

Siruhano: A Narrative on the Patterns, Dynamics, and Issues on the Traditional Health System at Tapaz, Capiz Philippines

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Abstract

This study explored Siruhano: A Narrative on the Patterns, Dynamics, and Issues of Traditional Healthcare System at Tapaz, Capiz Philippines. Using the qualitative research design, two (2) informants from barangay Camburanan and Daan Banwa Tapaz, Capiz, were purposively chosen based on the three-generation test by Manuel (1955). Fieldwork, observations, informal and key informant interviews, and documentary and photographic analysis were used. Verbatim data transcripts were analyzed using the general inductive approach (Thomas, 2006) and in vivo coding technique. The patterns of the traditional health system vary from the origin and forte of the siruhano. In terms of dynamics, siruhano was known to believers until this era, when presence of licensed medical practitioners and health workers was available in the locality. The prevailing issues on the siruhano as they perform their traditional health care services to the folks in the locality were: legitimacy, discrimination, poverty, and life threats.

Out of 5 participants, the majority were males (80.00%), above 60 years old (80.00%), married (60.00%), unable to study or finish college education (60.00%), unemployed (80.00%), and Catholic (80.00%). This study aimed to understand the underlying patterns, dynamics, and issues in the traditional health system, to describe the themes based on the narratives of the siruhano, to recognize the different traditional health systems, and to identify these various traditional health systems that are being used in the modern age at Tapaz, Capiz Philippines. Based on the authors' Knowledge, this is the first qualitative study pertaining to the narratives on the Patterns, Dynamics, and Issues of the Traditional Health System at Tapaz, Capiz Philippines, known as the home of Panay Bukidnon, which was one of the last indigenous group of people in the province. Local studies revealed that practitioners of folk medicine in the Philippines are mostly married Catholic males with low economic status and low educational attainment, which is similar to the findings of the current study. Similar foreign studies have also found that practitioners of traditional and complementary medicine are often males and married. Another study also found out that most of these healers inherited their supernatural powers of healing from their parents, while some of them use lucky charms and amulets, and other folk remedies when hearing the word "mutya" and "pakpak." It was also depicted in the study that most of the "Pat-an" have started their healing journey at a young age, and their healing is centered on God. The majority of them are well-versed in local traditional medicine plants, which was their main prescription during their treatment. The majority of the participants have good and effective diagnosing attitudes toward their clients.

Practitioners have strong conviction in their field of practice because of their belief that they were chosen and had given gifts of prowess that defines their ability. They also show a strong commitment to their work and utilize healing practices with their utmost skills. The challenges that most traditional healers experience are the discrimination of the people from their own community and interrogation of the validity of their medical practices. Participants' responses reveal that the traditional health system does not uplift the economic status of healer/s and that most of them do not rely on the payment of their clients. It can also be noted from the study that traditional healers experienced life threats that triggered fear and anxiety. Their responses also prevail that the practitioners don't have any provision from the government for them to be recognized as part of the national heritage that promotes cultural inclusion, which is very important to the next generation.

The common traditional healing method of the "Pat-ans" in the community are "*manugtawas; manugluy - a; manugbotbot; manugluop; manugban – aw; manu-gpabata; manughilot; manughimulso; manugtayahop; and manugpalayas sang malain nga espirito*". It was found in this study that all of these methods are still being used in this modern age.

Keywords: Patterns, dynamics, issues, traditional health system, local folk

Introduction

Traditional health system takes a holistic view of the individual, including environmental factors that affect a person's physical, mental, emotional, and spiritual well-being. It was first documented in the 16th century at the start of Spanish colonization, so it's hard to tell how early it began.

In Tapaz, Capiz, Philippines, the Siruhano maintained culture, religion, and medicine communicated with spirits that were thought to be associated with natural phenomena. *Siruhano* is a local term for "shaman," known as the first healer within the community. As a general practitioner and the primary dispenser of healthcare in the hierarchy of traditional folk doctors. Mostly elders of the barangays are knowledgeable in the use of medicinal herbs. Their skills are commonly handed down from one generation to another in a family line, involving apprenticeship. (Gomez, 2013).

According to Apostol (2018), the Filipino traditional health system was composed of various specialties: midwifery, pulse diagnosis, bonesetting, herbology, suction cupping, skin scraping, herbal steam and smoke, energy medicine, and other forms of metaphysical healing. Each area and group of people had its own set of healers who passed down their Knowledge to children at an early age. The common folk diagnosis is that patients become sick due to supernatural illness-causers such as a duwende (dwarf), a nuno, a lamang-lupa a creature from the earth or underground or under the soil, a tikbalang, or a kapre.

Siruhano usually includes forms of prayers, such as bulong whispering prayers or orasyon (oration or prayer recitation), while treating patients. They may also practice rituals to drive away evil spirits, such as the performance of the kanyaw (cutting and bleeding chickens, then draining their blood on particular perimeters of the house) or the slaughter of pigs to search for the right type of liver that would reveal the cause of an illness. Sacrificial offerings are also sometimes used during treatments. Some *siruhanos* choose to treat patients only on certain days of the week, such as Tuesdays and Fridays, or on the feast days of the Sto. Niño and the Black Nazarene, with the belief that healing powers are greater during those days (JAMA Network, 2013).

Like the general folk doctors, *Siruhanos* obtain their pattern through ancestry, apprenticeship/observational practice, or epiphany and are generally performed by the elders of the community, regardless of gender. Their practice has a combination of elements from Christianity and sorcery, which appear to be opposites since one involves faith healing while the other requires black magic, and witchcraft (Nolasco, (2013). The combinations are a reflection of the legacies left by the conversion to catholicism from Spanish colonization since the local people had direct contact with the Portuguese explorer Ferdinand Magellan and ongoing local practices before colonization. The *siruhano* cover natural and supernatural illnesses using a wide range of methods. Two common methods used are herbal medicine, and orasyon, healing prayers deriving from a bible equivalency called the librito (Fiscalina, 2013). They treat major and minor ailments. These ailments include but are not limited to: headache, fever, cold, toothache, dengue fever, wounds, Infection, cancer, intellectual impairment, and other illnesses thought to be caused by supernatural creatures (Fierro, 2013). Aside from biological treatments, patients may also come to *Siruhano* to form or break any form of relationship, from marriage to friendship (Lozano, 2016). Treatments are dependent on the type of sickness and on the *siruhanos* themselves.

Most folk healers in the Philippines believe that their medicinal and healing skills come from a supernatural being or are given to them by God. Their practice and methods of curing ailments involve superstitions, recitation of prayers, and religious rituals accompanied by the mediation of the Holy Spirit, herbology, hydrotherapy, massage therapy, and divination. Although often found active in rural communities, traditional Filipino healers can also be found in small urban and suburban neighborhoods. During Spanish times in the Philippines, the Spaniards refer to folk doctors or traditional as *mediquillos* or herbal scientists, *herbolarios*, and sometimes as superstitious quacks. They were even called by the Spaniards simply as *matanda* or the elder (Palis, 2006).

The dynamics of the traditional health system vary on the *Siruhanos* powers and forces (ability to do something well and their expertise to cure their patronizers) such as *hilot*, *mangluluop*, *manugluy-a*, *mangtatawas*, *mediko*, and faith healers.

The *Siruhano* as expert in *hilot* can be either *manughilot* or the *manugpabata*. As

manughilot, massager, folk massage therapist, and folk chiropractor, siruhano uses massaging techniques to treat sprains, fractures, and other similar conditions that affect the skeletal system and the musculatory system, including ligaments. The practice treats illnesses in a variety of ways based on its own universal Law and natural Law (physical manipulation, herbal remedies, and dietary/lifestyle advice). Manughilot is either chosen by maestros or master *siruhanos*, or through apprenticeship (Fajardo, 2013). Gender is not a limiting factor since they can be any gender. When chosen, their trainings include a pilgrimage to a sacred mountain to perform the oracions, or words enabling communication with the spirit world or the panawagan (Bibiano, 2013). Similar to the *siruhano's* practice, the hilot is a fusion of spiritual and medicinal practices with a physical manipulation and the focus of healing the whole body being the main distinctions between the two practices. Illnesses were referred to as pilay and were defined by imbalances in the body which are explained by their enkanto, or unseen entities, elements, and manifestations in the body. This practice shares similarities with India's Ayurveda and Traditional Chinese Medicine. The magpapaanak, the other "hilot", is the folk "midwife" who does prenatal visits and check-ups to pregnant mothers. Normally a woman, she delivers babies during childbirth and often performs the ritual called the suob (a form of "aroma therapy" performed while placed under a cloak) (JAMA Network, 2013).

Magluluop is another *Siruhano's* power to make diagnosis based on the resulting appearance of a burned concoction composed of freshwater shell or saltwater shell (kalanghuga), salt, a piece of palm leaves that were blessed by Catholic priests during Palm Sunday, and charcoal resulting from coconut shells, coconut midribs. The burning of these materials is done while placed inside a tin plate accompanied by prayers and invocations and the making of the sign of the cross three times over the body of the patient. Depending on the appearance and shape of the burned materials, mangluluop refers and sends the ill person to either the albularyo, the mediko, or the manghihilot for further treatment. After the ritual and after telling the patient to which folk doctor to go next, the freshwater or saltwater shell is powdered by the mangluluop and prayerfully applies the powder following the steps of how to make sign of the cross on the patient's forehead, palms, and plantar arches of the feet. The remainder of the concoction is then thrown under the stairs at the entrance of the home to prevent evil spirits from re-invading the house (Mateo, 2013).

The *mangtatawas* literally user of tawas is the *Siruhano's* power determining the cause and nature of illnesses through the use of potassium alum, locally known in the Philippines as tawas as one of the primary ingredients. The other materials used in the diagnostic procedure are candles, eggs, mirrors, plain paper, and paper used for rolling cigarettes (Orendain, 2013).

The manugluy-a is the *Siruhano's* special power that combines folk medicine and

supernatural techniques used to drive away evil spirits, engkanto or tamawo. It uses luy-a or ginger as tool to treat *tuyaw* that triggers patients from the intervention of *malain it ginhawa* or evil forces.

Lastly, the *siruhano*, as faith healers, are persons who were previously saved from illnesses or death and had encountered epiphanies or mystical experiences who became convinced that they were destined to help sick people after receiving healing powers bestowed upon them by the Holy Spirit or other supernatural beings. Some of them started as an albularyo, a mediko, or a hilot. Some faith healers are psychic healers (faith healers who heal patients remotely), whisperers of prayers (whispers prayers over the affected part of the body of the patient), prayer blowers (blows prayers on affected areas of the patient's body), anointers that rub saliva over the affected area of the patient, healers who hovers crucifixes and icons on the body of the patient, and psychic surgeons (folk surgeons who perform "surgery" on a patient without the use of surgical tools).

Along with other cultural traditions, the traditional health system began to fade in the 17th century and continued with the introduction of hospitals and Western medicine after the Americans arrived. It is the aspiration of the researcher to narrate the patterns, dynamics, and issues of the traditional health system with the purpose that this study will add to the body of Knowledge concerning the limited literature and shed light to showcase the rich culture of Tapaz, Capiz Philippines.

Statement of the Problem

The study generally aims to document and analyze the Siruhano: A Narrative on the Patterns, Dynamics, and Issues of the Traditional Healthcare System at Tapaz, Capiz Philippines. Specifically, the study aims to answer the following questions:

1. What are the underlying patterns, dynamics, and issues on the traditional health system at Tapaz, Capiz Philippines?
2. What are the themes based on the narratives of the siruhanos?
3. What are the different traditional health system at Tapaz, Capiz Philippines?
4. What are the traditional health systems that are still being used in the modern age?

Methodology

This study utilized qualitative research methodology to understand the patterns, dynamics, and issues in the traditional health system of Tapaznons and describing the themes behind the narratives of the siruhanos. Qualitative research stresses the socially constructed nature of reality. This design is naturalistic, emergent, and purposeful focuses on real-world situations as they unfold naturally. There is acceptance of adapting inquiry as understanding deepens. Cases for study, such as individuals or communities,

are selected because they are information-rich and illuminative (Denzin & Lincoln, 2011, Berg, 2012 as cited in the study of Bicular 2022). Specifically, this study uses qualitative narrative research design, which is collecting and telling a story or stories (in detail). Researchers write narratives about the experiences of individuals, describe a life experience, and discuss the meaning of the experience with the individual. A narrative research design is focused on studying an individual person. The researcher becomes the interpreter of the individual's stories, as opposed to the community.

Participants

Purposive sampling was used to identify the Ten (10) key informants through the three-generation test (Manuel, 1955 as cited in Bicular, 2020). However, the researcher has saturated the community with those who have Knowledge about the traditional health system. Unfortunately, only 5 ar well-known (pat-an) siruhanos came out (Barot, and Antit) and were determined in coordination with barangay health workers in the lowland barangays of Tapaz, Capiz Philippines. The siruhano or merko known as traditional herbal healers in the local community, were identified as participants of this study.

Locale of Study



Data Collection

Fieldwork, observations, informal and key informant interviews, and documentary and photographic analysis were used to gather data. These methods substantiate and triangulate the data elicited from the informants. For ethical considerations, necessary permits and disclosure information was secured from the informants prior to the conduct of the study.

Data Analysis

Data gathered through informal and key informant interviews were transcribed in verbatim. To make sense of the data transcripts, general inductive approach (Thomas, 2006) was used (see Figure 2). Emerging concepts were then arranged thematically. In

vivo coding (Saldana, 2009) was used since folk terms are participant-generated words from members of a particular culture, subculture, or microculture. Folk terms extracted indicate the existence of the group’s cultural categories (McCurdy, Spradley, & Shandy, 2005). The codes refer to a word or short phrase from the actual language found in the qualitative data record, “the terms used by [participants] themselves” (Strauss, 1988). This qualitative study utilized thematic analysis to interpret its findings. It focused on the important questions, topics, time periods, and events of the experiences of each individual. Through the process of horizontalization, all statements that were relevant to the participant's experience were listed, and each comment was considered to hold equal value. The findings were then interpreted and categorized accordingly into codes, which were all held verbatim. This was done by going through all interview transcriptions and labeling words, phrases, and sections of text that were related to the research questions of interest. Then, the codes were grouped into themes that aided the authors in answering each research question, enabling the authors to formulate the essence of the experiences of the participants, both individually and as a whole. All of these were manually done without the use of any qualitative software tool.

