio of the proposed project shows that the company can pay its short-term obligation from 104 % in the first year of the operation with a gradual increase to 153 % in the fifth year of operation. The working capital is in a positive figure starting from 58,228,409 pesos to 217,588,599 pesos—a desirable situation to avoid bankruptcy. The payback period is in the fourth year of operation. It is a period in the operation where the initial cost of an investment is expected to recover. The shortest period of recovering the initial cost is much better. In the first year of operation, the dialysis center will need 1,696 procedures to reach the break-even. The number of procedures in the break-even is very much lower than the projected number of procedures. Return of investment shows 23 % in the first year of operation and gradually increases to 33% in the fifth year of operation. The proposed project has a big initial investment; hence, it would take four to five years to achieve financial stability.

Socio-Economic Responsibility Study

The expansion of the AHP dialysis center can accommodate a much larger number of dialysis patients and is much more significant than the current existing dialysis center. The dialysis center will give both qualitative and quantitative benefits to its stakeholders. The details of the benefits are discussed below.

Customers. Treatment offered by the hemodialysis center can help kidney failure patients improve their quality of life. Kidney failure is irreversible, however, long and satisfying life is still possible through dialysis treatment. Machines and equipment are available in the market, however, not all patients can purchase it. The center will purchase the equipment and supplies and offer these services to customers at a reasonable price. Increasing the number of machines helps to address the increasing demand for hemodialysis treatment. The number of patients projected to be served at the proposed dialysis center is tabulated in Table 14.

Table 14

Quantitative Benefits of Customers From 2020-2024

Year	No. of Customers Served	Amount in P
Year 1	169	52,332,540.00
Year 2	183	67,037,841.00
Year 3	197	85,372,881.36
Year 4	211	108,173,496.60
Year 5	225	136,460,025.00

Employees. Employees and team members of the dialysis center may benefit from the proposed project in terms of monetary compensation and a sense of fulfillment by serving the patients. Family members and other dependents may also benefit from the compensation packages received by the employees and the team members.

Increasing the number of machines means a new workforce for the dialysis center will be added to the current number of employees to enjoy the benefits of the employees. The number of beneficiaries is based on personnel requirements.

Table 15

Quantitative Benefits of Employees From 2020-2024

Year	No of Beneficiaries	Amount in P
Year 1	39	2,220,000
Year 2	39	2,442,000
Year 3	39	2,686,200
Year 4	39	2,954,820
Year 5	39	3,251,302

Creditors. The supplier will benefit from the expansion of the existing dialysis center. Dialyzers, hemodialysis needles, tubing, and other materials needed in the procedure of dialysis treatment is a past inventory. Additional dialysis machines will increase the number of patients served and the supplies needed in the dialysis treatment. The current supplies needed for the operation of the dialysis center will triple due to its expansion. Currently, there is one supplier who regularly provides the necessities in the operation of the dialysis center. The plan is to have another supplier that will make the prices a little bit competitive. The current supplier and the new possible supplier will benefit from the expansion of the dialysis center. Table 16 shows the number of supplier benefits.

Table 16

Quantitative Benefits of Creditors From 2020-2024

Year	No. of Creditors	Amount in P
Year 1	1	29,822,640.00
Year 2	2	35,280,108.00
Year 3	2	41,736,371.00
Year 4	2	49,374,122.00
Year 5	2	58,409,566.00

Owners. Owners may benefit from the proposed projects by gaining more profits and fulfilling the purpose of serving the people and sharing Christ into the community. Profits from these projects will support other community projects. The primary purpose of the owner is to serve the people.

Table 17

Quantitative Benefits of Owners From 2020-2024

Year	No. of Owners	Amount in P
Year 1	1	80,825,209
Year 2	1	103,182,893
Year 3	1	132,237,914
Year 4	1	169,771,539
Year 5	1	217,588,599

Community, society, government, and the church. The expansion of the current dialysis center will benefit the community, society, government, and the church. At present, the dialysis center cannot offer additional services due to its limited capacity; therefore, expansion is a major concern. The community will benefit from the proposed project if the positioning plan is to be implemented. The community will be aware of how kidneys are damaged and how it could be avoided through innovative programs. Promotional activities through various media can help reach the society so that the services of the dialysis center will be made known to the public. There is no hindrance for dialysis patients to spend their vacation in Palawan even if they are on dialysis therapy because their needs will be addressed appropriately through the expanded dialysis center. An increase in tax collection will be among the benefits of the government from the proposed project. Tithes and offerings are the benefits of the church.

Table 18

Quantitative Benefits of the Community, Society, Government, and the Church From 2020-2024

Year	Community	Society	Government	Church
Year 1	12,000.00	18,000	1,869,468	222,000
Year 2	13,200.00	19,800	2,484,187	244,200
Year 3	14,520.00	21,780	3,228,336	268620
Year 4	15,972.00	23,958	4,170,403	295482
Year 5	17,569.20	26,353.8	5,313,007	325130.2

Conclusion and Recommendation

The demands for the proposed projects are enough to pursue the expansion of the dialysis center, to maintain and gain more market, and to implement innovative programs. Hemodialysis machines, chairs, and construction of the building are essential in the expansion. The 30 hemodialysis machines are enough to beat the competitor with its capacity of 15 hemodialysis machines. Permits, floor plans, required personnel, compensation package, and Gannt chart are vital to the implementation of the project. The strategic framework, contingency, and exit plans are present in the existing dialysis center to make the expansion smoother and more manageable. Due to the significant amount of the initial investment, and the short-term financial resources, the financial stability of the project will be feasible in the fifth year of operation onwards. The dialysis patients and physicians and stakeholders are the primary beneficiaries of the proposed project. Community, society, government, and the church are the secondary beneficiaries.

After a thorough study and research concerning the needs and importance of the expansion of dialysis center, particularly within Puerto Princesa, it was found that there is dire need to expand the dialysis center in order to cater to the increasing demands of patients suffering from kidney failure. This will not only help the patients but also the dialysis center team, the surrounding community, the government, and the church. A well-equipped dialysis center will be a lucrative business on the island of Palawan considering its location and distance to mainland Luzon. The proposed business is good for implementation in the year 2020 and when there are no other ongoing projects to support the operation while earning is for the recovery of the investment. Further study to conduct is to evaluate the cost-effectiveness of a kidney transplant as one of the new services of the dialysis center.

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Viability of Tutorial Services in Palawan

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Abstract

The demand for tutorial services increased, as supported by research done by the Asian Development Bank, where two-thirds of families in the Asia Pacific Region spend money on tutorial lessons of their children. However, based on a study, there is a continuous decline in the quality of education in the Philippines. Thus, this market study was conducted to evaluate the viability of establishing a tutorial center for elementary students who want to improve their learning in Mathematics, English, and Science. The study utilized descriptive research. The data were collected using a survey questionnaire to 309 elementary students in the town of Brooke's Point, Palawan. Data were analyzed using liquidity and profitability ratio, working capital, break-even analysis, payback period, and capital budgeting. The results revealed that the production and operation study gives assurance that the proposed business can provide tutorial services that the target market needs. The proposed business requires five capable personnel to start its operations. The financial study shows that from years 1-5, the profitability of the business will be increasing although the number of students remains constant. The proposed business had a Net Present Value (NPV) of P379,598.20. The Internal Rate of Return (IRR) is 9%. In five years, the proposed business will contribute to the employees, suppliers, community, society, government, and the church. The proposed business will be profitable and successful if established in 2020. Further study can be conducted to assess the feasibility of adding more courses and numbers on the capacity of the proposed business.

Keywords: *viability, Net Present Value, Internal Rate of Return, tutorial services*

The tutorial has deep historical roots back in the ancient times where none of the known schools existed. Socrates tutored Aristotle, who then became Alexander the Great's tutor (Fox, 2015). Student-to-student tutoring is not a new concept. During the 19th and early 20th centuries, most American students attended a one-room schoolhouse (Liu, R. (2018).

Tutorials in Turkey have been very helpful to students who want to study at a prestigious university and most of them started having it since primary schools (Berberoglu & Tansel, 2014). They either hire a private tutor who teaches them, go to their teachers after classes where a separate payment is made, or enroll in a tutorial school. Tutorials help them improve their learning skills in subjects where they have difficulties and consequently allow them to choose a prestigious high school to enroll in a good college and find a high paying job later (Berberoglu & Tansel, 2014). According to Nerval (2016), tutorials help students adjust to changes in educational systems just like having a K to 12 programs where students are required for one year in kindergarten, six years in elementary grades, four years in junior high school, and two years in senior high school. Students gain advanced knowledge of their lessons, improve their level of self-confidence, and focus more on their studies. Additionally, senior analyst for K-12 and higher education at Technavio (Private Tutoring Market in the US, 2018) said that:

The increases in the awareness and willingness to spend on education for good career opportunities have been increasing the number of enrollments in higher education. Therefore, the growing enrollments are creating a plethora of opportunities for private tutoring service providers to expand their presence in the market (p 1).

Tutorial benefits parents especially those who are both working and want their child to improve learning and fill up the times where they could not help their children in their homework. In tutorial lessons, students became independent and those who have a hard time with their studies improve their learning ability. It also helps them have the success they want in life (Paulu, n.d.)

This study refers to private tuition or tutorials for an individual or a small group where the fee is paid personally. Milwaukee Area Technical College (2020) describes the five types of tutoring services namely: walk-in, supplemental instruction (SI), structured learning assistance (SLA), online, and in-class tutoring. The customers can choose which type of tutoring class applies to them that would enhance their learning ability. Furthermore, Morin (2019), the author of *The Everything Parent's Guide to Special Education* book, said that parents should look at the positive and negative side of each type of tutoring to ensure the learning of their children from tutorials.

The advances nowadays affect each household which leads both parents to work, especially women who are supposed to take care of their children at an early age. Children are sent to poor daycare centers and parents lost their time to ask about their child's day (Singh, 2019). The main reason for this study was to provide tutorial services for elementary students who want to improve their learning in Mathematics, English, and Science. The researcher has observed that both parents in a family were employed and students nowadays have difficulty in learning the said subjects when they go to high school and college especially because of the transition period in K to 12 education. Tutorial services can help students to cope up with these changes in education (Nerval, 2016).

This research aimed to evaluate the viability of establishing a tutorial center in Palawan specifically its marketing, operations, organization and human resource, strategic management, financial, and socio-economic responsibility. This research is significant to businessmen, parents, teachers/tutors, and researchers.

The result of the study will be disseminated to the above-mentioned beneficiaries and other interested readers by providing them a copy of the paper and through internet publishing.

This study includes parents of elementary students enrolled in Brooke's Point Central School from Grade 1 to Grade 6 as the respondents. The target population was the school children on the said elementary school from Grade 1 to Grade 6 regardless of age, whose parents were working or managing their businesses. The target market was chosen because it was nearest to the proposed location of Tutorial Services in Palawan. Questionnaires were distributed in the afternoon and collected the next day.

The study was done from October 2019 to March 2020. Limitations of this study include the time given to finish this project proposal and the resources for this study.

Methodology

The researcher used both primary and secondary data. Primary data were gathered from the interview of parents of the target market, observation on the target market, and distribution of survey questionnaires within the target area. Secondary data were derived from books, journals, and the internet. Information from books, journals, and related researches and studies were obtained from John Lawrence Detwiler Memorial Library (JLDM) of the Adventist University of the Philippines.

The researcher has observed that there is a growing population in the area of Barangay Pangobilian, Poblacion District 1, and Poblacion District 2 in the town of Brooke's Point, Palawan. This is evidenced by an increased number of housing projects, a number of schools, and other establishments.

The researcher used a self-constructed questionnaire which was validated by seven laymen and seven experts. The questionnaires were distributed to the target market after asking permission from the school principal. Records from the Municipal Planning and Development Office (MPDO) and Philippine Statistics Authority (PSA) were used for the data on the population of the three chosen barangays.

The researcher used descriptive method as required in doing business research to utilize historical trends and projections. Descriptive research involves data from interactions, surveys, interviews, and observation which answers questions such as "what is" or "what was" (Narbarte, 2015).

The population and sampling technique used was purposive sampling. Purposive sampling was based on whom the researcher thinks appropriate for the study (Narbarte, 2015). The researcher chose this technique because it focuses on a particular group that falls on the target market. This technique saved resources in doing the study and the number of population and households were acquired from the MPDO and the percentage increase was from the website of PSA. From the number of households collected, the researcher assumed that each household has five members - a mother, a father, and three children. The average increase in the number of households is 516 which is used in projecting the population for the next five years. The sample of the population was taken from the total number of households divided by the average number of persons on each household, which was five (5), resulting in 2,092 numbers of households in the year 2019. The researcher assumed that out of the 2,092 households, 1,245 were children and 847 adults. Slovin's formula was used to get the number of the sample population where survey questionnaires were distributed.

The data gathering procedure started when the researcher submitted a letter to the school principal asking permission to research the school premises before distributing 320 questionnaires to the target market. A margin was given to unreturned questionnaires, yet the researcher was able to gather 309 which is more than the sample size. The questionnaires were distributed in the afternoon for students to bring home to their parents and were gathered the next day to provide time for the students' parents to answer.

Data gathered from the survey questionnaires were manually tabulated. The researcher used the projection method, ratio analysis, working capital, break-even analysis, payback period, and capital budgeting formulas to analyze data.

Results and Discussion

Marketing

Table 1 presents the information on the respondents' intention to support the tutoring services in Palawan. Based on the result of the data gathered from the survey questionnaires, 24% of the parents send their children to tutorial lessons while 76% of the population does not. In terms of the subject taken by children for tutorial lessons, the respondents assured the researcher to enroll in mathematics (15%), English (5%), and science (4%). It showed that more percentage of the respondents will enroll their children in mathematics. According to Gafoor and Kurukkan (2015), mathematics is a subject that causes many negative emotions. So it is a great challenge to mathematics teacher is to make a positive attitude in students toward learning mathematics

The percentage of sending to tutorial lessons varies, 12% will send their children once a week, 10% twice a week, and 2% will send their children to tutorial services every day for 10 days during vacation.

Three options for the number of tutorial hours per week were provided to the respondents; 13% will enroll for only one hour per week, 6% will enroll for two hours per week, and 5% will enroll for 3 hours per week.

Table 1

Profile of the Respondent's Support to the Tutorial Services

Survey on Patronizing the Proposed Tutorial Lessons	Frequency	Percentage
Yes	72	24%
No	232	76%
Total	304	100%
Subjects Taken by the Children for Tutorial Lessons	Frequency	Percentage
Mathematics	44	15%
English	16	5%
Science	12	4%
Total	72	24%
Frequency of Sending Children to Tutorial Lessons	Frequency	Percentage
Once a week	35	12%
Twice a week	31	10%

{table continues on the next page}

other (pls. specify) Every day for 10 days during vacation	6	2%
Total	72	24%
Number of Tutorial Hours	Frequency	Percentage
1 hour	40	13%
2 hours	18	6%
3 hours	14	5%
Total	72	24%

Table 2 presents the tutorial lessons fee per hour and what percent of the 72 respondents will avail of the services at a particular amount. The majority (19%) of the respondents who will enroll the tutorial services would want to pay less P200 per week, 4% will pay for P201-P400, nobody will pay between P401-P600, and only 1% for P601 and above.

Table 2
Tutorial Lesson Fee Per Hour

	Frequency	Percentage
less than P200	58	19%
P201-P400	12	4%
P401-P600	0	0
P601 and above	2	1%
Total	72	24%

The breakdown of the possibility of sending the respondent's children to the proposed tutorial services is presented in Table 3. The table shows that 17% were willing to send at least one child in the family for tutorial lessons in case a tutorial center is established.

Table 3
Possibility of Sending Their Children to a Tutorial Center

	Frequency	Percentage
Yes	196	17%
No	49	4%
Maybe	38	3%
Total	283	24%

The respondents of the study were provided with four options for the venue of the proposed services. Majority of the 72 respondents would want the home service (83%)

Table 4
Possible Venue of Tutorial Lessons

	Frequency	Percentage
Puerto Princesa City	2	3%
Home Service	60	83%
BPCS	8	11%
PRIVATE SCHOOL	2	3%
Total	72	100%

The proposed tutorial center has four competitors – the teachers in BPCS who tutor after class hours, the private schools, those who offer home service tutoring, and tutorial centers in Puerto Princesa City. Currently, there is no tutorial center existing in the proposed location which means, the proposed tutorial center has a sure market share. According to the data gathered, parents send their children for tutorial lessons because of the competence of tutors and their convenience. The teachers in BPCS were accessible to the market while offered home services were also convenient for those who do not want to go out to study. There was no data available if other factors such as sales, income, number of workers, years of existence, and forms of the business were to be considered.

The proposed tutorial center has a market share of 7,024 in the total number of tutorial hours demanded in the year 2019. The total quantity supplied by competitors was only 6,850 hours while the total number of hours demanded was 13,874 and increasing every year. The total number of tutorial hours demanded was greater than the hours supplied therefore, the proposed tutorial services have a share in the market.

Operations Study

The operations process starts with the registration of students by their parents and choosing which course to take, English, Mathematics, or Science. The registration fee and partial payment should be made in the cashier for validation of enrolment and release of the tutorial schedule. The student then returns on the day of the tutorial session for lessons.

The proposed tutorial center will use both manual and mechanical equipment in delivering its quality services. The primary EMFF to be used is desktop computers for the registrar and cashier, a laptop for the owner, whiteboards, and marker, tables and chairs for students, office tables and chairs, visitors' chairs and benches, printer, and internet connectivity. The proposed tutorial center will also need air condition and other necessary equipment. A straight-line method of depreciation is used on long-term equipment with no salvage value allocated.

The proposed tutorial business will rent space in Brooke's Point Christian High School Business Center because it is more convenient than to construct a new building. The rental fee is Php 9,350 per month excluding payment for utilities such as water and electricity. Space will be renovated according to the layout and floor plan and it is estimated to cost ₱5,000.

The proposed tutorial business will be located at Brooke's Point Christian High School Business Center, Poblacion District 1, Brooke's Point, Palawan. BPCHS Business Center is a commercial center for a different type of businesses. This location is suitable for the business because it is near the elementary schools and very convenient for the target market. After all, it is near the public market and can be easily located.

The location of the proposed tutorial center is a three (3) hour and a 38-minute drive or has a distance of 195.2 kilometers from the city of Puerto Princesa, Palawan. It is near the municipal public market and three elementary schools. Brooke's Point has a total population of 66,374 as of December 31, 2019, and its income level was ranked as first class. This location is very convenient and viable because the target market is willing and able to avail of the services as evidenced by the market study.

The layout of the proposed tutorial center will be a combination of an office and a school layout. There will be three sections, one for each course and a management office for the office workers and tutors. There will be a comfort room on the right side of the entrance door. The layout and floor plan figure are shown below:

The proposed tutorial center has a total demand of 13,874 and an organization's demand of 2,306. It has an annual capacity of 920 in 2019 and the proposed business will render services equal to its capacity. The daily capacity of students to be accommodated is 15 during school days within the tutorial schedule of 5 pm to 7 pm on Monday to Thursday, 11:15 am to 1:15 pm on Fridays and 1 pm to 6 pm on Sundays. During the summer or vacation period, the capacity will be 40 with a tutorial schedule of 8:30 am to 5:30 pm Monday to Friday. Regular office hours will be 8:30 to 5:30 pm Monday to Friday for office workers.

Organization and HR Study

The proposed tutorial business will be owned by one person who has the sole control and ownership of the business. This form of ownership is easy to establish and does not require a lot of documents especially upon registration and can be easily managed and decisions can also be made immediately. The only disadvantage is that all losses incurred and taxes to be paid become a burden to the owner herself with no one to share with.

Before the proposed tutorial business can be established, hiring and screening of workers must take place. The tutorial service will be required to register its organization to the barangay where it is situated and to the municipality where it belongs. It is also required to apply for registration in the Bureau of Internal Revenue (BIR) for income tax payment. A sample of the necessary documents can be found in the appendix.

The tutorial business will be headed by its owner who manages the whole organization. There will be a registrar who facilitates the registration of each student who also acts as the organization's secretary then by a cashier and a disbursing officer who collects payment and disburses expenses. A part-time cleaner will also be hired to ensure the cleanliness of the entire facility. The organization will hire three (3) part-time teachers, one for each of the courses.

The tutorial center will only hire qualified and competent office workers and part-time tutors to render quality tutorial services. Shown in the table below are the personal and academic qualifications and experience of personnel of the proposed tutorial center.

Strategic Management Study

The strategic framework will be checked periodically every six months by submission of reports by the secretary which will be evaluated by all personnel together with the owner.

For the contingency plan such as in the case of brownouts, a stand-by generator owned by the commercial center will be used. In case the tutorial center will not be successful, alternative courses will also be offered to pre-school and secondary students. If the proposed tutorial center will not be profitable, all its assets will be sold and workers are to be paid of what they deserve and all liabilities shall be settled.

Financial Study

The financial statements of a 5-year best case scenario show that the proposed tutorial center is feasible based on the results shown and summarized in Table 5. Although the income is lower for the first few years of operations, it is expected to increase every year which indicates profitability. There will also be a favorable flow of cash for the 5-year projected statement of cash flows and an increasing financial position of the proposed tutorial center shown in each of the balance sheets.

Table 5

Summary of Financial Operations From the Year 2020 to 2024

Year	Net Income	Net Cash	A = L + C/E
2020	193,774.18	2,526,719.98	2,706,974.18
2021	309,804.61	2,840,633.40	2,996,778.80
2022	410,975.61	3,190,717.81	3,322,754.41
2023	471,650.36	3,644,476.97	3,752,404.77
2024	592,681.98	4,166,267.75	4,250,086.75

In analyzing the projected financial statements of the proposed tutorial center whether to continue to invest or not capital budgeting tools such as Net Present Value (NPV), Internal Rate of Return (IRR), and Benefit-Cost Ratio (BCR) are used where the summary can be seen on the table below. Capital budgeting is a technique used to evaluate the potential of an investment. It can be seen that the PV of the ₱2,000,000 invested in the proposed tutorial center in 2020 is ₱184,546.84, ₱281,001.92 in 2021, ₱355,016.19 in 2022, ₱388,027.91 in 2023, ₱464,381.84 in 2024, and ₱694,623.49 in 2025 with a total of ₱2,367,598.20 after six years. The discount rate used is 5%. The difference between the amount invested and its total PV is ₱367,598.20, which is its NPV. It indicates that the proposed tutorial center will be profitable and should be considered because it has a positive result. The IRR was also used to test the profitability of the investment. It is used to measure the rate of how the business will grow.

It can be seen in Table 6 that the IRR after six years is 9%, which indicates that the business has negative rates from 2020 to 2023 but grows after annually. The calculated IRR is the interest rate which makes the NPV equal to 0. The BCR is also used to measure how much benefit is gained considering the cost of investment and it should be greater than one for the investment to be considered. Table 6 shows that the benefit can only exceed the cost after six years with a BCR of P1.18:1. Therefore, by using these capital budgeting techniques, a decision is to be made and that is to pursue the investment for the proposed tutorial center.

Table 6

Summary of Financial Condition Using the Principles of Capital Budgeting From the Year 2020-2025

Year	NPV	IRR	BCR
2020	184,546.84	-	₱0.09
2021	281,001.92	-	₱0.14
2022	355,016.19	-28%	₱0.18
2023	388,027.91	-12%	₱0.19
2024	464,381.84	0%	₱0.23
2025	694,623.49	9%	₱0.35
	NPV= 367,598.20		Total BCR = ₱1.18

Other financial analysis tools were also used to evaluate the financial condition of the proposed tutorial center within five years. These analyses were liquidity ratio, working capital, payback period, break-even, and Return on Investment (ROI). The summary of the analysis done can be found in Table 7. The current ratio was used to measure the liquidity of the proposed tutorial center and the ratio from 2020 to 2024 is more than one which means that the proposed tutorial center has a high capability to pay its current liabilities. It can be computed by simply dividing the total current assets with the total current liabilities. The proposed tutorial center has also a lot of working capital which means that operations can be sustained. Working capital is computed by deducting all current liabilities from the total current assets. The period about how long the initial investment will be recovered which is the payback period was also used. It can be seen on the table below that it takes about more than three years for the investment to be recovered, which is a good indication that the proposed tutorial center should be continued. Financial analysis on how much tutorial hours will the proposed tutorial center render to equate its service costs with revenues, the break-even point. In the year 2020, it should render 3,607 tutorial hours, 2,783 in 2021, 2,731 in 2022, 2,681 in 2023, and 2,632 in 2024. It can be observed that the amount is decreasing over time. The ROI is also used to measure the rate of return on investment using the net income each year. It has an increasing rate from 2020 which means that investment in the proposed tutorial center should be realized.

