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5. The articles may either be written in English or Filipino. All articles written in either languages must be accom panied by an Abstract which is written in English.

6. All contributions must be original.

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WORK MOTIVATION, WORK COMMITMENT AND PERFORMANCE OF PUBLIC SCHOOL TEACHERS IN THE DIVISION OF PASSI CITY: BASIS FOR AN INTERVENTION PROGRAM

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ABSTRACT

This descriptive correlational study determined the level of work motivation, work commitment, and performance of Public School Teachers in the Division of Passi City as basis for an Intervention Program. The participants of the study were the 226 randomly selected public school teachers in the Division of Passi City, Iloilo. Data were gathered using the Work Motivation Questionnaire and the Organizational Commitment Questionnaire and were statistically analysed using the mean, t-test, ANOVA and Pearson's r set at 0.05 alpha level. Data with significant findings were further subjected to Scheffe test. Findings of the study showed that majority of the teachers were female who earned Masters units in teaching and have been teaching for more than a decade. Teachers have high level of work motivation in terms of need for achievement, need for power, and need for affiliation and high level of work commitment in terms of loyalty towards work, personal commitment, and security of tenure. The teachers have very satisfactory level of performance as reflected in their Individual Performance Commitment and Review Form (IPCR). No significant difference existed in the level of work motivation and work commitment of teachers in terms of age, sex, highest educational attainment and length of service. Also, no significant difference existed in the performance of teachers when classified as to districts. Significant differences occurred in the teacher's level of work motivation and work commitment when classified according to different dimensions. No significant relationship existed between the work motivation and performance of teachers as well as their work commitment and performance while a significant relationship occurred in the level of work motivation and work commitment. The behavior of the students is the most common problem encountered by the teachers. The organizational development program is recommended to further motivate and enhance the commitment and performance of teachers.

Keywords: dimension, intervention, public school teacher, work commitment, work motivation, performance

INTRODUCTION

Philippine Education should aim at producing students who respect human rights, whose personal discipline is guided by spiritual and moral values, who can think critically and creatively, who can responsibly exercise their rights and duties as citizens and whose minds are informed by science and reason (EDCOM Report, 2001). This can easily be realized if teachers exert extra effort in truly understanding and sincere by implementing the provision in the Philippine Constitution of 1987 in its mission of a "just and humane society".

The educational thrusts of the DepEd today are designed to update our schools, curricula, teaching force and incorporate the values that would adopt, in the light of the on-going changes, the present needs and demands involving personal and professional advancement of the teachers so as to have quality education.

The teachers are very important resources in effecting changes in the lives of students. But rarely do people take time to recognize or much less appreciate the contributions that teachers make. This is may be due to the typical characteristics of teachers to devote all their energies to performing their primary function of educating students. But it is exactly these teachers that education needs to become leaders.

Khanser (2014) believes that aside from being leaders, teachers act as surrogate parents, models, facilitators, advisers, guidance counsellors, civic workers, disciplinarians and classroom managers. In addition, high expectations were expected among teachers. They were expected to become role models for students and people in the community as well as manage far-reaching changes in and out of schools (McLendon, 2014).

In order to improve the teaching performance of teachers, it is important that teachers are motivated, as well as committed and satisfied with their job. Vance (2016) emphasized that employees who are motivated and committed to their organizations give their companies crucial competitive advantages – including higher productivity and lower employee turnover.

Henceforth, it is the objective of this investigation to determine the work motivation, work commitment and job performance of teachers.

STATEMENT OF THE PROBLEM

This descriptive-correlational study aimed to ascertain the work motivation, work commitment, and job performance of teachers in Passi City, Iloilo as a basis for an intervention.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
   1.1 Sex
   1.2 Age
   1.3 Highest Educational Attainment
   1.4 Length of Service
2. What is the level of work motivation of teachers in terms of:
   2.1 need for achievement
   2.2 need for power; and
   2.3 need for affiliation
3. What is the level of work commitment of teachers in terms of:
   3.1 loyalty towards work
   3.2 personal commitment; and
   3.3 security of tenure?
4. What is the performance of teachers as reflected in their Individual Performance Commitment and Review Form (IPCR)?
5. Is there a significant difference on the level of work motivation of teachers when classified as to need for achievement, need for power and need for affiliation and when grouped according to age, sex, educational attainment and length of service?
6. Is there a significant difference on the level of work commitment of teachers when classified as to loyalty towards work, security of tenure and personal commitment and when grouped according to age, sex, educational attainment and length of service?
7. Is there a significant difference on the performance of teachers when grouped according to districts?
8. Is there a significant relationship on the level of work motivation and work commitment of teachers; Work motivation and performance of teachers; and work commitment and performance of teachers?
9. What intervention program may be proposed?

METHODOLOGY

Research Design

The survey-correlational method of research was employed in this study. A survey study, also referred to as a descriptive study, determines and describes the way things are (Gay & Airasian, 2003). According to Best & Khan (1994), descriptive research is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing.

Three (3) data-gathering instruments: the Work Motivation Questionnaire (WMQ (Robbins, 1993), Insilada's Organizational Commitment Questionnaire (2010), and the Individual Performance Commitment and Review Form (IPCRF) were utilized to evaluate the performance of teachers in public schools.

Locale of the Study

The study was conducted in the Schools Division of Passi City, Iloilo comprised of the thirty-eight (38) elementary schools and seven (7) secondary schools divided into four districts.

Respondents of the Study

The participants were the 226 randomly selected public school teachers in the Division of Passi City, Iloilo. They were chosen using the simple random sampling technique where everyone has the same probability of being chosen as participants in the study.

Data Gathering Procedure

Three (3) data gathering instruments was used in this study: the Work Motivation Questionnaire (WMQ) (Robbins, 1993), Insilada's Organizational Commitment Questionnaire (2010), and the Individual Performance Commitment and Review Form (IPCRF).

The data gathered were subjected for statistical analysis using the following statistical tools; frequency count, mean, percentage, analysis of variance and the Pearson r moment correlation coefficient.

FINDINGS

1. Profile of the Respondents

The data shows that 87% (f=196) of the public school teachers are female while only 13% (f=30) are male. In terms of age, 53% (f=120) of the public school teachers are 42 years old and below while 47% (f=106) are above 42 years old. For educational attainment, 22% (f=50) of the public school teachers have bachelor's degree, 55% (f=125) have earned units in a master's degree, and 23% (f=51) are already full-fledged master's degree holder. As to their length of service, 31% (f=70) of the public school teachers have been teaching for 1-10 years, 36% (f=81) have been teaching for 11-20 years, and 33% have been teaching for 21 years and above.