Results and Discussion

Out of 5 participants, the majority were males (80.00%), above 60 years old (80.00%), married (60.00%), unable to study or finish college education (60.00%), unemployed (80.00%), and Catholic (80.00%) (Table 1).

Table 1: Sociodemographic Profile of the Participants

Participant	Age	Sex	Civil Status	Education	Religion
A	75	Female	Married	Elementary Level	Roman Catholic
B	63	Male	Married	College Graduate	Roman Catholic
C	80	Male	Married	Elementary Level	Roman Catholic
D	61	Female	Married	Elementary Level	Roman Catholic
E	62	Male	Married	Elementary Level	Roman Catholic

Conceptual Analysis

Basic themes from the codes were developed and organized into five categories that eventually led to the theme. The statements gave way to seventeen codes that were grouped into 5 categories that were further arranged into four organizing themes, paving the way to the central idea of the study, which is the Patterns, Dynamics, and Issues in

Traditional Health System in Tapaz, Capiz (Figure 1, Table 2).

	Statement	Coding	Category	Theme
1.	Inherited the healing power from the parents.	Source of information	Pattern	Source of Knowledge
2.	Healing power comes from amulets and charms.	Source of healing power	Pattern	Source of Knowledge
3.	Started healing at an early age.	Years of practice	Pattern	Source of Knowledge
4.	Healings are all centered to God	Spiritual impetus	Pattern	Source of Knowledge
5.	Well-verse and or knowledgeable in the use of local medicinal plant.	Aptitude in herbal medicine	Pattern	Source of Knowledge
6.	Good and effective healing diagnosis and techniques	Healing approaches	Dynamics	Traditional healer's behavior
7.	Faith in traditional healing	Strong conviction	Dynamics	Traditional healer's behavior
8.	Chosen by spirits/supernatural beings as an agent to heal individuals.	Medium to heal	Dynamics	Traditional healer's behavior
9.	Willingness to serve clients	Commitment to serve	Dynamics	Traditional healer's behavior
10.	Utilization of healing practices	Strength to heal	Dynamics	Traditional healer's behavior
11.	Discrimination of the people from the community	Discrimination	Issues	Prevailing concerns
12.	Experienced being questioned and or interrogated by medical authorities	Legitimacy	Issues	Prevailing concerns
13.	Traditional healing does not uplift the economic status of healer/s	Poverty	Issues	Prevailing concerns
14.	Experienced aggravations that trigger fear and anxiety	Life threats	Issues	Prevailing concerns
15.	Lack of provision from the government to be recognized as part of the national heritage that promotes cultural inclusion	Government support	Issues	Prevailing concerns
16.	Healing methods and techniques used by traditional healers in their field of expertise (Manugtawas, Manuglu-a,manugbotbot: manugluop; manugban-aw; manugpabata; manughilot; manughimulso; manugtayhop; and manugpalayas sang malain nga espirito)	Commonly Applied Healing Approaches	Traditional Health System	Traditional Healing practices
17.	Healing methods that are widely used and available today	Healing Methods in Modern Age	Traditional Health System	Traditional Healing practices

Table 2. Thematic Analysis of the Study

The first primary organizing theme, sources of Knowledge, was linked into one of the categories of the traditional health system, which is the pattern or the sources of the “Siruhano’s Kina-adman” or ability namely: 1)source of information 2) source of healing power, 3) years of practice 4) spiritual impetus and 5) aptitude in herbal medicine. For the secondary organizing theme, namely “traditional healer’s behavior” was associated with 1) Healing approaches, 2) Strong Conviction 3)Medium in healing 4) Commitment to serve, and 5) Strength to heal.For the third organizing theme, prevailing concerns were connected to namely: 1)Discrimination 2) Legitimacy 3) Poverty 4)Life Support and 5) Government support. For the Third organizing theme, “traditional healing practices,” was associated with 1) commonly applied healing approaches, 2) healing methods in

modern age.

For the first primary theme, different ideas arose from the participants' answers regarding the sources of their Knowledge 1) "inherited the healing powers from parents," 2) "healing powers comes form amulets and charms," 3) "started healing at early age" 4) "Healings are all centered to God" 5) "well-versed and or knowledgeable in the use of local medicinal plant".

The second theme is traditional healers' behavior. The responses of the participants show that 1) good and effective healing techniques 2) faith in traditional healing 3) chosen by spirits/supernatural beings as an agent to heal individuals, 3) willing to serve clients and utilization of healing practices. For the third theme, which is prevailing concerns, the participants answered that 1) discrimination of the people from the community 2) experience being questioned and or interrogated by medical authorities 3) traditional healing does not uplift the economic status of healer/s 4) experienced aggravations that trigger fear and anxiety 5) Lack of provision from the government to be recognized as part of the national heritage that promotes cultural inclusion. In the fourth theme which is traditional healing practices, it tells that 1) healing methods and techniques used by traditional healers in their field of expertise such as: Manugtawas; Manugluy - a; manugbotbot; manugluop; manugban - aw; manugpabata; manughilot; manughimulso; manugtayhop; and manugpalayas sang malain nga espirito, 2) Healing methods that are widely used and available today.

Discussions

This study aimed to understand the underlying patterns, dynamics, and issues in the traditional health system, to describe the themes based on the narratives of the siruhano, to recognize the different traditional health systems, and to identify these various traditional health systems that are being used in the modern age at Tapaz, Capiz Philippines. Based on the authors' Knowledge, this is the first qualitative study pertaining to the narratives on the Patterns, Dynamics, and Issues of the Traditional Health System at Tapaz, Capiz Philippines, known as the home of Panay Bukidnon, which was one of the last indigenous group of people in the province. Local studies revealed that practitioners of folk medicine in the Philippines are mostly married Catholic males with low economic status and low educational attainment, which is similar to the findings of the current study. Similar foreign studies have also found that practitioners of traditional and complementary medicine are often males and married, whose ages range within the average interval of 60 and whose education level is elementary level. These sociodemographic profiles were all evident in the findings of the present study. Another study also found out that most of these healers inherited their supernatural powers of healing from their parents, while some of them use lucky charms and amulets, and other folk remedies when hearing the word "mutya" and "pakpak". It was also depicted in the study that

most of the “Pat-an” have started their healing journey at a young age and their healing is centered on God. The majority of them are well-versed in local traditional medicine plants which was their main prescription during their treatment. The majority of the participants have good and effective diagnosing attitudes toward their clients.

Practitioners have strong conviction in their field of practice because of their belief that they were chosen and had given gifts of prowess that defines their ability. They also show strong commitment towards their work and utilizes healing practices with their utmost skills. The challenges that most traditional healers experienced are the discrimination of the people from their own community and interrogation of the validity of their medical practices. Participants’ responses reveals that traditional health system does not uplift the economic status of healer/s that most of them do not rely on the payment of their clients. It can also be noted from the study that traditional healers experienced life threats that triggers fear and anxiety. Their responses also prevail that the practitioners don’t have any provision from the government for them to be recognized as part of the national heritage that promotes cultural inclusion which is very important to to the next generation.

The common traditional healing method of the “Pat-ans” in the community are “*manugtawas; manugluy - a; manugbotbot; manugluop; manugban – aw; manugpabata; manughilot; manughimulso; manugtayhop; and manugpalayas sang malain nga espirito*”. It was found in this study that all of these methods are still being used in this modern age.

Conclusion

Documenting the traditional healthcare system of Tapaz, Capiz Philippines through its “Siruhanos” provides a picture of the rich cultural beliefs on folk illness, folk etiology, diagnosis, and therapeutics. However, the culture is mixed with various other cultures that can be understood in the context of Philippine history. It can be argued that some Siruhanos are still preserving our culture even in the modern age by digesting the way how they discover and practice traditional healing. They become instrumental in ensuring that their fellow receives the health care a person needs regardless of gender and social status. In this context, this study traced the existence of traditional healers. It was found out that siruhanos are considered the “general practitioner” knowledgeable in most of the folkloric modalities, usually versed in the use of medicinal herbs and spiritual/supernatural interventions. Their procedures and rituals were observed with similarities in performing orasyon, hilot, and himolso; likewise, with their common healing paraphernalia such as “*ralanhan, tubig nga may orasyon, mutya* and other supernatural materials”. Although there are noted differences and similarities in the description of their practices and procedures, these key informants' healing practices are all centered on God with a pure intention to cure one's illnesses and to be of help to other people.

Siruhano cites the expensive consultation fees and medicine from the health professional that hinders the patients from consulting to them. It is undeniable that the social structure resulting from the conflict between people with different interests and resources has created an uneven distribution of power and resources in society, thus affecting these poor people. Moreover, people continue to create meaning from their health conditions, despite the prevailing explanation from the Western medical system. These meanings, through social interaction, develop interpretations of various illnesses that are acceptable to society. Therefore, people think that medical staff cannot cure a certain disease, so they must consult a Siruhano.

It can also be understood that Siruhanos, despite the discrimination of the norms and questions on the legitimacy of their health practices, continues to persist in order for them to serve their own community. They are unprotected by the Law because there is no provision in the constitution that could help them preserve their practices for the younger generation.

Recommendations

Hence, further studies on the patterns, dynamics, and issues and exploring the other features of traditional healing should be conducted and preserved as part of the locals' culture and tradition. If possible, a need to establish an organization for these indigenous healers is recognized so that they will not be exploited by this modern society and will continue to exist for generations.

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Teachers' Research Engagement and Challenges|: Bases for Mentoring Program

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Abstract

This study investigated the following questions: a. what is the demographic profile of teachers in terms of sex, age, length of service, and educational attainment? b. What is the level of teachers' research engagement in the areas of qualitative and quantitative research? c. What are the challenges of teachers in research in the areas of qualitative and quantitative research? d. What mentoring program will be formulated? This study is descriptive in nature. Data were collected from the 200 teachers from the Tapaz East and Tapaz West District, Division of Capiz, and were analyzed qualitatively. Results of the study revealed that 145, or 72.5 percent were young while 55 or 25.5 percent, were old. In terms of sex, 153 or 78 percent were female while 44 or 22 percent were male. In terms of length of service, 89, or 44.5 percent, were new, while 111, or 55.5 percent, were old. In terms of educational attainment, 125 or 62.5 percent were bachelor's degree holders, 55 or 27.5 percent were master's degrees, and 20 or 10 percent were Doctorate degree holders. In terms of the level of teachers' research engagement in the areas of qualitative research and quantitative research, 108 or 54 percent of the teachers were highly engaged; 67 or 33.5 percent of them were engaged; 20 or 10 percent were less engaged, and 5 or 2.5 percent were not engaged.

The majority of the teacher respondents agreed that the challenges encountered according to rank: additional workload and burden on the part of the teacher (42%), lack of time (16.5%), writing anxiety (14.5%), lack of support from the school (9.5%), lack of sufficient reference materials (9%), and inadequate knowledge regarding the conduct of research (8.5%). Most of the respondents encountered challenges in conducting research, like the lack of time, had anxieties in writing and conducting the study, and perceived research as an additional burden on their part. Additionally, analyzing the quantitative and qualitative data in identifying the issues to be investigated has been a tough challenge for them as well. And so, the researcher of this study has made a mentoring program to resolve the challenges and difficulties experienced by the teachers who conducted the research and will be used by future teacher-researchers.

Keywords: Engagement and challenges, descriptive, research, teacher-researchers, Philippines

Introduction

A nationwide initiative to encourage teacher research participation should start with defining the desired behaviors and the barriers. While most agree that the workforce lacks the skills required to adapt to the new curriculum, the nature of the 'need' is less clear, both in general and in connection to teacher research engagement. It's hardly surprising that the workforce isn't now demonstrating these behaviors. But it's unclear where they "fell short." It's also unclear how this affects the new curriculum's success (Tripney et.al, 2018).

Mehrani (2015) examined teachers' research commitments to give light on whether, which, and when instructors employ educational research. This type of analysis is crucial to closing the research-practice divide because it allows us to study academic research discourse from the perspective of individuals who have been mostly excluded from it. When questioned about their research involvement, teachers frequently alluded to their university years and, most often, to term projects they had submitted to their instructors as part of their course requirements. Thus, teachers' positive responses to queries regarding their level of participation may not represent their current research activities but rather some academic rules and regulations. That is, teachers may have studied or conducted research as part of their original teacher training or further degree courses, but not necessarily as teachers. This confirms that many teachers' research commitment ends with university graduation.

Although difficult, conducting research can help teachers improve their knowledge and skills. Teachers see research as a key tool in producing and delivering great learning outcomes to pupils. It is also useful and practical for both teachers and students. According to Ulla et al. (2017), completing research is crucial to professional progress. This allows them to investigate classroom and school problems and solutions while expanding their knowledge and skills for classroom teaching.

However, professors who enjoy research find it difficult to continue for numerous reasons. According to Ulla's research, here are key scientific problems in 2018: foremost, lack of school support in terms of finances, work, and training. Lack of reference materials refers to a lack of school library, other sources such as current periodicals and magazines, or even internet access. Third, due to increased effort and strain on teachers, performing research has become a burden and is treated less. One factor is nervousness about writing and lack of time. Fourth, lack of understanding about conducting action research due to others not being able to attend research training.

Statement of the Problem

In this connection, the researchers probed to study the research engagement and challenges teachers encountered to be a basis for the mentoring program through an action plan as part of the recommendations. This study aimed to determine the level of teachers' engagement and the challenges in research as a basis for formulating mentoring program in the Capiz State University during the year 2022. Specifically, this study sought to answer the following questions:

1. What is the sociodemographic profile of the respondents in terms of sex, age, length of service and educational attainment?
2. What is the level of teachers' research engagement in the areas of qualitative and quantitative research?
3. What are the challenges of teachers in research in the areas of qualitative and quantitative research?
4. What mentoring program will be formulated?

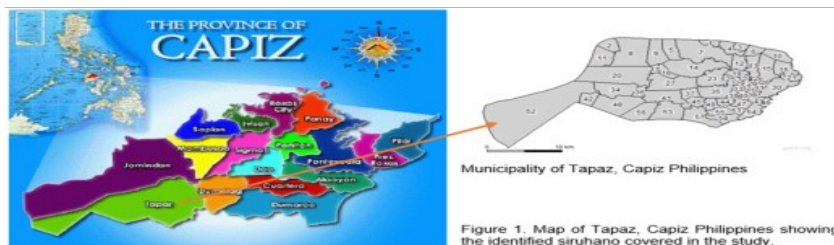
Methodology

This study employed a descriptive research method. According to McCombes (2020) descriptive research aims to describe a population, situation, or phenomenon accurately and systematically. Thus, the nature of the research investigation was a descriptive design, which used a researcher-made questionnaire validated by a panel of experts (Ysulan, 2021).