Table 7

Summary of Financial Condition Using Other Tests From the Year 2020 to 2024

Year	Liquidity Ratio	Working Capital	Payback Period	Break-even	ROI
2020	5.00	2,033,519.98	5.83	3,607	9.69%
2021	5.60	2,352,433.40	3.64	2,783	15.49%
2022	6.30	2,712,517.81	2.30	2,731	20.55%
2023	6.60	3,123,276.97	1.03	2,681	23.58%
2024	7.60	3,650,067.75	0.02	2,632	29.63%

Socio-Economic Responsibility Study

There will be more than 900 elementary students who will be taught in the tutorial business. The advantages of registering for tutorial session/s at the proposed center are having competent tutors and convenience to study. The tutorial lessons will also enhance their English speaking and writing skills, mathematical ability, and their scientists' minds. As for the employees and their families, they will benefit from the tutorial center through salaries and wages. The owner will also benefit from investing through its net income and the community, society, government and the church will greatly benefit as it adds value to the economy as a whole. The community and society benefit through sponsorship of school activities. The government benefits in terms of taxes and the church in the return of tithes and offerings.

The researcher analyzed the results regarding the different parts of a feasibility study such as the marketing, operations, organization and HR, strategic management framework, financial, and socio-economic responsibility studies and summarized its findings as follows. Tutorial Services in Palawan:

1. Offers three subjects for tutorials such as Mathematics, Science, and English.
2. Has an organizational demand for 2,306 and a market share of 7,024.
3. Has four processes involved: registration, payment, schedule, and tutorial lesson.
4. Renders tutorial services to its full capacity with the business hours during school days: Monday to Thursday 5:00 pm to 7:00 pm, Friday 11:15 am-1:15 pm, and Sundays 1:00 pm-6:00 pm. For summer breaks: Monday to Friday from 8:30 am to 5:30 pm.
5. Is a sole ownership form of business.
6. Hires 1 regular employee, 3 part-time tutors, and 1 part-time utility worker.
7. Has formulated its strategic framework to be evaluated periodically by qualified persons.
8. Is found to be profitable based on its financial study.
9. Fulfill its socio-economic responsibility to its stakeholders such as the customers, owner, employees, the community, society, government, and the church.

Conclusion and Recommendation

In conclusion, the market study shows a sizeable market share of 7,024. The operations study assures the capability of the proposed tutorial center to provide what the market needs within the proposed location. The organizational and human resource study also shows the stability and sufficiency of the workforce. Furthermore, the financial study shows increased profitability from the years 2020-2024. The proposed business is also socially and economically responsible by contributing ₱1,323,535.00 to different stakeholders.

It is recommended that tutorial services be implemented within six months. It is also recommended to do a further study about the viability of adding more courses aside from what is going to be offered.

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The Viability of a Multidisciplinary Wound Care Center in Puerto Princesa

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Abstract

The best approach in managing a chronic wound is via a multidisciplinary team in a facility that is dedicated to such. It has been proven in countries around the world and is slowly gaining ground in the Philippines. At present, there is no dedicated wound care center in the city of Puerto Princesa, hence this study was conducted. A descriptive research design was used in this study. A total of 37 doctors which represent 30% of the 122 population were chosen purposively to participate in this study. Their responses were used to calculate the demand for the business. Various profitability ratios such as the Break-Even Analysis, Payback Period, Liquidity Ratio, Return on Investment, Return on Assets, Net Present Value, Internal Rate of Return, and Benefit-Cost Ratio was used to determine the viability of the proposed establishment. The research showed that there is a demand for wound care services in the city; however, there is currently no facility that can meet that demand which is increasing annually. The study also revealed that the proposed location is ideal, considering the cost involved and its proximity to other establishments. The personnel requirement is minimal and the equipment and machines needed are basic. The initial investment can be recovered after two years and the center is profitable. The mission and vision set are achievable and readily evaluable regularly. Lastly, the community, society, government, and the church will benefit from this undertaking. The wound care center will be the first and only institution that will cater to outpatient wound care in the whole province of Palawan. Being the only player in the market, it is predicted to get 100% of the market share. It is therefore recommended that the establishment of a dedicated wound care center be undertaken immediately.

Keywords: *viability, wound care, wound care center*

Problematic wounds, most of the complex and chronic, are best managed by a multidisciplinary team. A chronic wound has been defined by Järbrink et al. (2017) as one that has ―failed to proceed through an orderly and timely reparative process to produce anatomic and functional integrity within a period of three months or that has proceeded through the repair process without establishing a sustained anatomic and functional result. According to the Wound Healing Society in 2016, chronic wounds are classified as pressure ulcers, diabetic ulcers, venous ulcers, and arterial insufficiency ulcers. A multidisciplinary team is defined as a group of health care workers with different disciplines (general surgeon, vascular surgeon, diabetologist, nurse, etc.), each providing specific and distinct services to the patient (Moore et al., 2014). Chronic wound significantly influences the patients' quality of life and their capacity to be productive.

Wound care procedures can vary between hospitals. Wound management difficulties can be attributed to a lack of standardized protocol, a well-integrated multidisciplinary team, and a specific wound care unit. An establishment of a wound care center can help solve the above difficulties while providing wound management service. The goals of wound management service are to treat chronic wounds through the stages of healing, reduce infections or complications, prevent future chronic wounds, and restore the functional activities of daily life. The impact of caring for chronic wounds remains to be quantified in the Philippine setting. Local studies have been scarce to date on the burden of chronic wounds in terms of financial, physical, and emotional aspects of both patients and their caregivers. In contrast, the burden of chronic wounds has been extensively analyzed in foreign literature. In a study in 2018, Nussbaum et al. found out that around 15% of Medicare beneficiaries in the United States, roughly estimated at 8.2 million patients, are afflicted with some form of a chronic wound. This translates to around $28 billion spent on wound care. The total cost of managing patients with chronic wounds in Wales amounted to £328.8 million—an average cost of £1727 per patient and 5.5% of total expenditure on the health service in Wales (Phillips et al., 2015). In the European Union, the incidence of wounds is around 4 million (Moore et al., 2014).

The burden of disease for chronic wounds is expected to be enormous as we move towards the future. According to Tsao (2018), health conditions such as diabetes, patient age, and obesity contribute to developing the common non-healing wounds of diabetic foot ulcers, vascular leg ulcers, and pressure ulcers. There are 1-2% of people who will suffer a chronic wound during their lifetime in developed countries (Sola et al., 2016).

The search for a better way of managing chronic wounds led to the present paradigm of a multidisciplinary approach. Adherence to a protocol or guideline in dealing with chronic wound prevention and treatment translates into social and economic benefits especially for patients with diabetic foot ulcers, venous leg ulcers, pressure ulcers, and arterial ulcers. Edwards et al. in 2013 (as cited in Chen et al., 2015), proved that the implementation of evidence-based protocols for wound assessment and treatment was significantly related to improved healing outcomes. Attempts at wound closure with various traditional and allegedly cheap products lead to further expenditures, prolonged healing, and life-threatening limb complications. It has been proven in several disease entities that observance of a protocol in the management of those entities leads to a more expeditious and lasting recovery. It also translates into savings for the patient and the health insurance provider in the long run. Also, the presence of different yet complementary specialists in one clinic is ideal because of the efficient delivery of quality care through constant communication and collective resources (Kim et al., 2016). One of the key recommendations was the multidisciplinary care for the patient with a chronic wound.

In 2017, a feasibility study, similar to the proposed facility for a planned wound care center, was done by Muenyong-Zinner: the Care First Wound Healing Center in Los Angeles County, California. The target population has the same co-morbid diseases such as diabetes, peripheral vascular diseases, and pressure ulcers. It also included elderly residents who live near the area. The author intended to capture the disabled and non-ambulant patients by providing home care services. This is not part of the proposed business strategy of this present study. Also, the Hyperbaric Oxygen Therapy, a staple treatment modality in most wound care centers abroad, will not be part of this present study.

The business of wound care is a big industry worldwide. In an article in 2018, Kopf held that ―the global wound care and wound management market will expand at a compound annual growth rate of 4.3 % from $33.9 billion in 2017 to $45.5 billion by 2024, according to research from data and analytics firm Global Data. The demand for better wound care is translated into the proliferation of wound care clinics. At present, more than 1,000 outpatient wound care centers are in operation in the United States with annual payments of more than $50 billion (De Leon et al., 2016). These are staffed by a multidisciplinary team which includes nurses, assistants, geriatricians, vascular surgery consultants, podiatrists, orthopedists, and anesthesiologists (Sola et al., 2016).

According to Sood, Granick, & Tomaselli, (2014) the development of new and effective interventions in wound care remains an area of intense research. The establishment of wound care centers, apart from the humanitarian and altruistic reasons, has been proven profitable. Attempts to estimate the costs associated with the management of chronic wounds have been based on literature studies or broad estimates derived from incidence rates and extrapolations from relatively small-scale studies (Phillips, et al., 2015).

In the Philippines, the demand is also expected to rise with the increase in the number of Filipinos afflicted with diabetes and obesity, and of the aging population. The prevalence of diabetes mellitus in the country is at 5.8% while the prevalence of obesity is 4.7% (World Health Organization, 2016). The country's population increased by over 35% in the last 20 years with those who are 60 years and older expected to overtake those aged 0–14 years old by 2065 (Badana, 2018). However, wound care centers in the Philippines have not been able to catch up.

Given this, the researcher, with the Palawan Medical Mission Group Multipurpose Cooperative proposes to put up The Palawan Wound Care Specialists, a multidisciplinary wound care center in Puerto Princesa. It will be housed inside the new Palawan Medical Plaza in Malvar Street, Barangay Mandaragat. It will be the first in the MIMAROPA region and will cater to patients and medical professionals alike from all over Palawan. The center will be a consultation hub, ambulatory surgery facility, and diagnostic establishment all in one. The center is projected to open in 2021.

Methodology

This study used a combination of exploratory and descriptive research designs for this study. Exploratory research is conducted to have a better understanding of the existing problem, which is the extent of the chronic wound problem in Puerto Princesa City and even the province of Palawan but will not provide conclusive results.

There were a total of 276 physicians who are members of the Palawan Medical Society (PMS) as of 2019, according to the PMS Secretary 2017-2019. Of these, only 122 doctors (44.2%) practice or hold clinics in Puerto Princesa. Seventy-three physicians (26.4%) practice outside of the city. Fifty doctors (19.9%) do not have clinics although some of them practice in Puerto Princesa. This group includes those who have retired already, those undergoing residency or fellowship training, those on leave for more than a year for various reasons, and those whose practice does not necessitate holding clinics such as radiologists, anesthesiologists, and pathologists. The rest (9.4%) are registered PMS members whose whereabouts are unknown or unspecified.

The sampling size was obtained by acquiring 30 respondents (30%) for every 100 target population. For this study, the sample size is 37 doctors being 30% of 122. The margin of error is set at 0.05. The sampling technique utilized was non-probability sampling, particularly purposive.

Most of the questionnaires were distributed during the two meetings of PMS doctors in the city. They were retrieved before the doctors left. Some of the questionnaires were left in the doctors' clinics by the researcher's office secretary and were collected after a few days. Table 2 shows the number of questionnaires distributed and retrieved.

Table 1
Questionnaires Distributed (QD) and Retrieved (QR) 2019

Place	Population	Sample	QD	QR
Puerto Princesa	122	37	60	48

The gathered data were analyzed using statistical and financial analysis tools.

Results and Discussion

The proposed center will be staffed with a different specialty and subspecialty physicians, as well as allied medical personnel, who will follow a standardized and research-based protocol in the care of the wound of patients. The following services will be offered: patient and wound assessment, wound dressing, wound debridement, and patient and care provider counseling. The target clients are patients with chronic wounds, burn patients, patients with fistulas, diabetic patients, patients with incontinence, pressure ulcers or bedsores, peripheral arterial diseases, DM (diabetes mellitus) foot, arterial ulcers, dry and wet gangrenes, venous diseases, venous or stasis ulcers, lymphatic diseases, vacuum-assisted wound closure, wound dehiscence (post-surgical), traumatic wounds, chronic fistulas, burn and radiation wounds, infected wounds, ulcerating or non-healing, malignant wounds, and minor wounds. Further, specialized wound care products will be available in the center because of the bulk-buying scheme that will be negotiated with the different industry partners. These include hydrocolloids, hydrogels, alginates, collagen, foam, transparent, and cloth dressings.

The respondents to the questionnaires were doctors because they will be the ones who will refer and make their patients aware of the existence and benefit of being managed in a wound care center. The doctors targeted are those practicing in Puerto Princesa only. This is because the patients they cater to will be the constant clients of the center owing to the proximity of location. Later on, by word of mouth and reputation, the center will also attract doctors and patients from the municipalities outside of the city. The center will also seek accreditation from the Philippine Health Insurance Corporation (Philhealth) to lessen the expenditure of patients and to cater to indigent clients as well.

The projected population of doctors practicing in Puerto Princesa for the next five years was obtained by adding nine to the population in 2019 and progressively adding nine to the sum until the year 2024 is reached.

Table 2
Projected Population of PMS Doctors Who Will Practice in Puerto Princesa 2020-2024

Year	Population
2020	131
2021	140
2022	149
2023	158
2024	167

The survey showed that 83% of doctors (101 out of 122) see patients with chronic wounds in a week. The total demand was computed based on the highest percentage of the number of patients that doctors see in a week. This can be found in question number 2 of the questionnaire. Forty-four percent of the respondents see at least one patient in a week; thus, multiplying the number of doctors with the percentage of those who see one patient a week and with the number of weeks in a year, we will get the total demand in the number of patients per year. The succeeding example is for the year 2019.

101 doctors (83% of 122 doctors)
x 44% (percentage of doctors seeing one patient per week) x 52 weeks in a year

2,310 patients in a year

If the total number of patients in a year is multiplied by ₱2,500, which is the average amount paid by a patient to a doctor for treatment of wounds, we get the total demand per year in pesos. For the year 2019, the computation follows:

2,310 patients in a year x ₱2,500

₱5,775, 000/year

In question number 5 of the survey, 94% responded that they will refer their patients to the wound care center if and when it is established. By multiplying the total demand in units per year with 94%, we will get the demand for the proposed business in units. Then if we multiply the demand of the proposed business in units with ₱2,500, which is the average cost of treatment for such wounds, we will get the demand for the proposed business in pesos. Again, the computation for the year 2019 follows:

2,310 patients in a year
x 94% (doctors who will refer patients to the center)

2171 patients in a year

2171 patients in a year x ₱2,500

₱5,427,500/year

Table 3 contains the projected total demand and demand for the proposed business in units and pesos for the next five years.

Table 3
Projected Demand for the Proposed Wound Care Center 2019-2024

Year	Total Demand in units	Total Demand in Peso	The Demand of the Proposed Business in units	The Demand of the Proposed Business in Peso
2019	₱2,310	₱5,775,000	₱2,171	₱5,427,500
2020	₱2,488	₱6,220,000	₱2,339	₱5,847,500
2021	₱2,659	₱6,647,500	₱2,499	₱6,247,500
2022	₱2,829	₱7,072,500	₱2,659	₱6,647,500
2023	₱3,000	₱7,500,00	₱2,820	₱7,050,000
2024	₱3,171	₱7,927,500	₱2,981	₱7,452,500

At present, there is no facility of the same kind in Puerto Princesa, Palawan, or even in MIMAROPA. Most patients are taken care of by individual doctors or are given remedies by relatives and caregivers.

The wound care center will be the first and only institution that will cater to outpatient wound care in the whole province of Palawan. It is also foreseen as an ambulatory surgery center, meaning patients can go home after a minor procedure such as wound debridement. Being the only player in the market, it is predicted to get 100% of the market share.

The wound care center will be housed in the new multispecialty and diagnostic clinic owned by the Palawan Medical Mission Group Multi-Purpose Cooperative (PMMGMPC). The structure, called the Palawan Medical Plaza, is composed of two buildings connected by a footbridge. It is made up of concrete and steel and is considered a permanent building. There will be no rent or lease since the center is owned by the cooperative.

The wound care clinic will be located on the 4th floor of the main building. An elevator is in operation for ease of access. The Palawan Medical Plaza can be found in Malvar Street, at the heart of the business district of Puerto Princesa. Malvar Street is one of the main thoroughfares of the city. It is a few meters from the Department of Health-operated hospital, the Ospital ng Palawan. The two private hospitals namely, Palawan Medical Mission Group Multi-Purpose Cooperative Hospital and Adventist Hospital Palawan are within its two-kilometer radius. Thirty-five doctors currently hold their clinic in the same building.

The Palawan Wound Care Specialist is foreseen to be the only health care concept of its kind in the MIMAROPA Region. It can cater not only to the patients in the province, but also to patients from Mindoro, Romblon, and Marinduque. The only challenge at present is the unavailability of direct transport from the other provinces to Palawan. With the establishment of the projected nautical highway and the roll-on, roll-off bus services, this is a very close reality.

The center will initially open Mondays to Saturdays from 8:00 am up to 5:00 pm. For the year 2020, that would be a total of 300 working days. There would be one shift only for all workers. The center can cater to 5-6 patients per treatment room per day.

The wound care center has a maximum capacity of 3,000 patients per year. The researcher assumes that in the first year, only 70% of the capacity will be utilized, 80% in the second year, 90% in the third, and finally 100% in the fourth and fifth year. We also assumed that majority of patients will present with medium wounds and bigger; hence, the usual fee that they will pay is ₱2,500. The table below shows the projected revenue based on the percentage of capacity from 2020 to 2024.

Table 4
Projected Revenue in 5 Years

Year	Maximum Capacity	Percentage	Actual Capacity	Price (Average)	Projected Revenue
2020	3,000	70%	2,100	₱2,500	₱5,250,000
2021	3,000	80%	2,400	₱2,500	₱6,000,000
2022	3,000	90%	2,700	₱2,500	₱6,750,000
2023	3,000	100%	3,000	₱2,500	₱7,500,000
2024	3,000	100%	3,000	₱2,500	₱7,500,000

The center will have an initial inventory of supplies to the amount of ₱315,000. Since the building is new, costs for repair and maintenance are low initially. The utilities which include mobile phone and internet bills are also presented in the table below.

The following is a summary of the financial position of the wound care center for the next five years. It is noteworthy to emphasize that the net income steadily increases from the start. The same trend is reflected in the net cash. The total assets also increase progressively as the center operates.

Table 5
Summary of Financial Operations From Year 1 to Year 5

Year	Net Income	Net Cash	A = L + C/E
2020	₱2,225,649.12	₱2,023,184	₱5,504,111
2021	₱2,754,149.12	₱2,944,847	₱8,319,885
2022	₱3,090,824.40	₱3,260,982	₱11,451,794
2023	₱3,591,324.40	₱3,779,033	₱15,101,754
2024	₱3,591,324.40	₱3,775,408	₱18,698,089
2024	₱3,171	₱7,927,500	₱2,981

Conclusion and Recommendation

The research showed that there is a demand for wound care services in the city; however, there is currently no facility that can meet that demand which is increasing annually. The study also revealed that the proposed location is ideal, considering the cost involved and its proximity to other establishments. The personnel requirement is minimal and the equipment and machines needed are basic. The initial investment can be recovered after two years and the center is profitable. The mission and vision set are achievable and readily evaluable regularly. Lastly, the community, society, government, and the church will benefit from this undertaking. The researcher recommends that a dedicated wound care center be established immediately as it is cost-effective for the community and also profitable as a business enterprise.

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Expansion of Goat Farm in Palawan Adventist Academy

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Abstract

The demand for goat's meat increased as supported by the increase in the total disposition of goat in 2018 by 0.95 percent. However, based on statistics there is a continuous decline in the goat supply in the Philippines. Thus, this market study was conducted to evaluate the viability of establishing an expansion of the goat farm in Palawan Adventist Academy, Narra, Palawan. The study utilized descriptive research. The data were collected using a survey questionnaire to a total population of 20 sellers. The data were analyzed using financial analysis tools. The results show that the proposed business will be profitable and successful if established. The demand for farm supplies generates income for suppliers. The production and operations study gives assurance that the proposed business can produce good quality goats that the target market needs. The proposed business requires five capable personnel to start its operations. The financial study shows that from years 1 – 5, the profitability of the business is increasing although the number of goats sold is constant. The proposed business had a Net Present Value (NPV) of P79,091.84. The Internal Rate of Return (IRR) is 8.53%. In five years, the proposed business will contribute to the employees, suppliers, community, society, government, and the church. The proposed business was supposed to be implemented by 2020. Further study can be conducted to assess the feasibility of an additional number on the capacity and new products such as goat milk and cheese as an addition to the proposed business.

Keywords: *viability, net present value, internal rate of return, goat farm*

Goats are considered as one of the useful animals. Its meat and milk are important for human consumption, and as one of the first animals to be domesticated, it is usually grown for milk and meat production (Madu, Omar, & Zailani, 2016; Monterio, Costa, & Lima, 2017). Perez, Ebuan, and Cusipag (n.d) also stated that since goats are smaller as compared to other animals, it is easier and more economical to raise. Goat farming is the raising and breeding of domestic goats. It is a branch of animal husbandry, wherein the goats are raised principally for their meat, milk, fiber, and skin. Goat farming can be very suited to production with other livestock such as sheep and goat on low-quality grazing land. Goats efficiently convert sub-quality grazing matter that is less desirable for other livestock into quality lean meat. Furthermore, goats can be farmed in a relatively small area of pasture and limited resources (Qushim, Gillespie, & McMillin, 2016).

The demand for goat's meat increased as supported by the increase in the total disposition of goat in 2018 by 0.95 percent. And according to the Philippine News Agency (2018), the "Palawan Economic Development Council (PEDCo) is out to make the province the 'goat capital' in Asia" (para.1). Since goat farming is becoming more popular and profitable, expanding the goat farm of Palawan Adventist Academy (PAA) will help the institution to maximize its resources and provide additional income to the institution as well.

The proposed expansion will still be located on the premises of PAA at Narra, Palawan. The target market would be the sellers of goat meat. The expansion will offer goat for slaughter to the target market. This proposed expansion will approximately need four million to be financed by the school and it is expected to begin when the facilities and requirements are ready, possibly on 020.

Statement of the Problem

The central problem of this study is the evaluation of the viability of establishing an expansion of the goat farm in Palawan Adventist Academy.

The main objective of this study is to determine the viability and feasibility of establishing an expansion of the goat farm in PAA.

Specifically, objectives for the different functional areas of management are as follows:

1. Marketing

a. To describe the nature of the primary and the secondary products to be provided.

b. To determine the demand and supply for the products of a goat farm and its market share.

c. To formulate a marketing plan and strategies for a successful operation of the goat farm.

2. Technical

a. To determine the processes involved in operating the goat farm in the most effective, efficient, and economical way.

b. To find out the necessary equipment, machinery, furniture and fixture, building requirements, ideal location, and the most effective layout in the expansion of goat farm.

c. To come up with the ideal capacity of the goat farm and establish the most practical business hours.

d. To verify the most economical costs to be incurred in the operation.

e. To establish quality control and other controls to be effective and efficient in the operation process.