Table 1 shows the data.

Table 1. Profile of the Public School Teachers

Profile	Frequency (f)	Percentage (%)
Sex		
Male	30	13%
Female	196	87%
Age		
42 years old and below	120	53%
Above 42 years old	106	47%
Highest Educational Attainment		
Bachelor's Degree	50	22%
With Master's Units	125	55%
Master's Degree Holder	51	23%
Length of Service		
1 – 10 years	70	31%
11 – 20 years	81	36%
21 years and above	75	33%
Total	**226**	**100%**

2. Level of Work Motivation of Teachers in terms of Need for Achievement, Need for Power and Need for Affiliation

The data in Table 2 shows that the public school teachers have a high level of work motivation in terms of need for achievement, need for power and need for affiliation.

The result of the study simply states that teachers with high level of work motivation tries and does their best to attain their goals and objectives. Also, they take responsibility in every activity that they go through and usually, they are in a managerial level where he or she wants to give orders and direct employees. The result also implies that teachers try to be people oriented more than task oriented and their desire and needs for making relationships with people is evident.

Table 2. Level of Work Motivation of teachers in terms of Need for Achievement, Need for Power and Need for Affiliation

Level of Work Motivation	Mean	Description
Need for Achievement	4.24	High
Need for Power	3.99	High
Need for Affiliation	4.28	High
Overall Mean	**4.17**	**High**

Legend:
4.50 – 5.00 – Very High *1.50 – 2.49 – Low*
3.50 – 4.49 – High *1.00 – 1.49 – Very Low*
2.50 – 3.49 – Average

3. Level of Work Commitment of Teachers in terms of Loyalty towards Work, Personal Commitment and Security of Tenure

The data in Table 3 shows that public school teachers have a very high level of work commitment in terms of loyalty towards work and high level of work commitment in terms of personal commitment and security of tenure.

The result simply states that majority of the teachers value their work and they are willing to do everything to promote and improve their school. The result also supports the idea that teachers are committed to performing their duties without any doubts and that they are proud and happy in their situation in their work. Also, majority of the teachers care for the future of the school and most of them learned a lot of things since they became a part of the school.

Table 3. Level of Work Commitment in terms of Loyalty towards Work, Personal Commitment and Security of Tenure

Level of Work Commitment	Mean	Description
Loyalty Towards Work	4.50	Very High
Personal Commitment	4.25	High
Security of Tenure	4.36	High
Overall Mean	**4.37**	**High**

Legend:
4.50 – 5.00 – Very High *1.50 – 2.49 – Low*
3.50 – 4.49 – High *1.00 – 1.49 – Very Low*
2.50 – 3.49 – Average

4. Performance of teachers as reflected in their Individual Performance Commitment and Review Form (IPCRF)

The data in Table 4 reflects a very satisfactory level of teachers' performance in their IPCR, M=4.17, SD=0.37.

When classified as to districts, District I-A (M=4.16, SD=0.35), District I-B (M=4.29, SD=0.32), District II-A (M=4.11, SD=0.39) and District II-B (M=4.15, SD=0.41) teachers have very satisfactory level of performance in IPCR.

Sison (1991, in Valerio, 2008) cited that performance refers to actual or realized achievement. To improve one's performance, Rummler and Brache (1995) suggest that management creates a job environment in which capable, adequately trained people have clear statements of, regular feedback on, positive consequences for, and barriers to school achievement.

Table 4. Level of Teachers' Performance as Reflected in their IPCR

Teachers' Performance	SD	Mean	Description
District	**0.37**	**4.17**	**Very Satisfactory**
District I-A	0.35	4.16	Very Satisfactory
District I-B	0.32	4.29	Very Satisfactory
District I-A	0.39	4.11	Very Satisfactory
District I-B	0.41	4.15	Very Satisfactory

Legend:
4.50 – 5.00 – Outstanding *1.50 – 2.49 – Poor*
3.50 – 4.49 – Very Satisfactory *1.00 – 1.49 – Very Poor*

5. Difference on the Level of Work Motivation of Teachers as to Need for Achievement, Need for Power and Need for Affiliation and when classified according to Age, Sex, Educational Attainment and Length of Service

The data below shows that there is a significant difference in the level of work motivation of teachers in the different dimensions, F(2,675) = 28.859, p=0.000. This means that the level of work motivation of teachers varies across dimensions.

In fact, using Scheffe as a post hoc test, the differences existed between the need for achievement and the need for power, and between the need for affiliation and the need for power.

Thus, according to Kohn (1993) understanding motivation begins with a careful analysis of the incentives and rewards present in the school and classroom. He further argued that applied behaviorism which amounts to saying, do this and you'll get that, is essentially a technique of controlling people.

Table 5.1 Difference on the Level of Work Motivation of Teachers in the Different Dimensions

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	11.641	2	5.820	28.529	0.000	Significant
Within Groups	137.709	675	0.204			
Total	149.349	677				

Meanwhile, in terms of profile, the data in table 5.2 shows that there is no significant difference in the level of work motivation of teachers in terms of sex [t(224)=1.433, p=0.153], and age [t (224)=-1.936, p=0.054]. This means that the level of work motivation of teachers does not vary across age and sex.

Table 5.2 Difference on the Level of Work Motivation of Teachers According to Sex and Age

Category	t-value	Df	p-value	Interpretation
Sex	1.433	224	0.054	Not Significant
Age	-1.936	224	0.153	Not Significant

Also, table 5.3 reveals a not significant difference in the level of work motivation of teachers in terms of highest educational attainment, F(2,223) =3.987, p=0.220. This means that public school teachers in the Division of Passi City have comparable level of work motivation regardless of the highest educational attainment.

Thus, according to Kohn (1993) understanding motivation begins with a careful analysis of the incentives and rewards present in the school and classroom. He further argued that applied behaviorism which amounts to saying, do this and you'll get that, is essentially a technique of controlling people.

Table 5.3 Difference on the Level of Work Motivation of Teachers According to Highest Educational Attainment

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	1.241	2	0.620	3.987	0.220	Not Significant
Within Groups	34.697	223	0.156			
Total	35.937	225				

And also, there is no significant difference in the level of work motivation of teachers in terms of length of service, F(2,223)=2.129, p=0.121. This means that public school teachers in the Division of Passi City have comparable level of work motivation regardless of the length of service in the teaching profession.