Participants

The respondents of this study were permanently employed teachers of Tapaz East and Tapaz West Districts, Schools Division of Capiz. To determine the number of actual respondents, they were purposively chosen. According to Arikunto (2010: 183), purposive sampling is the process of selecting a sample by taking a subject that is not based on the level or area but it is taken based on the specific purpose. Purposive sampling is where a researcher selects a sample based on the needs of the study. After a series of selections, 100 teachers from both districts were taken as respondents.

Locale of the Study



Data Collection

The study's independent variables were the areas of qualitative and quantitative research. The dependent variables are engagement and challenges. The present study determined differences in the teachers' research engagement and challenges to qualitative and quantitative research. The instrument was composed of 2 parts: part 1 is about the research engagement survey, and part 2 is about the challenges. The statements were taken in the Bullo and Labastida (2021) for the challenges and collected literature for the engagement. To check whether the questions are appropriate, clear, reasonable, non-superficial, non-ephemeral, typical, and sufficiently inclusive, Good and Scates Criteria of Validation were employed, and conducted pilot testing, as the objective of the pilot work was to try out the questionnaire to identify the irrelevance, unnecessary statements, confusing items and words, difficulties of the respondents with the instructions, sequence, and format and to determine the average amount of time needed to finish answering it. The researcher made google forms and personally distributed the questionnaire so that the purpose of the study would be properly understood by the respondents and so to ensure the accuracy of the responses.

Data Analysis

The test result for the respondents will be tabulated and computed using the following statistical treatments; Frequency was used to describe the sociodemographic profile of the respondents; Mean was used to identify the level of teachers' research engagement in the areas of qualitative and quantitative research. Rank was used to identify the challenges of teachers in research in the areas of qualitative and quantitative research and to identify the mentoring program that is needed by the teachers.

To analyze the data on the level of teachers' engagement, the following scale was used

Mean Score	Level of teachers' research engagement in the areas of qualitative and quantitative research
4.51– 5.00	Highly engaged
3.51 – 4.50	Engaged
2.51 – 3.50	Less engaged
1.51- below	Not engaged

Results and Discussion

In terms of age, 145, or 72.5 percent, were young, while 55, or 25.5 percent, were old. In terms of sex, 153 or 78 percent were female, while 44 or 22 percent were male.

In terms of length of service, 89, or 44.5 percent, were new, while 111, or 55.5 percent, were old. In terms of educational attainment, 125 or 62.5 percent were bachelor's degree holders, 55 or 27.5 percent were master's degrees, and 20 or 10 percent were Doctorate's degree holders.

In terms of the level of teachers' research engagement in the areas of qualitative research and quantitative research, 108 or 54 percent of the teachers were highly engaged; 67 or 33.5 percent of them were engaged; 20 or 10 percent were less engaged, and 5 or 2.5 percent were not engaged.

The majority of the teacher respondents agreed that the challenges encountered according to rank: additional workload and burden on the part of the teacher (42%), lack of time (16.5%), writing anxiety (14.5%), lack of support from the school (9.5%), lack of sufficient reference materials (9%), and inadequate knowledge regarding the conduct of research (8.5%).

Conclusion

1. The majority of the respondents were females, and bachelor's degree holders and their ages ranged from 30-40 years old.
2. The teacher-researchers were challenged by the lack of time, experienced writing anxiety in conducting research, and viewed it as an additional workload and burden on their part.
3. Furthermore, they also experienced difficulties in analyzing quantitative and qualitative data and identifying issues and problems to be investigated. A mentoring program should be proposed as a means of enhancing the teacher's prowess in research.

Recommendations

1. Teachers should be provided with adequate research seminars, training, and workshops, and they must attend these on a regular basis to acquire research skills and processes in order to produce quality research;
2. School Heads and Administrators should extend their support to teachers by sending them to research seminars, training, workshops, and other activities designed to better prepare them to conduct research and develop a growth mindset of time management.
3. Future Researchers should conduct further research related to this study to deepen the study to a different extent and to address specific research problems of classroom teachers mainly, and a mentoring program on research should be implemented to help teachers avoid problems in the future conduct of their research.

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The Modular Learning Approach in the New Normal: An Assessment

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Ann D. Navarra, and Ma. Auxilium D. Funtilon

Abstract

This study was conducted at Capiz State University- Tapaz Satellite College during the Second Semester of the Academic Year 2020-2021. Respondents of the study were the officially enrolled students of the satellite college. The main aim of the research was to find the level of the assessment of the students on the Modular Learning Modality of CapSU-Tapaz and the problems they have encountered.

Most of the Respondents were males, young (22 years old and below), and were from BEED 3. Respondents assessed the Modular Learning to be effective and the top five most problems they have encountered were: No/Intermittent Internet connectivity; they find it hard to understand some parts of the modules; Financial Problems to buy necessary gadgets like laptops, cellphones, load, and others; Distractions on their households/environment when they answering their modules, and lastly Lack of time to answer their modules because they are doing household chores.

Keywords: Modular Learning, Students, Assessment

Introduction

The outbreak of the new coronavirus infection known as COVID-19 has turned out to be a global health emergency. It has rapidly affected thousands of people, who are sick or being killed due to the spread of this disease. The COVID-19 pandemic also resulted in a widespread disruption such as travel restrictions, closure of schools and global economic recession.

Most countries around the world have temporarily closed educational institutions to contain the spread of the virus and reduce infections (Tria, 2020). Face to face engagement of students and teachers within the school has also been suspended. The Philippines is in the process of adapting to the new normal form of education at present, and continuous innovations of educators and active involvement of other stakeholders are the driving force for its success.

Modular learning is the most popular type of Distance Learning. In the Philippines, this learning modality is currently used by all public schools because according to a survey conducted, learning through printed and digital modules emerged as the most preferred distance learning method of parents with children who are enrolled this academic year (Bernardo, J). This is also in consideration of the learners in rural areas where internet is not accessible for online learning.

The teacher takes the responsibility of monitoring the progress of the learners. The

learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging among others. Where possible, the teacher shall do home visits to learners needing remediation or assistance (Llego, N.D.). Printed Modules will be delivered to students, parents or guardians by the teachers or through the Local Government Officials. Since education is no longer held within the school, parents serve as partners of teachers in education. Parents play a vital role as home facilitators. Their primary role in modular learning is to establish a connection and guide the child. (Flip Science, 2020).

The use of modules encourages independent study. One of the benefits of using modules for instruction is the acquisition of better self-study or learning skills among students. Students engage themselves in learning the concepts presented in the module. They develop a sense of responsibility in accomplishing the tasks provided in the module. With little or no assistance from others, the learners progress on their own. They are learning how to learn; they are empowered (Nardo, M.T.B,2017). Other advantages of modular instruction include more choice and self-pacing for students; more variety and flexibility for teachers and staff; and increased adaptability of instructional materials.

The key purpose of this research is to find out the effectiveness and challenges encountered by the students in the implementation of Modular Distance Learning in the Tertiary Level. Also, this study aims to ascertain the methods, interventions or solutions of every educational institutions as well as the government in providing assistance to students, parents and teachers who are having difficulty in this new learning modality.

Statement of the Problem

This study was generally aimed to determine the level of effectiveness and challenges met by the students of Capiz State University Tapaz Satellite College. Specifically, it aimed to provide answers on the following questions.

1. What is the profile of the respondents such as age, sex, course and year level?
2. What is the level of the assessment on the modular approach in delivering the quality of education in today's time?
3. What are the top 5 problems they met as they pursue their education under the Modular Approach of Instruction delivery?

Methodologies

Research Design

The study used a quantitative approach using a descriptive design.

Respondents of the Study

The respondents of the study were the students of Capiz State University -Tapaz Satellite College enrolled during the Academic Year 2020-2021. The respondents were identified using Convenience Sampling.

Instrument

The primary instrument to collect the data was a standardized questionnaire that was responded by the respondents in a google form document. The questionnaire was adopted from International Module Evaluation Questionnaire at <https://www.surveymonkey.com/r/3SZYF6F> . The interview to triangulate the data for the problems encountered by the students was done using Google Meet and it was recorded.

Data Collection Procedure

The necessary permits were secured prior to the distribution of the questionnaire. The link had been sent on the Group Chats of the student. One week time schedule were being allotted by the researcher and then, links were being closed. The data were collected as soon as the respondents finished answering the questionnaires on the specified time frame. Each accomplished questionnaires were inspected to check if all the items are answered. Tallying of data were personally made by the researchers. Furthermore, the data were tabulated, analyzed, and interpreted using frequency, percentage, mean, and SD

For the triangulation of the data on the problems encountered by the students, an interview had been conducted. Ten students were conveniently selected who willingly submitted themselves to take part on the interview. The interview was conducted using google meet and it was recorded.

Result and Discussions

Table 1
Profile of the Respondents

	Frequency	Percentage
Sex		
Male	63	81%
Female	14	19%
Age		
Young (22-below)	59	77%
Old (23-up)	18	23%
Course and Year Level		
BEED 1A	7	9%
BEED 1B	15	20%
BEED 2A	10	13%
BEED 2B	0	0
BEED 3	23	30%
BSED 1	1	1%
BSED 2	1	1%
BSED 3	9	11%
BSA 1A	0	0
BSA 1B	0	0
BSA 2A	7	9%
BSA 2B	2	3%
BSA 3	2	3%
BSA 4	0	0
Total	77	100%

The collected data showed that there were 77 respondents in total who responded to the questionnaire being floated via google form. As to their sex, sixty-three (63) or 81 % of them were males and fourteen (14) or 19% of them were females. In regards to their age bracket, fifty-nine (59) or 77% of them belong to the bracket of young (22 years old -below) and eighteen (18) or 23% of them belong to the category of old (23 years old -above). As to their course and year level, seven (7) or 9% were from BEED 1A, fifteen (15) or 20% were from BEED 1B, ten (10) or 13% were from BEED 2A, none from BEED, twenty-three (23) or 30% were from BEED 3, one (1) or 1% from BSED 1, one (1) or 1% from BSED 2, nine (9) or 11% were from BSED 3, none from the BSA1A, none from the BSA 1B, seven (7) or 9% from BSA2A, two (2) or 3% from BSA 2B,two (2) or 3% from BSA 3 and none from the BSA 4.

This clearly shows that majority of the respondents were males; young (22 years old and below) and most of them were from BEED 3 of the Teacher Education Department.

Table 2

Level of the Assessment on the Modular Approach

Category	No. of Respondents	Mean	SD
Level of Assessment on the Modular Approach	77	3.95	.492

<i>Scale</i>	<i>Description</i>
4.21-5.00	Highly Effective
3.41-4.20	Effective
2.61-3.40	Not Effective
1.81-2.60	Moderately not effective
1.00-1.80	Highly not effective

The results showed that the delivery of the Modular Approach being adopted by the CapSU-Tapaz Satellite College is Effective. This had been shown on the data with a mean of 3.95 and a standard deviation of .492.

This means that students found it effective to cater their educational needs while the satellite college is adapting on the new normal delivery of education. Considering with the limitation of resources, and some faculty members find it new and hard for them to prepare quality modules out of preparing the usual lectures on the previous time; still the satellite college stands true and firm to the vision of the university, to be the center of academic excellence by delivering quality service to all.

Table 3

Problems Encountered by the Students

		Frequency	Percentage
1	Poor Internet Connectivity	77	100%
2	Difficulty in understanding some parts of the module	65	84%
3	Financial Problems (laptops, cellphones, load, etc)	63	82%
4	Distractions in their household/ environment	54	70%
5	Lack of time to answer their modules because they have a lot of household chores.	53	69%

On the survey conducted, the respondents were given the direction to list down the top 5 problems they have encountered if there is/are in this modular learning modality. After collecting their responses, all of it were being ranked accordingly. Then, the top five of the most problems encountered by the students were being selected.

First is the poor internet connectivity which is really a perennial problem in Tapaz. Considering the topographical situation of the Municipality, most of the places or Barangays don't have a good connection of the internet or even cellphone signal. During the virtual discussion, Participant 5 said that, *"Isa ito sa mga problema po na hindi maiiwasan kahit na po noong face to face pa. Napakahirap pong makahanap ng magandang signal at kung minsan pa kailangan pang hintayin at bantayan ang oras para matyempuhan ang magandang koneksyon sa paggamit ng internet"* (Its one of the unavoidable problems even we are in the face to face. Its hard to find a place that has a good signal and sometimes you have to wait for the time where the connection in the internet is good). On the other hand, Participant 1 added that, *"in my case, I have experienced of having poor internet connection especially sa Upland brgy kami. I really need to find a place to access a better connection"*, which had been agreed by Participant 7 saying that, *"poor internet connectivity is the most problem that we faced"*.

As the saying goes, "if there's a will there's a way". Despite on this problem encountered by the students, they still find ways and means to survive. It is their unwavering commitment in their

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As the saying goes, "if there's a will there's a way". Despite on this problem encountered by the students, they still find ways and means to survive. It is their unwavering commitment in their education that drives them to do more and be better.

Second, is the difficulty in understanding some parts of the module. Participant 3 exclaimed that, *"There are instructions that are difficult to understand and sometimes lead to misinterpretation. There are also parts that has no exact examples that made me do the wrong things or gets me answer wrongly"*. Also Participant 10 added that, *"Not all are gifted, sir. Mabudlay gid Katama ang self-learning. That is why need gid ang discussion sang teacher or instructor bisan sa gamay lang nga time para ma-enlightened man ang mind namon nga learners sa mga bagay nga wala naintindihan"* (Not all are gifted sir. Its hard to do self-learning. That is why we need the discussion of our teacher or instructor for us to be enlightened for the lessons we don't understand). Participant 6 continued further that, *"muna nga ga-communicate kami sa amon nga mga subject teacher so thankful man kami nga mga students kay ga-respond man ang mga teachers/professors"*(That is why, we are communicating with our subject teachers and we are thankful because that they are responding to us as well).

Modular Mode of Instruction entails a self-learning pace where students really find it hard to adjust because they are more adaptive on a regular face to face instruction. Modules will not suffice the total learning of the students thus they really need the assistance and support of every course facilitators to fully understand the topics included on

their respective modules. Hence, the new normal of education today really need a collaboration between the Course Facilitators, students and Parents for a satisfying learning of the students.