3. Organization and Human Resource

a. To decide on the most appropriate form of ownership
b. To identify the requirements needed in starting the business
c. To determine the number of qualified people to run the project effectively.
d. To develop a compensation package that will keep and motivate the people to work hard for the organization.
e. To identify the necessary steps to be done before the implementation of the project.

4. Strategic Management

a. To develop the Mission, Vision, and objectives, KRA, and PI for the proposed organization.
b. To set a strategic evaluation to review the operations of the proposed organization.
c. To set contingency plans, alternative plans, and exit strategies just in case the assumptions do not work as expected.

5. Financial

a. To make realistic assumptions that will guide in the preparation of financial statements
b. To agree on the amount of total investment required to implement the project.
c. To explore the possible sources of financing that would yield low interest.
d. To determine the financial returns of the organization after the preparation of financial statements.
e. To analyze the activities that promise success to the organization.

6. Socio-Economic Responsibility

a. To examine the operations of the organizations to be responsible to the stakeholders.
b. To quantify the contributions to the stakeholders.

Review of Literature

Goats (*Capra hircus*) are mammals with backwardly arching hollow horns, short tail, and straight hair (Lemay, 2015). They are one of the first domesticated animals (Hirst, 2018; Monterio et al., 2017) that give benefits to the human race for they provide various products such as milk, meat, and fiber. Gillingham (n.d) agreed by stating that goats are versatile animals for they provide such products that can be consumed by humans. Also, goats provide saleable skin and manure that can be used to nourish garden soil. Furthermore, Lemay (2015) also added cheese, butter, leather, and yarn to the list of products that goats provide. Vincent (2018) also stated that goats can supply nutritious and flavorful milk to drink, which can be made into other foods. Moreover, Goat Farming Business (2016) mentioned that goats are essential to every special event such as birthdays, baptism, marriage celebrations, and other parties.

Goats are not hard to raise. Vincent (2018) stated that since goats are browsing animals, they want an area that has grass, shrubs, weeds, herbs, trees, and bushes. Goats can survive steep or rocky areas and raising them could make unproductive lands useful. Monteiro et al. (2017) also added that goats have superb adaptability to the difficult mountain conditions and intense weather circumstances. Aside from adaptability, goats are also efficient since they love to eat plants, they meet their nutritional needs, it lessens the need to feed them expensive feeds and leads to low maintenance cost (Goat Farming Business, 2016; Goat Raising Feasibility, 2017; Vincent, 2018). Moreover, the smaller size of the goat makes it easier to handle and needs less space for feeding. However, facilities such as feeders, water vessels, working stations, and kid mortality can be considered as challenges in raising goats (Madu et al., 2016). Vincent (2018) also added that predators such as eagles, goannas, foxes, dogs, and people affect the population and distribution of goats. Hence, goats should be managed well by providing good fences to avoid roaming goats and damage to gardens, plants, and other properties.

In the 18th century, goat farming left a huge impact in Europe when unique breeds emerged through breeding goats from Europe, Asia, and Africa and on 19th century, specialized agricultural production replaced traditional farming, leading to growth in goat production, for it aimed at supplying growing urban populations (Boyazoglu, Hatziminaoglou, Morand, 2015). In the Philippines, since goat farming is very simple and low-cost (Goat Farming Business, 2016), and with the increase in demand, the Department of Agriculture (DA) urges farmers to venture on goat raising (Baccay, 2019). Furthermore, National Dairy Authority (NDA) said that 1.56 billion of funds from the United States Department of Agriculture (USDA) are for dairy goat farming to develop programs in rural areas (Manalo, 2019).

The importance of the study locally is to establish evidence in proving the feasibility of the expansion of the goat farm. This study will inform local of the potentials of the business as well as how it will help in the global economy for goat farming is becoming more popular (Vincent, 2018) and was found to be one of the ideal sources of income, if managed well, because it is easy to manage, encourage family labor, and cost-efficient (Perez et al., n.d). According to Goat Farming Business (2016), goats provide a source of income for approximately 15 million Filipinos; and because of it, more Filipinos are now into raising goats (Goat Raising Feasibility Study, 2017). It is also important to help the global goat farming industry in engaging with other countries that do well in goat farming and hopefully will contribute to the international trade of these livestock. Gillingham (n.d) stated that goat meat is marketable worldwide and international demand for goat meat increased. Also, Boyazoglu et al. (2015) also stated that in the Mediterranean countries, goat farming plays a significant role in the economy.

A similar study was conducted to be named as J.A.C.K Goat farm to be located in Tarlac, Philippines. The business was classified as a commercial goat and slaughter farm and it focuses on raising and breeding domestic goat for their meat and milk. The business' target market was restaurants in Tarlac, markets, occasions, and farmers inside and outside of Tarlac. The exploratory method was used and questionnaires were distributed to the target market (Term Paper Warehouse, n.d).

This feasibility study, expansion of the goat farm is different from J.A.C.K Goat Form for this research paper focused only on selling goat for slaughter, furthermore, this paper's respondents are sole meat sellers in Palawan, where the proposed business will also be located.

Industry Profile

Goat Farming belongs to the agricultural industry specifically to animal husbandry. Animal husbandry is the practice of breeding and raising livestock. In the Philippines, according to the Philippine Statistics Authority (2019), for the 2nd quarter of 2019, livestock shared a total of 17.41 percent in the total agricultural output. Livestock value amounted to 77.7 billion at current prices and presented a 1.96 decrease as compared to the previous quarter. However, livestock production for the first half of 2019 increased by 2.24 percent. For the second quarter of 2019, total goat inventory was estimated to be 3.83 million heads, 1.4% higher than the previous year's data. Goats are usually priced per kilogram, live weight, and the average price of goat for slaughter was 150.26 per kilogram, live weight. It was higher than the previous year's average price of 9.8%.

Sale of meats is usually made to customers on weekdays but during festivities such as Christmas, Easter, and Ramadan, it as the best-selling time to costumers (Madu et al., 2016). Sale of other products such as milk took after an initial period of 15 months and manure can also be sold per kilo as fertilizers (Madu et al., 2016).

Promotion strategy is an attempt by marketers to reach customers and its goal is to stimulate action from the target market and according to Ahmed (2018), it is important to know consumers to target them with promotion strategy. Traditional advertising at the television, radio, newspapers, magazines, and billboards; and online advertising by maximizing the use of social media such as making posts and videos to various social media sites is also helpful in creating a brand image for the product (Ahmed, 2018).

Success and Risk Factors

Strengths vs. opportunities. Since one of the strengths of the proposed business is its supportive management, it should be utilized to help the business in achieving its goals and objectives in leading the goat farming market. The management should fully support the business for it to achieve its goals and objectives and become a leading goat farm in the area and also in the whole province. The positive and good relationships between the management and the workers should be continued and the positive culture that is based on the organization's faith should also be maintained so that everyone will be productive and motivated to work and perform duties to achieve the goal of the business. To help in the community, out of school youth should also be employed for their time to be occupied and for them to be productive as well. Since the government supports goat raising as it is one of the activities that help in the economy, management should solicit help from the government and affiliated institutions to maximize resources well and to lead the market.

Strengths vs. challenges. The management should support and the business in dealing with the weak telecommunication signals, and frequent electric power interruption so that processes that need such resources will not be affected. Proper measures and plans should also be made with regards the pests, diseases, and unpredictable weather conditions should also be made and assistance from affiliated companies and the local government should also be asked for faster and better implementation of plans and measures.

Weaknesses vs. opportunities. To keep good management and workers, a good and fair compensation package should be offered; proper training for current and future jobs should also be made; and hiring of employees should also be done properly and carefully to achieve good and capable workers such as experts in the field of business. To deal with the unpleasant odor, possible diseases, and mortality rate, management may ask assistance from the government especially during vacation when the institution has less income. To gain more knowledge from the business and good business partners and for benchmarking, good relationships with other goat farmers should also be made.

Weaknesses vs. challenges. Change in the workforce is one of the unavoidable weaknesses of the business, thus from managerial positions to the rank-and-file position, proper training and delegation of duties and training for the possible position should be made. Brownouts, unpredictable weathers, and pests should be dealt with wisely to avoid or minimize diseases and high mortality rates. Experts in goat farming must also be hired to help in dealing with the challenges. To motivate workers, ensuring a good working environment such as providing comfort, good communication signals, and necessities such as electric power may motivate workers to work and enjoy doing it. A good relationship with other goat farmers should be achieved to gain knowledge in dealing with the challenges.

Methodology

Research Design

In doing this study, the researcher used both exploratory research and descriptive research. The researcher gathered data from customers and competitors to gain knowledge of the customs, values, and buying practices of the target market in a particular place. Interviews, surveys and observation were also done by the researcher.

Sources of Data and Instrumentation

The researcher used both primary and secondary data. Primary data were gathered from observation, interviews, survey questionnaires, and available data. Secondary data were derived from books, journals, and online references obtained from John Lawrence Detwiler Memorial library.

The questionnaire is self-constructed, validated by five experts and five laymen; and distributed to the target market. Records from the Department of Trade and Industry and municipal of Narra, Palawan were also used with regards to the target market and competitors.

Population and Sampling Techniques

The target market is sellers of meat in Narra, Palawan. The method that the researchers used is 100 percent examination. This is because the total number of sellers is just 20.

Data Gathering Procedures

The questionnaires were distributed to the meat sellers in Narra, Palawan. No allowance for non-response is given because of the few numbers of respondents. To make sure that all the questionnaires are distributed and collected, the researcher used the help research assistant.

The researcher conducted interviews with the farm managers, traders, caretakers, government agencies like the Department of Agriculture (DAR), municipal office workers particularly in the Business Permit Department to accumulate first-hand information about the proposed business

The observation was conducted on the local livestock markets to understand trading practices, particularly the pricing method used in the area. Through thorough observation, the researcher also obtained data on the number and size of goats commonly sold in the market.

Results and Discussion

Product Description

The proposed business will produce a goat for slaughter as its primary. Both native and hybrid goat – preferably Boer will be raised by the proposed business. The goat that will be sold by the proposed business is aged 1-2 years. Normally, goats of this age are medium-sized and are often sold at P15, 000. Goats will be sold after kidding 7-8 times to goat traders for P250.00/live weight kilograms. A new batch of does will then replace the goats that are sold. The Boers will also be replaced after 7-8 years.

Demand

Meat sellers will be the target market of the proposed business, specifically, those who sell meat in the local markets at the premises of Narra, Palawan, and markets near PAA. Most of the population is from the bigger market area-the marketplace located at the town of Narra, Palawan.

The total demand was computed by multiplying the total population with the highest frequency of buying schedule of the target market with the average number of goats sold. Then its weekly, monthly, and yearly value are computed by using conversion amounts to arrive at the desired data. Then the yearly amount in quantity is multiplied by the average selling price per piece to get the amount of quantity demanded in peso. The same process is applied to get the quantity demand and peso equivalent of the proposed business, the only difference is the number of those who are willing to patronize the product.

The total demand in units and peso is greater than the demand in units in peso of the proposed business. It is because some of the target markets are not willing to patronize the proposed business.

Supply

Palawan is one of the eyed locations for goat farming. And in Palawan, one goat farm is visible, known as CNMS Manor and Goat Farm. It is located in Sta. Monica, Puerto Princesa City, Palawan. In the same City, RG Goat Farm also exists. However, near the target market, there are no known goat farms yet.

Market Share

Market share is computed by subtracting from total quantity demanded the total quantity supplied or capacity of the competitors. The market share then will be compared to the quantity demanded of the proposed business. The organization's total demand is greater than the unmet demand available for the proposed business. This is possible because 95% of the meat sellers are willing to patronize the product of the proposed business

Marketing Strategies

After analyzing, the project in connection with its target market and the probability of earning a profit, the market plan is devised. This marketing plan considers the 4 Ps of marketing mix namely: product, promotion, price, and place.

Product. To attract customers and encourage them to patronize the product, the proposed business will produce a healthy goat. This is done through proper vaccines which will be administered by the trained farmworkers or by a professional veterinarian in cases that cannot be handled by the farmworkers.

For the product planning ₱25,000.00 will be used for the research of proper vaccines, injections for antibiotics, and substitute supply of the goat's primary food, prospect veterinarian, and farmworkers. This will be done by the manager.

Promotion. The farm will conduct promotion activities within three weeks before its operation. Hired farmworkers will do advertisements in the market to attract future customers. Leaflets containing the name of the farm, location, products offered, and contact information will be distributed. Along the road, there will be signages indicating that a goat farm is nearby.

The budget for the market and cooperative promotion will be ₱1,500, the leaflets will be allocated with a ₱500 budget, and ₱2,500 will be for the signage, ₱1,500 for other promotional expenses. The following years will have a lesser cost of promotion because only improvements to the products will be promoted.

Price. As practiced in the local market, the farm will sell the goat on a cash-to-cash basis based on goat size. Credit will not be accepted because goats are high price-low volume products. The risk of uncollectible accounts can cause loss to the business.

The market-oriented method will be used in pricing the product. This method is appropriate when the price is based on the interaction of demand and supply. When the demand for goat is high, the farm will offer the goat at a higher price. On the other hand, when the demand falls; the goat will be sold for a lower price. To be able to use this pricing method effectively, the managing partner or the head goat keeper should monitor the price of goat in the market weekly. The goat will be priced based on the prevailing market price per kilo live weight plus the percentage of profit.

Place. The goat farm will be located at Narra, Palawan. It is accessible because it is near the road. The farm will receive orders Mondays to Thursdays through text messages and phone calls. The expected delivery is every Thursday but delivery on other days except Saturday will be accepted. The goat will be delivered at the agreed place with the customer as long as it does not exceed the 10 km allotted distance. Fuel cost of ₱1,000 is expected to be consumed every week of delivery. And cell phone load of ₱300 monthly is expected to be consumed. The following years' costs were estimated using a 5% increase to the cost of the previous year due to inflation and price changes.

People. To provide healthy goat, seminars on proper vaccination and castrating goat will be done by the management. It is to train the workers on how to handle goats. This training includes the right way of vaccinating and castrating goats. Proper grazing of the goat will be observed to make sure that the goat will grow bigger over the period. Twenty-five thousand pesos (₱25,000) will be allocated for training and seminars of workers about goat raising for the first year for it is a starting stage and workers should be trained properly and ₱15,000 for the following years for additional training and seminars to be attended.

Operations/Production Study

Production process and flow chart. The proposed business is goat farming which falls under the production process. Since the proposed business is an expansion of the existing small goat farm in PAA, additional goats are to be bought. The proposed business will require the acquisition of 80 Philippine native does of at least one year of additional four bucks to be used for breeding.

According to Sing (2019), the gestation period of a goat is 145 to 156 days. And on the scheduled birthing date, farmworkers will assist the goat, and veterinarian's aid will be asked if unmanageable situations occur. 1.5 months young goats will be castrated to stop the production of male hormones and eliminate unwanted breeding. New-born does are allowed to suck milk for 6-10 months, after such period, does will be weaned and transferred to separate pen for immunization, deworming, fattening, and will be released in the pasture. Immunization will be done quarterly to the weaned goats and are bathed to remove lice. After 6-12 months of fattening, the goats will be disposed of.

Equipment, machinery, furniture, and fixture (EMFF). The proposed business will be using manual labor. EMFF costing at least ₱10,000 will be capitalized and will be depreciated using the straight-line method. Other items below ₱10,000 will be expensed. The equipment, machinery, furniture, and fixture of the business includes a barn, generator, movable weighing scale, water tank, laptop, and delivery truck

Other items costing less than ₱10,000 that are necessary to the production include feeding manger, exhaust fan, table, branding iron, castration ring, calculator, swiveling chair, plastic chairs, and filing cabinet.

Building. The proposed business will construct a building that will be used as an office, supply room, and barn. Constructing a building became an option because it best suits the type of business and since the organization has enough land to be used. The rough estimate of the cost of the building construction ₱1,000,000.

Location. The proposed location will be located in Barangay Tacras, Narra, Palawan, the. Barangay Tacras is one of the Barangays in the municipality of Narra, it is located between Barangay Aramaywan and Burirao. The size of the lot is 5,000 hectares. It is located in the back part of the land area of PAA, which is just along the national highway to the south of Palawan and is accessible to the customers and future investors. The land area for the location of the goat farm is purely agricultural and has no families residing nearby the area.

The nearest competitor is located in the town of Narra, which is 30 kilometers from the location. While the nearest public market is at the nearby Barangay, which is one kilometer away from the proposed location.

The location also enjoys various mobile network signals and services, which could help in dealing with non-personal transactions. The road going to the place is already concrete, which makes transportation transactions easier with various actively operating vehicles such as buses and vans. From Puerto Princesa City, the location can be reached by paying P90.00 via bus and P180.00 via van. From the nearest town, the fare to the location is P25 and 40 via bus and van, respectively.

Layout and floor plan. Proper ventilation is needed for the proposed project for faster drying of floors and a healthy environment for the goat's well-being. Proper arrangement of equipment, furniture, and fixtures will also be observed for the sake of ease of movements in the area.

Mature goats such as bucks and does are to be kept at the right side of the entrance, together with the suckling does while the weaned does will be kept on the opposite side and an office will be set near the exit of the barn.

Capacity and scheduling. The proposed business will begin raising 800 goats that will be supervised by the farm manager. Head goat keeper, two goat keepers, and one driver will be hired. The workers will work for six days from Sunday to Friday, eight hours per day.

Waste disposal. Goat manure is the only waste that will be produced by the proposed business. Such manures will be collected daily. It will be dried and will undergo composting to produce an organic fertilizer that will be used in other agricultural activities of the school and will be given to the community as an extension program.

Utilities and other costs. The proposed business will incur utilities and operating costs that are necessary for carrying out the business operations. Electricity, water, fuel, supplies, salaries, and benefits of workers are some of the costs that the project will incur.

Production cost. The production cost begins from the gestation period until it is sold. Direct materials include deworming solutions, immunization vaccines, and feeds. The direct labor will be composed of payments to the workers and the factory overhead will be computed by identifying the indirect costs.

Quality control. The proposed business will appropriately record all additional to the goats such as the purchase of new goat and birth of doe. The recorded information will include the age, initial live weight, and identification number. Quarterly health check-ups will also be made to monitor and know possible threats and growth and it will be followed by deworming, vaccination, and weighing. The manager will keep the record to monitor each goat.

Other forms of control. The treasurer of PAA will be the one to check the records to monitor the progress with regards to expenses and handling of assets especially cash.

An account for the goat farm will be made to monitor its operation. Expenditures for utilities and supplies should be approved first and must be supported with proper documents such as bills and receipts.

The management of cash will be made by the school's business office and no credit terms will be made for each transaction to avoid the risk of uncollectible for customers. Other assets will be monitored monthly and inventory will be kept to ensure the proper recording and existence of assets.

Organization and HR Study

Form of ownership. The proposed business will operate as an extension of auxiliary operation PAA, a corporation. Having the form of ownership, which is under a corporation, the proposed business will have the following advantages:

Since the business requires big capital investment, the corporation will easily finance it using its finances and other financing activities. Having an existing financial and managerial system, the management of the proposed business will be easier.

If the proposed business will not perform well, it can easily be stopped, and the school may still use the facilities for other purposes. However, it can also have disadvantages such as:

The limited liability a corporation has may discourage potential investors especially if good financial stability is not achieved. Corporations are highly regulated by the SEC.

Organizational requirements. There are the requirements that the proposed business needed to comply with and to submit at the Permits and Licenses Section in the Municipal office of Narra, Palawan.

Barangay clearance. It is one of the Philippine-government issued identification documents needed for much important business, job, or personal transactions.

Sanitary permit. It is the official document issued by the Department of Public Health and Social Services that authorizes a health-regulated establishment to operate after it has been determined to have met the requirements for sanitary operation.

Health certificate. Issued by the rural health unit of the municipality to ascertain that the owners and personnel are physically healthy and are free from any communicable diseases.

Fire safety inspection certificate. It is a requirement of the business permit and licensing system of local governments to ensure compliance with the regulatory requirements for safety and general public welfare.

Social Security System (SSS) clearance. It is the clearance certificate issued by the SSS to observe the compliance with the existing SSS regulations to protect the interest of the employees whose salaries are being deducted from the payment of SSS contributions and to make sure and certain that the employee's contributions are remitted to SSS.

Organizational structure and chart. This section shows how the business will be run from the top to the bottom, the jobs needed to ensure that the business will run smoothly, and the chart that will show the scalar chain of command.

The structure of the business is as follows: the head goat keeper will be under the supervision of the treasurer and the principal. The treasurer and principal should approve the business transactions. The head goat keeper will supervise the goat keepers in taking care of the goat, the driver in delivering goats and other transactions, and the guard in keeping the farm safe.

Personnel requirements. The proposed business requires five personnel to start its operations.

Qualification standard. For the proposed business to operate well, its human resource should meet qualification standards. Such standards will be based on personal qualities, educational attainment, and working experience. The head goat keeper must be responsible, honest, knowledgeable in handling goats, patient, hardworking, and time conscious. He/she must also be at least a high school or college graduate and have at least 2 years of work experience. Goat keepers must also possess most the personal qualifications like the head goat keeper and must be able to read and write. The driver should be responsible, honest, and patient; must have a driver's license and mechanical background; and have at least 2 years of work experience. The guard must also be honest, responsible, and alert physically and mentally; must have sufficient training in guarding properties and must have experience of at least 1 year.

Job description. Every job in the organizational chart has its job description. It states the title of the job, whom to report, who supervises, summary duties and responsibilities, and detailed tasks. The head goat keeper reports to the treasurer, supervises the goat keepers, driver, and guard, and is the overall supervisor of the farm. The goat keeper reports to the head goat keeper and in-charge of taking care of the goats and the farm. The driver reports to the head goat keeper and in-charge of all transportation transactions. And guard reports to the head goat keeper and will ensure the safety of the farm and goats.

Compensation package. All personnel must be compensated for the job they performed. And in this section, the workers' pay, benefits, allowances, and incentives, if any, will be discussed. All employees are entitled to benefits required by the government such as SSS, Phil health, Pag-ibig, and 13th-month pay. If the services were rendered on holidays, additional fees will be given.

Projected timetable. The projected timetable shows the estimated time and money that will be spent in preparation, organization, and before the actual operation of the proposed business.

Preparation of the feasibility study. The researcher conducted a study to gather all the necessary information to evaluate whether the proposed business is viable or not. This will take up to two months and will probably cost up to Php10, 000.

Formal organization. After determining the viability of the proposed business, it may now register to the Department of Trade and Industry (DTI) to acquire legal personality to carry the name Goat Raising Farm in Narra, Palawan. The application of necessary permits will also take place on this step. All permits needed in the operation of the proposed business will cost a total of Php 3,000.00.

Preparation of the place. The preparation of the place will take place on this step that will take three months. The preparation of the pasture, construction of the barn, and installation of the water source will be included in this step. This will entail a total cost of P25,000.

Acquisition of equipment, furniture and fixture, and construction of building and land improvements. The canvassing, ordering as well as purchasing of equipment, furniture and fixtures will take place in this place. It will take about P2,000.00

Recruitment of employees. The hiring of qualified employees will take place in this step. The training and seminars of the chosen employees will also be included in this step. This will take one month; it is to make sure that the hired employees will be competent in their assigned position. The estimated cost is P1,500.00

Marketing and promotion. The introduction of the proposed business is an essential part of the pre-operating process because the proposed business is newly established and will be the first goat farm in the place. Familiarity must take place between the neighbors, target market, and the business to create rapport. P6,000.

Start of the operation. After all the steps were completed, the proposed business is ready to operate. The acquisition of goat to be used for breeding will be done first right after the commencement of operations.

Strategic Management

Strategic framework. Formulation and application of the major goals and initiatives taken by the top management will provide the organization the guide on how it will achieve its purpose. The following are the mission, vision, objectives, key result areas, performance indicators, strategies/programs, activities/tasks, and resources of the proposed business.