Table 5.4 Difference on the Level of Work Motivation of Teachers According to Length of Service

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	0.673	2	0.337	2.129	0.121	Not Significant
Within Groups	35.264	223	0.158			
Total	35.937	225				

6. Difference on the Level of Work Commitment of Teachers in the Different Dimensions and according to Profile

The data below shows that there is a significant difference in the level of work commitment of teachers in the different dimensions, F(2,675) = 14.148, p=0.000. This means that the level of work commitment of teachers varies across dimensions.

In fact, using Scheffe as a post hoc test, the differences existed between loyalty towards work and security of tenure, and between loyalty towards work and personal commitment.

Teachers who are more committed to the profession and its goals are less likely to be highly committed to the organization (Wallace, 1993; Valerio, 2008).

Table 6.1 shows the data.

Table 6.1 Difference on the Level of Work Commitment of Teachers in the Different Dimensions

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	7.033	2	3.517	14.428	0.000	Significant
Within Groups	164.518	675	0.224			
Total	171.551	677				

Meanwhile, in terms of profile, the data in table 6.2 shows that there is no significant difference in the level of work commitment of teachers in terms of gender [t(224)=0.235, p=0.814], and age [t(224)=-0.651, p=0.515]. This means that the level of work commitment of teachers does not vary across age and sex.

Table 6.2 Difference on the Level of Work Commitment of Teachers According to Sex and Age

Category	t-value	Df	p-value	Interpretation
Sex	-0.651	224	0.515	Not Significant
Age	0.235	224	0.814	Not Significant

Also, table 6.3 reveals a not significant difference in the level of work commitment of teachers in terms of highest educational attainment, F (2,223)=1.305, p=0.273. This means that public school teachers in the Division of Passi City have comparable level of work commitment regardless of the highest educational attainment.

But Tierman (2000) stressed that organizationally committed teachers value religion, faith and teaching while professionally committed teachers value faith, personal growth and development and love of children.

Table 6.3 Difference on the Level of Work Commitment of Teachers According to Highest Educational Attainment

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	0.486	2	0.243	1.305	0.273	Not Significant
Within Groups	41.510	223	0.186			
Total	41.996	225				

And also, there is no significant difference in the level of work commitment of teachers in terms of length of service, F (2,223)=0.984, p=0.376. This means that public school teachers in the Division of Passi City have comparable level of work commitment regardless of the length of service in the teaching profession.

Moreover, schools as loosely coupled organizations have difficulties in observing teachers, assessing performance, and mandating specific practices; therefore, teacher's professional commitment is crucial for achieving good instruction (Firestone & Pennell, 1993; Valerio, 2008).

Table 6.4 Difference on the Level of Work Commitment of Teachers According to Length of Service

Sources of Variation	SS	df	MS	F	p-value	Interpretation
Between Groups	0.367	2	0.184	0.984	0.376	Not Significant
Within Groups	41.628	223	0.187			
Total	41.996	225				

7. Significant difference on the performance of teachers when grouped according to Districts

The data in table 7 shows that there is no significant difference in the level of teachers' performance when classified as to districts, $F(3,222) = 2.393$, $p=0.069$. This means that teachers' competence across the different districts are comparable.

Carr (1994, in Valerio, 2008), also believes that clear, worthwhile, challenging goals, practical standards and useful feedback, sufficient autonomy and appropriate support, recognition, time and money also support performance.

Table 7 Difference in the Level of Teachers' Performance According to Districts

Sources of Variation	SS	Df	MS	F	p-value	Interpretation
Between Groups	0.972	3	0.324	2.393	0.069	Not Significant
Within Groups	30.070	222	0.135			
Total	31.043	225				

8. Relationship between Work Motivation and Work Commitment; Work Motivation and Performance; and Work Commitment and Performance of Teachers

The data in Table 8 shows the relationship between the level of work motivation and commitment of teachers; work motivation and performance of teachers; and work commitment and performance of teachers.

The level of work motivation of public school teachers is significantly related to the teachers' commitment towards work, $r=0.459$, $p=0.000$. This means that public school teachers' motivation is an important factor that would affect their commitment towards work. In fact, 21.07% () of the variance in the teachers' commitment towards work is accounted for by the teachers' level of work motivation. On the other hand, the level of work motivation of public school teachers is not significantly related to the teachers' performance based on IPCR, $r=0.037$, $p=0.575$. This means that public school teachers' motivation is not a significant factor that would affect their performance based on IPCR. Also, the level of work commitment of public school teachers is not significantly related to the teachers' performance based on IPCR, $r=0.036$, $p=0.593$. This means that public school teachers' commitment is not a significant factor that would affect their performance based on IPCR.

Table 8. Relationship in the Level of Teachers' Work Motivation and Commitment of Teachers

Category	R	p-value	Interpretation	Decision
Work Motivation Teachers' Commitment	0.459	0.000	Significant	Reject Ho
Work Motivation Teachers' Performance	0.037	0.575	Not Significant	Accept Ho
Work Commitment Teachers' Performance	0.036	0.593	Not Significant	Accept Ho

9. Proposed Intervention Program

PROPOSED INTERVENTION PROGRAM
DIVISION OF PASSI CITY
A.Y. 2019 - 2020
ORGANIZATIONAL DEVELOPMENT
INTERVENTION

Rationale:

Of all the challenges in an organization, the key issue is to create and maintain a motivated and committed teachers, since the more committed and motivated teachers are, the higher the probability of achieving organizational objectives and enhancing work performance.

The importance of work motivation and work commitment cannot be underestimated as both directly have an impact on the organizational performance and effectiveness. Although debatable, one of the aspect that acts as a differentiator between the school and teachers is their motivation and commitment towards their work.

Organization Development refers to the change effort planned organization-wide and managed from the top to increase the organization effectiveness through designed activities involving organization's processing behavioural-science knowledge.

Organization Development is a response to identify the need of change, using an education strategy to the normative change such as the beliefs, attitudes, values, and structure of organizations so they can adapt to the new technologies, markets, and challenge, and the dizzying rate of change itself.

It is with this in mind that this document has been created as a tool to mentor teachers in the Division of Passi City in terms of classroom management, discipline and work motivation.

Objectives:

1. To create an environment of continuous improvement and development of teachers.
2. To allocate funds for the development of the organization and teachers in teaching and learning and in their leadership skills.

3. To provide a system for merits and awards for teachers who are innovative and excel in teaching and service to the organization.
4. To provide financial assistance for activities which aim at promoting and improving teacher's motivation and commitment and enhancing student learning.