Third, Financial Problem or lack of funds to buy necessary gadgets like laptops or cellphone or even to buy a load to supplement their studies. Although, the students were already enjoying free tuition on their courses, financial support is still an issue. As what have been mentioned by Participant 2, *“Isa din ito sa mga pinakaproblema ko. As a working student, this is one of the reasons why I’ve worked hard para matustusan ng boss ko ang mga needs ko sa school. Napahirap but I have to survived”*(Its one of my problems. As a working student, this is one of the reason why ive worked hard so that my boss will support my needs in school. It’s hard but I have to survive). As agreed by Participant 8, *“Isa sa mga problema ko kapin pa legad wala ko cellphone, kabudlay pirmo lang late sang mga update sa school about online class, module distribution kag kung nano pa. Kaabot gani nga wala na ako kakuha exam tungod indi ko updated”*. (Its one of my problems before especially that I don’t have a cellphone, its hard that I am always late for the updates about our online class, module distribution and others. There was even a time that I wasn’t able to get an exam because I’m not updated).

Financial problem is truly one of the prevalent problems in the life of the students. Yet despite of these, they still find ways and means to survive and acquire the education they deserved. Scholarships and grants were a big help to them yet most of them were still challenged by the fact that if they will not strive harder, they will not make it at the end of the line.

Fourth is the distractions in their households/environment during the time that they accomplishing their modules. Participant 8 shared that, *“Isa sa mga problema nga indi gid malikawan kay ang amon balay sa tupad lang ka manukan kag kung mag-online class, ang pamalo ka manok todo pa sa wakal ka reporter”* (Its one of the problems that I can’t avoid because our house is near a poultry house and during our online class, the sound of the chickens were even louder than the voice of the reporter) . Participants 1 and 2 who both reside near the highway agreed further, *“may mga oras nga indi na ako kabati sang mga instructions kung mag-online class tungod sa gahod sa palibot. Kag may mga punto gid nga masabad ang iban ko nga family members nga naga-istorbo gid sa akon. Kag ini naka-apekto gid sa akon sa pamaagi nga indi ako ka focus”* (There were times that I could not hear anymore the instructions during our online class because of our noisy environment. And there are times that my family members were disturbing me and this affect my focus).

Various sources of distractions will really affect the performance of the students. One of the best mechanism is adopting on the policy of a home learning space where they can have a peaceful and comfortable space on their homes where it is there that

they will be accomplishing their tasks and activities on their modules or even a place to stay for their scheduled online classes.

Fifth is the lack of time to answer their modules because they are doing household chores and some of them were working students who tried to find ways and means to support their needs. Participant 1 commented that, *“this is really a problem kay may mga oras nga gusto ko magtuon pero indi ako ka focus tungod sa olobrahon sa amon balay”* (This is really a problem because that there are times that I want to study but I cant have my focus because of my household chores). Participant 9 continued that, *“Yes, kulang gid ang time para mag-answer bisan pa may time management. Especially kon ikaw nasarigan mag-obra sa sulod ka balay”* (Yes, there is no ample time to answer despite that there is a time management, specially that I am the one responsible for our household chores).

The students' responsibilities on their respective home might not be excused yet understanding and support from their family members should be with utmost concern. On the new normal, its truly an abnormal setting for all us yet we have to live by it. By simply, giving considerations and full support specially during the time that the students were doing their modules or accomplishing the performance tasks will have a positive impact on the performance of the students.

Other problems encountered by the students were: inappropriate schedule for learning, misuse of technology, decreased motivation, weakened relationship of teachers and students, feeling of anxiety, attitude of some of the instructors, and lack of family support.

Conclusions

On the aforementioned results, the Researchers were able to formulate the following conclusions:

1. Majority of the respondents were males, young and from BEED 3.
2. The respondents find the modular learning modality of CapSU-Tapaz Satellite College to be effective.
3. The top 5 of the most problems encountered by the students in this modular instruction were: Intermittent/no internet connectivity is the most problem encountered by the students; Difficulty in understanding some parts of the module; Financial Problems (laptops, cellphones, load, etc); Distractions in their household/environment; and Lack of time to answer their modules because they have a lot of household chores.

Recommendations

1. Academic leniency should be strengthened by the Faculty. Most especially for the submission of the requirements and accomplishing assessments/performance tasks by the Students.
2. Intermittent or No Internet connection is a perennial problem in Tapaz. The ongoing projects of establishing Connectivity by the LGU in the Barangays will be beneficial to every populace. But as of the moment, students should really find time, exert an effort and spend for their connections. They can go to a place where they can have the signal so that they can research and do their activities. To adjust and live in the new normal is really hard, yet this problem should not be an excuse to boost and improve their selves by accessing the internet that can give them additional knowledge and information for them to accomplish their tasks.
3. A limited online class that will be agreed by both Students and the Course Facilitators should be done on their respective subjects. On this mechanism, once a week or twice in a month meeting/s will give the opportunity for the discussion of the topics included in the modules that will help students to better understand their lessons before doing the assessments or activities in it.
4. Social Media platforms should be utilized like Facebook and Messenger that will serve as a good avenue of enhancing the communication and lesson presentation of the Course Facilitators and the Students. If in any case, communication through text messaging or call through cellphone should be used as well.
5. Despite of the problems encountered by the students, they should build a strong, healthy and positive mindset that they can overcome these trials and hindrances.

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Relevance of School Related Factors to Employability of Graduates at Capiz State University

Ricky D. Fecara and Veronica F. Gardose

Abstract

This study aimed to determine the relevance of school related factors in terms of School Related Factors such as Curriculum and Instruction, Faculty and Instruction, and Student Services. Likewise, to identify competencies learned by graduates that are useful in their present job. Descriptive type of research was utilized in the study. Results revealed that promoting good professionalism have the highest relevance to their job placement followed by knowledge on current practices in teaching and learning and cafeteria or canteen and practical and application component obtained the least mean score. While Communication and Human Relation Skills are the competencies useful to the graduates. Employees of higher education institutions should be aware of the image they project while dealing with the students and they should keep on reminding their value as part of the students' development of future professionals.

Introduction

A nation's economy runs on the knowledge and skills of its people. The requirements for skills evolve with external investment, technological advances and globalization. To keep pace with changes, people need to acquire skills to be productive and earn a living and all of these can be achieved through education. Education is the most important mechanism for the empowerment of people for their socio-economic, political and technological development. The learning environments of higher education institutions must take cognizance of this in structuring their course programs. For the purpose of quality assurance of course programs, higher education institutions can contribute meaningfully by applying the principles of tracer study to create sustainable learning empowerment environment for the continuous professional development of past students. While many higher education institutions provide training to a variety of clients, most forget them as soon as they graduate and leave the institutions' environment with no means to contact them. Employability upon graduation and over the long term is, understandably, the major priority for the vast majority of our University students. Over the past two decades or so the University has increasingly offered a wide spectrum of higher education courses that provide students with the necessary tools enabling them to develop their employability skills, to heighten their own awareness of these skills and to improve their ability to articulate them. These skills, once acquired, of course need to be honed throughout one's working life, being put into practice not only in job searching and during interviews but also in personal development planning and in making the most

of work experience opportunities. There is no doubt that a student's lifelong learning capability and therefore his/her employability are enhanced through their university experience. The core mission of University continues to be the creation of an open space of higher learning within a life-long perspective. This is based on equity of access and should be seen as an opportunity for individual development, allowing all those capable of benefiting from higher education to integrate better into the global knowledge society.

With the steady increase in the number of College graduates, employment opportunities for them have become very competitive. Most universities have the policy to strengthen existing links and to create new bridges with the world of work. In line with the mission of the Capiz State University, a prominent University recognized for its commitment to innovative programs in addressing society's challenges, the College evaluates how its graduates have paired in their employment scene after their graduation. The Cooperative Education also of this University plays an important role in developing the skills of the CapSU graduates which is done through the different industries whom the institution is linked with. The graduate tracer study provides the desirable information as to what is happening to the graduates when they join the world of work. It is equally important to find out how adequate is the training provided by our institution in the overall performance of their career life, the extent by which the knowledge, communication and other skills have been developed. This tracer study is also a way which can provide valuable information for evaluating the results of education and training of an institution and thereby serve as a basis for future planning activities. It is for the above purpose that a tracer study on the graduates of CapSU Tapaz is proposed by the researcher.

The study quotes the speech made by Y.B. Dato Eri Mohamed Khaled Nordin, Minister of Higher Education Malaysia, in a seminar entitled "Enhancing Graduate Employability: Issues, Concerns and the Way Forward" (July 21, 2009). Today's challenging economic situation means that it is no longer sufficient for a new graduate to have knowledge of an academic subject; increasingly it is necessary for students to gain skills which will enhance their prospects of employment.

In the study conducted by Lalican (2007) she emphasized that the acquisition of knowledge in the undergraduate specialization, skills and competencies will also promote productivity, efficiency and expertise in the graduates' present job.

On Employment Status (Miranda, 2000), the provision of written agreement notwithstanding and regardless of the oral agreement of the parties, an employment shall be deemed to be regular where the employee has been engaged to perform activities which are usually necessary or desirable in the usual business or trade of the employee; except where the employment has been fixed for a specific project or undertaking the completion or termination of which has been determined at the same time of engagement of the employee or where the work or service to be performed is seasonal in na-

ture and employment is for the duration of the season. One of the most serious problems in the Philippines in the 1980s and early 1990s concerned the large number of students who completed college but then could not find a job commensurate with their educational skills. If properly utilized, these trained personnel could facilitate economic development, but when left idle or forced to take jobs beneath their qualifications, this group could be a major source of discontent.

Statement of the Problem

Specifically, it will seek to answer the following questions:

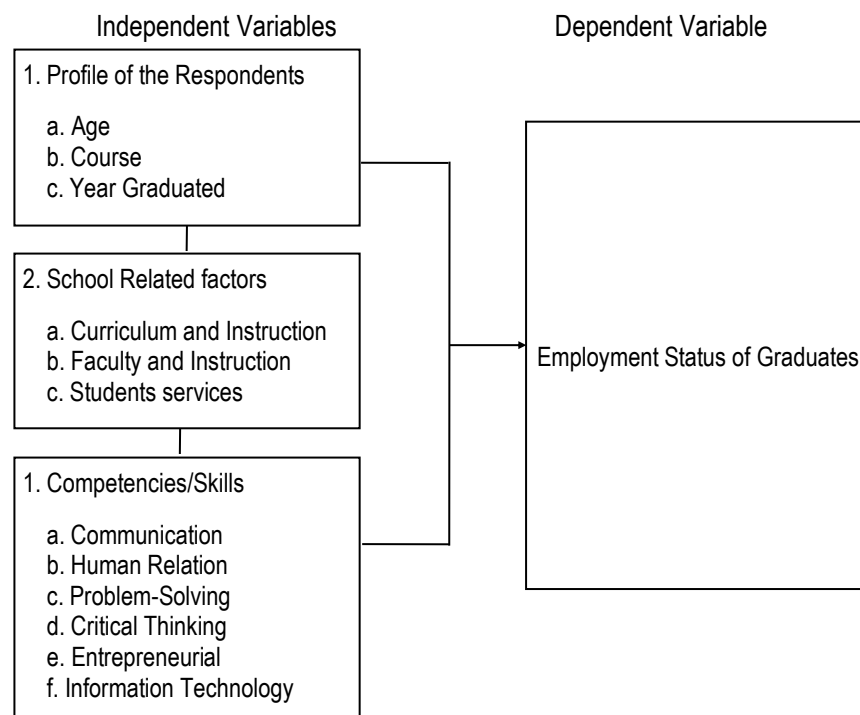
1. To determine the job placement profile of the respondents in terms of
 - 1.1 Job after graduation
 - 1.2 Present employment
 - 1.3 Employment Status and Nature of Employment
2. To determine the relevance of the following school-related factors to the job placement of the respondents in terms of
 - 2.1 Curriculum and Instruction
 - 2.2 Faculty and Instruction
 - 2.3 Student Services
3. To identify the competencies / skills and work related values developed by Capiz State University – Tapaz Satellite College considered by the respondents useful in meeting the demands of their present work.

THEORETICAL FRAMEWORK:

Providing employment for an expanding population is one of the greatest challenges nations must have to face the present time. This is particularly acute in developing countries where the rate of population growth far outstrips job opportunities. Mounting a drive to meet that challenge should come not only from the government but also from the private sector. *Importance of job creation.* Not only do jobs in the private sector provide employment opportunities for the members of the Labor force which endow them with purchasing power through the incomes they receive as compensation for their contribution on product but at the same time job creation is responsible for the so-called multiplier effect. The birth of new manufacturing establishment, for instance, will help bring about the use of raw materials that are indigenous in the country and to certain extent will contribute to the ability of the government to discharge its responsibility to the people which it seeks to serve through the taxes they pay. With high incidence of employment rate, not to say, full employment, aggregate purchasing power of the Labor force helps boost the economy through increasing production, since they are all consumers thereby resulting in the efficient use of country's resources. Also with more people gain-

fully employed, hours are put to productive use thereby affording little room for misdemeanors and criminality than when individuals have all the time for themselves. Labor must be made acquainted with all these gains that partly accrue to their interests. And so they have a moral obligation to insure the continuous operation of business establishment if only for their own sake and not those of the owners of the business alone. Any closure or contraction of business operation affects labor's interest and the economy as well. Further, tracer studies can provide the information needed to reform educational programs to bring about the match between the requirements of the employment world and study. Surveys do have their disadvantages for it is sometimes difficult to locate graduates and let them complete questionnaires. Schomburg (2007) warns that the graduates might not always be able to identify the relationship between the knowledge acquired during study and their professional lives and that research findings are valuable inasmuch as planners can turn the findings into concrete reforms. However, the main purpose of this paper was for the researchers to investigate the employment status of the graduates and determine what percentage of the graduates had acquired first job after they graduated. The concepts that the researchers had to indulge in were to look on the graduates' important profiles and to assess whether or not these profiles had satisfied their expectations so that whatever results they could account for would be a good venue of curriculum enhancement as well as institutional development.

CONCEPTUAL FRAMEWORK



Research Design and Methodology

This tracer study used descriptive research design. Along with this, Calderon as cited by Laguador (2010) emphasized that descriptive research is a purposive process of gathering, analyzing, classifying and tabulating data about the prevailing conditions, practices, beliefs, process, trends and cause and effect relationship, thereby making adequate and accurate interpretations about such data with or without the aid of a statistical method.