Mission. The proposed business exists to provide a high quality of goat to meat sellers for the safe consumption and satisfaction of the people in Narra, Palawan.

Vision. The proposed business envisions being a leading goat farm in Narra, Palawan by 2030.

Objectives. The short-term targets of the proposed business are Marketing: To maintain the level of sales throughout the 8 years of operation. Production: To maintain a full capacity of goats within the years of operation; to sell big and healthy goats over the years of operation. Human Resource: To sustain the workforce over the 8 years of operation.

Key Result Areas

Marketing: The sales will increase by 10% every year.

Production: The number of goats ready for sale will increase, low mortality rates, health, and quality size of a goat.

Human Resource: Employee Turnover Certificates and Licenses

Performance Indicators

Marketing: Five thousand goats are sold every year. Production: All does kid each year, the record of mortality of goat is zero, and all goats are big and are free from diseases. Human Resource: There is zero employee turnover every year and one hundred percent of the employees acquired license and certification to administer vaccines from the Department of Agriculture.

Strategies

Marketing: Increase awareness of customers and obtain customer loyalty. Production: Assure 100 percent pregnancy of does, decrease mortality rate, prevent goat diseases, and maximize the growth of goat. Human Resource: Reduce employee turnover and make employees more equipped

Programs

Marketing: Distribute leaflets, construct a landmark, gather contact information of existing customers, and offer free delivery. Production: Timely breeding, successful kidding of does, timely vaccination, goat deworming, and proper goat grazing. Human Resource: Proper employee benefits and employee training and seminars.

Activities

Marketing: Distribution of leaflets, the printing of leaflets, distribution, constructing a landmark, sculpture outsourcing, gathering of contact information, personal inquiry to customers, and keeping of customer information record. Production: timely breeding, determine the goats ready for breeding, facilitate breeding, successful kidding of does, determine the kidding date of the goat, assisting goat during delivery, timely vaccination, set dates for quarterly vaccination, vaccination, goat deworming, feed goat with deworming solution daily, proper goat grazing, schedule the timely rotation of grazing area. Human Resource: Proper employee benefits, register employees to SSS, Pag-ibig, and Phil Health, gives salary, employee training, and seminars, set an appointment with the Department of Agriculture in the area, enroll the goat keeper to the seminars and training, acquire certification and license.

Tasks

Marketing: Printing of leaflets. The design and printing of leaflets will be done through outsourcing. The chosen printing press will design and print the leaflets for a cost of P500.00.

Distribution of leaflets. Farmworkers will be tasked to go to the local livestock market on Thursday and farm workers will distribute the leaflets to the meat sellers.

Sculpture outsourcing. The school administrator will choose a design for the landmark and pay P5, 000.00 for the landmark.

Personal inquiry to customers. The head goat keeper will ask existing customers to give their contact numbers and addresses or any contact information.

Keeping customer information record. The head goat keeper will save telephone or cell phone numbers of customers and will encode contact information of customers in the laptop, print encoded information for a cost of P100.00, and keep on a separate folder in the office.

Production: Determine does ready for breeding. Goat keepers will observe the behavior of does. After observing the behavior of does, the goat keeper will evaluate if the does are ready for breeding.

Facilitate breeding. The goat keeper will guide the Boer to the area where the does are, the goat keeper will isolate the goat and after 20 minutes, they will separate the does from the Boer.

Determine the kidding date of goats. To determine the kidding date of does, the goat keeper will keep track of the date of breeding. The goat keeper will count 279-281 days from the date of breeding.

Assisting does during delivery. The goat keeper will observe the does to know if it is ready for kidding, the goat keeper will monitor goat for 24 hours when labor exceeds 24 hours, the goat keeper will assist in the goat delivery.

Set dates for quarterly vaccination. To determine the date of the next vaccination, the goat keeper will keep track of the date of the last vaccination. After three months from the date of the last vaccination, the goat keeper will again vaccinate the goat.

Vaccination. Each quarter, the goat keeper will inject goat with proper vaccines. Feeding goat with the deworming solution. Every day, the goat keeper will mix the deworming solution to the grass or grass. Human Resource. Register employees to SSS, Pag-ibig, and Phil Health, the farm workers will fill-up the registration form, the head goat keeper will pass forms to the office, give a salary, the treasurer will determine the minimum wage applicable in the area, set an appointment with the Department of Agriculture in the area, the head goat keeper will call the office of Department of Agriculture to set the appointment date and will pay the amount of P25, 000.00 for the seminars and training. Enroll the goat keeper to the seminars and training, after setting an appointment, the head goat keeper will list the names of all goat keeper that will attend the training and seminars. Acquire certification and license. The goat keeper will wait for the delivery of certificates and licenses.

Strategic Evaluation

To evaluate the progress of the business, evaluation, review, and follow-up will be conducted by the goat keepers, head goat keeper, school treasurer, and principal. In the case of the difference between the actual results as compared to the expected results, the root cause of the problem should be determined so that the variance in the expectations and the actual results will be solved. Corrective actions are planned, implemented, and monitored by the persons involved so ensure that the strategic plans and goals are achieved and for the root cause of the problem to be solved as well.

Other Strategies and Plans

Contingency plans. Back-up plan for unforeseen events is necessary to cope with emergencies and to avoid interruptions in the business operations. The contingency plans of the proposed business are the following: In case of brownouts, a stand-by-generator will be used to supply energy throughout the whole farm especially in the barn. Proper ventilation cannot be interrupted because it is very important for the goat. The place cannot be dim especially during evenings because thieves can go inside without being detected when it is dark; If a goat has difficulty in delivering her doe even with the assistance of the farmworkers, a veterinarian will then be called; An insurance will be purchased to minimize the loss in case of unfavorable circumstances such as goat pestilence and fire; the proposed business will hire physically and mentally abled individuals when one or some of the farmworkers gets sick; If the goat used in breeding does not kid anymore, it will be sold to the goat traders who buy in a live weight basis to generate cash that will be used in buying a new breeding goat.

Alternative plans. If the major assumptions of the business change, the farm will do the following: If there is a high competition in Narra, the proposed business can venture into a goat trader that sells goat on other places other than outside the premises of Narra.

Exit strategies. If the proposed business will not earn a profit and continues to generate a loss, the goat farm will be closed, the goats will be sold to prospective buyers at a lower price. The land for the barn will still be used for other purposes such as the stock area of other farm produce. The properties, plant, and equipment which can never be used by the institution will also be sold at lower prices, while those that can be used will be kept in the school premises, the same will be done to the furniture and fixtures. The farm will also take charge of arranging the hiring of its present workers. The money that will be gathered through these strategies will be used to pay off debts and the salaries and benefits of the workers.

Financial Study

Major assumptions. The major assumptions of the researchers in making the financial statements are the following:

Assets. Starting from the second year of operation cash should not be less than P1,000,000.00 to finance the operations of the business for the next eight months. It is because sales are assumed to be in the last quarter of each year. The biological assets account is increasing yearly due to the price and physical change. The depreciation of fixed assets is computed using the straight-line method. Farm supply balance is assumed to be the safety stock good for 3 months. The price of the farm supplies increases every year due to the inflation rate. The land is accounted for using the cost method.

Liabilities. Payables are assumed to be paid every end of the month. Income tax is 30% of the net income before tax. Withholding tax increases as the compensation of workers increases. It is paid at the end of the year. Benefits such as SSS, Pag-ibig, and Philhealth are assumed to be paid every end of the month thus it was accrued at the end of the year assuming that offices are closed. An increase in the amount of salary is due to the inflation rate.

Income statement. Sales each year increase in consideration of the inflation rate. Inflation increases the utility expense.

Capital investment. The initial capital investment needed for the business to operate includes the pre-operating expenses, operating expenses, as well as the capital expenditures or fixed assets.

Pre-operating expenses. Before the start of the operations, pre-operating expenses are incurred to ensure that the operation will start smoothly. For 2 months, the feasibility study costing P10,000.00 is made to verify the feasibility and viability of the business. Formal organization and preparation of the place follow costing P25,000.00 and P4,000.00, respectively. Employee recruitment will cost P1,500.00 and marketing promotion to ensure that the business is introduced well is costing P2,500.00. Scouting for PPE and goat costing P4,000.00 is also part of the pre-operating expenses.

Operating expense/working capital. The operating expense/working capital for the first six months includes utilities, other operating expenses, and other supplies less than P10,000. The operating expenses for the first six months amount to P443,095.00.

Capital expenditure or fixed assets. This refers to the fixed assets needed in the proposed business such as equipment, machinery, furniture and fixtures, building, and land. Total capital expenditure amounts to 1,318,694.00. It includes expenditures for the barn, generator, weighing scale, water tank, laptop, and delivery truck.

With all the data gathered, the total capital investment needed for the operation is P 4,139,134.00.

Sources of Funds

Palawan Adventist Academy will provide the funds needed to finance the capitalization of the proposed business.

Financial Statements

The financial status of the proposed business is shown in different financial statements.

Projected Statement of Comprehensive Income

For the 1 year of operation, there is no sale. The income reflected in the first year is from the price and physical change of biological assets. In the second year, the income shown in the income statement is from the fair value gain on the sale of the biological asset and the fair value gain from the price and physical change of the remaining biological asset. Income is increasing every year. Although the yearly increase in the net income is not that high, the capital continuously increases as a result of the increase in the number of goats as well as the increase in its fair value. The payback period of the business is over two (2) years.

Projected Statement of Financial Position

The total assets of the business are rapidly increasing each year brought by the increase in the value of the biological assets due to the price and physical change. Also, the realized gain from the sale of biological assets added cash to the entity. On the other hand, the increase in the total liabilities is only minimal. This is because there are just a few payables.

Projected Cash Flow Statement

There is an increased cash flow for the 5 years of operation resulting from the increase of sales and less operating expenses for the succeeding years because most of the expenses are made in the first year of operation.

Financial Analysis

To determine the performance and sustainability of the business, financial analysis is done. It is used to analyze whether an entity is stable, liquid, and profitable. It was found out that the proposed business had a Net Present Value (NPV) of P1,745,740.33, which means that the present value cash inflow is greater than the present value of cash outflow so investing in the project is not risky. The Internal Rate of Return (IRR) is 26.48%. This is useful if external financing is made since the IRR is greater than the discount rate, then the project is safe to be accepted. The Benefit-Cost Ratio of the proposed business is 1.42, greater than 1, which means that the proposed business had a positive return. After 2 years of operation, the initial investment put into the business will be recovered.

The financial conditions of the company are analyzed and the proposed business is liquid enough to finance its current liabilities because the current ratio is greater than 1. And as for the break-even, only the first year's break-even point is not met. And with the good performance, the return on sales, return on investment, and gross profit ratio had good results, except for the first year.

Socio-Economic Responsibility

Customers. The study shows that establishing this proposed business will help meat sellers decrease their unmet demand and will provide them with good quality goat meats at an affordable price.

Employees. The proposed business will not be successful without the efforts and skills of the workers. Five employees and their families will be benefitted from the study. Workers will receive their salary as well as the employer share for their benefits like SSS for safety, PhilHealth to ensure health situations, Pag-ibig to aid them in other financial situations.

Suppliers. The proposed business will be needing a lot of supplies from different suppliers to raise goats. By patronizing suppliers' products, their sales will increase as well as their operating income.

Owners. The owner of the proposed business will enjoy monetary and non-monetary benefits. Monetary benefits will result from the net income that the proposed business will earn and the non-monetary is represented by the increase in the capital due to the increase in the number of goats as well as their value.

Community, society, government, and the church. The proposed business will benefit the community, society, government, and the church in a various manner. Organic fertilizer from the composted goat manure will be given freely to those in need of it, lectures about the benefits of goat farming will also be given to increase awareness of the community and society regarding the nature of the proposed business. The proposed business is also open for educational purposes trips to aid students the learning that the farm may offer. As for the government, its operations and projects will be aided with the tax and the licensing payments that the proposed business has to pay. And the tithes and offerings of the workers, as well as the 10% allotment from the business' net income after tax will help the church on its operations.

Conclusion and Recommendation

The marketing study shows that the proposed business will be profitable and successful if ever it is established. It is because 95 percent of the meat sellers are willing to patronize the product of the business. The result of the marketing study depicts that the business will have a big market share.

The technical study or the production and operations study gives assurance that the proposed business can produce good quality goats that the target market needs. This is because the processes involved in the production of goats are monitored.

The organizational and human resource study shows the hierarchy of capable employees who will run the business. In this study, it can be concluded that there is a stable workforce because the workers will be hired with qualifications and standards.

The financial study shows that from years 1 – 5, the profitability of the business is increasing although the number of goats sold is constant. This is because goat price changes each year.

In five years, the proposed business contributes to the employees P2, 211,994.20; to the suppliers, 1,455,329.77; to the community, society, government, and church P 5,482,164.96; and to Palawan Adventist Academy P 9,493,099.26 in a total of cash and non-monetary assets.

From the findings gathered from the study and conclusions stated above, the researcher recommends the proposed business for implementation by 2020.

The researcher also recommends further study the feasibility of an additional number on the capacity and new products such as goat milk and cheese as an addition to the proposed business.

The target market of this study is the sellers of meat at Narra, Palawan, especially those located near Palawan Adventist Academy and the nearby town. Businesses can be owned individually, owned by partners, and corporations.

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The Effect of ISO Certification on the Stock Performance Ratios and Financial Indicators of Publicly-Listed Companies in the Philippine Stock Exchange

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Abstract

A certified ISO 9001 quality management system ensures clear processes and structures, tasks, and responsibilities throughout the entire organization. Despite the numerous companies adopting the standard, arguments exist for and against ISO certification. Literature reveals that ISO 9000 certification has resulted in positive and negative impacts on companies' performance. The main purpose of this study was to assess the effects of ISO 9001 implementation on the performance of publicly-traded companies in the Philippine Stock Exchange. Data of organizations were collected through web content analysis from the Philippine Stock Exchange and Bloomberg. Out of the 134 companies listed in the PSE, only 91 companies had websites and 37 (41%) companies are ISO-certified. Both parametric and non-parametric tools were used to explore the effect of ISO certification on the measured parameters. The results showed that ISO certification is not significantly related to the business sector. However, it is negatively correlated with the year listed in the PSE. ISO certified companies have higher earnings per share, dividend yield, annual net income, and debt to assets ratio while non-certified companies have higher price to earnings ratio, price to sales ratio, year return on the stock, and annual profit margin. Further results revealed that there is no significant difference in price to earnings ratio, price to book ratio, price to sales ratio, and year return on stock between ISO-certified and non-certified companies. The earnings per share, dividend yield, annual net income, and debt to assets ratio differ. ISO certification is recommended to improve the company's financial performance indicators.

Keywords: *ISO 9001, stock performance indicators, financial indicators, Philippine Stock Exchange*

International Organization for Standardization or ISO 9001 is defined as the international standard that specifies requirements for a quality management system (QMS) (American Society for Quality, 2019). These standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements and that quality is consistently improved.

Since its introduction in 1987, there are over one million companies and organizations in over 170 countries certified to ISO 9001. The number of firms adopting the standard has been growing constantly and many firms still encourage their supply chain partners to seek certification. Therefore, implementation of the ISO 9000 series probably represents one of the most widely used systems for achievement of transition towards improved organizational managerial systems (International Organization for Standardization, n.d.).

Despite the numerous companies adopting the standard, arguments exist for and against ISO certification. Literature reveals that ISO 9000 certification has resulted in both positive and negative impacts on companies' performance. Starke et al. (2012) found that ISO 9000 certification is associated with an increase in sales revenues, a decrease in the cost of goods sold/sales revenue, and an increase in the asset turnover ratios of the certified firms. Ahmed (2017) found that the operational performance and product/service quality of the service industries are specifically and essentially impacted by the effectiveness of ISO 9001. Iwaroand Mwasha(2012) found that ISO 9001 certified organizations performed better in workmanship compared to non-ISO 9001 certified organizations. A correlation relationship was established among the improvement of workmanship factors, ISO 9001 certifications, and workmanship performance. The findings of the study conducted by Jepng'etich (2013) in Kenya conclude that ISO 9001 certification led to the improvement of the financial performance of commercial state corporations. The result established that there is a statistically significant difference between the financial performance of commercial state corporations in Kenya before ISO 9001 certification and after ISO 9001 certification and between noncertified and certified commercial state corporations.

Chatzoglou et al. (2015) found strong evidence that ISO 9000 implementation is highly associated with improvements in overall financial performance. Moreover, it was found that ISO implementation is directly associated with significant improvements in quality awareness, operations execution, market share, customer satisfaction, and sales revenue.

Other studies show no impact or contrasting impact based on different variables. Ochieng et al. (2015) found that ISO 9001 certification influenced return on net assets of the certified organizations, but no significant differences were found in the net profit and turnover between the ISO 9001 certified organizations and the ones not certified on the same. Tigani (2011) found that implementation of the ISO 9000 Quality Management System has no impact and does not improve the performance of the organizations' workers.

ISO in the Philippines

Despite the number of researches on ISO 9001 and performance in developed countries, little information exists on ISO 9001 experiences in developing countries, especially the Philippines. There is a great need for research providing information about the effect of ISO 9001 certification on the performance of these countries. Capistrano (2008) showed that there are improvements in the performance measures of certain companies in the Philippines after certification, although not statistically significant. Neyestani and Juanzon (2017) showed that ISO 9001 standard significantly affects the reduction of quality cost within construction projects in Metro Manila, Philippines. Dadulla (2019) found that ISO 9001 implementation and certification is correlated to the increase in sales revenue, net profit, and the book value of the organizations. There were statistically significant differences in the sales revenues, net profits, and book values among ISO 9001 certified organizations before and after their certification.

Abundant studies have documented the impact of ISO certification on the performance of companies. These studies show conflicting results. Some studies show companies with quality assurance systems result in improved process control, better quality, and therefore improved business performance. Other studies show a negative impact or no significant correlation between ISO certification and performance. Furthermore, little data exists regarding ISO certification and the performance of companies in the Philippines. No data exist regarding the relation of ISO certification concerning stock performance. Results from this study will provide a means for investors to assess certain stocks based on their ISO certification. It will also assess if the implementation of quality management systems translates to operational efficiency, better business performance as well as better performance in the Philippine stock market.

This study answered the following questions:

1. What percentage of companies listed in the Philippine Stock Exchange are ISO certified?
2. Is ISO certification related to variables, such as the business sector and years listed in the Philippine Stock Exchange?
3. Does the year the company was listed in the Philippine Stock Exchange affect indicators such as Price to Earnings Ratio, Earnings Per Share, Dividend Yield Price to Book Ratio, Price to sales ratio, Year return on stock, annual net income, Annual Profit Margin, Debt to assets ratio?
4. How does ISO certification affect certain stock indicators such as Price to Earnings Ratio, Earnings Per Share, Dividend Yield Price to Book Ratio, Price to sales ratio, Year return on stock, annual net income, Annual Profit Margin, Debt to assets ratio?

The null hypothesis of the study are as follows:

1. ISO 9001 Certification is not correlated with the business sector
2. ISO 9001 Certification is not correlated with the year registered in the Philippine Stock Exchange
3. There is no correlation between the company's year of registration in the Philippine Stock exchange and its financial and stock indicators.
4. There is no statistically significant difference in Price to Earnings Ratio between ISO 9001 Certified companies and non-ISO 9001 certified companies
5. There is no statistically significant difference in Earnings Per share between ISO 9001 Certified companies and non-ISO 9001 certified companies.
6. There is no statistically significant difference in Dividend Yield between ISO 9001 Certified companies and non-ISO 9001 certified companies.
7. There is no statistically significant difference in Year return on stock between ISO 9001 Certified companies and non-ISO 9001 certified companies.
8. There is no statistically significant difference in Price to Book Ratio between ISO 9001 Certified companies and non-ISO 9001 certified companies.

9. There is no statistically significant difference in Price to sales ratio between ISO 9001 Certified companies and non-ISO 9001 certified companies.
10. There is no statistically significant difference in Annual Net income between ISO 9001 Certified companies and non-ISO 9001 certified companies.
11. There is no statistically significant difference in Annual Profit Margin between ISO 9001 Certified companies and non-ISO 9001 certified companies
12. There is no statistically significant difference in Debt to assets ratio between ISO 9001 Certified companies and non-ISO 9001 certified companies.

The Research Paradigm of the Study

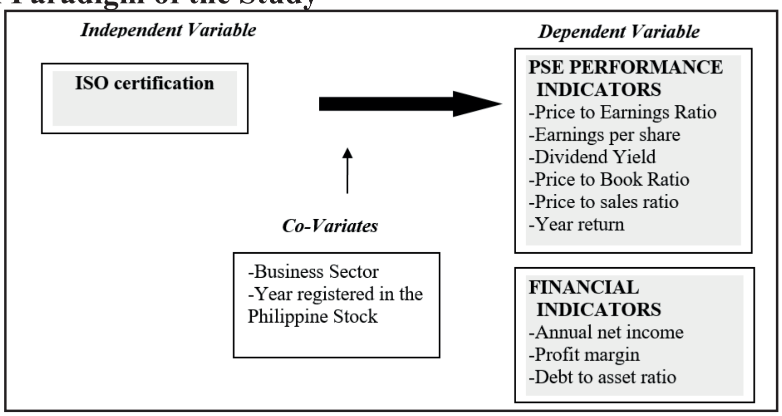

Figure 1. Research Paradigm showing the different variables in this study.

This paradigm explains the effect of ISO certification on the PSE performance indicators and financial indicators. In this study, the covariates include the business sector and the year registered in the Philippine Stock

Methodology

Research Design

A descriptive, correlational design was used to explore the effect of ISO certification on stock performance ratios and financial performance indicators of publicly-traded companies in the Philippine Stock Exchange. A set of criteria was made for companies to be included in this study.

1) The organization must be listed in the Philippine Stock Exchange
2) The organization should have a website. Out of the 134 companies listed in the PSE, only 91 companies had websites.
3) The certification must cover their entire organization and not just one or a few business operations, and/or departments, implying total company commitment.

Data Gathering

All data was gathered through web content analysis from September to October 2019. The list of publicly listed companies was obtained from the Philippine Stock Exchange (2019) data. From that website, stock data such as PE ratio, and Earnings per Share was obtained. From this website, data such as stock price, price to earnings ratio, price to book ratio, price to sales ratio, one-year return earnings per share, dividend percent, and last dividend reported were obtained. Net income, profit margin, as well as debts to assets ratio was obtained from this website as well.

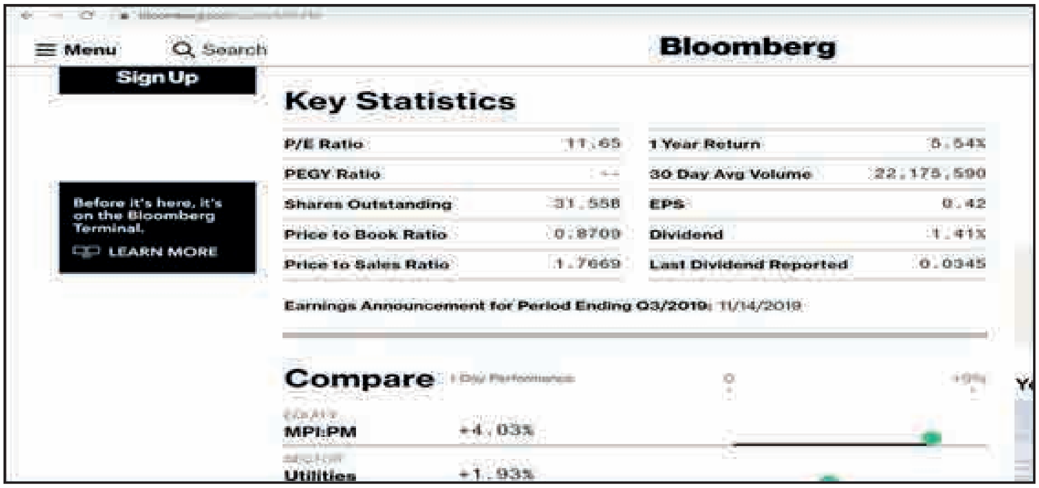

Figure 2. Sample Data on key Stock Statistics

Tables 1 and 2 show the Stock indicators and financial indicators used in this study.