Objectives	Strategies	Performance Indicator	Persons Involved	Budget
To upgrade the educational qualification of teachers.	Encourage teachers to enrol in graduate school programs.	Improved number of teachers enrolled and finished their masters and doctorate degree.	School Heads, Master Teachers, Classroom Teachers	Scholarships from different agencies PhP 6, 000.00 for tuition of the teachers PhP 30, 000.00 Thesis and Dissertation Assistance
To enhance faculty teaching capability.	Attendance to seminars and trainings relevant to improve the teaching and learning process. Hold workshop which encourage dialogue, collaborative work and collaborative decision-making.	Improved attendance of teachers to trainings and seminars to improve their teaching skills and learn new methods and strategies in teaching. Teacher's attendance to workshops that would improve their collaborative and decision-making skills.	Teachers and School Heads	Faculty Development Fund Registration from the Participants
To provide a system for merits and awards for teachers who excel and perform quality service to the organization.	Award and acknowledge teachers who are innovative, excellent in teaching and service to the institution and to the community.	Awarded and acknowledged teachers in their efforts in giving their best in the teaching and learning process and in their contributions in service to the institution and in the community.	Teachers and School Heads	School/ Agency Fund Allocated for this purpose
To provide incentives for teachers in their performance in teaching.	Giving of incentives to teachers to develop and improve their motivation and commitment in the institution.	Gave incentives to teachers for their excellent performance in their work.	Teachers and School Heads	Appropriate budget for this purpose Solicitation from private institutions and individuals

CONCLUSION

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

1. Most of the public school teachers are seasoned teachers who earned master's units in teaching.
2. Teachers are motivated enough in their work even when classified in terms of need for achievement, need for power, and need for affiliation.
3. Teachers are committed enough in their profession in terms of loyalty towards work, personal commitment, and security of tenure.
4. Teachers in the Division of Passi City performs very well in their profession as reflected in their IPCR.
5. The teacher's level of work motivation varies across when it comes to need for achievement, need for power and need for affiliation while it does not vary and comparable as to age, sex, length of service and educational attainment.
6. The level of work commitment of teachers varies according to loyalty towards work, personal commitment and loyalty towards work while it does not vary and comparable as to age, sex, length of service and educational attainment.
7. The performance of the teachers is comparable regarding of the districts they belong to.
8. Teachers' work motivation is an important factor that would affect their commitment towards their work.
9. The Organizational Development Program for teachers is proposed to motivate and develop the commitment of teachers towards their work. Also, the program would inspire the teachers to perform well in doing their job.

RECOMMENDATION

1. Public school teachers must be encouraged to continue and finish graduate studies for their professional growth and development.
2. Department of Education Officials and School Heads should continue to conduct activities to motivate public school teachers.
3. Teachers should involve themselves in activities in order to motivate themselves in doing teaching works.
4. Department of Education Officials and School Heads should treat teachers equally per district, that is, equal opportunity and benefits must be given to them to further strengthen their trust and commitment to service.
5. Department of Education Officials and School Heads must continue to enhance the criteria on evaluating teacher's performance based on the

areas suited for all in such a way that no one will be left behind.

6. Teachers should help each other and reflect on the best thing to do in order to maintain and further enhance their performance based on the criteria of IPCR.
7. The organizational development program can be implemented in the institution. Preparing and equipping the teachers with various skills on the delivery of instruction, classroom management and assessment would help the teachers become more motivated and committed.

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STUDENT SERVICES IMPLEMENTATION AND CLIENTS' SATISFACTION AT CBSUA-CALABANGA CAMPUS

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ABSTRACT

Abstract- Higher Education Institutions were mandated to promote quality education, Student Affairs and Services must systematically and deliberately provide student centered activities and services in support of academic instruction to facilitate holistic and well-rounded student development to produce citizens suited to the aims of the country and of humanity. This descriptive, evaluative, and developmental study analyzed the student services provided by the Central Bicol State University of Agriculture – Calabanga Campus among its 112 students and 102 administrators/ faculty. The study employed descriptive statistics and Pearson r Moment Correlation Coefficient on the data collected through survey questionnaire and interview. This empirical study found that respondents were generally moderately satisfied of the student services provided such as in student welfare, student development, and institutional student programs and services. Further, this study revealed that there was a highly significant relationship in the implementation and level of satisfaction in the student services. Development plan for a sustainable student services bearing the salient features, (a) Vision, Mission, Goals, Objectives (b) targets, (c) program thrusts, (d) projects and (e) budgetary requirements were proposed to serve as the mechanism or blueprint in ensuring a quality, relevant, effective and efficient student services.

Keywords: student services, service implementation, student satisfaction, student welfare, student development, institutional student programs

INTRODUCTION

The fundamental purpose of education is to gain knowledge, understand the forms of proper conduct and acquire technical competency in specific subject (Manali, 2010). Schools also stressed the development of the "whole student" along several dimensions – intellectual, social, civic, physical, moral, and spiritual. Educators are expected to provide a broad general education that will assist each individual to attain his potential and enhance the range and quality of the individual and the group (Ferret, 2001). It is indeed a must to everyone particularly those within the education system to execute imperative programs leading to the attainment of the University's vision, that is, a leading university of agriculture in the Philippines and in the ASEAN Region.

Student support services, also known as student services, pupil services or specialized instructional support, include prevention, intervention and follow-up services for students and families. Student services professionals provide direct services for all children and youth, especially those who are experiencing problems that create barriers to learning. Direct services are provided by means such as education, counselling, consultation and individual assessment. In addition, student support services personnel provide in-service training, parent education, community collaboration and carry out student services program management. Student services are a vital part of comprehensive school program success (Makor & Floyd, 2015).

Lizotte (2015) also expressed that generally, student support services cover a very wide-range services including, but are not limited to: athletics, student government, counseling, clubs and organizations, fraternity and sorority life, student leadership, and spiritual life. All of these support services help to enhance the overall student experience. Audin and Davy, 2003 as stated by Ciobanu (2013), in the context of multicultural academic diversity, stimulated by globalization, it is necessary for all aspects of school life, student services included, to meet these new challenges. Many aspects of student life, on an academic, social or cultural level become more difficult to understand and manage with a population that finds itself in a state of continual growth and diversification. To this effect, the creation of effective student services that are focused on its necessities, in order to provide the required support for academic activity and stimulate personal, social, cultural and cognitive development, is needed. This was supported by the statement from Department of Education – New Jersey (2014) that comprehensive and coordinated student support services are critically important for the social, emotional, and character development of students and the development of learning climates that are conducive to student achievement of high academic standards. They further added that student support services foster positive relationships among educators and students, thereby increasing students' attachment to school, and serve as an essential link between students, and their families and school resources and community-based health and social services.