Subjects

The study used non probability sampling of subjects. In this sampling design, the researchers selected the respondents who are conveniently available. The respondents of the study were 78 Bachelor of Science in Elementary Education, and 44 Bachelor of Science in Agriculture graduates from 2016-2020.

Instrument

Standardized questionnaire was the main instrument of the study (adapted from the study of Luisa Macatangay, 2013). The questionnaire consisted of different parts namely: general information, educational background, trainings/advance studies attended after college, employment data, and views on curriculum, views on teaching staff, and views on resource facilities/services.

Data Collection

Names, addresses and contact numbers of the graduates from 2016-2020 was taken from the registrar's office. The researcher administered by sending through social media the questionnaire to the graduate-respondents.

Data Analysis

The data collected was classified, tabulated and coded for analysis. The following statistical tools was employed in interpreting the data that was obtained from the survey. Percentage was used to analyze the profile of the respondents with respect to the selected variables. Weighted Mean was used to determine the degree of perception of the graduate- respondents in the usefulness and relevance of their educational background to their employment status. Rank was used to arrange in a series of ascending or descending order of importance. The respondents were given four (4) options to determine the relevance of school related factors to the job placement of the respondents. To arrive at a verbal description of each item, the arbitrary numerical guide was followed: 3.5 – 4.00: Very Relevant; 2.5 – 3.49; Relevant; 1.5 – 2.49; Slightly Relevant; 1.0 – 1.49: Not Relevant.

RESULTS AND DISCUSSIONS

Table 1. Socio- economic profile of the respondents

Profile	Means	Percentage
Employment		
Employed	76	62.30
Unemployed	46	37.70
Self-Employment	52	42.60
Status of Employment		
Permanent	30	24.60
Temporary	22	18
Contractual	24	19.7
Income		
1. 10,000.00	42	34.4
2. 5,000.00	28	23

Majority of the respondents (76 or 62.30%) were employed after graduation compared to those graduates who were unemployed (46. Or 37.70%). This is an indication for a high demand in Education and Agriculture graduates. Majority of the graduates (46 or 37.7%) are contractual workers, (24 or 19.7%) are permanent workers, (30 or 24.6 are temporary workers while (22 or 18%) are self-employed. (52 or 42.6%) are earning above Php 10,000, (42 or 34.4%) are earning Php 5,000-10,000 while (28 or 23%) are earning less than Php 5,000.

Relevance of School Related factors to the job placement of the respondents in terms of

A. Curriculum and Instruction

Table 2. Relevance of Curriculum and Instruction to the job Placement of the respondents

Curriculum	Mean	Interpretation	Rank
Promoting Good Professionalism	3.58	Very Relevant	1
Inculcation of Positive Values	3.52	Very Relevant	2
Overall Study Program	3.45	Relevant	3
Knowledge Acquired	3.45	Relevant	3
Skill Required	3.37	Relevant	6
Current Issues & Development	3.39	Relevant	5
Theoretical Component	3.34	Relevant	7
Practical & Application Component	3.34	Relevant	7
Composite Mean	3.43	Relevant	

Note: descriptive meaning is based on the following scale. Very Relevant (3.51-4); Relevant (2.51-3.50); Slight relevant (1.51-2.5); 1-1.50) Not relevant

As shown in table 2, the relevance of school related factors in terms of curriculum and instruction to the job placement of the respondents are promoting Good professionalism with a mean of 3.58 and Inculcation of positive Values with a mean of 3.52. And the least relevant is theoretical component and practical application component with a mean of 3.34.

The composite mean score of 3.43 implies that the curriculum and instruction is considered relevant to the job placement of CapSU Tapaz graduates. It is important for university instructors to seize their student's career enthusiasm and foster a connection between the curriculum and potential future career applications. Providing students with an opportunity to connect their classroom learning, (online or face-to-face) with workplace relevance will result in many positive learning outcomes such as motivation, grit, and career goal setting. As stated by Schwartz, Gregg, and McKee (2018) "Guidance and information focused on careers should be included throughout one's undergraduate experience". To integrate career content into the classroom the following tips are suggested: integrating career focused topics in discussions and activities; using and integrating services offered by career resource centers; including guest speakers; and incorporating additional online career resources. These strategies help foster a connection between course material and professions and careers students may be considering.

B. Faculty and Instruction

Table 3. Relevance of Faculty and Instruction to the job Placement of the respondents

Faculty and Instruction	Mean	Interpretation	Rank
Practical Knowledge	3.52	Very Relevant	1
Qualifications	3.52	Very Relevant	1
Knowledge on Current Practices In Teaching and Learning	3.52	Very Relevant	1
Delivery Skills/Teaching methodology	3.50	Relevant	4
Interactions with Students	3.49	Relevant	5
Ratio of Students & Teachers Theoretical Knowledge	3.48	Relevant	6
Show Ethical Behaviors in Dealing with Students	3.47	Relevant	7
Creativity in Teaching	3.44	Relevant	8
Up to Date Knowledge on Issues and Development Education	3.42	Relevant	9
or Class Size	3.38	Relevant	10
Availability for Consultation	3.32	Relevant	11
Use Technology in Teaching and Learning Process	3.27	Relevant	12
Composite Mean	3.44	Relevant	

Note: descriptive meaning is based on the following scale. Very Relevant (3.51-4); Relevant (2.51-3.50); Slight relevant (1.51-2.5); 1-1.50) Not relevant

As shown in Table 3 the relevance of school related factors in terms of faculty and instruction to the job placement of the respondents are Knowledge of Current Practices in Teaching and Learning with a mean of 3.52 and Practical Knowledge with a mean of 3.52. The least relevant are Use Technology in Teaching and Learning with a mean of 3.27 and Availability of Consultation with a mean of 3.32.

The composite mean score of 3.44 implies that the faculty and instruction is considered relevant to the job placement of the engineering graduates. It implies that students significantly learned the lessons if the teachers can impart and deliver the subject matter fluently with an aid of appropriate methods and fairness in measuring the students' academic performance or knowledge inside the classroom which can formulate a good foundation of their future success in employment. Teaching aids were perceived to be indirectly relevant to the job placement of the respondents because these are only instructional materials as they see it but they never realized that these are the instructional media used by their teachers in order to understand the subject on its most appropriate way (Laguador & Dotong, 2013).

C. Resources Facilities/Services

Resources Facilities/ Services	Mean	Interpretation	Rank
Policies & Procedures	3.47	Relevant	1
Student's Affairs Office	3.42	Relevant	2
Faculty Room	3.40	Relevant	3
Lecture	3.39	Relevant	4
Student's Activities	3.34	Relevant	5
Student's Association Office	3.34	Relevant	5
Counseling & Career Service	3.30	Relevant	7
Seminar Room	3.27		8
Courses Offering	3.21	Relevant	9
Resource Center	3.19	Relevant	10
Student Parking	2.99	Relevant	11
Computer Laboratory	2.95	Relevant	12
Cafeteria/Canteen	2.80	Relevant	14
Composite Mean	3.24	Relevant	

Table 4.

Relevance of Resource Facilities/Services to the job Placement of the respondents

Rel-

Table 4 presents the relevance of School Related factors in terms of Resource Facilities/Services. Policies and Procedures with a mean of 3.47 is considered the foremost relevant to the job placement of the respondents followed by Student's Affairs Office with a mean of 3.42. Cafeteria or Canteen with a mean of 2.80 and Student's lounge were considered with the least relevance. The composite mean score of 3.21 implies that the school related factors in terms of student services also contributing to the job placement of the respondents. This implies that the graduates recognized the value of relevance of student support to their employment. It has been observed that school physical facilities are essential tools to facilitate and stimulate learning programmes. Teachers need them in an ideal working environment. Experience shows that if physical facilities are available, students tend to have interest in learning; this will invariably lead to high performance. A close observation of the performance of secondary school students perhaps could be traced to lack of physical facilities and a motivating learning environment. Most schools seems to lack the necessary facilities that could enhance effective teaching and learning as a result little is expected from students in terms of academic performance. Experience shows that inadequate physical facilities have some adverse effect on students' interest to learn. Hence, this may invariably affect their academic performance. Akomolafe & Adesua (2016).

D. Competencies Learned at CapSU Most Useful to the Graduates

Table 5. Frequency Distribution of CapSU Tapaz Graduates In Terms of Competencies Learned in College They Find Very Useful in Their Job

Skills	Frequency	Percentage
Communication	51	41.8
Human Relation	29	23.8
Critical Thinking	13	10.7
Entrepreneurial	11	9
Information Technology	11	9
Problem-Solving	7	5.7

Table 5 showed that communication skills ranks first followed by human relation skills. The Entrepreneurial and Information skills had the lowest responses with 9 percent. The curriculum of CapSU had included communication skills to give students strong foundation in order for them to compete in the outside world when they look for their employment.

However, problem solving skill was considered the least useful among the listed indicators probably this was not emphasized in the curriculum of CapSU. Therefore, it is suggested to give emphasis on problem solving or critical thinking in all subjects across programs in the new curriculum. Most of them considered problem solving skills to be one of the useful competencies learned in college as well as entrepreneurial and information technology skills. These are being utilized by the respondents in answering the demands and challenges of the day-to-day activities on their respective work places. It is always necessary to develop these skills to boost their self-confidence and resourcefulness that would make them successful in dealing and giving answers to company problems.

CONCLUSIONS

Based on the results and findings, the researchers established the facts that majority of the respondents are employed permanently, and earned more than 10,000 a month. It was found out that the curriculum used for instruction are promoting good professionalism and inculcation of positive values among the respondents. Theoretical and practical application were not highly relevant but the faculty qualifications, practical knowledge in teaching and learning along with the knowledge in on Current practices found to be very relevant in the job placement of the respondents. Policies and procedures also matters most so as the office of student affairs. The very useful competencies that the respondents considered were communication and human relations.

RECOMMENDATIONS

1. Efforts from the University must be done to increase the rate of employment among its graduates.
2. Promotions of professionalism and positive values inculcation must be preserved as integral part of the curriculum. Faculty must continue upgrading themselves for current trends and practices in teaching.
3. Intervention programs must be done to further enhance the oral and written communications skills of the students.

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Performance of Different Varieties of Oyster Mushroom Applied with Different Liquid Plant Food Supplement

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Abstract

Mushrooms represent one of the world's greatest untapped resources of nutritious food and a good source of protein, vitamins and minerals and are known to have a broad range of uses both as food and medicine. As an income-generating project, mushroom production just like farming may opt to use supplements to maximize production. The use of organic fertilizers/amendments could be a good alternative since consumers are increasingly curious about where and how their food is produced and what impact it has on the environment hence, this study was conducted to determine the performance of different varieties of oyster mushroom applied with different liquid plant food supplement. The study was conducted using Factorial CRD. Factor A consists of three treatments corresponding to the varieties used as follows: V₁ – White, V₂ – Yellow and V₃ – Gray. Factor B were composed of four treatments corresponding to four Liquid plant food supplement as follows: P₁ – water, P₂ – FPJ, P₃ – Vermitea, P₄ – FAA. Each treatment was replicated 3 times. Results revealed that diameter of cup, number of fruit bodies, number of flush, weight of fruiting bodies and total number of mushroom harvested significantly affected by the variety but not with different plant food supplements. However, number of days from opening to emergence of primordia, number of days from opening up to harvestable stage and length of the stalk did not significantly influenced by both varieties and different plant food supplements. In growing oyster production used white variety for higher yield.

Keywords: Fermented plant juice, fish amino acid, fruiting bodies mushroom cup and Yield

Introduction

Mushrooms represent one of the world's greatest untapped resources of nutritious food. Cultivation of saprophytic edible mushrooms may be the only currently economical biotechnology for lignocellulose organic waste recycling that combines the production of protein rich food with the reduction of environmental pollution (Obodai et al., 2003).

Mushrooms are a good source of protein, vitamins and minerals and are known to have a broad range of uses both as food and medicine. These are often found as sap-

rophytes on soil, open fields, farm lands, wood and roadsides. The fruiting bodies are large enough to be visible to the naked eyes. They belong to the class Basidiomycetes, order; Agaricales. Mushroom provides a variety of tastes, flavour and texture Fresh mushroom contain about 80-95% moisture, 0.3-0.4% fat and 1% minerals and vitamins mushrooms are not destroyed by cooking, drying and freezing (Nair, 1982).

Most of the cultivated species of mushrooms belong to the phylum Basidiomycota, although some Ascomycota such as members from the genera *Morchella* or *Tuber* have also been successfully cultivated and commercially exploited (Rubini et al. 2014; Liu et al. 2017). Unlike plants, mushrooms are heterotrophic organisms which require external nutrients to grow; the vegetative mycelium (hypha network) supplies nutrients for the growth of basidiomes (reproductive stage) (Taylor and Ellison 2010).

It produces a number of enzymes including lignin-degrading enzymes (laccases, lignin peroxidases, manganese peroxidases, arylalcohol oxidase, aryl-alcohol dehydrogenases or quinone reductases), and hemicellulose and cellulose-degrading enzymes (xylanase, cellulases or cellobiose dehydrogenase), to facilitate the degradation of lignocellulosic substrates (Sánchez 2009; Kabel et al. 2017; Vos et al. 2017).

Edible mushrooms are recommended by the FAO as food, contributing to the protein nutrition of developing countries dependent largely on cereals. Presently three Mushrooms namely *Pleurotus* species (Oyster Mushroom), *Volvariella volvaceae* (Straw Mushroom) and *Auricularia spp* (Ear Mushroom) are under commercial cultivation. Oyster mushroom is cultivated worldwide, especially in Southeast Asia, India, Europe and Africa. They can be cultivated under both temperate and tropical climatic conditions and harvested all over the year. The oyster mushrooms (*Pleurotus spp.*) are in the third place after the white button and shiitake among the world mushroom production (Gyorfi et al., 2007). Oyster mushrooms are the easiest and least expensive commercial mushrooms to grow because they are well known for conversion of crop residues to food protein.

Mushroom supplementation is understood as a farming method based on the physical addition of nutritional amendments to compost, during the process of composting, the mixture of raw materials, at spawning or during casing (Estrada et al. 2009; Pardo-Giménez et al. 2012). The practice of nutritionally supplementing compost for mushroom cultivation at the time of spawning or casing to maximize crop yield emerged in the 1960s (Schisler and Sinden 1962; Lemke 1963) and is widely recognized and accepted, however its use can be restricted in some sectors because of technical and economic factors (Randle 1985).