Table 1
Stock Indicators and Their Interpretation

Stock Indicator	Interpretation
Price to Book Ratio	The price-to-book or P/B ratio is calculated by dividing a company's stock price by its book value per share, which is defined as its total assets minus any liabilities.
Price to Sales Ratio	The price-to-sales ratio is calculated by taking a company's market capitalization (the number of outstanding shares multiplied by the share price) and divide it by the company's total sales or revenue over the past 12 months.
Price to Earnings Ratio	The P/E ratio measures the relationship between a company's stock price and its earnings per share of stock issued. The P/E ratio is calculated by dividing a company's current stock price by its earnings per share (EPS).
Earnings per share	Earnings per share are the portion of a company's profit that is allocated to each outstanding share of its common stock. It is calculated by taking the difference between a company's net income and dividends paid for preferred stock and then dividing that figure by the average number of shares outstanding.
Dividend Yield	Refers to a stock's annual dividend payments to shareholders, expressed as a percentage of the stock's current price.
Year return on stock	Year return is a percentage of how much an investment has increased in value on average per year over a period of time. The yearly rate of return is computed by looking at the value of an investment at the end of one year and comparing it to the value to the beginning of the year. The rate of return for a stock includes capital appreciation and any dividends paid.

Table 2

Financial Indicators and Their Interpretation

Financial Indicator	Interpretation
Annual Net income	Net income tells investors whether or not a company makes money and as such, it offers insight into whether or not a company's business may succeed or fail.
Annual Profit Margin	This represents what percentage of sales has turned into profits. The profit margin has become the globally adopted standard measure of the profit-generating capacity of a business and is a top-level indicator of its potential percentage of revenue remaining after all costs, depreciation, interest, taxes, and other expenses have been deducted. It is calculated by dividing earnings (or profits) by sales
Debt to assets ratio	The debt to total assets ratio is an indicator of a company's financial leverage. It is the percentage of a company's total assets that were financed by creditors

Statistical Analysis

Descriptive statistics were used to compare the number of ISO 9001 certified companies versus non- ISO certified companies included in the study in terms of price to earnings ratio, earnings per share, dividend yield price to book ratio, price to sales ratio, year return on stock, annual net income, annual profit margin.

Hypothesis testing was done using two different test types: parametric and non-parametric. Chi-square test was done to analyze the relationship of ISO certification and the classification of the companies into different sectors in the Philippine Stock Exchange. Pearson correlation was used to analyze (a)the relationship between the year the company was registered in the PSE and ISO Certification and(b) the relationship between the year the company was registered in the PSE and the different financial indicators and stock market indicators.

To test the null hypotheses, an independent samples t-test was used to see the difference of means between the groups of unrelated samples. Therefore, non-parametric tests were done in this research. The authors chose the Mann-Whitney U Test for nonparametric testing.

Results and Discussion

Percentage of Companies Listed in the Philippine Stock Exchange is ISO certified

Figure 3 presents the Percentage of ISO Certified and non-ISO Certified companies listed in the Philippine stock exchange. Out of the 91 companies included in the study, 37 (41%) are ISO certified while 54 companies (59%) are not ISO certified.

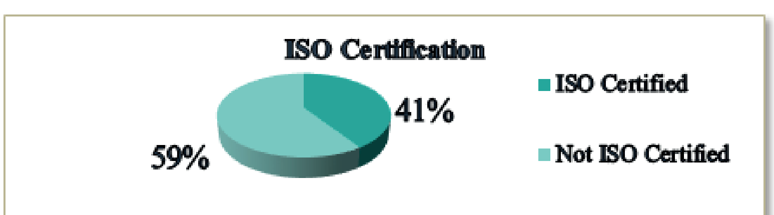

Figure 3. Graph showing the Percentage of ISO Certified and non-ISO Certified companies

The financial and stock performance indicators of companies who are ISO certified and not are presented in Tables 3 and 4. These values indicated in the tables were used to determine the effects of ISO certification on these indicators. The financial indicators include annual net income, annual profit margin, and debt to assets ratio.

Table 3
ISO and Its Financial Indicators

	ISO Certification	Minimum	Maximum	Mean	Std. Deviation
Annual Net income (in millions)	ISO certified	23.080	31817.72	8828.417297	9294.6656796
	Not ISO certified	-560.50	37078.33	5358.284906	8735.5292462
Annual Profit Margin	ISO certified	1.1200	32.890	13.574865	8.9217087
	Not ISO certified	-14.030	77.720	20.627407	17.4559279
Debt to assets ratio	ISO certified	1.680	61.710	30.238649	18.0807387
	Not ISO certified	1.04	71.140	22.119216	18.0048303

The stock performance indicators include price to earnings ratio, earnings per share, dividend yield, year return, price-book ratio, price-sales ratio.

Table 4
ISO and Its Stock Performance Indicators

	ISO Certification	Minimum	Maximum	Mean	Std. Deviation
Price to Earnings Ratio	ISO certified	2.9410	69.17	18.45673	13.50953
	Not ISO certified	3.114	1805.56	56.85563	245.1419
Earnings per share	ISO certified	0.03	135.91	11.04892	25.71059
	Not ISO certified	-0.13	87.28	3.681667	12.51656
Dividend Yield	ISO certified	0.33	29.41	3.688649	4.9167
	Not ISO certified	0.11	11.07	2.678333	2.225765
Year Return	ISO certified	-48.3300	107.2500	7.131081	28.07406
	Not ISO certified	-48.5000	140.0000	11.554074	30.2784735
Price Book Ratio	ISO certified	.2836	5.0246	1.691962	1.198072
	Not ISO certified	.2286	8.1983	1.627217	1.549433
Price Sales Ratio	ISO certified	.0868	4.8212	1.931411	1.324786
	Not ISO certified	0.1107	55.5175	3.890125	7.93296

ISO Certification's Relationship with Business Sector and Years of Being Listed in PSE

Table 5 presents the number of business sectors in terms of financial, holding firms, industrial, mining, property, and services of the companies who are ISO certified and not ISO certified.

Table 5
Descriptive Statistics for ISO Certified and Not Certified Companies and Sectors

Sector	Financial	Holding Firms	Industrial	Mining	Property	Services	Total
ISO certified	2	8	14	1	4	8	37
Not ISO certified	10	10	11	2	13	8	54
Total	12	18	25	3	17	16	91

Table 6 shows that ISO certification is not significantly related to the business sector (X2= 8.12, p=.150). The null hypothesis that ISO 9001 Certification is not correlated with the business sector is therefore accepted.

Table 6

Chi-Square Test Result for ISO Certified and Not Certified Companies and Sectors

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.121a	5	.150
Likelihood Ratio	8.568	5	.128
N of Valid Cases	91		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.22.

ISO 9001 Certification's Relationship with the year registered in the Philippine Stock Exchange

Table 7

Pearson Correlation Result of ISO Certification and Year Registered in the Philippine Stock Exchange

Correlation of ISO Certification and Year registered in the Philippine Stock Exchange	
Pearson Correlation (r)	-.161
Sig. (2-tailed)	.127

As shown in Table 7, ISO certification is negatively correlated with the year listed in the PSE but it is weak with a Pearson correlation coefficient of -.161. The later a company is registered in the PSE, the more likely it is to be ISO certified, but this correlation is weak. The null hypothesis that ISO 9001 Certification is not correlated with the year registered in the Philippine Stock Exchange is accepted.

Year Registered in the Philippine Stock Exchange and its effects on Price to Earnings Ratio, Earnings Per Share, Dividend Yield Price to Book Ratio, Price to sales ratio, Year return on stock, Annual Net income, Annual Profit Margin, Debt to assets ratio

Table 8

Pearson Correlation Result of Year Registered in PSE with PE Ratio, EPS, and Dividend Yield

		PE ratio	EPS	Dividend yield
Year registered in PSE	Pearson Correlation	-.143	-.111	.094
	Sig. (2-tailed)	.177	.294	.375

Pearson Correlation Result of Year Registered in PSE with Year Return, Price to Book Ratio, and Price to Sales Ratio

	Year Return	Price : Book Ratio	Price : Sales Ratio	Dividend yield
Year registered in PSE	Pearson Correlation	.107	.198	-.077
	Sig. (2-tailed)	.311	.059	.470

Pearson Correlation Result of Year Registered in PSE with Annual Net Income, Profit Margin, and Debt to Assets Ratio

	Year Return	Annual Net Income	Profit Margin	Debt to Assets Ratio
Year registered in PSE	Pearson Correlation	.066	.110	.220*
	Sig. (2-tailed)	.538	.301	.040

ISO certification and its effect on Stock Indicators (Price to Earnings Ratio, Earnings Per Share, Dividend Yield Price to Book Ratio, Price to sales ratio, Year return on stock, Annual Net income, Annual Profit Margin, Debt to assets ratio)

ISO Certification's Effect on Price to Earnings Ratio

Table 9

Mean Rank of Price to Earnings Ratio Between ISO 9001 Certified Companies and Non-ISO 9001 Certified Companies

	Group	Mean Rank
Price/ earnings ratio	ISO 9001 Certified companies	45.43
	Non-ISO 9001 Certified companies	46.39

Based on Table 9 it can be seen that the mean rank or average rating of the group on the Price: Earnings Ratio of ISO 9001 certified companies is 45.43 while the mean rank value of the company that is not ISO 9001 certified is 46.39. It can be concluded that ISO 9001 certified companies have lower Price: Earnings ratios than firms that are not ISO 9001 certified. The differences are statistically shown in Table 11

Table 10

Mann-Whitney Testing result for Variable: Price: Earnings Ratio

Remark	Price/earnings ratio
Mann-Whitney U	978.000
Wilcoxon W	1681.000
Z	-.170
Asymp. Sig. (2-tailed)	.865

Table10 shows the result on the value of the Mann-Whitney test for the PE ratio is 978.000, converted to a Z value of -.170. The value of significance of 0.865 is above the predefined significance value of 0.05 then the null hypothesis is not rejected. This means that there is no difference in price to earnings ratio between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Earnings per Share

Table 11

Mann-Whitney Testing result for Variable: Earnings per Share

	Group	Mean Rank
Earnings per share	ISO 9001 Certified companies	55.20
	Non-ISO 9001 Certified companies	39.69

Based on Table11, it can be seen that the mean rank or average rating of the group on the Price: Earnings Ratio of ISO 9001 certified companies is 55.20 while the mean rank value of the company that is not ISO 9001 certified is 39.69. It can be concluded that ISO 9001 certified companies have Higher Earnings per share than firms that are not ISO 9001 certified. The differences are statistically shown in Table 12.

Table 12

Mann-Whitney Test for the Earnings Per Share

Remark	Earnings per share
Mann-Whitney U	658.500
Wilcoxon W	2143.500
Z	-2.751
Asymp. Sig. (2-tailed)	.006

Table 12 shows the value of the Mann-Whitney test for the earnings per share is 658.500, converted to a Z value of -2.751. The value of significance of 0.006 is below the predefined significance value of .05 then the null hypothesis that there is no statistically significant difference in Earnings Per share between ISO 9001 Certified companies and non-ISO 9001 certified companies is rejected. This means that there is a statistically significant difference in earnings per share between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Dividend Yield

Table 13

Mann-Whitney Testing result for Variable: Dividend yield

	Group	Mean Rank
Dividend yield	ISO 9001 Certified companies	49.23
	Non-ISO 9001 Certified companies	43.79

Based on Table13, it can be seen that the mean rank or average rating of the group on the Dividend Yield of ISO 9001 certified companies is 49.23while the mean rank value of the company that is not ISO 9001 certified is 43.79. It can be concluded that ISO 9001 certified companies have a higher dividend yield than firms that are not ISO 9001 certified. The differences are statistically shown in Table 14.

Table 14

Mann-Whitney Test for the Dividend Yield

Remark	Dividend Yield
Mann-Whitney U	879.500
Wilcoxon W	2364.500
Z	-.966
Asymp. Sig. (2-tailed)	.334

Table 14 shows the value of the Mann-Whitney test for the Dividend yield is 879.500, converted to a Z value of -.966. The value of significance of .334is above the predefined significance value of 0.05 then the null hypothesis is not rejected. This means that there is no difference in Dividend yield between ISO 9001 certified companies and ISO 9001 non-certified companies.

Table 15

Mann-Whitney Testing Result for Variable: Year Return

	Group	Mean Rank
Year return of stock	ISO 9001 Certified companies	45.19
	Non-ISO 9001 Certified companies	46.56

Based on Table15, it can be seen that the mean rank or average rating of the group on the yearly return of stocks of ISO 9001 certified companies is 45.19 while the mean rank value of the company that is not ISO 9001 certified is 46.56. It can be concluded that ISO 9001 certified companies have lower Price: Earnings ratios than firms that are not ISO 9001 certified. The differences are statistically shown in Table 16.

Table 16

Mann-Whitney Test Result for the Year Return

Remark	Year Return
Mann-Whitney U	969.000
Wilcoxon W	1672.000
Z	-.242
Asymp. Sig. (2-tailed)	.808

Table 16 shows the value of the Mann-Whitney test for the Year return is 969.000, converted to a Z value of -.242. The value of significance of 0.808 is above the predefined significance value of 0.05 then the null hypothesis is not rejected. This means that there is no statistically significant difference in the yearly return of stocks of ISO 9001 certified companies versus ISO 9001 non-certified companies.

ISO Certification's effect on Price to Book Ratio

Table 17

Mann-Whitney Testing result for Variable: Price: Book Ratio

	Group	Mean Rank
Price/ Book ratio	ISO 9001 Certified companies	49.41
	ISO 9001 Certified companies	43.67

Based on Table 17, it can be seen that the mean rank or average rating of the group on the Price: Book Ratio of ISO 9001 certified companies is 49.41while the mean rank value of the company that is not ISO 9001 certified is 43.67. It can be concluded that ISO 9001 certified companies have a higher price to book ratios than firms that are not ISO 9001 certified. The differences are statistically shown in Table 18.

Table 18

Mann-Whitney test result for the price to book ratio

Remark	Price/book ratio
Mann-Whitney U	873.000
Wilcoxon W	2358.000
Z	-1.018
Asymp. Sig. (2-tailed)	.309

Table 18 shows the value of the Mann-Whitney test for the price to book ratio is 873.000, converted to a Z value of -1.018. The value of significance of .309 is above the predefined significance value of 0.05 then the null hypothesis is not rejected. This means that there is no statistically significant difference in price to book value ratio between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Price to Sales Ratio

Table 19

Mann-Whitney Testing Result for Variable: Price: Sales Ratio

	Group	Mean Rank
Price/ sales ratio	ISO 9001 Certified companies	41.39
	Non-ISO 9001 Certified companies	47.45

Based on Table 19, it can be seen that the mean rank or average rating of the group on the Price: sales Ratio of ISO 9001 certified companies is 41.39while the mean rank value of the company that is not ISO 9001 certified is 47.45. It can be concluded that ISO 9001 certified companies have lower Price: sales ratios than firms that are not ISO 9001 certified. The differences are statistically shown in Table 20.

Table 20

Mann-Whitney test result for the Price/ sales ratio

Remark	Price/sales ratio
Mann-Whitney U	824.000
Wilcoxon W	1490.000
Z	-1.087
Asymp. Sig. (2-tailed)	.277

Table 20 shows the value of the Mann-Whitney test for the Price/ Sales ratio is 824.000, converted to a Z value of -1.087. The value of significance of 277 is above the predefined significance value of 0.05 then the null hypothesis is not rejected. This means that there is no statistically significant difference in price to sales ratio between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Annual Net income

Table 21

Mann-Whitney Testing result for Variable: Annual Net income

	Group	Mean Rank
Annual Net income	ISO 9001 Certified companies	52.76
	Non-ISO 9001 Certified companies	40.43

Based on Table 21 it can be seen that the mean rank or average rating of the group on the Annual Net income of ISO 9001 certified companies is 52.76while the mean rank value of the company that is not ISO 9001 certified is 40.43. It can be concluded that ISO 9001 certified companies have higher Annual Net income than firms that are not ISO 9001 certified. The differences are statistically shown in Table 22.

Table 22
Mann-Whitney Test Result for Annual Net Income

Remark	Annual Net income
Mann-Whitney U	712.000
Wilcoxon W	2143.000
Z	-2.202
Asymp. Sig. (2-tailed)	.028

Table 22 shows the value of the Mann-Whitney test for Annual Net income is 712.000 converted to a Z value of -2.202. The value of significance of .028 is below the predefined significance value of 0.05 then the null hypothesis is rejected. This means that there is a statistically significant difference in Annual Net income between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Annual Profit Margin

Table 23
Mann-Whitney Testing Result for Variable: Annual Profit Margin

	Group	Mean Rank
Annual profit margin	ISO 9001 Certified companies	38.89
	Non-ISO 9001 Certified companies	50.87

Based on Table 23, it can be seen that the mean rank or average rating of the group on the Annual profit margin of ISO 9001 certified companies is 38.89 while the mean rank value of the company that is not ISO 9001 certified is 50.87. It can be concluded that ISO 9001 certified companies have a lower Annual profit margin than firms that are not ISO 9001 certified. The differences are statistically shown in Table 24.

Table 24
Mann-Whitney Test Result for the Annual Profit Margin

Remark	Annual profit margin
Mann-Whitney U	736.000
Wilcoxon W	1439.000
Z	-2.125
Asymp. Sig. (2-tailed)	.034

Table 24 shows the value of the Mann-Whitney test for the Annual profit margin is 736.000, converted to a Z value of -2.125. The value of significance of .034 is below the predefined significance value of 0.05 then the null hypothesis is rejected. This means that there is a statistically significant difference in Annual profit margin between ISO 9001 certified companies and ISO 9001 non-certified companies.

ISO Certification's effect on Debt to assets ratio

Table 25
Mann-Whitney Testing Result for Variable: Debt to Assets Ratio

	Group	Mean Rank
Debt to assets ratio	ISO 9001 Certified companies	51.35
	Non-ISO 9001 Certified companies	39.53

Based on Table 25, it can be seen that the mean rank or average rating of the group on the Debt to assets ratio of ISO 9001 certified companies is 51.35 while the mean rank value of the company that is not ISO 9001 certified is 39.53. It can be concluded that ISO 9001 certified companies have higher Debt to assets ratio than firms that are not ISO 9001 certified. The differences are statistically shown in Table 26.

Table 26

Mann-Whitney Test Result for the Debt to Assets Ratio

Remark	Debt to assets ratio
Mann-Whitney U	690.000
Wilcoxon W	2016.000
Z	-2.143
Asymp. Sig. (2-tailed)	.032

Table 26 shows the value of the Mann-Whitney test for the Debt to assets ratio is 690.000, converted to a Z value of -2.143. The value of significance of .032 is below the predefined significance value of 0.05 then the null hypothesis is rejected. This means that there is a statistically significant difference in Debt to assets ratio between ISO 9001 certified companies and ISO 9001 non-certified companies.

Table 27 presents the summary of the test for the hypotheses. It showed that the result for earnings per share, dividend yield, annual net income, annual profit margin was statistically significant but not on price to earnings ratio, price to book ratio, price to sales ratio, and year return on stock.

Table 27

Summary of Null Hypotheses

	ISO 9001 Certified Companies	ISO 9001 Not Certified Companies	Statistically significant
Price to Earnings Ratio		Higher	No
Earnings Per Share	Higher		Yes
Dividend Yield	Higher		Yes
Price to Book Ratio	Higher		No
Price to sales ratio		Higher	No
Year return on stock		Higher	No
Annual Net income	Higher		Yes
Annual Profit Margin		Higher	Yes
Debt to assets ratio	Higher		yes

The interpretation of the effect of ISO certification on the stock performance and financial indicators are presented in Table 28 and 29.

Table 28.

Interpretation of the relationship between ISO certification and Stock performance indicators

	ISO Certified	Not ISO Certified	Significance	Interpretation
Price to Earnings Ratio		Higher	No	PE ratio of ISO companies is lower than non-ISO certified companies. This may mean that the stock is undervalued and therefore has potential for growth
Earnings per share	Higher		Yes	If a company has high earnings per share, it means it has more money available to either reinvest in the business or distribute to stockholders in the form of stock
Dividend Yield	Higher		No	The higher dividend yield is usually more attractive to stock investors
Price to Book Ratio	Higher		No	Price divided by book value which is total assets minus liabilities. May indicate that ISO stocks have lower book value. Comparing this to debt to assets ratio which is also higher, this may indicate that ISO certified companies are in the period of expansion and therefore have potential
Price to sales ratio		Higher	No	Market capitalization divided by rales or revenue. A lower ratio is more attractive as an investment because there is potential for the stock price to increase
Year return on stock		Higher	No	Money gained at the end of the period divided by the initial investment. The rate of return for a stock includes capital appreciation and any dividends paid.

Table 29

Interpretation of the relationship of ISO certification and Financial indicators

	ISO Certified	Not ISO Certified	Significance	Interpretation
Annual Net income	Higher		Yes	Higher net income tells investors that the company is making money and that the business may succeed
Annual Profit Margin		Higher	Yes	Lower ratio of earnings divided by sales. May mean that there are higher operational expenses in running a business despite the higher annual income.
Debt to assets ratio	Higher		Yes	A higher debt to assets ratio, compared with the data that ISO certification is weakly correlated with a company that was registered later in PSE may indicate that the company is in the expansion phase, therefore, has a bigger potential for growth

Discussion

The existing terms and conditions in the ISO 9001 quality management system can reduce non-compliance with the quality of goods and services. By requiring employees to work following the standards, the damage to products produced by a company will decrease, the level of productivity will increase, resulting in reduced costs of operating losses. This lack of costs incurred will have an impact on the increase in company assets because of cost savings.

This research serves as a dual purpose. First, this will be used by companies to assess if ISO certification indeed increases the level of productivity and improvement of financial performance. Second, this study may be used by investors in choosing which stocks offer a higher potential for profit for long term investment.

ISO Certification is relatively young in the Philippines with the first company accredited in 2003. (SGS, 2016) In this study, one finding is that the companies who registered later with the Philippine Stock Exchange were more likely to be ISO certified than the companies who were registered earlier. The author posits that one driving force for this is the signaling theory. New companies seek certification with a management standard thus signaling to customers and end-users that the company conforms to such standards results in a greater quality of goods and services. This generates a competitive advantage for the new company. Another driving force for seeking certification is that new companies are in the expansion phase and reducing operating losses, and an increase in financial performance will result. This is reflected in this study's findings that ISO certified companies had higher annual net income yet lower annual profit margin and higher debt to assets ratio compared to non-ISO certified companies.

The main purpose of the financial decisions taken by company management is to maximize the prosperity for shareholders in the company. Based on the findings of our study, company management should maximize the implementation of ISO 9001 standards in the company to increase the annual profit margin and decrease the debt to asset ratio.

The results of this study may also be used by investors in choosing which stocks for long term investment. Financial literacy programs have recently been initiated by Bangko Sentral ng Pilipinas to create understanding and awareness of financial issues and decisions. There is also greater access to investment portfolios through websites such as COLFinancial.com, mutual funds through different brokerage firms, and unit investment trust funds through banks. Knowledge of the different stock performance indicators will help potential investors choose smartly by getting the best possible deal when purchasing stock.

In our study, ISO 9001 certified companies have lower price to earnings ratio, higher earnings per share, higher price to book ratio, lower price to sales ratio, higher dividend yield and lower year return on stock compared to non-ISO-certified companies. These findings of stock performance indicators coupled with the finding that ISO certified companies are relatively new in the Philippine Stock Exchange may signify that these new stocks have greater potential for growth for long term investment. On the downside, ISO certified companies have greater financial leverage which may be viewed by investors as risky.