Student services are distinct instances of such programs. Results in several studies conducted implied that these services give significant impact on addressing the problems, gaps, and concerns inside and outside the formal classroom atmosphere. Student services advance student development and learning, foster community engagement, promote diversity, inclusion and respect, and empower students to thrive meaningfully (studentservicescenter.stanford.edu).

CBSUA is amenable in strengthening its student services to keep abreast with the continuing global challenges and indispensable changed of educational landscape by adhering to the mandate that is "to form individuals who can later become productive citizens of the country and the world. Its responsibility is not only confined to the teaching and development of job skills but also to the acquisition of life skills and values. Higher Education Institutions must provide a set of student centered activities and services in support of academic instruction intended to facilitate holistic and well-rounded student development for active involvement as future responsible citizens and leaders (CMO No. 9, s. 2013)."

It was therefore in these perspectives that the researcher intended to conduct study to determine and assess the student services provided by the University.

OBJECTIVES OF THE STUDY

A. General

This research aimed to determine the student services provided by the Central Bicol State University of Agriculture- Calabanga Campus.

B. Specific

Specifically, this study aimed to:

1. Determine the services provided to the students;
2. Determine the extent of implementation and satisfaction in the services provided;
3. Find out if there is significant relationship in the implementation of services and level of satisfaction; and
4. Develop a plan that may be recommended as a result of the study.

METHODOLOGY

Research Design

The study employed the descriptive, evaluative, correlational, and developmental methods of research. The descriptive method was used to describe the services provided by the institution, and the issues and concerns encountered in the implementation of the aforesaid services.

Evaluative method was utilized to assess the extent of implementation and satisfaction of students in the services provided.

Correlational method was employed to determine if there was a relationship between the implementation and satisfaction of the students in the services, namely; student welfare, student development, and institutional programs and services.

The developmental method of research was applied in the preparation of a plan that may be recommended for a sustainable student services in the institution.

Respondents of the Study

The respondents of the study were the undergraduate students of CBSUA-Calabanga from second year to fourth year and school administrators and faculty. There were a total of 112 students and 102 administrators/ faculty randomly selected through random sampling technique.

Research Instrument

The research instruments utilized in this study were the questionnaire and interview guide.

Questionnaire. Two (2) sets of questionnaire were prepared; for the administrators/faculty and students. This was divided into four parts: Part I – Profile of the Respondents, Part II –Extent of Implementation (EOI) and Extent of Satisfaction (EOS) on student services; and Part III – Issues and concerns encountered by the school in the implementation of the student services.

Interview Guide. This is a set of open-ended questions prepared by the researcher that was used during the interviews to the respondents to substantiate the gathered data from the questionnaires and documents obtained.

Statistical Treatment

Data were tallied and analyzed using frequency count, weighted mean, ranking and Pearson r Product Moment Correlation.

FINDINGS

A presentation of the overall result and findings of the study which focused on the determination and assessment of the student services in this campus, CBSUA-Calabanga.

Services provided to the students

After the documentary analysis conducted appertaining to the programs, projects, activities of the office of the University's Student Affairs and Services, it can be asserted that CBSUA is adhering to the mandate of delivering student services to their clienteles. Based from the CMO No. 9, s. 2013, HEIs are mandated to offer student services which are grouped into three; a) student welfare services, b) student development services, and c) institutional student programs and services.

Among the various student welfare services, the respondents believed that the school initiated the information and orientation services to the students through the Orientation Seminar being conducted in a campus wide setting during the start of the school year. Moreover, each college, the College of Arts and Sciences (CAS), College of Education (COE), and College of Industrial Technology (CIT) managed the same activity to their respective students. These findings are supported by the factual supports derived from the OSAS documents.

On the other hand, student organizations and activities ranked first among the six student development services. Some of the organizations actively functioning are Supreme Student Government, SAMBIT, and TESS. While sports development programs outnumbered the rest of the other institutional student programs and services. The result was supported by the responses from the interview that the university dynamically joined sports event in the local and national level competitions.

However, it was found out that the school is not offering student housing and residential services, and foreign/ international student services as these two services were included in the aforementioned CHED memorandum. Based from the interview, students who are residing in remote areas are living in boarding houses in the vicinity of the university.

These findings implied that the university was abiding to the mandates and therefore implementing diverse services to serve their clients. Lizotte (2015) expressed that student support services cover a very wide-range services including, but are not limited to: athletics, student government, counseling, clubs and organizations, fraternity and sorority life, student leadership, and spiritual life. All of these support services help to enhance the overall student experience.

Extent of Implementation (EOI) and Extent of Satisfaction (EOS) of the respondents in the services provided

As shown in Table 1, the extent of implementation of student welfare services as perceived by the respondents were moderately implemented with the mean score of 2.74 and the extent of satisfaction was also moderately satisfied (mean= 2.77). It was noted from the respondents' responses during the interview that the university is conducting regular comprehensive program and provide information materials on institutional mission, vision, goals as they were displayed in conspicuous places of the campus. Rules and regulations, student conduct and discipline, student programs, services and facilities and other information are widely disseminated to the students particularly during the Orientation Seminar.

As to the student development services, it was found out that the extent of implementation was strongly implemented (mean=3.26) and the extent of satisfaction was strongly satisfied (mean score= 3.25). This was supported by the respondents' affirmation that the school supported the establishment and implementation of student publication and other media forms, and production of yearbook. Students were also engaged in various activities such as leadership programs, student publication, student organizations, sports development, volunteerism, and others. The student organizations and activities undergo accreditation, re-accreditation, monitoring and evaluation under their Constitution and by-laws, and likewise provided with adequate office space and other institutional support.

The institutional student programs and services were moderately implemented (mean= 3.14) and respondents were moderately satisfied (mean= 3.22). Students were given opportunities to partake in some institutional and community physical fitness and well-being activities. Likewise, programs for sports development promotes national, sectoral, and cultural sports activities and development. Moreover, the school also conducted regular sports programs supporting school athletes and the whole studentry.

On the other hand, the institution provided scholarships and financial assistance in various forms and accessible modalities available to students with appropriate screening and monitoring procedures and guidelines understood by applicants and recipients, thereby giving chances for those less fortunate students to continue their schooling.