Mushrooms can be grown either on commercial scale using highly sophisticated equipment's or small scale using low cost materials and agricultural wastes. Mushroom

growing is one income-generating activity that people can engage both in rural and urban areas with the right technology. Small scale mushroom production provides an opportunity for farmers interested in an additional enterprise and is an option for those without much land. As an income-generating project, mushroom production just like farming may opt to use supplements to maximize production.

The use of organic fertilizers/amendments could be a good alternative since consumers are increasingly curious about where and how their food is produced and what impact it has on the environment hence, this study was conducted to determine the performance of different varieties of oyster mushroom applied with different liquid plant food supplement

Methodology

Experimental treatments and design. The study was conducted using Factorial CRD. Factor A consists of four treatments corresponding to the varieties used as follows: V₁ – White, V₂ – Yellow and V₃ – Gray. Factor B were composed of four treatments corresponding to four Liquid plant food supplement as follows: P₁ – water, P₂ – FPJ, P₃ – Vermitea, P₄ – FAA. Each treatment was replicated 3 times. The experimental lay-out was shown in Figure 1.0.). The treatments were applied as spray material to the fruiting bags during growing stage after the first flush and every week thereafter for three months. Each treatment per replication was represented by 5 fruiting bags.

Replication 1	Replication 2	Replication 3
V3P1	V1P4	V2P1
V1P1	V2P1	V1P2
V3P2	V2P2	V2P2
V3P4	V2P3	V3P1
V3P4	V2P2	V1P3
V3P3	V2P4	V1P2
V2P3	V3P2	V1P3
V1P4	V1P2	V2P4
V3P2	V1P4	V3P3
V1P3	V3P4	V3P1
V2P3	V3P3	V2P1
V1P1	V1P1	V2P4

Figure 1.0 The experimental lay-out of the study arranged in Factorial CRD.

Legend

Factor A – Varieties

V1 – White

V2 – Yellow

V3 – Gray

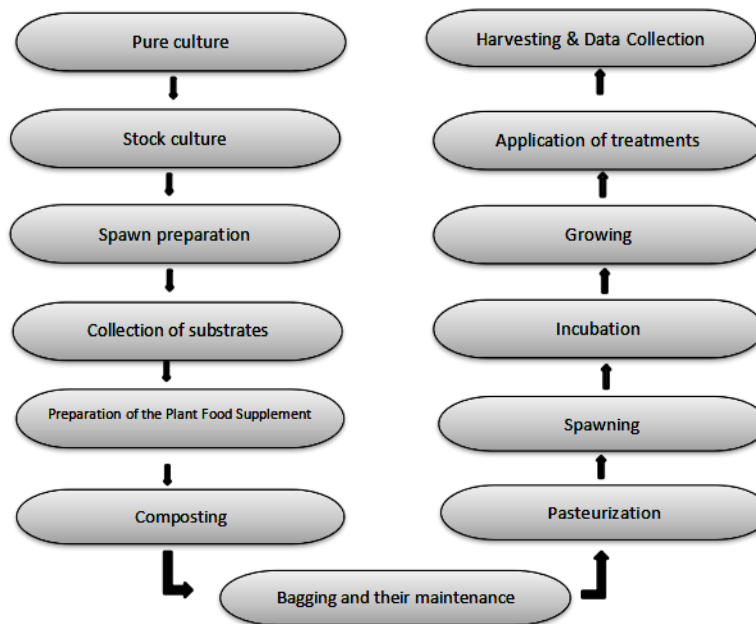
Factor B – Liquid Plant Food Supplement

P1 – Water

P2 – FPJ

P3 – Vermitea

P4 – FAA



Data Gathering

Number of fruit bodies .The number of fruit bodies was determined by counting the fruit bodies taken from five sample bags from each treatment. The mean was computed and expressed as number of fruit bodies per treatment.

Diameter of the cap (cm). The diameter of the cap was determined by measuring the cap from one side to the other side passing the center. Five samples was measured from each treatment. Then, the mean was determined by summing up the data divided by 10.

Length of the stalk (cm). The stalk was measured from the base to the point below the cap. Five samples was measured from each treatment. Then, the mean was determined by summing up and divided by 10.

Number of flush. The number of flushes of mushroom was determined by counting

from the first emergence of primordial up to the last within a month period.

Number of days from opening to emergence of primordia. After the opening the fruiting bags, the number of days until the emergence of primordial was counted. Six samples from each treatment was used for the gathering of data.

Number of days from opening up to harvestable stage. The number of days from the emergence of primordia to harvest was counted. The five samples per treatment used for the emergence of primordial will also be used.

Weight of fruiting bodies (g). For this parameter, five sample bags from each treatment was taken at random. The harvested fruit bodies was weighed using a gramer and was recorded for a period of 4 weeks starting from the first harvest. The recorded weight in grams was summed up and divided by the number of harvest to get the mean weight per harvest.

Total number of mushrooms harvested. The number of flushes of mushroom was determined by counting from the first emergence of primordial up to the last within a month period.

Cost and Return Analysis

The cost and return analysis of producing mushroom was determine. This was done by recording all expenses throughout the conduct of the study and income realized from the production. Gross income was calculated by multiplying the total weight of mushroom with the prevailing market price. The difference between the gross income and the expenses represents the net income.

Statistical Tools and Analysis

The data was analyzed using the Analysis of Variance and F-test for Factorial CRD. Differences among treatment means was determined using Duncan's Multiple Range Test (DMRT), interpreted at 5% and 1% levels of significance.

Results and Discussion

Diameter of the Cup

The diameter of the cup of oyster mushroom differed significantly with varieties but not among the plant food supplement used (Table 1). The widest cup was observed in a white variety with a mean of 8.96cm which was found comparable to gray variety with a mean of 8.48cm. On the other hand, the smallest cup was observed in yellow variety with a mean diameter of 7.31cm.

The mean of oyster mushroom applied with plant food supplements ranges

from 8.05cm to 9.27cm, respectively. No significant interaction effect was observed between variety and plant food supplements in influencing the diameter of the cup of oyster mushroom.

Number of Fruit Bodies

Table 1 shows the number of fruit bodies of different varieties of oyster mushroom as influenced by different liquid plant food supplements. The analysis of variance revealed a significant result in terms of varieties but not in different plant food supplements. Yellow variety obtained the highest number of fruit bodies with a mean of 6.69 followed by white and gray variety with a mean of 4.02 and 2.90, respectively. The mean number of fruit bodies applied with different plant food supplement ranges from 3.95 to 5.23.

There was no interaction effect between the variety and plant food supplements in influencing the number of fruit bodies of oyster mushroom.

Table 1. Diameter of cup and number of fruit bodies of different varieties of oyster mushroom applied with different liquid plant food supplement.

Treatment	DIAMETER OF CUP(cm)			Mean	NUMBER OF FRUIT BODIES			Mean
	Variety*				Variety**			
Plant Food Supplements	White	Yellow	Gray		White	Yellow	Gray	
Water	8.94	8.02	8.46	8.47	4.23	5.83	2.77	4.28
FPJ	9.26	7.48	7.89	8.21	2.81	6.33	2.71	3.95
Vermitea	8.77	7.10	8.27	8.05	4.29	6.85	2.91	4.68
FAA	8.88	6.63	9.27	8.26	4.75	7.73	3.22	5.23
Mean	8.96a	7.31b	8.48ab		4.02b	6.69a	2.90c	

Length of the Stalk (cm)

The length of the stalk of oyster mushroom is presented in Table 2. No significant differences were observed in both varieties and plant food supplements. For varieties. Means ranged from 11.72cm to 13.53cm, respectively. While for the plant food supplements, means ranged from 12.13cm to 12.89cm, respectively.

The different varieties of oyster mushroom and plant food supplements did not interact in influencing the length of the stalk of oyster mushroom.

Number of Flush

The number of flush of oyster mushroom was significantly affected by variety but not

with different plant food supplements (Table 2). White variety oyster mushroom obtained the highest number of flush with a mean of 3.37 this was followed by gray variety 2.18 and the least number of flush was observed in yellow variety with a mean of 1.51.

For the plant food supplements, means ranged from 2.20 to 2.52. the ANOVA further revealed that the two factors did not interact in influencing the number of flush of oyster mushroom.

Number of Days From Opening to Emergence Of Primordia

Different varieties and plant food supplements did not significantly affect the number of days from opening to emergence of primordia (Table 3). Mean ranged from 3.01 to 3.24 for varieties and 2.99 to 3.16 for liquid plant food supplements.

Likewise, ANOVA revealed that the two factors did not interact in influencing the number of days from opening to emergence of primordia of oyster mushroom.

Number of Days from Opening up to Harvestable Stage

Number of days from opening up to harvestable stage of oyster mushroom is presented in table 3. There was no significant differences in terms of varieties and plant food supplement in influencing the number of days from opening up to harvestable stage of oyster mushroom. For varieties, means ranged from 6.58 to 7.02, while for different plant food supplements, means ranged from 6.68 to 6.86.

The different varieties and different plant food supplements did not interact in influencing the number of days from opening up to harvestable stage of oyster mushroom.

Table 2. Length of the stalk (cm) and number of flush of different varieties of oyster mushroom applied with different liquid plant food supplement.

Treatment	LENGTH OF THE STALK (cm)			Mean	NUMBER OF FLUSH			Mean
	Variety				Variety**			
Plant Food Supplements	White	Yellow	Gray		White	Yellow	Gray	
Water	13.69	12.18	11.46	12.44	3.26	1.35	2.00	2.20
FPJ	11.99	11.70	12.71	12.13	3.48	1.58	2.46	2.51
Vermitea	13.39	11.56	13.71	12.87	3.00	1.70	1.86	2.19
FAA	15.06	11.42	12.20	12.89	3.73	1.42	2.40	2.52
Mean	13.53	11.72	12.52		3.37a	1.51c	2.18b	

Table 3. Number of days from opening to emergence of primordia and number of days from opening up to harvestable stage of different

Treatment	NUMBER OF DAYS FROM OPENING TO EMERGENCE OF PRIMORDIA			Mean	NUMBER OF DAYS FROM OPENING UP TO HARVESTABLE STAGE			Mean
	Variety				Variety			
Plant Food Supplements	White	Yellow	Gray		White	Yellow	Gray	
Water	3.11	3.28	3.10	3.16	6.91	7.10	6.34	6.78
FPJ	3.21	2.83	2.94	2.99	6.95	6.60	6.48	6.68
Vermitea	3.27	2.91	3.21	3.13	6.97	6.61	7.01	6.86
FAA	3.37	3.02	3.08	3.16	7.23	6.69	6.50	6.81
Mean	3.24	3.01	3.08		7.02	6.75	6.58	

Weight of Fruiting Bodies

Weight of fruiting bodies of oyster mushroom differed significantly with the different varieties but not among the plant food supplements (Table 4). Oyster mushroom in white variety obtained the heaviest weight of fruiting bodies followed by gray variety with a mean of 119.89g and 55.69g, respectively and the lightest weight of fruiting bodies was obtained from yellow variety with a mean of 55.96g.

For the various plant food supplement, the mean ranges from 62.83g to 77.74g. There was no significant interaction effect between varieties and different plant food supplements in influencing the weight of fruiting bodies of oyster mushroom.

Total Number of Mushroom Harvested

Total number of mushroom harvested is presented in table 4. The ANOVA revealed a significant result on the different varieties of oyster mushroom but not in the application of plant food supplement. The highest number of mushroom harvested was obtained from white variety with a mean of 116.85 this was followed by gray variety with a mean of 56.30 and the lowest number of mushroom harvest was found in yellow variety with a mean of 35.88. For the plant food supplements, mean ranges from 62.70 to 80.12.

The ANOVA further revealed that the two factors did not interact in influencing the total number of mushrooms harvested.

Table 4. Weight of fruiting bodies (g) and total number of mushroom harvested of different varieties of oyster mushroom applied with different liquid plant food supplement.

Treatment	WEIGHT OF FRUITING BODIES (g)			Mean	TOTAL NUMBER OF MUSHROOMS HARVESTED			Mean
	Variety**				Variety**			
Plant Food Supplements	White	Yellow	Gray		White	Yellow	Gray	
Water	131.76	46.34	55.12	77.74	142.09	46.34	51.93	80.12
FPJ	105.04	37.17	46.29	62.83	101.03	35.57	51.51	62.70
Vermitea	125.01	24.35	59.75	69.70	118.75	24.92	60.57	68.08
FAA	117.74	36.31	61.57	71.87	105.54	36.68	61.20	67.81
Mean	119.89 a	36.05c	55.69b		116.85 a	35.88 c	56.30 b	

Gross and Net Income

Table 5 presents the gross and net income of oyster mushroom. Results showed that the gross and net income of mushroom was significantly affected by variety but not in the application of plant food supplements. White variety obtained the highest gross and net income with a mean of 23.86 and 16.64 pesos, respectively. This was followed by gray variety with a gross and net income of 11.14 and 3.39 pesos, respectively. The lowest gross and net income was found in yellow variety with a mean of 7.21 and -0.04 pesos, respectively.

No significant interaction effect was noted between varieties and plant food supplements in affecting the gross and net income of oyster mushroom.

Table 5. Gross income and net income of different varieties of oyster mushroom applied with different liquid plant food supplement.

Treatment	GROSS INCOME			Mean	NET INCOME			Mean
	Variety**				Variety**			
Plant Food Supplements	White	Yellow	Gray		White	Yellow	Gray	
Water	26.35	9.27	11.02	15.55	20.35	3.27	5.03	9.55
FPJ	21.01	7.43	9.26	12.57	14.01	0.43	2.26	5.57
Vermitea	25.00	4.87	11.95	13.94	18.00	-2.13	4.95	6.94
FAA	23.21	7.26	12.32	14.26	14.21	-1.74	3.32	5.26
Mean	23.89 a	7.21c	11.14b		16.64 a	-0.04c	3.89b	

Conclusions

Based on the results obtained, the following conclusions were drawn:

1. Different variety of mushroom significantly influenced the growth, yield and economic parameters of mushroom except for the number of days from opening to emergence of primordia, number of days from opening up to harvestable stage and length of the stalk.
2. All the growth and yield parameters of this study were not affected by the applications of different liquid plant food supplements.
3. There is no interaction effect between varieties and plant food supplements in influencing the growth and yield of oyster mushroom.