Investment in different stocks requires in-depth analysis of the different stock indicators aligned with the investor's purpose for investing. Based on our study, looking into the ISO certification of a company may be a helpful tool, coupled with other stock indicators, in decision making in an investor's stock portfolio.

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Challenges and Benefits of Outsourcing: A Case Study from Outsourcing Agencies

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Abstract

Global outsourcing services continue to grow and have contributed to economic growth, but some practices challenge their progress. This study discussed and weighed the advantages and difficulties that the outsourcing effects on different organizations and individuals. It aims to mitigate the risks of lacking strategic management poses to the goals and objectives of each stakeholder. The study employed a case study design using thematic analysis. It examined interview transcriptions with three owners and managers of outsourcing agencies, six employees from different outsourcing companies, and six organizations who contract services. It applied related literature, which includes current news and events and internet sources for triangulation. There have been a considerable number of challenges in outsourcing which include lack of strategic flexibility, negative external environment, and impact on human resources and innovation. On the positive side, benefits include new skills and technology, an increase in competitiveness, and focus on core activities. The guarantee to achieve specific goals is at stake if parties involved will not work out the gaps between each participants' purpose. The outsourcing firm, its employees, and its clients must understand each objective. By firmly establishing the strategic mission and vision that a client shares with the outsourcing entity, it would set the standard to follow. With that in place, organizations can resolve and mitigate the risks and challenges of outsourcing. Strategic management which is the core of strategic outsourcing is the key to achieve profitability and competitive advantage of both entities.

Keywords: *outsourcing, organizations, human resource, business process outsourcing, strategic management*

Outsourcing is “a strategy by which an organization contracts out major functions to specialized and efficient service providers, who become valued business partners.”, according to Supply Chain Resource Cooperative (SCRC) (2006, para. 5.). It is an agreement that constitutes a relationship between three parties, namely, the principal, the service provider, and the employees of the service provider (The International Comparative Legal Guides and the International Business Reports (ICLG, 2019). Engaging in outsourcing must be planned. It requires considering strategic and tactical issues in the organization to achieve business goals (Outsourcing Insider, 2012).

Some of the benefits of outsourcing as enumerated by Overby (2017) are lower costs (due to economies of scale or lower labor rates), increased efficiency, variable capacity, increased focus on strategy/core competencies, access to skills or resources, increased flexibility to meet changing business and commercial conditions, accelerated time to market, lower ongoing investment in internal infrastructure, access to innovation, intellectual property, and thought leadership, and possible cash influx resulting from the transfer of assets to the new provider

The word outsourcing was extracted not later than 1981 from the expression “outside sourcing”. Outsourcing has been present since World War II (The Economist, 2008). During that time, activities outsourced included contracting a business process (e.g., processing of payroll, processing of claims, information technology, security, janitorial, and others), functional and/or non-core functions such as production, plant management, and call center support (Troaca & Bodislav, 2012).

Outsourcing is an industrial activity where services or jobs are given to third parties by a particular entity. Outsourcing can offer tremendous benefits for a company, but when negotiating and maintaining outsourcing partnerships, some major risks and challenges need to be mitigated.

Outsourcing is an agreement whereby one firm hires a separate company to assume responsibility for an internally planned or ongoing operation and includes, at times, the transfer of staff and properties from one business to another. It may also simply mean somebody who is not an employee of a company performing certain functions in which someone who is in the company’s payroll will perform.

History of Outsourcing and How it Became an Industry

Outsourcing emerged as a new business strategy in the early 1980s (The Times of India [TOI], 2010) when Eastman Kodak decided to outsource its information technology system. It was groundbreaking, and since then, companies changed their perspective about the activity (SCRC, 2006) and most organizations now are likely to select outsourcing more based on who can deliver more effective results for a specific function than if the function is core or commodity (TOI, 2010). Outsourcing can offer greater budget flexibility and control by allowing organizations to pay for the services and business functions they need. It also reduces the need to hire and train specialized staff, makes available specialized expertise, and can reduce capital, operating expenses, and risk, (Lalitha, 2016). Growth of offshoring of IT-enabled services, both to subsidiaries and outside companies or offshore outsourcing is linked to the availability of large amounts of reliable and affordable communication infrastructure following the telecommunication and Internet expansion of the late 1990s (Sherif, 2006). Services making use of low-cost countries included:

- back-office and administrative functions, such as finance and accounting, HR, and legal
- call centers and other customer-facing departments, such as marketing and sales services
- IT infrastructure and application development
- knowledge services, including engineering support, product design, research and development, and analytics.

In the early 21st century, businesses increasingly outsourced to suppliers outside their own country sometimes referred to as offshoring or offshore outsourcing. Other options subsequently emerged as nearshoring, crowdsourcing, multi-sourcing, (Business Trends Quarterly, 2006) strategic alliances/strategic partnerships, strategic outsourcing (Vitasek, Ledyard, & Manrodt, 2010). From Drucker's perspective (Wartzman, 2010), a company should only seek to subcontract in those areas in which it demonstrated no special ability. Outsourcing results from an internationalization of labor markets as more tasks become tradable partnered with technological progress (Mankiw & Swagel, 2006). The rise in industrial efficiency which characterized development in developed countries has occurred as a result of labor-saving technological improvements. The outsourcing services market continued to flourish in Central and Eastern Europe during 2007–2009. The BPO market is estimated to be around US$140 billion as of 2016 and is expected to appreciate US$163 by the end of 2021 according to a report in the BPO Services Global Industry Almanac 2017 (Larina, 2017). India, Philippines, Eastern Europe, and Russia are major powerhouses in the outsourcing industry according to Hinkelman (2008). From this point, the BPO industry continued to grow and generate more revenue, with the industry providing the most job opportunities in the private sector (Natividad, 2015).

In the Philippines, the BPO sector only accounted for 0.075% of the GDP in 2000 but rose to 2.4% in 2005 which indicated a great potential for generating employment. In this sector alone, it reached a staggering one million workers by 2010 and accounted for 27% of all new jobs (Magtibay-Ramos, Estrada & Jesus, 2007). Natividad (2015) reported that in 2011, The BPO industry becomes one of the biggest and fastest-growing job providers in the private sector where US$11B revenue generated and 638,000 Filipinos employed in which Revenue comprised 4.9% of country's total GDP. In 2012, the BPO industry grows even further by 46% annually since 2006 that revenue comprised 5.4% of the country's total GDP. Revenue generated climbs up further to $15.5B and 900,000 Filipinos are employed full time in the year 2013. As projected last 2016, the BPO industry would generate 1.3 million new jobs, with 17% annual growth. This growth in the industry is further promoted by the Philippine government. BPO is highlighted by the Philippines Development Plan as among the 10 high potential and priority development areas. To further entice investors, government programs include different incentives such as tax holidays, tax exemptions, and simplified export and import procedures (DCRTrendline, 2015).

A study done by Shared Services and Outsourcing Network (SSON, 2019), discovered that there is a need for outsourcing companies to be more transparent and proactive. At the same time, it mentioned that "the industry is growing, but technology disruption is changing the business model" (p. 3).

In the Philippines, this strategy has become an industry. It contributes 11% to the country's GDP and creates 700 businesses that employ around 1.2 million individuals (Outsource Accelerator, 2020).

The recent hostage drama in Greenhills San Juan in Metro Manila created issues and concerns. The person involved is a security guard from an outsourcing agency disgruntled about working treatment and conditions, bribery, and corruption among entities they serve (Malasig, 2020). People blame different parties about why the incident happened. At the conduct of this research, the Department of Labor and Employment (DOLE) has responded to the incident and will investigate the security firm. If found guilty of any wrongdoings, DOLE will charge a criminal case against the outsourced agency and the cancellation of their license (Patinio, 2020).

With the benefits and challenges presented by the literature, this study confirmed the benefits and challenges of outsourcing in selected outsourcing agencies in the Philippines. It discussed and weighed the advantages and difficulties that the outsourcing industry effects on different organizations and individuals. It aims to mitigate the risks in achieving the goals and objectives of each stakeholder. Another objective is to understand what outsourcing means and how it became an industry that benefits different economies around the globe.

Methodology

The study employed a case study design using thematic analysis. Case studies are a strategy of inquiry in which the researcher explores in depth a program, event, activity, process, or one or more individuals. A case study may use interviews to collect data for their studies. Data are recorded, transcribed, and coded. Data from interviews are analyzed for common themes to identify participants' perspectives on a phenomenon being studied (Creswell, 2013).

The participants were chosen using purposive sampling. This study examined interview transcriptions with three owners and managers of outsourcing agencies, six employees from different outsourcing companies, and six organizations who contract services. These participants' points of view discussed the benefits and challenges of outsourcing. Further, related literature, which includes current news and events and internet sources, were used for triangulation. Data were analyzed by themes.

Results and Discussion

Benefits of Outsourcing

The benefits of outsourcing were identified by the participants as access to new skills, talent, and technology, cost savings, focus on core activities, increase competitiveness, operational flexibility, provide continuity and risk management.

Access to new skills, talent, and technology. One of the primary reasons why a business may want to outsource a task is when it requires skilled expertise. Permitting a focus on a core mission in providing high-quality products and services to the customer outsourcing the task to people who can perform it better makes sense (Outsource 2 India, n.d.). Outsourcing saves a huge amount of money from benefits to training that it is enabling the company from receiving employees (Patel, 2020).

When the business expands, demand for product or service changes. Business requirements are the top priority and the chosen partner will allow for changes through the development process (Librojo, (2017). Furthermore, when projects require advanced skills and ability outside the employee's abilities, it is time to outsource. By partnering with an external company, employees and customers can understand the latest technology without having to master the entire development process themselves.

Outsourcing opens the benefit for expertise. Outsourcing companies provide specialized skills that would perfectly fit the needs of a particular company to augment higher quality products and services. Aside from cutting on costs, it benefits the service provider as its pool of talent gets employed while the company benefits from the expertise offered to them. According to Bucki (2020), outsourcing is also a good option if the cost of expanding to handle those operations is too expensive, would take too long to effect, or would create inefficiencies in the company's business model.

Additionally, outsourcing allows operations or departments that have cyclical demands to bring in additional resources when necessary. The outsourcing company can then be released when things slow down again, maintaining a company's flexibility (Bucki, 2020).

Cost savings. According to EducBa (2019), outsourcing has become an easy and cost-effective technique, which is used widely in today's digitization world; it allows the organization to obtain high-quality services at a low operational cost. It is more cost-effective to outsource than to expand operations internally as it lowers costs by reducing the expenses associated with bringing on new employees such as hiring search, onboarding, healthcare, and other benefits, payroll taxes, an increased need for workers in management and HR positions. Outsourcing can often bring better management skills to the company than what would otherwise be available without significant restructuring especially for the departments that have evolved into uncontrolled and poorly managed areas (Bucki, 2020).

Moreover, Bucki (2020) emphasized that businesses often think about outsourcing purely in terms of cost savings, but outsourcing can do more than just lower expenses. It can be a way to promote innovation and access new skill sets that reposition the company in the market. Considering the outsourcing contributions in growth progress, cost living preview outside contractors versus handling a task with current staff are exceeding. Focusing on the value of a contractor's expertise is significant to the company.

According to EducBa (2019), the most important benefit is that outsourcing of work allows one to the work done at a very low cost and in a much more efficient way.

Focus on core activities. Choosing an outsourcing company that withholds a specialization associated with a personal process and service choice for a better assertion of productive and efficient services, often of greater quality and at the same time, facilitates with the leverage of knowledge and skills along with a complete supply chain (Ostapchuk, 2020). The skilled expertise of the outsourcing partner produces deliverables faster, increasing turnaround time to the customer, and helps the organization gain a competitive edge in the market. Strategic outsourcing increases productivity while managing in-house resources intelligently (Outsource 2 India, n.d.). Outsourcing is important but mundane activities allow re-focusing in-house resources on the activities that are profitable without sacrificing quality or service (Bucki, 2020).

By increasing productivity and efficiency, a business can be more successful, better-prepared for market challenges, and have a streamlined cash flow (Outsource 2 India, n.d.).

There are always a lot of tasks to be done in any given business process and some do not even play to the skills. When these are distributed to an external company, and ample time is allotted to focus on crafts to ensure quality production. All processes cannot be achieved by a single person or by one department alone, regardless the how great a talent one or the company possesses. Owning the tasks without the staff/employees' expertise, inefficiency results that are caused by wasted time and money. According to Fenton (2019), focus on the core business process is very important to a critical business process. It is always more cost-effective to outsource everything but the core business process. One can save money, avoid stress, and spend energy working on enjoyable things.

Increase competitiveness. The ultimate benefit of outsourcing is that it helps an organization gain a competitive edge in the market; the producer not only provides the customer with best-of-breed services but increasing the productivity while managing in-house resources intelligently and helps surpass competitors who have not yet realized the benefits of outsourcing (Outsource 2 India, n.d.). From a startup or growing business perspective, it is one thing to understand the basics of outsourcing but completely another one to use it as a competitive advantage. Being able to accomplish this requires careful planning, strategy, and understanding of its impact across the business departments (Lopez, 2017).

According to RBC Medical Innovations, an advantage that it offers firms by engaging a partner with the expertise and capacity to rapidly bring innovations to market and enables companies to focus on core competencies and build those skills that directly add value to customers. Sternaliza (2016) also suggests that one of the main advantages of outsourcing is a reduction in costs, thus improving the company's competitiveness and profitability while Corporate Finance Institute adds to focus more on the company's core competencies and thus improving its competitive advantages by outsourcing time-consuming process to external companies.

Increased competitiveness is evident when there's leveraging of knowledge and skills with a complete supply chain (Northern Island Business Info, n.d.). After allocating the task to the outsourcing partner, the employees' workloads are shared. Significant to the development of an internal task force and use them more efficiently (Outsource 2 India, n.d.).

Riggins (2017) says that outsourcing helps get things done quicker; working with a few staff; things are achieved quicker by-passing time-consuming tasks on to freelancers or external agencies. It also helps increase market share through competitive pricing given that the product got an edge as assured of the quality acquired as the best of both worlds in terms of efficiency in the delivery of service.

Operational Flexibility. Outsourcing allows operations or departments that have cyclical demands to bring in additional resources when they're necessary. The outsourcing company can then be released when things slow down again, maintaining flexibility (Bucki, 2020). Outsourcing certain independent tasks, allows the business to maintain a financial flexibility when there is an uncertainty in demand, scaling up or down comfortably. At a much lower cost, outsourcing provides additional benefit of running the business in full throttle even during off season or even down times (Outsource 2 India, n.d.).

The benefit of flexibility in outsourcing allows exploration for suppliers who are credible in a particular business area that suits the needs; that can be flexible when needs change; retains skills needed; save money and offer the quality of service needed (Outsourcing Advisors, n.d.). Outsourcing for a specific long-term project prevents headache of putting things together without the assurance of quality output; however, there are several options in outsourcing of which standing ground are decided to serve best product that meets the needs of consumers.

As with human resource, outsourcing gives a way to choose people who can offer expertise to serve the company's interest without the hiring and training costs. Outsourcing staff offers the benefit of utilizing as much or as little needed to – all without complaint, because these expectations would be clearly outlined in the service level agreement (Solver One, n.d.).

Provide Continuity and Risk Management. According to Bucki (2020), while periods of high employee turnover can add uncertainty and inconsistency to business; outsourcing provides a level of continuity to the company while reducing the risk that a substandard level of operation could bring even over a short period of time. Between the pressure of transition and startup and the daily demands to deliver services and satisfy business stakeholders, risk is often left for "later" (Batty, n.d.).

Every business has a fair share of risks to be taken as part of the challenge on how well it can outweigh such and come up with good strategic plans to contain the risks. Considerable risks involve operational, reputational, financial and relationships. Outsourcing allows sharing in any associated risks with the outsourcing partners thereby reducing the burden. By outsourcing to a competent outsourcing partner, the risk involved in having the same task done by in-house staff that may not be as competent in the field is reduced (Outsource 2 India, n.d.).

One of the most important factors in any project is risk assessment and analysis and by outsourcing certain campaigns or processes on to experts in their respective fields, the enhanced ability to plan and mitigate potential risks are a benefit (Riggins, 2017)

To triangulate the results from the participants, the researchers identified and categorized different outsourcing benefits from the literature and presented it in Table 1.

Table 1
Outsourcing Benefits

Benefits	References
Access to new skills, talent, and technology	Bucki, 2020Campbell, 2019Knowledge@ Wharton, 2004Kremic, et al., 2006SSON, 2019
Compliance	Kremic, et al., 2006
Cost savings	Bucki, 2020; Campbell 2019; Knowledge@ Wharton, 2004; Kremic, et al., 2006
Focus on core activities	Bucki, 2020; Campbell, 2019; Craumer, 2002; Kremic, et al., 2006
Increase competitiveness	Campbell, 2019; Craumer, 2002; Knowledge@Wharton, 2004; Kremic, et al., 2006
Operational Flexibility	Bucki, 2020; Kremic, et al., 2006
Provide Continuity and Risk Management	Bucki, 2020; Craumer, 2002; Knowledge@ Wharton, 2004; Kremic, et al., 2006; SSON, 2019

Challenges of Outsourcing

Much as the benefits has it all in favor of outsourcing, it cannot be denied that challenges are on the verge of disrupting any business processes because competition is real in the corporate world. The challenges in outsourcing that are defined in the succeeding discussion should be taken in keen consideration as it might disrupt the steady flow of benefits in outsourcing.

Lack of Strategic Flexibility. Strategic plans serve as the guide which the outsourcing companies use to make sure that they follow the right track. As part of the process, every company needs ancillary services to complete operational requirements of the business but there are just issues and policies that hinders employee for additional staff on a regular status, hence, outsourcing comes into the picture. While overheads may seem higher if considered on a daily basis, but it actually is better compared to hiring regular workers. Ostapchuk (2020) explains that a company decides to outsource services to lower the cost, but the vendor creates new overheads for changes, modifications and adaptations during the service period.

Hiring an outsourcing firm typically means ceding control of and thus insight into, the development process (Ostapchuk, 2020). Moreover, there is a risk that people would not get engaged at work since there is only limited supervision from the outsourcing company.

The overall outsourcing cost is bound to skyrocket this way and it has been found that hidden costs in outsourcing add an average of 25% to the price of engagement. If the company is being lenient and not being thorough on this earlier on, it surely would pose the business at risk as the service provider would just think that it is just considerable to impose hidden costs to the outsourcing company.

Some may try to hide overall margins to ensure more profitability over the life of the contract. Since different services have different costs and margins, a provider can use or claim to have used the ones that offer the most benefit. A client often has few means to oversee what the service provider is doing and how much it charges (Wong, 2006).

Risk is increased when the service provider tries to cut corners or use cheaper materials as such practices can be detrimental to the company and may significantly reduce sales, alongside with the brand equity (Go, 2018). Therefore, it is advisable to follow up every discussion with an email or any form of written correspondence to allow concerned parties to clear any ambiguous details during discussions and guarantee that everyone involve in the project knows what is expected on both parties (365outsource.com, 2019).

Quality of service might be at risk and this could worsen if there are barrier to communication between the company and the service provider. It goes to show that communication and quality go hand in hand, and it is very critical to not being able to come up with strategic plans on how to safeguard communication and quality not being compromised in the process of outsourcing.

Patel (2020) said that it is given to expect quality and anything less than this will be a disappointment; does not mean a result of unsuccessful outsource particular tasks, discussions of the expected quality upfront are expected.

Negative External Environment. According to Cameron Herold, the founder of a COO training program, communication is essential to success in the business world. It remains a major problem since there are number of employees report not being engaged at work.

Cultural stereotypes and niceties are increasingly playing an important role in determining the fate of the outsourcing deal. The complexities of the process to be outsourced and the impact of outsourcing to people of different cultural background should be studied beforehand as cultural coherence and synchronization has to be considered thoroughly (“Top Ten Benefits,” n.d.). It is easy to focus on the benefits of outsourcing, all without considering the impact it can have on the company as a whole and when planning to outsource, it is needed to take steps to ensure that it does not have a negative effect on company culture (Patel, 2017). Outsourcing will undoubtedly have an impact on the organizational culture. Potential clashes maybe overlooked between the outsource service provider's company culture and their own (Ryan, 2017).

Meanwhile, according to Hernandez (2017), the Department of Health (DOH) plans to educate business process outsourcing (BPO) employees on health issues as some studies reveal people working in the industry suffer from various diseases. Furthermore, it is imperative to give considerable attention to every health risk faced at work that includes job-related stress which are being countered with unhealthy lifestyle.

According to Dr. Colin Pilbeam of Cranfield University (2020), "Outsourcing is a significant and increasingly common organizational change initiative of the modern era, occurring not only in private companies but also in public sector organizations across the globe. However, outsourcing can introduce safety risks into an organization."

Negative external environment has numerous factors that challenge effectivity and efficiency of the outsourcing world and these should not be dealt with lightly. The ranges of operations differ, and these could be affected by the risks that arise inevitably as the outsourcing process continues to operate.

Impact to Human Resources. People are the ultimate drivers of corporate excellence Davies, 2017). Human resource is a staple component for any business (Outsource Accelerator, 2019). A company enjoy the advantage from technology but it's the people who makes critical thinking, it's the human resource who stands upfront to make use of the efficiency of technology and not the other way around. Outsource Accelerator (2019) further states that today's business sector is definitely different from how it used to be before the turn of the millennium, what with the rise of cutting-edge and accessible technologies. The opening-up of new global trade hubs and the evening-out of playing fields for big multinationals and small-to-medium enterprises alike; but one thing that remains unchanged is how anchored an institution's successes and failures are in its employees.

Assessing the HR risk is more than just ensuring that critical employees aren't outsourced; just as strategy is changing so is the employment contract (Davies, 2017). It is a fact that the greatest motivation of every employee is the pay. When a worker is well compensated, it doesn't matter how challenging the work may be, it would even perform a notch higher to stay in the company. The support for training program and skills development and experience is very important. All these are supposed to be included in the contract between the employee and the company as this will give the worker the security of tenure. Research revealed that if contract is broken or threatened, neither promotion nor pay rises will repair the damage (Davies, 2017).

Moreover, Davies (2017) went on to say the effect of outsourcing decision upon the motivation and retention of employees is a central risk factor. People feel uneasy or intimidated and their morale goes down when they are not valued especially when the stipulations in the contract are not met, thus, it creates a gap between the worker and the employer, worse, scarcity of talent will hamper any good standing outsourcing company. While outsourcing continues to be lucrative and profitable for both ends of the transaction, some companies find themselves unequipped to address skills such as finance and accounting and are particularly vulnerable to a skills shortage due to the companies' multidisciplinary nature.

Negative Impact to Innovation. Batty (2020) defines innovation as the object and means of identifying and introducing improvements that result in an elevated level of business execution. But there several factors that defeat the impact of innovation to the growth of the business. Outsourcing can greatly enhance the innovative capability of the organization and in the right setting it can. However, it's important to understand the innovation trail of the organization and how outsourcing might affect it. (Davies, 2018).

Further, outsourcing is easy to be replicated by the competition as it provides competitive advantage only to the first movers (Mourdoukoutas, 2011) but when new brandings come along, competition is just as stiff as it could get, and poses a challenge to every outsourcing company. Mourdoukoutas (2011) further states that it leads to fragmentation and disintegration of the supply chain, inviting new competitors into the industry and undermining pricing power and profitability. It also nurtures corporate complacency and undermines a company's relations to its labor, customers and the domestic and local communities.

On the other hand, innovation wouldn't come along with synergy. According to Bryant (2015), synergy makes a team stronger and more effective; it is the goal and achieving it is critical to success. However, negative synergy can result from inefficient committees, business units that lack strategic fit and from other poorly functioning joint efforts (DuFrene, 2020).