Table 1. Summary of the Extent of Implementation and Extent of Satisfaction in the Student Services

STUDENT SERVICES	EOI		EOS	
	M	I	M	I
A. STUDENT WELFARE SERVICES	2.74	MI	2.77	MS
B. STUDENT DEVELOP-	3.26	SI	3.25	SS
C. INSTITUTIONAL STUDENT PROGRAMS AND SERVICES	3.14	MI	3.22	MS
GRAND MEAN	**3.05**	**MI**	**3.08**	**MS**

Legend:
EOI-Extent of Implementation
EOS-Extent of Satisfaction
M - Mean
I -Interpretation

Interpretation:
3.25 – 4.00 Strongly Implemented/ Strongly Satisfied
2.50 – 3.24 Moderately Implemented/ Moderately Satisfied
1.75 – 2.49 Less Implemented/ Less Satisfied
1.00 – 1.74 Not Implemented/ Not Satisfied

The outcomes were in concurrence with the statement of Department of Education – New Jersey (2014) that comprehensive and coordinated student support services were critically important for the social, emotional, and character development of students and the development of learning climates that are conducive to student achievement of high academic standards. They further added that student support services foster positive relationships among educators and students, thereby increasing students' attachment to school, and serve as an essential link between students, and their families and school resources and community-based health and social services.

Significant relationship in the implementation of services and students' satisfaction

Table 2 revealed the result of the relationship in the implementation and the satisfaction in services offered by the campus. The result of the test revealed that there was a highly significant positive relationship between the level of implementation of the services and the clients' satisfaction, r =0.807, $p < 0.001$.

Table 2. Table for the test of significant relationship in the implementation and satisfaction of student services provided by CBSUA – Calabanga Campus, school year 2017-2018

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.455403302	1.455403302	37.42440208	5.6012E-06
Residual	20	0.777783062	0.038889153		
Total	21	2.233186364			

Legend: p value
< 0.05 = * (Significant)
< 0.01 = ** (Highly Significant)
> 0.05 = ns (not significant)

This implied that the university was committed to achieve quality, relevant, and efficient higher education through meaningful and student-centered activities. The services were maximized by the intended clienteles ensuring the utmost implementation that will advance their welfare and potentials. Lizotte (2015) affirmed that support services help to enhance the overall student experience and according to Audin and Davy, 2003 as stated by Ciobanu (2013), the creation of effective student services that were focused on its necessities, in order to provide the required support for academic activity and stimulate personal, social, cultural and cognitive development, is needed.

Plan that may be recommended as a result of the study

This development plan is a proposed campus – level plan anchored from the findings of this study. This defined the university as an institution of higher learning bringing quality education for all through an intensified student services programs and projects. Salient features of this plan include; (a) student services vision, (b) mission, (c) goals, (d) objectives, and (e) targets. Comprised also with the various program thrusts, projects or activities to be undertaken for the period of five years, and the budgetary requirements for every activity.

CONCLUSION

Findings of this study generated the following conclusions:

1. CBSUA - Calabanga have various student services conducted such as: Information and Orientation Services, Career and Placement Services, and Guidance and Counseling Services, the top three highest responses in the Student Welfare Services; Student Organizations and Activities, Student Council/Government, and Student Activities under the Student Development Services; and Sports Development Programs, Social and Community Involvement Programs, and Scholarships and Financial Assistance (SFA) for Institutional Student Programs and Services.

2. In general, the respondents were moderately satisfied (mean= 3.05) with the student services and perceived them as moderately implemented (mean=3.08).
3. There was a significant relationship in the implementation and satisfaction in the student services.
4. Student services development plan is geared towards achieving a sustainable student services that will support the academic instruction to facilitate holistic and competent students and responsible citizens of the country.

RECOMMENDATION

Based from the findings, the following were recommended:

1. It is highly recommended that the institution must strengthen their policies execution, personnel designation, and encourage more partnerships for linkages and support to withstand the numerous student services plans and projects.
2. The administrators and other concerned officials shall act according to their roles, duties, and responsibilities to realize and sustain the implementation of the different student services.
3. It is also recommended that the school shall intensify the monitoring and evaluation of the services and determine possible factors contributing to the success and failure of programs.
4. The five – year sustainable development plan will serve as a blueprint in achieving the university goals hence it is recommended to equip it with the most suitable strategies to address the services with the most prevailing constraints.

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EMPLOYABILITY OF THE BISU- BALILIHAN GRADUATES OF ACADEMIC YEAR 2009- 2010 TO 2013-2014

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ABSTRACT

The study was conducted to determine the employability of the BISU- Balilihan Campus graduates in the A.Y. 2009- 2010 to 2013-2014. Likewise, this sought to determine the employment rate of the graduates in relation to their field of specialization. The study used the descriptive research design and utilized a questionnaire as a data gathering tool. It is concluded that there are more female graduates than male and majority are singles. Most of the graduates landed a local job while only a minimal number were not able to find employment until the time this study was conducted. Most graduates earn between P10, 000.00 to P15, 000.00 however, noticeable also is the number of graduates with an income below P5, 000.00. Most of them are contractual basis and are in the rank and file level. Result showed that majority of the respondents are gainfully employed and landed a job from less than a month to six months as walk in applicants. Majority are working as rank and file in their respective place of work. Working environment plays a big role in staying their first job while salaries and benefits and career challenge are their bases in accepting the current job. Moreover, the graduates landed a job related to their field of specialization. Computer skills, Oral communication Skills, writing Skills and Human Relation Skills were deemed to be most useful competencies learned by the graduates from BISU- Balilihan that have greatly contributed to their job placement.

Keywords: Tracer Study, Employability, Employment Rate, Graduates, BISU- Balilihan

INTRODUCTION

This tracer study aims to determine the employability of BISU- Balilihan graduates in their respective fields for the year 2010-2014. CHED mandated all HEIs to conduct Graduate Tracer Studies to determine the employability of the graduates in their respective disciplines. This is currently viewed as a means to ensure better mobility and acceptability of our graduates and professionals in the global market and also to monitor the quality of the programs offered in the HEIs. Several HEIs in the Philippines have already responded this mandate and have already determined the status of their graduates.

Along with these developments, Bohol Island State University Balilihan Campus cannot afford to be unresponsive to the curricular demands of the present situation. According to Torres (2011), "Education must be constantly updated in order to meet the employment demands and overcome occupational and social imbalance ". In order for BISU- Balilihan to be updated in the rapidly changing labor market and technological environment, curricular reforms should be conducted. This reform/s must be influenced by evidence/s like the result of a Graduate Tracer Study.