Recommendations

Based on the findings of the study, the following recommendations were forwarded:

1. Use white variety of oyster mushroom in growing oyster mushroom for higher production and net income.
2. Conduct similar study using different plant food supplements, in other locations and other time of the year to gather more comprehensive information.

3. Likewise, conduct chemical analysis in oyster mushroom to know if there is a changes on the nutrient content of mushroom.

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Pag-ginawi: The Impact of Socio-economic and Traditional Practices of the Local Folks in Tourism Industry

Ronilo G. Berondo

Abstract

This study explored on Pag – ginawi: The Impact of Socioeconomic and Traditional Practices of the Local Folks in the Tourism Industry. Tourism has been regarded as one of the fastest-growing industries in the world. It is one source of income-generating projects which contributes to a country's economic growth and development. Thus, this study assessed the socioeconomic impacts and Traditional Practices of the Local Folks in the Tourism Industry, specifically in the Municipality of Tapaz, which covered the following characteristics: employment generation, increase in investment in the area by private and public organizations, entrepreneurial development, increase in the standard of living, public facility development, infrastructure development, social relation development, increase in cultural activities, increase in pride, cultural exchange, appreciation of local culture, positive change in people's lifestyle, behavior and values have a Neutral degree of responses perceived by the respondents. Moreover, negative characteristics of tourism also need to be examined, such as an increase in property prices. Nonresidents are getting benefits, increase in the cost of living, commercialization of activities, dilution of local languages, increase in crime, increase in social conflicts, social dislocation, increase in crowding and congestions, prostitution, inflation, pollution and loss of cultural identity, as these impacts would prove that the industry brings positive change in the lives of Tapaznon in the Municipality. Using the qualitative research design, local folks' informants from Tapaz, Capiz were purposively chosen based on the three-generation test by Manuel (1955). Fieldwork, observations, informal and key informant interviews, and documentary and photographic analysis were the methods used. Verbatim data transcripts were analyzed using the general inductive approach (Thomas, 2006) and in vivo coding technique.

Keywords: Impact, tourism industry, tourism development, tourism destinations, and local folks

Introduction

Tourism is bringing great benefits to destinations the world over and has become an instrument for poverty alleviation and sustainable development. The power of tourism in breathing new life into dying cultural expression has been widely

recognized. Moreover, tourism has the capacity to nourish social values and other dimensions through greater appreciation and sharing. The power of tourism in breathing new life into dying cultural expression has been widely recognized. Moreover, tourism has the capacity to nourish social values and other dimensions through greater appreciation and sharing.

Tourism comprises all activities during a person's travel within a tourist's destination outside of their country of origin. (UNWTO, OECD, Eurostat, International Recommendations on Tourism Statistics. 2009). It carries a lot of significance as to the contribution to our country's foreign exchange earnings, investment opportunities, infrastructure, and superstructure developments through tourist spending. Moreover, in terms of its social benefits, tourism motivates and encourages friendship between SSRG International Journal of Economics Management Studies (SSRG – IJEMS) – Volume 5 Issue 12 - December 2018 ISSN: 2393 – 9152 <http://www.internationaljournalssrg.org> Page 44 the host community and tourists, cultural enrichment and appreciation to cultural diversity, educational significance for gaining information's and enhancing knowledge of the places visited, and lastly a vital peace force for creating peace and harmony.(Cruz, Zenaida; Principles of Tourism).

In Tapaz, Capiz Philippines, Pag – ginawi mirrors the status of the tourism industry as it's influenced by local folks. Tourism in the Municipality of Tapaz has maintained its constant growth over the years. The increase in tourist arrivals for many years brought major changes in the socioeconomic developments, particularly in major tourism destinations in the community. The increase in entrepreneurial developments, investment opportunities, and other economic developments in the place. Appreciation of local culture, contributory factors for peace and understanding among cultural groups, and other relevant changes in the people's way of life and behavior are major transformations brought by the industry in the community.

Thus, tourism's economic impact is observed through changes in the economic status and activities of the people who directly and indirectly are involved in tourism activities in the community. (Research Resolutions and Consulting Ltd. 2007; Guidelines: Survey Procedures for Tourism Economic Impact Assessments of Gated, Permanent Attractions). Tourism economic characteristics include an increase in local income, employment opportunities, and business linkage. When tourists travel, tourist spending on local products and services considers, thereby increasing the economic activity in the area. White, Sean. 2010. Measuring Tourism Locally; Guidance Note Local Economic Impact Modelling Approaches. Social tourism is not similar to the social impacts of tourism. Its main purpose is to make sure tourism is accessible to people. Socio-cultural impacts of tourism need to be considered since people living within the community are the primary beneficiary of its changes and developments (Kraig, 2001). Tourism also needs to be controlled so as not to create irreversible damage to the environment, cul-

tural and historical heritage, and other physical and intangible resources in the community. (Engelhardt, Richard UNESCO Regional Advisor for Culture in Asia and the Pacific vi). Generally, travel and tourism have economic and social impacts huge as it is a good avenues for business opportunities and investments, creating more jobs and other entrepreneurial development in the country. Aside from that, tourism protects heritage and cultural values through the preservation and conservation of its resources. (2015, Scowsill David, President, WTTC). Against this background, the proposed study will investigate the social and economic impacts of tourism in the Municipality of Tapaz. Better understanding and awareness of how tourism affects the lives of the people and how it contributes to the economic growth in the community could be realized. Further, the significance of evaluating and assessing the socioeconomic impact of the tourism industry in the Municipality of Tapaz would also strengthen the industry not only as one of the incomes generating resources but also as a means to improve the social lives of the people living in the Tapaz

The Municipality of Tapaz, Capiz located at the farthest part of the province, has been opening its doors towards strengthening its tourism industry. For the last five (5) years, the drastic change in tourism activities has attracted more tourists to come and visit several tourist attractions in the community. Natural, man-made, cultural, historical, and special activities and festivals give birth to a better tourism cycle. The town, aside from the tourist attractions, also boosts its local products such as “*banig*”, *native orchids*, and *handicraft made by Panay Bukidnon tribe*. The rise of tourism gives locals more opportunities to sell and market their local products and services to domestic and foreign tourists. These local products keep the Municipality of Tapaz on the roadmap of tourism development in Capiz. Nevertheless, with the effort and creativity of its tourism personnel, its future development would come a long way toward successful tourism activity in the province. Further, the significance of assessing its socioeconomic impact would pave the way for the creation of a local tourism development plan that would help strengthen the industry not only as one of the incomes generating resources but also as a means to improve the social lives of the people living in the Tapaz.

Materials and Methods

Research Design

The study used a qualitative research design. The nature of Qualitative research is humanistic and idealistic. The quantitative approach, on the other hand, is more reliable because it relies on numerical data that can be measurable. Although the Qualitative method is used to understand intangible concepts such as people's beliefs, experiences, attitudes, behavior, and interactions. It generates non-numerical data. The integration of qualitative research into intervention studies is a research strategy that is gaining in-

created attention across disciplines (Pathak, 2013). This was also chosen for studies in a case-to-case basis, such as individuals, communities, and small groups, because the results that can be yielded are rich and illuminative (Denzin & Lincoln, 2011, Berg, 2012 as cited in the study of Bicular 2022).

Participants

Purposive sampling was used to identify the key informants through the three-generation test (Manuel, 1955 as cited in Bicular, 2020). Purposive sampling deviates from the standard random, which can be used to target specific informants/participants that are relative to the required parameters which could achieve the objectives of the research. “Specific kinds of people may hold different and important views about the ideas and issues in question and therefore need to be included in the sample” therefore, it is imperative for this study to use this type of sampling (Campbell, 2020). However, the researcher has saturated the community with those who have knowledge about “Pag – ginawi” that mirrors the traditional Practices of the Local Folk in the Tourism Industry. The local folks in the Municipality of Tapaz, Capiz were identified as participants of this study.

Locale of Study

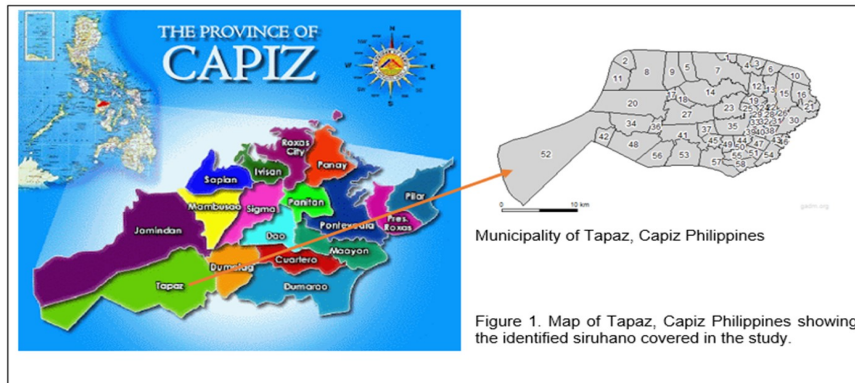


Figure 1. Map of Tapaz, Capiz Philippines showing the identified siruhano covered in the study.

The study was conducted within the Municipality of Tapaz, Capiz. The figure above depicts the geographical location of where the study was conducted.

Data Collection

Fieldwork, observations, informal and key informant interviews, and documentary and photographic analysis were used to gather data. These methods substantiate and triangulate the data elicited from the informants. For ethical considerations, necessary permits and disclosure information was secured from the informants prior to the conduct of the study.

Data Analysis

Data gathered through informal and key informant interviews were transcribed verbatim. In order for the data to be comprehensible to analyze, a general inductive approach was used and was put through a thematic analysis (Alase, 2017). In vivo coding was used since the researcher works with an individual case study whose language is unique, and at the same time, the researcher wishes to honor the informants by maintaining the authenticity of his or her speech in the analysis. These reasons suggest that a more participant-centered form of coding may be more appropriate. (Saldana, 2014).

Results and Discussions

The Municipality of Tapaz is composed of many barangays which were officially recognized as tourism destinations in the community. Primarily, these barangays benefit the tourism industry since it is where major tourist attractions are found. Major changes and developments have been observed by local residents and tourists, particularly in these tourism sites. The tourist attractions found within these areas are further categorized into natural attractions, man-made, cultural, historical, festivals, and other special activities. As per survey, there are still unknown tourists destinations or attractions in the Municipality. Consequently, the local government office is presently monitoring these sites to gain income and opportunities in the area

Conclusions

Based on the results and findings of the study, the socioeconomic impact of tourism in the Municipality of Tapaz has Neutral perceived positive socioeconomic impacts. In comparison, the perceived negative impacts have not been experienced or observed by the respondents in the community. This can be assumed that the respondents still have to validate and experience more of its positive impacts in order to fully conclude that tourism brings socioeconomic impacts in the lives of the people in the Municipality. Nevertheless, there is no evidence or support that negative impacts of tourism exist or have been experienced by the residents of the community. Still, tourism holds the opportunity to boost the socioeconomic development of the Municipality of Tapaz.

Recommendations

Based on the results and findings of the study, the following are its recommendations:

1. Creation of a Tourism Development Framework by the Local Government Tourism Office, which serves as a tool in the planning and implementation of future tourism projects and developments in the Municipality of Tapaz.

2. Improvement of tourism destination facilities and services to meet the standard service quality of tourists and guests visiting the area
3. Encourage and support locals to promote local products and services to strengthen small and medium enterprise developments.
4. Community involvement and participation in the creation of tourism development plans in order to strengthen and sustain the tourism industry in the Municipality.
5. The Municipality of Tapaz possesses a lot of infamous tourist attractions. Hence, it is recommended that the tourism office, in collaboration with the respective barangay officials may, register these existing tourist attractions in order to be officially part of its tourism attractions through promotions and marketing that could attract more tourists to come and visit the Municipality.
6. It is recommended that the tourism legislative office in Tapaz may conduct or include the socioeconomic status of the tourists visiting the locality to help measure the socioeconomic impact of the tourism industry in the Municipality.

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RESILIENCY OF PANAY-BUKIDNON STUDENTS ON DISASTER RELATED PHENOMENA

Remia G. Garde and Melanie c. Leccio

Abstract

This descriptive study ascertained resiliency of the Panay-Bukidnon students of Capiz State University, Tapaz Satellite College for the school year 2020-2021. This study included all 39 enrolled Panay-Bukidnon students as respondents aimed to determine the following: (1) profile of the respondents in term of sex, religion, family monthly income, residence distance from the town and position held in the barangay; (2) level of resiliency of the respondents on disaster related phenomena as entire group and when categorized as to sex, religion, family monthly income, residence distance from the town and position held in the barangay; (3) significant differences on the level of resiliency of the respondents when categorized as to some related variables; and (4) practices of the respondents on disaster related phenomena. The data were collected via Google form using a questionnaire prepared by the researchers comprising of 3 parts. Part 1 dealt on the profile of the respondents. Part 2 consisted of 10 statements on resiliency taken from Connor-Davidson Resilience Scale (CD-RISC-10) questionnaire, and Part 3 consisted of the resiliency practices observe by the respondents during the occurrence of disaster related phenomena. The data were analyzed using descriptive statistics such as frequency counts, percentage, mean and standard deviation. One-Way Analysis of Variance (ANOVA) and Independent sample t-test were used for inferential statements. The Statistical Package for Social Science (SPSS) software was used in the analysis of data at .05 alpha. Findings of the study revealed that the respondents were dominated by female, Roman Catholic, children of the family with poor monthly income, residing far from the town proper (beyond 10km away from the town proper) and doesn't held any position in the barangay. In terms of the level of resiliency, the respondents are resilient regardless of sex and family monthly income. However, when respondents were categorized as to religion, residence distance from town and position held in the barangay, only Baptist and Roman Catholic, residing far from town and those holding position in the barangay were resilient, respectively. No significant difference existed in the level of resiliency of the respondents when categorized as to different variables. The first three dominant resiliency practices observed by the respondents during the occurrence of disaster related phenomena were (1) My faith in God helps me to survive challenges and even makes me stronger and wiser after experiencing unpleasant or painful feelings like sadness, fear and anger, (2) I believe I have a purpose that's why I need to recover from failure and disappointment, and (3) I stay positive about the future even when faced with seemingly insurmountable obstacles. As to the findings of the

present study, it is highly recommended that Brgy. Officials or Panay Bukidnon Officials may conduct annual DRRM symposia to sustain or increase resiliency level among its members.