Another issue that comes to this ground is the slow turnaround time. Delivery of products would take longer, requiring to create a schedule where the time gap is reduced if not eliminated (Chris (2015); further, it affects the quality of the product.

Summing up all these factors, it would be best that companies prepare for strategic plans to outweigh such challenges and come up with fresh ideas to remain competitive and profitable.

Confidentiality and Intellectual Property Issues. According to Outsourcing Advisors (n.d.), the center of any business is the information that keeps it running. For payroll, medical records or any other confidential information that will be transmitted to the outsourcing company, there is a risk that the confidentiality may be compromised. It comes with a risk of losing intellectual properties such as business plans, trade secrets, etc. (Sardana, 2019). Riggins (2020) states that in this age of data protection, it is essential to exercise caution whenever using customer data. Much as we want to keep confidentiality in the business process, it is just inevitable to do so because it is but essential to divulge some information that is needed to ensure that goals and objectives are met by the service provider.

Outsourcing presents a considerable risk that client companies will experience theft or hacking of property. There is a challenge of securing the confidential information of companies' customers or clientele (Lim, 2020). Handing-over sensitive information may cause worry about the way the outsourcing company handles the resources' security. It is, therefore, relevant to include all the necessary clauses regarding the safeguard of rights and confidentiality in the service-level agreement (Ostapchuk, 2020). The risk of data breach gets mitigated when the service provider follows stringent data protocols, and this would just be possible when there is a service provider who is trustworthy and has integrity in the business deals.

Loss of Control and Management difficulties. Making a deal with an outsourcing company to provide services to serve the interest of the company requires to impart of the management function to them. Outsourcing company will not be driven by the same standards and mission that drives the company (Raineri, 2019). However competent and reliable the service provider may be, compromising its objectives for profitability and on that process of handing over the management control is unassured, potential conflicts could arise. One is the lack of alignment over contractual terms since the company has no direct control over the people and when even minute issues arise, certain protocols has to be observed, thus addressing the issue could be delayed instead of solving it head-on.

Managerial control will nonetheless belong to another individual or business entity (Raineri, 2019). The management does not have any direct control over the outsourced staff as directives must come from the outsourced company, so in any eventualities that call for immediate action, it will take time to make decisions; even if processes or protocols are done or unfollowed within the premises of the company. Given these possible risks, it has to be considered ahead of time to mitigate the lack of control as it will cost time and money in the long run.

Moreover, it is also considered a potential risk when changes in management could lead to some resistance as the client's staff needs to adhere to their rules and regulations and at the same time, they need to follow the policies set by the organization where they are deployed. According to Ryan (2017), who makes the decisions is a common source of contention, internal employees often assume authority and decision rights when, frequently, authority is transferred to the service provider as part of the outsourcing agreement. According to Riggins (2017), planning with external agencies or freelancers, the control is loosing of how those tasks are being monitored and performed.

The outsourcing company should look for compatible goals and common ideas with the company that is ready to take the specific business part further (Raineri,2019). There should be a clear understanding of who has the authority and decision-making power for the affected business functions (Ryan, 2017).

Different literature provided different challenges which the research compiled and categorized in Table 2.

Strategic Outsourcing

Strategic management is the key to resolve the challenges in outsourcing. According to Kenton (2020), it "involves setting objectives, analyzing the competitive environment, analyzing the internal organization, evaluating strategies, and ensuring that management rolls out the strategies across the organization (para. 1)." Applying outsourcing to the company's strategy means analyzing the reasons why it is necessary. According to a study by Kremic, Tukel, and Rom (2006), cost, strategy, and politics are the key drivers. Private companies use cost and strategy as primary reasons while public entities usually outsource because of the political environment.

Cost. Strategically, bringing down the cost is a traditional and often mentioned benefit of outsourcing from the interviews conducted and literature gathered in the study (Kremic, et al., 2006; Bucki, 2020; Campbell, 2019; Knowledge@Wharton, 2004). It brings improved operational activity and better organizational performance. In an interview with a school administrator and a manager of a company that outsources, one of the reasons why they contract external services is due to cost-cutting measure. They benefit from spending less for employee benefits. Hiring direct employees will cost companies to pay more obligations such as training and development, government-mandated benefits, and in some cases, legal costs because of employee dissatisfaction and grievances. An external contractor can offer its service at a much affordable price. Kremic, et al. (2006) mentions, "Having fewer employees requires less infrastructure and support systems which may result in a more nimble and efficient organization (p. 468)." The increase of the BPOs and KPOs in the Philippines is an example of a cost reduction drive by organizations from countries like the USA, Australia, and the United Kingdom. Lower labor costs and world-class quality service are the traits the country is known for (Jobstreet, 2020). Multinational companies such as IBM, Coca Cola, and Sainsbury outsource functions of their company to save millions of dollars (Chamberland, 2003).

Strategy. Outsourcing is strategy-driven if it leads to focus on the organization's core objectives. According to Kremic, et al., (2006), from a cost saving point of view, companies now see outsourcing to increase competitiveness, better operational performance, and focus on core activities.

Table 2
Challeges of Outsourcing

Challenges	References
Confidentiality and intellectual property issues	Flatworld Solutions, n.d.; Kremic, et al., 2006; Overby, 2017; Shaporda, 2017; Smith, n.d.
External Reaction	"Top 5 Outsourcing Challenges," n.d.); Flatworld Solutions, n.d.; Kremic, et al., 2006; Overby, 2017; Ryan, n.d.; Shaporda, 2017; Sodexo, 2019; Yempo, 2019
Innovation Capacity	Bunachita, 2016; Flatworld Solutions, n.d.; Kremic, et al., 2006; Overby, 2017; Shaporda, 2017; Sodexo, 2019; Smith, n.d.; SSON, 2019; Yempo, 2019
Loss of control and management difficulties	Bunachita, 2016; Overby, 2017; Ryan, n.d.; Shaporda, 2017
People Impact	"Top 5 Outsourcing Challenges," n.d.); Flatworld Solutions, n.d.; Kremic, et al., 2006; Ryan, n.d.; Smith, n.d.; Sodexo, 2019
Strategic Flexibility	"Top 5 Outsourcing Challenges," n.d.); Craumer, 2002; Flatworld Solutions, n.d.; Kremic, et al., 2006; Ryan, n.d.; Shaporda, 2017
Provide Continuity and Risk Management	Bucki, 2020; Craumer, 2002; Knowledge@ Wharton, 2004; Kremic, et al., 2006; SSON, 2019

Chamberland (2003) added that market repositioning and achieving significant increase in share price adds to the objective. According to the interviews and literature, organizations can refocus scarce resources by getting a third-party service provider. The result adds benefit to the development of the companies' core activities (Kremic, et al., 2006). Further, Kremic, et al. stated that "In addition to refocusing resources on core competencies, other strategy issues which encourage the consideration of outsourcing are restructuring, rapid organizational growth, changing technology, and the need for greater flexibility to manage demand swings (p. 469)."

Political. Other than the market growth and better profit that outsourcing can benefit private firms, a public organization is driven to hire service contractors for the benefit of its constituents (Kremic, et. al., 2006). Public services like in the Philippines are often performed by private companies which are usually outsourced by government units. The Philippine government in 2017 issued a Joint Circular No. 1, s. 2017 (Civil Service Commission (CSC), 2017) clarifying the goals of contracting services. It is "to ensure the continuous and efficient delivery of government programs and services, such as in the implementation of projects requiring personnel with skills or expertise not available in the agency, or implementation of time-bound projects or tasks which renders the hiring of permanent employees impractical and more expensive (para. 3)."

Outsourcing can be tactical or strategic according to Chamberland (2003). Tactical, he further explained, happens to resolve practical issues like trying to cut costs or improve current technical problems which are activities associated to the objectives and goals of the organization. Strategic is aligning the outsourcing activity according to the organization's vision and mission; what is needed to be achieved. Chamberland (2003) quoted that, "a structure that approaches a partnership-like arrangement typically offers the greatest value to organizations engaged in strategic outsourcing, as it best allows the parties to address key business considerations during the term of the relationship (para. 8)." In a partnership, there is a mutual understanding between the two parties and the sharing of control. According to an outsourcing agreement, the service provider or outsource firm gives importance to the goals and objectives of its clients leading to strategic outsourcing.

One of the reasons to outsource strategically in line with a firm's goals and objectives is to keep a competitive advantage. To do this, most multinational companies around the globe set up customer service support that gives assurance to the quality of service they give to their end-users.

An interview with an employee of a local BPO firm mentions how customer support works. The person was in a team taking calls from customers who need assistance with the client's products. The interviewee mentioned that it is prohibited to divulge information about the firm's business location. The need to talk in an American accent so customers of their client will not think they are talking with non-American personnel must be upheld for the whole work schedule. The situation is an example of giving importance to the client's character as an American business establishment. As part of the quality measure and to keep the best customer service experience excellent, the American organization has made the Filipino BPO firm speak according to their dialect, in effect, achieving customer satisfaction that leads to a competitive advantage.

Chamberland (2006) highlighted two factors for an organization to determine which functions need to be outsourced based on the following: (para. 15 & 16)

- Contribution to the achievement of the objective. If the function's potential to achieve the objective is low, the firm can outsource. The organization needs to determine if the function is a core or non-core activity, whereas, if it is non-core, it should outsource.

- Capability to perform internally. If the capability of the firm to perform the function is weak, there is a possibility to outsource.

As part of the strategy, these factors must be analyzed by the organization before it decides to undertake to outsource. This is the most critical stage in planning or taking consideration of strategic outsourcing. The first challenge would be to know what function or functions in the organization must be contracted externally. As an example, Chamberland (2006) mentioned that in the 1890s, there was a need by Coca Cola to "extend its business across new markets (para. 11)." Its bottling section is a key function to achieve this objective. Since it has no capability, at that time, to engage in this activity, they decided to license an independent bottling company. They were able to satisfy their endeavor. For decades, Coca Cola was able to be on top of the game until in the 1970s its outsourced bottling firm was not able to improve against its principal's competitor. To resolve the issue, Coca Cola bought allied bottling companies and strengthened its capability, making bottling a strategic section of the organization.

Outsourcing firms need to cope up with the needs and objectives of their principal. Proactiveness is necessary to realize a harmonious relationship (Shared Services & Outsourcing Network (SSON), 2019). If the bottling company licensed by Coca Cola were able to have alignment with the goals and objectives, the company would have enjoyed the benefits of having no competitor with the famous beverage company.

Outsourcing Challenges and Strategic Management

Analyzing the challenges requires solutions to mitigate the risks that could hinder the growth of the outsourcing industry. The researchers identified six major threats and concerns and suggested resolutions which applies strategic management as follows:

Lack of strategic flexibility. As organizations strive to get a competitive edge, being rigid in just looking out for the trends and just following it without looking beyond each possibility is a grave strategy (Davies, 2018). Davies (2018) reiterated that "The capacity for an organization to be strategically flexible should be an essential part of the outsourcing risk assessment process (para. 23)." To be flexible is to be ready for any contingent or fortuitous event. In outsourcing, what may apply to be contracted externally now may be a great source of competitive advantage in the future just like how Coca Cola handled its bottling function (Chamberland, 2006). A partnership-like relationship with the client is a great advantage for both parties engaged in outsourcing. Having close communication, and understanding the goals and objectives of each participant will greatly improve any modification in a contract in the future.

Negative external environment. Control is not an absolute task, especially when talking about external factors. This challenge talks about geolocation, legal, political, and tax implications, and other unknown situations that outsourcing brings to the organization and the external service provider. Contingency planning both done by parties in the outsourcing contract must be established right before the implementation of a project. Again, strategic management plays a big role to confront this challenge.

Impact to human resources. Critical roles in the organization should not be outsourced (Davies, 2018). These are those engaged in the core activity of the company. A "change management strategy (para. 5)" is suggested by Lim (2020) to be ready for any negative impact brought by the employees within the organization. The best time would be before the contract to a third party is signed, he further advised. The main purpose is to let everyone know why there is a need to outsource and what the implications to each stakeholder within the organization are. This challenge negatively affects the human resources of the organization calling for an external service but an advantage to the outsourcing industry. It creates businesses offshore to grow and improve economic conditions.

Negative impact to innovation. The issue of innovation is about how the external service provider reacts to the competitive advantage of its clients. Alignment with the goals and objectives of the customers is fundamental to create a long-lasting relationship. They should be proactive and transparent on what they have and be able to report what their client needs (SSON, 2019). Coleman (SSON, 2019) advises clients of an outsourcing firm to be more realistic about what they ask from the provider. The bottom line is mutual understanding and transparency about each mission and purpose.

Confidentiality and intellectual property issues. Data security and privacy is a concern by everyone. Ekezie (2019) suggests looking in-depth with the external service provider before hiring them. A client must establish rules to obtain information and the outsourcing service provider must use a data protection risk control strategy that complies with best practice (Lim, 2020).

Loss of control and management difficulties. To master this issue, firms and external services providers must understand who has the power and authority over the project. It should be clear in the agreement and must be well understood by each stakeholder (Ryan, 2017).

Conclusion and Recommendations

Outsourcing has been a trend and continually developing to be a strategy by different organizations locally and globally. In the Philippines alone, it has contributed to be resilient even in times of crisis such as the COVID-19 pandemic where cost minimization and increase in production of various commodities are necessary. It became an industry because of the increase in demand for better talents and skills which are not available internally within an organization offshore on nearshore. Even non-core functions are being outsourced because of the drive to cut cost and strategically increase competitiveness, productivity, and performance.

The benefits of outsourcing run into a wide array of things to consider as it ensures the company in achieving its mission and vision in the long run. The study have determined that literature reviewed and answers of interviewees relates benefits brought by outsourcing is access to new skills, talent, and technology. Cost savings, a traditional driver why organizations contract to an external service provider, still continues to be an essential factor that pushes growth of the industry. Focusing to core activities is another consideration together with increase in competitiveness. Operational flexibility that provides continuity and risk management strategically balances achievement of the goals and objectives.

There have been a considerable number of challenges in outsourcing to date and it ranges from loss of control and management difficulties to threats to confidentiality and data security, risks to communication and quality control issues and on to risks to transparency and flexibility issues. The greatest challenge is poor planning and execution to uphold an outsourcing agreement. This is seen from most literature reviewed as the lack of strategic flexibility in dealing with outsourcing. In most cases other challenges highlighted such as the negative external environment, impact to human resources, impact to innovation, confidentiality issues, loss of control, and management difficulties are causes of lack of strategic management. These are the gaps between each participant's purposes. The outsourcing firm, its employees, and its clients must be able to understand each other's goals and objectives. By firmly establishing the strategic mission and vision that a client shares with the outsourcing entity, it would set the standard to follow. Strategic management which is the core of strategic outsourcing, is the key to achieve profitability and competitive advantage of both entities.

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Labour Migration: Student's Perception of Working Abroad after College Graduation

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Abstract

International migration for work has been a trend for most of the young people around the globe. Many of students are already planning and preparing on joining the international work force after they graduate. Their preparation also includes overcoming the challenges that may occur and preparing to live and work in the country they desired to work to. However, one of the conundrums for the people is what preparation they should do to successfully go and work abroad. Purposive sampling technique was used to get the samples. The respondents are mostly male (53%), Filipino (89%), and with a mean age of 23 years old. Using qualitative and quantitative techniques, it was found out that most of them are *very much* challenged with having limited financial resources (2.83), limited employment opportunities (2.78), and acquiring visa (2.75). They are, however, *very much* prepared and most prepared with eating the available local foods of their desired country (3.18) while they are *least* prepared in knowing the laws of their desired country (2.85). The study showed that they are ready to work since they feel *very competent*. They feel *most competent* with their ethical behavior (3.27) while they are *least competent* with their cultural sensitivity (2.98). They feel nervous, excited, and happy in going abroad after they graduate. They are preparing by improving their skills and studying hard so they may have sufficient skills after graduating. There are many factors that can solve these issues. Government, organizations, families and other people can help them either work abroad or provide better opportunities in their home country.

Keywords: *international workforce, multi-cultural awareness, working abroad, diverse workplace*

Moving to another culture adds another layer of disorientation and complexity (Sussman, 2011). Any individual who wants to work in another country, must be prepared. They have to acquire the customs of the country they preferred to work. In a study conducted by Ragma and Molina (2018), researchers found out that the selected OFWs are facing several challenges. These challenges include being afraid of the discrimination, abuse, culture shock, and such. This shows how the OFWs perceived the challenges they might encounter. However, there is still lack of information on how students perceive the idea of going abroad for work.

Numerous organizations have researched the impact of the international workers to the countries they came from and they worked in. They found out that it contributed to the countries' economic growth and enhancement of policies (OECD/ILO, 2018). This shows how much they contribute but it lacks the information on what challenges the immigrants face and how they prepare for it. The study of Lavonen (2010) examines the willingness of 158 students to move abroad in the future, and factors affecting it. The results indicate a high willingness among students to move abroad either as an expatriate, self-directed foreign experience (SFE). The most influential factors when considering an international move were family-related variables and variables related to the respondents' own careers.

Labour migration has been part of the lives of Filipinos. In 2016, the Philippine Statistics Authority (PSA) estimates around 2.2 million OFWs working in different parts of the world. Filipinos leave the country and their families to improve their economic condition (International Labour Organization, 2018). There have been a lot of researches about migrant workers conducted around the world; many valuable studies of international workers using cross-section data (Wickramasekara, 2008). However, none of those studies provides information about how college students prepare themselves in joining the international labor.

Objective of the Study

This study determined the perception of college students about working abroad. Specifically, it identified the following: (a) extent of student's interest of working abroad after graduation from college,

(b) preparedness on living in the desired country, (c) perceived competency in preparation for student's intention to work in their desired country, (d) perceived challenges in working in desired country abroad, and (e) respondents' feelings towards working abroad.

Students have started making plans and preparation for their future, so it is important to know if working abroad is one of those plans. Thus, the result of this study provided information to students so they can improve the curriculum and provide more certifications that will prepare the students in joining the international workforce. A university can be a training ground for future successful people all over the world.

The result of this study created awareness to those who are involved in managing the university. They must align the philosophy, mission, vision, and curriculum to equip students the skills, knowledge, and attitude they will need to become successful inside and outside of the students' respective country. Administrators should make every effort to plan strategically that it may prepare students in their goals after studying. Teachers and parents should also attend to the needs of the student to support its goals in life.

Review of Literature

In third world countries like the Philippines, citizens are most likely to go abroad for work. In the Philippines, OFWs who work in other countries carry different reasons. Some of them work abroad due to poverty, some found a better opportunity outside the country, and some are just curious about it. It is almost the same with other countries (Ragma & Molina, 2018).

In the corporate world, workforce diversity is being encouraged for some reasons. It creates awareness about the reality that people are different with each other in many ways namely: social status, religion, personality, ethnicity and culture (Onday, 2016). Having a diverse workforce can also be complex since both parties need cultural orientation. There is what they call geocentric philosophy in which companies focus on the ability and performance in choosing staff regardless of the nationality. This helped the manager to be wiser in selecting diverse employees (Sweeney & McFarlin, 2015).

In selecting and evaluating candidates, multinational companies vary in doing it. Sophisticated Western multinational companies use information systems or database that keep track of managers globally. From there they can use variety of techniques like psychometric tests, interviews, and even intensive reviews of previous accomplishments (Sweeney & McFarlin, 2015).

Multinational companies can be strict in getting employees but there are some ways for the students to help themselves in getting a job in a foreign country. Cross-cultural preparation will give them big advantage in joining international work force since it is a big part of most of the training efforts (Sweeney & McFarlin, 2015). Cross-cultural training can provide positive outcomes, develops more cultural awareness, and understanding. This is believed to help lessen the stress in workplace and encourage productivity. Cross-cultural training is also effective if it tackles environmental briefings like geography, climate, and housing. The following are the cross-cultural trainings to help a person be successful in living and working in other country: environmental briefings, cultural orientations, cultural assimilators, language training, sensitivity training, and field of experiences (Dlabay & Scott, 2011).

Other topics can also be included like employability skills. These are critical thinking, problem solving, and communication skills. Problem-solving skills, cultural sensitivity, managing people, patience, ethical behavior and tolerance are other characteristics that must be developed for a person to successfully penetrate the international labor market. The reason behind it is that the skills like language can be taught or an interpreter can be hired. However, students will be evaluated through their cultural awareness and appreciation, and mastery of employability skills (Dlabay & Scott, 2011).

This study is anchored on the Work of Cultural Transition as an emerging model. This model argues for the fundamentally cultural constitution of self in human development and is informed by career development and cultural adaptation literature. This theory starts with the position of position developed by Vygotsky and Luria that psychological processes are the emergent outcome of the transactions between an individual's ontogenetic history in a sociocultural framework, and characteristics of the immediate tasks confronting the individual. This approach considers individual traits as constructed by and entwined with a specific medium of human development, which includes language, norms, customs, values, and artifacts (Markus & Kitayama, 2010; Vygotsky & Luria, 1930/1993). The externalized social interaction concerns the nature of the self and its relationship with others is one of the key symbolic resources of culture (Adams & Markus, 2001; Bruner, 1994; Ryba et al., 2016).

Methodology

Research Design

This study determined the senior college students' perception about working abroad using descriptive research design. It focuses on the (a) extent of student's interest of working abroad after graduation from college, (b) preparedness on living in the desired country, (c) perceived competency in preparation for student's intention to work in their desired country, (d) perceived challenges in working in desired country abroad, and (e) respondents' feelings towards working abroad,

Population and Sampling Technique

The population of the study is the senior college students in a university in Cavite. This study used purposive sampling technique, a non-probability sampling method that uses judgment in obtaining a representative sample (Foley, 2018). The samples of the study consist of 15 senior students from each of the eight colleges in the university.

In this study there are more male students (63 or 52%) than female (57 or 48%). The respondents are currently in their senior year in college. Their ages ranged from 18 years old to 30 years and above. The students' ages ranged from 18 to 30 years old (23 or 19%), 21-23 years old, who are the majority (57 or 48%), 24-26 years old (34 or 28%), and 27 years and above (6 or 5%). The respondents represent 13% of the total population from each college. These are represented by the eight colleges namely the College of Arts and Humanities, College of Business, College of Dentistry, College of Education, College of Health, College of Nursing, College of Science and Technology. Most of the respondents are Filipinos representing 89% of the total respondents. The remaining 11% are non-Filipinos.

Instrumentation and Data Analysis

Survey questionnaire was the main data gathering tool. It was first validated by the experts and laymen before it was printed and distributed. Relevant questions were formulated to extract information from the population. The researchers looked for senior students per college and distributed it to them and were retrieved immediately. Descriptive statistics was used to address the objective of the study.

Results and Discussion

Interest of Working Abroad After Graduation from College

The students were *very interested* to join the international work force after they graduate from college (refer to Table 1). This result agrees with the study of Lavonen (2010) which examines the willingness of 158 students to move abroad in the future, and factors affecting it. These students indicated a high willingness move abroad either as an expatriate, self-directed foreign experience (SFE).

Table 1
Interest in Working Abroad after Graduation

Description	Mean	Interpretation
Interest in Working Abroad after Graduation	2.98	Very Interested
Grand Mean	2.98	Very Interested

Legend: 1 Not interested 2 less interested 3 Interested 4 Very Interested

They seemed very prepared in living abroad for work as can be seen in the Table 2. Their preparations in living in their desired country abroad include the following: adapting to the climate, cultural and political conditions in their desired country abroad. The respondents are *very prepared* in adapting to the climate conditions in the country they desire to live and work. They are also very prepared to live independently. Adapting to other culture is another thing they feel very prepared such as speaking the language, eating foods, having knowledge on the law, and understanding the value system of their desired country abroad.