The Campus has already produced five (5) batches of graduates from A.Y. 2010-2014 with approximately 300 graduates. In response to the call of CHED, the researchers believed that it is high time to locate and find the alumni of BISU Balilihan Campus particularly those who graduated from A.Y. 2010-2014 and find out their employment background to help the campus assess the relevance and quality of its education. Hence, the result of the Tracer Study might be a great help to BISU Balilihan to be more strategic in developing curriculum and making new staffing decisions, policy direction, budget priorities and the Universities development plan.

LITERATURE BACKGROUND

The Bohol Island State University Balilihan Campus was established in 2006. Its primary purpose is to provide opportunities for the financially depressed families to develop the living condition of the people through democratic access to education. As one of the campuses in BISU System, BISU Balilihan is creating a promising and rising university across Bohol Province which is now developing its facilities and strengthening its faculty in targeting accreditation for better quality education.

The researchers conducted this study to determine the employability of the graduates in their respective fields for the year 2010-2014. According to Polytechnic University of the Philippines (2005), "Tracer study is a method which is primarily intended to locate graduates of academic institution, past recipient of scholarship grants, former participants and among other situation in order to collect data and update information about this type of people."

This study is anchored in the theory of Trace and Decay by Edward Thorndike assumes that the learning leaves a mark on the brain, with the passage of time this trace decays when it is not rehearsed, and once decay has occurred, memory "dies out" or "fades away" (Sysenck, 2005). In this connection, the theory further elaborates that the learning gained from school should not be only limited inside the four walls of the classroom but it should be applied in everyday life.

Moreover, the researchers inclined this study to the tracer study of La Salle University. The study discussed the results of the tracer study of the College of Engineering Graduates who graduated between 2009 and 2013. (Macalisang, 2014)

On the other hand, Republic Act No. 10612 Chapter VI, Section 16 stated that; Review and Monitoring. – The DepEd, the CHED and the DOST shall report to the President and Congress after the first three (3) years, and annually thereafter, on the implementation of the provisions of this Act and submit recommendations for its improvement. The Departments are also tasked to monitor the hiring in high schools of scholars under this program, and to undertake such tracer studies and include these in the annual reports.

This article mandated the institutions to monitor the graduates for recommendations of the institution's improvement, so as to advance the knowledge and skills and can even help the students who will be the future graduates to easily cope with the rapid changes of the labor market.

OBJECTIVES

The main purpose of this study was to determine the employability of BISU- Balilihan Graduates of Academic Year 2009-2010 to 2013-2014.

Specifically, this study sought to answer the following questions:

1. Determine the personal profile of the BISU Balilihan Campus graduates in the A.Y. 2009-2010 to 2013-2014 on their employability.
2. Determine the employability aspects of the graduates of the graduates in terms of:
   2.1 span of time before landing the first job
   2.2 means of finding the first job
   2.3 Reasons for leaving the first job
   2.4 Reasons for accepting the current job.
   2.5 line of business where the graduates are currently employed
3. Is there a significant correlation between the graduate's field of specialization and their present occupation?
4. Determine the perception of respondents on the useful competencies learned by graduates
5. Determine the employment status of the graduates in terms of:
   5.1 Employment rate
   5.2 Under employment rate.

METHODOLOGY

The tracer study used the descriptive research design with are Two Hundred Twenty-Five (225) graduates served as respondents. These respondents are determined through systematic random sampling.

The graduates were contacted first for their specific addresses. Afterwards, researchers together with assigned enumerators personally meet and interview the graduates. But for those locations with very minimal sample, researchers sent them the instrument through emails or mails and were asked to return it by any means. The study utilized modified Graduate Tracer Study in gathering the needed data.

FINDINGS

Table 1 Personal Profile and Employment Data of Respondents

Variable	Frequency	Percentage
Personal Profile		
Civil Status		
Single	220	97.8
Married	5	202
Sex		
Male	75	33.3
Female	150	66.7

Variable	Frequency	Percentage
Employment Data		
Employment		
Never been employed	8	3.6
Currently Employed (Single or multiple Employment)	217	96.4
Local	208	95.9
Abroad	9	4.1
Monthly Income		
Below P 5,000	37	16.4
P 5,000 to less than P 10,000	52	23.1
P10,000 less than P15,000	57	25.3
P 15,000 to less than P 20,000	45	20.1
P 20,000 to less than P 25,000	28	12.4
P 25,000.00 and above	6	2.7
Employment Status		
Regular or Permanent	53	23.6
Contractual	71	31.6
Temporary	34	15.1
Casual	67	29.7
Self-Employed		0
Job Level		
Rank and file or Clerical	86	38.2
Professional, Technological or Supervisory	72	32
Managerial or Executive	67	29.8
Self-Employed		0

Table 1 shows two variables, the personal profile of the respondents and their Employment Data. The first variable displays that there are more female graduates (66.7%) than male graduates (33.3%). Moreover, majority of them are still single (97.8%). This implies that graduates have more priority in seeking a job than settling down.

On the other hand, the employment data reveals that most of the graduates are currently employed and land a job locally. Regarding their Monthly Income, there are 57(25.3%) graduates who earn a salary range of P 10,000 to P 15,000, 28(12.4%) graduates earns a salary range of P 20,000 to P 25,000 and there are 8 (2.7%) graduates who earn P 25,000 and above. This means that the graduates are determined in finding a good job and consequently have their own income.

Furthermore, their employment status shows that there are only 53 (23.6%) graduates who are permanent. This indicates that there is less probability in getting a permanent job status. Lastly, on Job Level most graduates are in Rank and file or Clerical. This reflects that there are more vacant positions in this level.

Table 2 Span of Time Before Landing the First Job In Percentage (%)

Span of Time before landing the first job	BS Information Technology	BS Computer Science	BS Electronics Technology	BS Electrical Technology	BSIT- Food Technology	Average
Less than a month	70.0	15.0	20.0	10.0	8.0	24.6
1 to 6 months	11.0	50.0	44.0	25.0	14.0	28.8
7 to 1 year	8.0	20.0	29.0	38.0	47.0	28.4
1 year to less than 2 years	11.0	15.0	7.0	27.0	31.0	18.2
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 2 shows the duration by which the graduates have landed on their jobs. The table suggested that of the five courses, BS Information Technology (IT) graduates get employed immediately after graduation, followed by the BS Computer Science (BSCS) and BS Electronics Technology (BS Elex) graduates, then lastly are the BS Electrical Tech. (BS Elect) and BSIT- Food Technology (Food Tech) graduates.