Keywords: Panay Bukidnon, Resiliency, Practices, Disaster

Introduction

With an increase in the occurrences of disasters there is growing interest in the way indigenous communities living in developing nations deal with disasters. Their perceptions of disasters are based on a much deeper understanding of their natural environment, of life, death and destruction.

According to the World Risk Report 2018, the Philippines ranked third in terms of disaster risk index, due to its geographical context, the highest risks posed to the country are those of earthquakes and tropical cyclones. Tapaz, the home of Panay Bukidnon, included in the Panay Fault, are at high risk of experiencing disaster related phenomena.

The Panay Bukidnon are the native people in the interior portion of Panay Island. They are referred to as Tumandok which means the Indigenous Dwellers. They speak the same with a very few semantical differences. They are similar in many other respect – farming and hunting practices, spiritual and binabaylan practices, and binukot and epic chanting tradition. Panay Bukidnon were named based on their local. Pan-ayanon (taga-Pan-ay) refers to mountain dwellers who inhabit the majority of the barangays of the town of Tapaz, Capiz. Their economic life is largely dependent on ka-ingin agriculture, supplemented with hunting and fishing. Most of the Pan-ayanon are situated in the upland barangays of the Municipality of Tapaz. Barangays that are hardly passable by vehicles. It will take 5 to 8 hours of walk before reaching vehicle travelable area. Difficulty of the resident in coming back and forth to the town proper is always an issue. The very alarming situation for Panay Bukidnon is when there are untoward incidents that may happen in their area – natural or man-made. Their location is indeed of great disadvantage for they could not be easily given urgent reinforcement or help.

Just recently, the Philippines had experienced tremendous and detrimental disasters. It affect the holistic being of every individual across all ages. The physical effects of a disaster are usually obvious. Hundreds or thousands of people lose their lives. The survivors suffer pain and disability. Homes, farms, crops, livestock, and many others were damaged or destroyed. The short-term emotional effects of disaster such as fear, acute anxiety, feelings of emotional numbness, and grief may also be obvious. For many victims, these effects fade with time. But for many others, there may be longer-term emotional effects, both obvious and subtle.

Perhaps no matter what effect it brings, the very challenge is the ability of the indi-

vidual to overcome the tests – trauma, tragedy, personal crises, and basic life problems and bounce back stronger, wiser, and more personally powerful. Resiliency is the key term that will enable us to develop mechanisms for protection against experiences which could be overwhelming, it helps us to maintain balance in our lives during difficult or stressful periods, and can also protect us from the development of some mental health difficulties and issues. For the family members of Panay Bukidnon particularly their children who are staying away from them for studies, the effect of disaster-related phenomena is difficult to be taken for granted. Being away from the family, especially during hard times, is a heart breaking situation.

Determining the level of resiliency to any phenomena will be of great help to every individual particularly that of the Panay Bukidnon students, since the sustainability of interventions at the community level depend, among a number of factors, on the availability of relevant local culture, knowledge and indigenous practices that can combine with new ideas to generate innovation. Hence, this study is being proposed.

Objectives/Statement of the Problem

This study sought answers to the following questions:

1. What is the profile of the respondents in terms of
 - a. Economic status
 - b. Sex
 - c. Religion
 - d. Distance of the barangay from the town proper
 - e. Position in the Barangay (Barangay Officials)
2. What is the level of resiliency on disaster-related phenomena of the respondents as a whole and when grouped according to parents educational attainment, economic status, sex, religion, distance of the barangay from the town proper, and position in the Barangay (Barangay Officials)?
3. Is there a significant difference between the level of resiliency on the disaster related phenomena and when respondents are grouped according to parents educational attainment, economic status, sex, religion, distance of the barangay from the town proper, and position in the Barangay (Barangay Officials)
4. What are the practices of Panay Bukidnon students during the occurrence of disaster related phenomena?

Methodology

This study aimed at determining the level of resiliency of Panay-Bukidnon students of Capiz State University for the school year 2020-2021 on disaster Related Phenomena. The nature of the research investigation was descriptive-correlational, which makes use of a standardized questionnaire adapted from Connor-Davidson Resilience Scale (CD-RISC-10).

Before the gathering of data, the researchers asked approval from the Regional Office of the National Commission for Indigenous People. Upon approval, a list of Panay Bukidnon members was taken from the Office of the Guidance and Counselor. Link of the google form was sent to the student IP president. The researchers personally monitored the administration of the questionnaire by sending private messages to IP members.

The individual response of the respondents were printed, tallied and submitted for computer processing via the Statistical Package for Social Sciences (SPSS) software. The level of significance was set at 0.05 alpha.

Results and Discussions

Profile of the Respondents

Table 1 shows the profile of the respondents. Results revealed that nearly four-fifths (79.50%) of the respondents are female and the rest are male (20.50%) which is true in 2017 PSA survey that there were approximately 1.32 females per one male in tertiary education enrolment in the Philippines.

In terms of religion, above four-fifths (82.10%) are Roman Catholic members, a little more than one-tenth are Pentecostal Missionary Church of Christ (10.30%), one-twentieth are Baptist (5.10%) and the rest (2.60%) are Born Again which is congruent to the 2015 census conducted by the Philippine Statistics Authority (PSA) that 79.50% of the population is Roman Catholic and 9% belong to other Christian groups.

As to family monthly income, more than four-fifths (84.605) of the respondents has a family monthly income of less than Php10,481, meaning they live below the poverty line; almost one-tenth (10.30%) are lower middle class family with income ranging from Php20,963 to Php41,942; and the remaining portion (5.10%) are classified low income but not poor with family monthly income ranging from Php10,481 to Php20,962 wherein usually they are those with jobs as craft workers, service industry laborers, repairmen, and blue-collar workers in skilled trade, among others (Philippine Institute of Developmental Studies, 2018). This indicates that most of the respondents came from poor family.

When it comes to residence distance from the town, more than three-tenths (61.50%) of the respondent are residing far from the town (beyond 10km) and the rest are residing near the town (within 10 km). This indicates that majority of the respondents were residing away from the town.

As to position held in the barangay, almost four-fifths (79.50) of the respondents do not held any government position in the barangay and the rest were Barangay Kagawad and Sangguniang Kabataan Kagawads and Chairpersons. This indicates that although most of the respondent were full time students, some were already holding political responsibility while studying.

Table 1. Profile of the Respondents

VARIABLE	FREQUENCY	PERCENTAGE
SEX		
Male	8	20.50
Female	31	79.50
TOTAL	39	100.00
RELIGION		
Baptist	2	5.10
Born Again	1	2.60
Roman Catholic	32	82.10
PMCC	4	10.30
TOTAL	39	100.00
FAMILY MONTHLY INCOME		
Poor (<i>Less than 10,481</i>)	33	84.60
Low Income but Not Poor (<i>10,481-20,962</i>)	2	5.10
Lower Middle (<i>20,963-41,942</i>)	4	10.30
TOTAL	39	100.00
RESIDENCE DISTANCE FROM THE TOWN		
Near (1–10km)	15	38.50
Far (beyond 10 km)	24	61.50
TOTAL	39	100.00
POSITION HELD IN THE BARANGAY		
Brgy Kagawad	2	5.10
SK Chairperson	2	5.10
SK Kagawad	4	10.3
Ordinary Citizen	31	79.50
TOTAL	39	100.00

Resiliency Level of the Respondents

Table 2 depicts resiliency level of the respondents. Data revealed that both male and female are resilient. This means that the respondents were resilient regardless of sex. Maybe this is the result of the different symposia on gender equality that both male and female are empowered to have an equal rights, conditions and opportunities, and the power to shape their own lives. The result of this study negates the study of Artuch-Garde et. Al., (2014) claiming that male students demonstrate higher resilience in case of difficulty and hardship compared with female students.

In terms of religion, both Roman Catholic and Baptist are resilient. Maybe this is because the two religions has more practices in common. Pentecostal Missionary of the Church of Christ is moderately resilient while Born Again is slightly resilient. Pargament & Cummings (2010) study supports this result. They pointed on evidences that religiousness itself is resilient to major life stressors; that is, in difficult times, religion is effective in helping people sustain their relationship with the sacred, it can help people move beyond prior levels of adjustment to achieve fundamental positive transformation and that these religions make promising approaches that integrate religious resources into interventions designed to enhance individual resilience to life stressors.

The same table showed that regardless of family monthly income, respondents were found to be resilient. Maybe because Panay Bukidnon members were similar in every activity, whether in agriculture, fishing, or culture. Their main source of living is also similar depending on the natural resources, maximizing the richness of the environment.

As to residence distance from town, those residing far from the town proper were resilient compare to those nearer thereof. Maybe because those in the far flung area are conditioned to bounce back by themselves especially on disaster related phenomena and they might have developed a culture of resiliency due to being left alone during natural calamities for a lot of times. Maybe they are already used that any help is always a big deal for it will take a longer time and a hard labor before it reaches their community. Hence, they had established that higher level of resiliency compared to those nearer to the town proper.

Finally, those holding a position in the barangay are more resilient compare to those ordinary citizens. Maybe because barangay officials are expected to perform responsibilities over their community members. Added to that, often times, barangay officials were the one sent to seminars and trainings that may somehow strengthen their skills and capabilities as Panay Bukidnon members.

Table 2. Level of Resiliency of the Respondents

VARIABLE	MEAN	SD	INTERPRETATION
ENTIRE GROUP	3.49	.7891	Resilient
SEX			
Male	3.65	.9957	Resilient
Female	3.54	.7411	Resilient
RELIGION			
Baptist	4.10	.8485	Resilient
Born Again	2.40		Slightly Resilient
Roman Catholic	3.58	.7301	Resilient
PMCC	2.75	.8185	Moderately Resilient
FAMILY MONTHLY INCOME			
Less than 10,481	3.37	.7896	Resilient
10,481 – 20, 962	3.95	.2121	Resilient
20,963 – 41, 942	4.30	.2160	Resilient
DISTANCE OF THE BRGY FROM THE TOWN PROPER			
Near (1 – 10 km)	3.33	.8942	Moderately Resilient
Far (More than 10km)	3.60	.7172	Resilient
POSITION HELD IN THE BARANGAY			
Brgy Kagawad	3.75	.9192	Resilient
SK Chairperson	4.50	.2828	Resilient
SK Kagawad	3.68	.2986	Resilient
Ordinary Citizen	3.3903	.8134	Moderately Resilient

4.2 – 5.0 *Highly Resilient*, 3.4 – 4.1 *Resilient*, 2.6 – 3.3 *Moderately Resilient*, 1.8 – 2.5 *Slightly Resilient*, 1 – 1.7 *Not Resilient*

Differences on the Resiliency of the Respondents

Table 3 shows the differences on the resiliency of the respondents. Data revealed that the resiliency of the Panay Bukidnon in any disaster related phenomena is the same regardless of sex, religion, family monthly income, residence distance from the town and position held in the barangay. This means that the Panay Bukidnon students resiliency level do not differ. It can be surmised that this maybe due to their similar up-bringing and exposure to the same culture that they have developed similar resiliency.

Table 3. Significant differences on the resiliency of the respondents when grouped according to related variable

VARIABLE	STATISTICAL TOOL	F/t – VALUE	SIG. VALUE
SEX	t – test	0.619	0.540
RELIGION	ANOVA	2.670	0.630
FAMILY	ANOVA	3.151	0.055
MONTHLY INCOME			
DISTANCE OF THE BRGY FROM THE TOWN PROPER	t-test	1.011	0.319
POSITION HELD IN THE BARANGAY	ANOVA	1.452	0.244

p < .05 significant

Practices of the Respondents on Disaster Related phenomena

Table 4 shows the practices of Panay Bukidnon on Disaster Related Phenomena. As revealed on the table, 37 out of 39 Panay Bukidnon students disclosed that first, their faith in God helps them to survive challenges and even makes them stronger and wiser after experiencing unpleasant or painful feelings like sadness, fear and anger. Secondly, their belief that they have a purpose that's why they need to recover from failure and disappointment. Thirdly, they stay positive about the future even when faced with seemingly insurmountable obstacles. These results indicate that faith in God, purpose of existence, and positive attitudes in life attributed in the resiliency practices of the Panay Bukidnon students. May be the preachings of their church leaders have strengthened their character. This further means that Panay Bukidnon students banks on their personal belief and self-regulating behavior in their capacity to be resilient.

Table 4. Practices of the Respondents on Disaster Related Phenomena

STATEMENT	FREQUENCY	RANK
My faith in God helps me to survive challenges' and even makes me stronger and wiser after experiencing unpleasant or painful feelings like sadness, fear and anger.	37	1
I believe I have a purpose that's why I need to recover from failure and disappointment.	30	2
I stay positive about the future even when faced with seemingly insurmountable obstacles.	29	3
The strong support of my family and friends empowers me to bouncing back from a loss or disappointment.	28	4
I help others when they need to relieve stress and boost their self-efficacy.	27	5
My desire to emulate the strength of the person I admire, helps me to become resilient.	25	6.6
I am willing to leave from my comfort zone and face my fears to overcome challenges and grow as a person	.25	6.5
My ability to be resilient comes from the trainings that I have attended.	22	8.5
I am able to laugh at my own misfortune which helps me to bounce back.	22	8.5
I easily bounce back after experiencing a difficult situation such as illness, injury or other hardships.	18	10

Conclusions

Majority of the Panay Bukidnon students live below the poverty threshold, female dominated, mostly Roman Catholic, residing 11 km and farther away from the town proper, and majority do not hold any position in the barangay.

Both male and female, Roman Catholic and Baptist, are resilient. Regardless of family monthly income, respondents are resilient. Those residing above 11 km away from

the town proper are resilient compare to those nearer thereof. Finally, those holding a position in the barangay are resilient compare to those ordinary citizens.

The resiliency of the Panay Bukidnon in any disaster related phenomena is the same regardless of sex, religion, family monthly income, distance of the barangay from the town proper and position held in the barangay.

Recommendations

In view of the findings, conclusions and implications, the following are recommended:

Brgy. Officials/Panay Bukidnon Officials should conduct annual DRRM symposia to sustain or increase resiliency level among its members. DRRM Focal person of the university may also conduct the same activity to sustain or increase resiliency among the students. Moreover, Tapaz LGU may strengthen the Evacuation Plan, Earthquake, Fire, and other drills, to develop alertness among the Panay Bukidnon members.

Future researches may conduct other studies involving Panay Bukidnon.

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