Preparedness on Living in the Desired Country

Table 2 presents the preparation made by the students on their intention to live in their desired country. The respondents feel prepared in going abroad to live there while working. Among the situations asked, their responses showed that they are very prepared in adapting to the climate and culture of the desired country, speaking the language their language, in eating the local foods, in knowing their laws and values. The highest rated item is 'Eating the local foods of my desired country'. The culture and religion of a person must have been influenced tourist food consumption like Japanese, French, and Italian whereas they more prefer to eat their own cuisine (Mak, Lumbers, Eves, & Chang, n.d.). Unlike the most of our respondents which are Filipinos who have cuisine that is influenced by different countries, they tend to easily adapt other cuisines that are almost same with them.

Table 2
Preparedness on Living in the Desired Country

Description	Mean	Interpretation
Adapting to the climate of my desired country.	2.91	Very Prepared
To live independently in my desired country	2.89	Very Prepared
Adapting to the culture of my desired country.	3.03	Very Prepared
Speaking the language of my desired country.	2.98	Very Prepared
Eating the local foods of my desired country.	3.18	Very Prepared
Knowing the laws of my desired country.	2.85	Very Prepared
Understanding the value system of my desired country.	3.00	Very Prepared
Grand Mean	2.98	Very Prepared

Legend: 1 Not prepared 2 Less prepared 3 Prepared 4 Very prepared

Perceived Competency in Preparation for Students Intention to Work in their Desired Country

The perceived competency in preparation for students' intention to worked in desired country other than Philippines is presented in Table 3. The respondents perceived that they are very competent to work in their desired country particularly with the skills mentioned in Table 3. They feel very competent in terms of their ethical behavior. Ethical behavior is defined as the behavior of adhering to professional standards and doing the right thing in a business, in which companies have different standards (Maxwell, 2018). According to Dlabay and Scott (2011), ethical behavior is one of the characteristics that need to be nurtured in all young people since it is essential to success in the international marketplace. This competence may help them to be successful in international level.

Among the competency skills listed, cultural sensitivity was the least rated competency skills of the respondents but still interpreted as very competent. Cultural sensitivity enables the employees to understand others who are different from them (PennState Extension, 2015). If they were able to improve this skill, it will give them another advantage in the international work force.

According to the International Labour Organization (2015), to get a job offer abroad, a person will need to have qualifications and some work experience. In planning, the individual should have all the right certificates and skills. Getting a job overseas can be a very time-consuming and sometimes expensive process. An individual should be competent in the job-related challenging task assigned in the future.

Table 3

Perceived Competency of Senior College Working Abroad

Description	Mean	Interpretation
Cultural Sensitivity	2.98	Very Competent
Critical Thinking Skills	3.05	Very Competent
Problem Solving Skills	3.04	Very Competent
Interpersonal Skills	3.14	Very Competent
Patience	3.20	Very Competent
Teamwork Skills	3.21	Very Competent
Ethical Behavior	3.27	Very Competent
Grand Mean	3.13	Very Competent

Legend: 1 Not Competent 2 Less Competent 3 Competent 4 Very Competent

Perceived Challenges in Working in Desired Country Abroad

The perceived challenges the respondents might encounter are presented in Table 4. The respondents feel *very challenged* to work abroad. The top four challenges identified by the respondents are limited financial resources, limited employment opportunities, cultural differences, and language barrier. Further, the respondents also identified that food preferences, independence in house chores, and insufficient skills are perceived to be slightly challenging in working abroad. This is because most of the respondents are Filipinos and they are in the third world country who wants to work in developed countries. They think that international labor market is competitive.

Foreign-born workers living and working in other country require adjustment to the host country. There are literatures that suggest foreign workers experienced more mental ill-health compared to native workers (Aalto et al., 2014; Font et al., 2012).

Table 4

Challenges in Working in Desired Country Abroad

Description	Mean	Interpretation
Cultural Sensitivity	2.98	Very Competent
Critical Thinking Skills	3.05	Very Competent
Problem Solving Skills	3.04	Very Competent
Interpersonal Skills	3.14	Very Competent

{table continues on the next page}

Patience	3.20	Very Competent
Teamwork Skills	3.21	Very Competent
Ethical Behavior	3.27	Very Competent
Grand Mean	3.13	Very Competent

Respondents' Feelings Towards Working Abroad

In an open-ended question, the respondents were asked "how the feel about working abroad". The respondents revealed mixed feelings and emotions. The respondents were nervous and excited with the idea of going abroad for work. Some were already planning about doing so. They also felt sad since they will be living away from their families and friends and living in another country is a big adjustment for them. Applying is really hard as well, since most of them were financially challenged. They feel that the employment opportunities in the country they desired to work in might be limited. Working abroad will be a great help to them personally and to their family as well, if it is the will of God, they will be happy to be there and still be happy otherwise. However, they feel there are many things they need to prepare.

Table 5
Feeling towards Working Abroad

How do they feel about working abroad?
They feel nervous.
Most of them feel excited about getting abroad
Some of them also say that they really plan to work abroad after graduation.
They will miss home and their families left in their home country.
It's challenging for them since applying alone is hard to do.
They feel that it will elevate their poor financial situation if ever they will work abroad.
If it is the will of God, they will be happy to be there.
They feel that there are many things they need to prepare.

Conclusion and Recommendations

Most of the senior college students were interested to work abroad. Some of them are already planning, while some are interested but don't know how to start. The senior college students in this study perceive they were very prepared, very competent to work in their desired country, regardless of the challenges of the cultural and geographical differences. There were several challenges they think they might encounter in planning to work abroad specially limited financial resources, limited employment opportunities, cultural differences, and language barrier. On the other hand, they feel slightly challenged with food preferences, independence in house chores, and insufficient skills. Furthermore, the senior college students have mixed feelings and emotion in their pursuit to working in another county. The felts nervous, excited, and happy for their intention.

With the high rate of students interested in working abroad with some of them are losing options due to lack of good opportunity in their countries, there is something that to be done by the people or organizations surrounding them. Hence, to help these senior students, the following actions are recommended:

1. It is highly recommended that the government must tie with other countries in creating job opportunities so that students can easily apply in other countries;
2. Government should encourage the creation of job opportunities in their home countries so that the locals will not have to go abroad and just stay in their own countries;
3. Cross-cultural training and seminars must be included in the curriculum of the colleges and universities.
4. Loans or assistance should be done by the government and/or banks to help these students to get to their desired country.
5. Students should try to immerse themselves and give more effort in learning other cultures for them to be more prepared.

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Influence of Interpersonal Relationship and Satisfaction on Customer Loyalty at a University Store

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Abstract

Customer loyalty provides the basis for the sustainable competitive edge of an organization. New customers tend to buy more than existing customers and not spend as much on rehabilitation. Commerce victory is critical to keeping customers coming back for more. The research was conducted among the customers of the University store in Silang, to determine if significant relationships were existing between the following: (a) interpersonal relationship and customer loyalty and (b) customer satisfaction and loyalty. Also, this study determined if there is a significant difference in customer loyalty considering age, sex, and occupation. One hundred customers of the university store were chosen randomly to answer the self-constructed questionnaires. The study used Pearson correlation, t-test, and Analysis of Variance (ANOVA) to analyze the difference and relationship among variables. This study revealed a *positive significant relationship* between the following: (a) interpersonal relationship and customer loyalty, and (b) satisfaction and customer loyalty. There was, however, *no significant difference* in customer loyalty when age, sex, and occupation are considered. Due to the better interpersonal relationship, they received; the customers buy things at the university store. Both male and female customers are loyal which means they patronize the University store products. The customers buy products from the University store regardless of their age and occupation. The study advises that the University store maintains a good interpersonal relationship with the customers, so in the future, the University store can promote more products for the benefit of the customers and the growth of their business.

Keywords: *interpersonal relationship, satisfaction, customer loyalty*

Customer loyalty provides the basis for the sustainable competitive edge of an organization. New customers tend to buy more than existing customers and not spend as much on rehabilitation. Commerce victory is critical to keeping customers coming back for more. New customers tend to take a toll more to purchase and not spend as much cash as existing, rehash clients. It is critical to commerce victory to keep clients coming back for more.

Customer loyalty is an important topic in both advertising and sales literature. The concept's value stems from the advantages of maintaining existing customers (McMullan, 2005). Research has shown that brand loyalty is correlated with business performance (Reichheld, 2003), which is a strong indicator of long-term profitability (Salegna &Goodwin, 2005). The product of a cycle beginning with customer satisfaction is customer loyalty (Oliver, 1999).

Satisfaction as an attitude, assessment, and emotional response shown by the consumer after the purchase process. It is an indication of being pleased with a product or a service (Ningsih & Segoro, 2014).

Customer satisfaction is important to quantify due to its significant impact on the long-term success of businesses as well as the patterns of consumer purchasing. It is known that the consistent provision of high customer satisfaction is associated with higher customer loyalty and enhanced credibility in academics (Anderson & Sullivan, 1993; Fornell, 1992; Wangnheim & Bayon, 2004).

One of the key tools for a successful business is customer satisfaction. Customer satisfaction is described as an overall assessment based on the overall experience of buying and consuming goods or services over time (Fornell, Johnson, Anderson, Cha, & Bryant, 1996). For sales, customer satisfaction always comes with it, which means that it defines the customer's preferences on how the goods and services are being facilitated by the companies. Actionable information on how to make customers further satisfied is, therefore, a crucial outcome (Oliver, 1999.)

Nonetheless, the product and its functionality, functions, quality, marketing operation, and customer support are the most important topics required to achieve or surpass customer satisfaction. Satisfied customers come back and buy more. In addition to buying more, they still work as a network by sharing experiences to meet other potential customers (Hague & Hague, 2016).

Just one-tenth of winning a new one is the cost of holding a client. Therefore, if the company wins a customer, a stronger relationship with the customer will continue to be established. Providing the quality of goods and services in the twentieth century is not just about pleasing consumers, but also about being healthy. This has, in addition, greatly benefited consumers from the purchase of quality products (Rebekah & Sharyn, 2004).

Customers also seek quality in the overall service which involves internal coordination between the organization responsible for various elements of the bid, such as the core product (goods or services) which provides the product, product documentation, etc. Only practices that produce value to consumers should be carried out from the viewpoint of competitiveness and productivity. Organizations also need to get to know their customers even better than usual. The company should build confidence with the customer, so it is easy to get customer feedback. This is how it was possible to develop a customer-oriented product or service (Hill, Brierley, & MacDougall, 2003).

Customer loyalty is an important factor that leads to gain a competitive advantage over other firms under a highly competitive and dynamic environment. It is built on two components, attitude and behavior (Leninkumar, 2017). Oliver (1999) describes loyalty as "a deep commitment to reconstructing and re-patronizing a favorite product or service in the future given contextual pressures and marketing efforts with the potential to cause switching behaviors" (p. 33). Customer loyalty is seen as the strength of the relationship between the relative attitude of a customer and the re-patronage. Although customer satisfaction is an essential part of a company, satisfaction alone cannot carry a business to the highest level. Customer satisfaction, particularly in regular purchases, produces a positive financial result. Customer loyalty formation and preservation are more challenging than it has been in recent years. This is due to the technological breakthrough and widespread use of the internet. Loyalty building allows the organization to concentrate on the quality of its product and services and to show that it is involved in satisfying the demand or creating a customer relationship (Griffin, 2002).

Thomas and Tobe (2013) stress that loyalty is more lucrative. Expenditure on gaining a new customer is greater than maintaining current customers. Loyal customers will inspire others to buy and think about other products more than twice before they change their minds. Customer loyalty is not gained by accident; it is created through the decisions of procurement and development. Customer loyalty design requires customer-centric strategies that consider the service recipient's desire and interest. Customer loyalty across multiple transactions is built over time.

Equally important in customer loyalty is the relationship with a client, and this allows a company to work in a broader context that stretches beyond itself, as no company can be world-class at all (McDonlad & Keen, 2000). Gremler and Brown (1999) split customer loyalty into three different categories, including loyalty to actions, deliberate loyalty, and loyalty to emotions. Nevertheless, emotional loyalty is created when a customer feels that their interest, thoughts, and enthusiasm correlates to a product.

Further, the effect of loyalty satisfaction was the most popular subject in marketing theory research. Therefore, numerous studies have shown that there is a direct connection between satisfaction and loyalty. As satisfied customers are loyal and unhappy customers are a seller (Heskett, Jones, Loveman, Sasser, & Schelsinger, 2011).

Leninkumar (2007) in their study observed that customers are not loyal to one particular bank as they have accounts in different banks for different purposes. Since banks are competing with it comes to their customers, there is a need to establish the loyalty of their customers. They have to focus on retaining existing customers and the latter on attracting new customers. These banks started to realize the prominence of customer loyalty and its contribution to its financial performance and growth, which lead them to consider more on the creation of a loyal customer base for a long term relationship.

Banks offer individuals and businesses various services such as cash settlement, remittance, and depository services. Lastly, due to the nature of financial services, interpersonal relationships and quality of service are essential for creating customer loyalty which leads to long-term profitability and competitive advantage (Bolton, 1998).

The social interaction between the service provider and the user helps to create feelings and loyalty (Kozub, 2008). Service quality strengthens interpersonal relationships as clients are treated properly and their problems are solved in time by well-trained service provider workers (Ehigie, 2006). Hui and Rachel (2015) pointed out that interpersonal relationship viewpoints that vary from family or kinship relationships, friendship and marriage, association relationships, jobs, clubs, communities, and workplaces.

With the above challenges and concerns, the purpose of this study was to know if the customers are loyal to a university store. Further, it determines the influence of interpersonal relationships on customer loyalty of the University store clients. This research answered specific questions:

1. What is the level of interpersonal relationship, customer satisfaction, and loyalty of the respondents?
2. Is there a significant relationship between:
    a. Interpersonal relationship and customer loyalty
    b. Customer satisfaction and customer loyalty
3. Do the following variables significantly predict customer loyalty?
    a. Interpersonal relationship
    b. Customer satisfaction
4. Is there a significant difference in customer loyalty when considering:
    a. Age
    b. Sex
    c. Occupation

Theoretical and Conceptual Basis

Customers have to be treated with care. They have different needs and demands about the services and products they wanted to avail of. Every organization should deal their customers in different ways since very seldom organizations satisfy the needs of every potential customer. They maintain a good relationship for them to be loyal to your organization. According to Grönroos as cited in Khadka & Maharjan (2017) it is also important to keep in mind that customers in a relationship with a service provider often want to be recognized and treated individually, even though they are part of a larger segment of the customers. (Grönroos 2007, 362.)

Expectancy disconfirmation theory. This theory was developed by Oliver (1980; Aigbavboa & Wellington, 2013) who proposed that a user's satisfaction level is a result of the difference "between expected and perceived product performance, and expectations as predictions of future performance". The expectations propose that products satisfying high expectations are predicted to generate greater customer satisfaction than products that meet low expectations.

Oliva, Oliver & MacMillan (1992) mentioned the two critical thresholds affecting the link between customer satisfaction and customer loyalty. On the high side, when satisfaction reaches a certain level, loyalty increases dramatically, at the same time satisfaction declined to a certain point, loyalty dropped equally dramatically

Oliver (1999) defines loyalty as "a deeply held commitment to rebuild and re-patronize a preferred product or service in the future despite situational influences and marketing efforts having the potential to cause switching behaviors. Krishnamurthi and Raj (1991) have shown that loyalty is less price-sensitive than unroyal in the option decision but more price-sensitive in the quantity decision (Burke and Ground coffee). On the other hand, while Thomas and Tobe (2013) emphasize that "loyalty is more profitable." Maintaining a good customer is not easy. Loyal customers are not gained by accident; they are established in time. They further added that designing for customer loyalty requires customer-centered approaches that recognize the want and interest of the service receiver. Customer loyalty is built over time across multiple transactions. Several studies have proved that satisfaction and loyalty have a direct connection with one another. As satisfied customers are loyal and dissatisfied customers are a vendor (Heskett, 2011.)

Methodology

This study is used descriptive correlational research design. One hundred regular customers of a University store were randomly sampled to answer the self-structured questionnaire. There were 51(51%) female and 49 (49%) male; 40 (53%) of the respondents are 18-28 years old and 60 (30%) are 39-48 years old; there are 56(56%) students, 32(32%) s staff, and 12(12%) visitors.

The survey questionnaire was content validated to ensure the items were measuring what it is supposed to measure. Permission from the supervisor of the University was secure before data gathering. The randomly selected respondents were given the questionnaires. The participants were ensured the data will be used for research purposes only.

The data were analyzed using SPSS version 23. Descriptive statistics such as the mean, standard deviation, and correlations were used to answer the research questions. The study used mean, standard deviation, Pearson correlation t-test, and Analysis of Variance (ANOVA) to address the research questions.

Results and Discussion

This study determined the influence of interpersonal relationships and satisfaction on customer loyalty at a university store. The level of interpersonal relationships, customer satisfaction, and loyalty was also computed. The results in table 1 present the descriptive results of the level of the interpersonal relationship among University store customers. The customers agree on all items in Table 1 except for item 1 that states "I enjoy good relationship with university store staff in which the customers answered moderately agree. Generally, the interpersonal relationship of the customers to the University staff is good. An interpersonal relationship is as important as customer satisfaction affecting customer loyalty. It is the relationship with a client, and this allows a company to work in a broader context that stretches beyond itself (McDonlad & Keen, 2000).

Table 1
Interpersonal Relationship

	Mean	Std. Deviation	Scaled Response
IS 1. I enjoy good relationship with university store staff.	3.49	.927	Moderately Agree
IS 2. University store staff are friendly.	3.69	.982	Agree
IS 3. University store staff are responsive to my needs.	3.61	.920	Agree
IS 4. I receive the right amount of guidance from university store.	3.54	1.049	Agree
IS 5. I receive the right amount of support from university store.	3.60	1.015	Agree

{table continues on the next page}

IS 6. University store staff communicates well with me.	3.61	1.034	Agree
IS 7. University staff helps in resolving conflicts with my buying needs.	3.61	1.072	Agree
Grand Mean	3.59	.796	Agree (Good)

1 Strongly Disagree (Very poor) 2 Disagree (Poor) 3 Moderately Agree(Fair)
4 Agree (Good) 5 Strongly Agree(Very good)

According to Ningsih and Segoro (2014) satisfaction as an attitude, assessment, and emotional response shown by the consumer after the purchase process which is manifested by being pleased with a product or a service. In this study, the level of customer satisfaction of university customers is generally high. The customers agree on items regarding the good behavior of the university store staff, the good quality, and the updated product of the university store. Further observation revealed that University store staff is helpful, commendable, and they entertain the customers' concerns. These results are presented in Table 2.

Table 2
Customer Satisfaction

	Mean	Std. Deviation	Scaled Response
S 1. The general prices of the product in the university store are just right.	3.21	1.094	Moderately Agree
S 2. The behavior of the university store staff is generally good	3.75	1.258	Agree
S 3. The quality of the product in the university store is good.	3.68	1.053	Agree
S 4. The products in the university store is updated.	3.61	1.004	Agree
S 5. University store staff is helpful.	3.65	1.009	Agree
S 6.The university store entertains the customers concerns.	3.66	1.047	Agree
S 7. The services of the staff in the university store is commendable	3.75	1.029	Agree
Grand Mean	3.62	.793	Agree (High)

1 Strongly Disagree (Very poor) 2 Disagree (Poor) 3 Moderately Agree(Fair)
4 Agree (Good) 5 Strongly Agree(Very good)

Customer loyalty is high (M=3.80, SD = .845) as revealed in Table 3. The customers will recommend university store products to my friends, use the product from the university store, provide suggestions whenever there is something wrong, and constructive feedback to help the university store improve. Customer loyalty is an important factor that leads to gain a competitive advantage over other firms under a highly competitive and dynamic environment. It is built on two components, attitude and behavior. As stated by Leninkumar (2017), customer loyalty is an important factor that leads to gain a competitive advantage over other firms under a highly competitive and dynamic environment.

Table 3
Customer Loyalty

	Mean	Std. Deviation	Scaled Response
CL 1. I will recommend university store products to my friends.	3.89	1.053	Agree
CL 2. I use the product from university store.	3.85	1.029	Agree
CL 3. I will continue using store products.	3.80	.974	Agree
CL 4. I provide suggestion whenever there is something wrong (example: expiration date of the product).	3.80	1.015	Agree
CL 5.I give	3.74	1.079	Agree
CL 6.I buy my stuff from university store.	3.72	1.064	Agree
Grand Mean	3.80	.845	Agree (High)
Grand Mean	3.62	.793	Agree (High)

1 Strongly Disagree (Very poor) 2 Disagree (Poor) 3 Moderately Agree(Fair)
4 Agree (Good) 5 Strongly Agree(Very good)

Correlates and Predictors of Customer Loyalty

The study discovered that there is a high positive significant relationship between interpersonal relationship, customer satisfaction and customer loyalty (r = .756, p = .000), (r = .756, p = .000), (r = .617, p = .000) as shown in Table 4. The implication is that the regular customers coming to the university store are satisfied with the products and the staff has good interpersonal relationship skills.

Two important reasons were identified by Rosenberg and Czepiel (2017) why customer loyalty and satisfaction is vital for modern-day business today. First, customers are scarce resource it is far easier to obtain from an old customer than from a new one. The other reason is that customer loyalty and satisfaction has a positive effect on the profitability revenues of the company.

Table 4
Interpersonal Relationship and Satisfaction as Correlates of Customer Loyalty

Correlations

		Interpersonal Relationship	Satisfaction	Customer Loyalty
Interpersonal Relationship	Pearson Correlation	1	.756**	.617**
	Sig. (2-tailed)		.000	.000
	N	100	100	100
Satisfaction	Pearson Correlation	.756**	1	.730**
	Sig. (2-tailed)	.000		.000
	N	100	100	100
Customer Loyalty	Pearson Correlation	.617**	.730**	1
	Sig. (2-tailed)	.000	.000	
	N	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

The results of the stepwise regression analysis revealed that customer satisfaction significantly predicts loyalty. The regression coefficient is .730 with 53 % as the variance in loyalty is accounted for by customer satisfaction. The regression model to predict customer loyalty was generated as YPredicted Loyalty = .957 + .786 (customer satisfaction). This means for every one unit increase in customer satisfaction, expect a .788 increase in customer loyalty. The interpersonal relationship was not a significant predictor of customer loyalty.

These results prove the study of Heskett et al. (2011) that there is a direct connection between satisfaction and loyalty. The satisfied customers are loyal and unhappy customers are a seller.

Table 5
Predictors of Customer Loyalty

		Unstandardized Coefficients		Standardized Coefficients			
Model		B	Std. Error	Beta	*t*	Sig.	R Square Change
1	(Constant)	.957	.275		3.477	.001	
	Satisfaction	.786	.074	.730	10.580	.000	.53
	R = .730	F(1,98) = 111.94		*p* =.000			

a. Dependent Variable: Customer Loyalty

Similarly, the results based on the age of the regular customers which were grouped into 18-28years and 39-48years was statistically *not significant* at $p < 0.05$ level: F (.863, 98) = .612, p = .749. the regular customers are from this age group are loyal to and buy products from the store.

Finally, the study investigated the significant difference of the regular customer at the store on their customer loyalty based on the occupation. The outcome of the study shows that there are *no significant differences* in the occupation on customer loyalty at p < 0.05 level: F = (83) = .800, p = .682. The discussion on this is that occupation did not deter the regular customers from being loyal to the store. Therefore, the study accepts the null hypothesis that there is no significant difference in customer loyalty were considering the sex, age, and occupation of the regular customers.

Conclusion and Recommendation

The customers had a good interpersonal relationship, a high level of customer satisfaction, and high customer loyalty to the university store. Interpersonal relationships and customer satisfaction are positively related the customer loyalty. However, the combined effect of the two predictors (interpersonal relationship and customer satisfaction) leads to a non-significant result for an interpersonal relationship based on the stepwise regression results. Customer satisfaction is the only significant predictor of customer loyalty that contributed 53% of the total variance in customer loyalty.

It is recommended in this study to maintain their interpersonal relationship with the customers and ensure customer satisfaction by continue providing quality products and services. Further study is conducted to identify factors affecting customer loyalty aside from the variables included in this study.

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