This may mean again that there is a bigger job opportunity for IT graduates in the market in that the availability of possible jobs can be secured immediately. Again, these may imply on the flexibility of employment for IT graduates. For BSCS and BS Elex, the duration can still be considered as immediate or average which may mean that graduates may still have greater opportunity in the job market though one can say that their skills may be one of the contributing factors for these job chances.

Lastly, most BS Elect and Food Tech. graduates had the longest possible time to get employment, and even more noticeable is the larger frequency of those who have more or less two years to land a job. This may possibly mean a really smaller job opportunity for them, and maybe equated to requirements of specific skills in the labor force.

Table 3 Means of Finding a Job In Percentage (%)

Means of Finding a Job	BS Information Technology	BS Computer Science	BS Electronics Technology	BS Electrical Technology	BSIT- Food Technology	Average
Response to an	9.0	13.0	8.0	15.0	23.0	13.6
As walk-in	35.0	43.0	26.0	29.0	24.0	31.4
Recommended	26.0	25.0	26.0	20.0	25.0	24.4
Information	17.0	9.0	37.0	33.0	21.0	23.4
Arranged by school's job placement	5.0	9.0	2.0	2.0	5.0	4.6

Means of Finding a Job	BS Information Technology	BS Computer Science	BS Electronics Technology	BS Electrical Technology	BSIT- Food Technology	Average
Family business	4.0	0.0	0.0	0.0	0.0	.8
Job Fair or Public Employment Service	4.0	2.0	1.0	1.0	2.0	2
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100%

Table 3 shows possible modes that enabled graduates to find their respective jobs. Inference from the table suggested that most IT and BSCS graduates landed the job as walk in applicants, while most BS Electrical and Electronics graduates, land their job through information from friends and lastly, most Food Tech. graduates land their job through recommendations from someone.

This may mean that there is a bigger job opportunity for IT and BSCS graduates in the market in that the availability of possible jobs can be secured through self-search. These jobs may not necessarily be related to their courses but can be landed upon through their own initiatives. While for BS Electrical and Electronics, this may mean a smaller job opportunity, that their job's availability is mostly learned through linkages. That is, acquisition of job is not as diverse as the other courses and may require specific skills that only linkages can be a good source of available opportunity. Lastly, for Food Technology graduates, there is a much smaller job opportunity that their job's availability is mostly acquired through recommendation of someone whose personal judgment in the capability of workers is being trusted by the company. That is, the job opportunity of these graduates is trimmed down to the skills that they can offer.

Table 3 Reasons for Leaving with the First Job

Reasons for leaving with the first job	Weighted Mean	Description	Rank
Working Environment	3.3	Moderate	1
Career Challenge	3.1	Moderate	2.5
Related to course or program of study	3.1	Moderate	2.5
Related to special skills	3.0	Moderate	4
Proximity to residence	2.9	Moderate	5
Salaries and Benefits	3.2	Moderate	7
Peer Influence	2.8	Moderate	7
Management Issue	2.8	Moderate	7
Health Reasons	2.6	Moderate	9
Family Influence	2.5	Moderate	10

Table 3 shows conceived reasons that caused graduates to leave their first employment. Working environment got the biggest in consideration. This may mean that incompatibility with the work surrounding triggers most of the job quitting. This is followed by career challenge and by relation with course. This is to mean that the first job the graduates took is not related to their respective field and that it may lack the challenge that they are looking for in a job, that is why they have to quit from it and considered another job related to their course and which maybe is more challenging.

Table 4 Reasons for Accepting the Current Job

Reasons for accepting the current job	Weighted Mean	Description	Rank
Salaries and Benefits	3.8	Much	1.5
Career Challenge	3.8	Much	1.5
Working Environment	3.7	Much	3
Related to special skills	3.6	Much	4
Related to course or program of study	3.5	Much	5
Management Issue	3.4	Moderately	6
Proximity to residence	3.2	Moderately	7
Health Reasons	3.1	Moderately	8
Peer Influence	3.0	Moderately	9.5
Family Influence	3.0	Moderately	9.5

Table 4 shows reasons for accepting the current job. In complement from reasons of leaving current job, working environment still played a crucial role in accepting a job offer, together with career challenge and salaries and benefits. This indicated that graduates preferred a comfortable working environment which at the same time may offer bigger career challenges and good remuneration package.

Table 5 Line of Business where Graduates are Employed In Percentage (%)

Major line of business of the company the graduates are presently employed in.	BS Information Technology	BS Computer Science	BS Electronics Technology	BS Electrical Technology	BSIT- Food Technology
1. Agriculture, Hunting and Forestry					
2. Fishing					
3. Mining and Quarrying					
4. Manufacturing		8.33	40.00	36.36	5.26
5. Electricity, Gas and Water Supply			2.50	**63.64**	
6. Construction	5.71	3.33			
7. Wholesale and Retail Trade, repair of motor vehicles, motorcycles and personal and household goods	14.29	21.67	**50.00**		13.16
8. Hotel and Restaurants					**68.42**
9. Transport Storage and Communication	**50.00**	**41.67**			
10.Financial Intermediation	7.14	5.00			
11.Real State, Ranting and Business Activities	11.43	3.33			
12.Public Administration and Defense; Compulsory Special Security					

Major line of business of the company the graduates are presently employed in.	BS Information Technology	BS Computer Science	BS Electronics Technology	BS Electrical Technology	BSIT-Food Technology
13.Education					
14.Health and Social					
15.Other Community, Social and Personal Service Activities					
16.Private Households with Employed Persons					
17.Extra-territorial					
18. Government	11.43	16.67	7.50		
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Table 5 shows the line of employment that graduates have to help determine whether the graduates were able to land a job in related to their chosen field.

Figures show that a significant number of the graduates were able to get a job which is related to their chosen profession. Most IT and BSCS graduates landed a job in communication, while BS Electronics were with wholesale and retail trade and or repair, both for electronic products or services, while most BS Electrical were employed with the electricity industry and lastly, Food Technology are with hotels and restaurants. These figures only reiterated the fact that their courses have a crucial role and of biggest influence in the type of job that the graduates chose to have.

Table 6 Relationship Between the Employed Graduate's Fields of Specialization and The Present Occupations

Courses	Variables	Degrees of Freedom (df)	Chi-Square Value (Cv)	Significance Value or Tabular Value (Tv)	Verbal Interpretation
BS INFO. TECH.	Fields of Specialization vs. Present Job	5	33	11.0705	The employed graduate's fields of specialization are related to their present job
BS COMP SCI		6	21	12.5916	
BS ELECTRONICS		3	61	7.8147	
BS ELECTRICAL		1	24	3.8414	
BSIT FOOD TECH.		3	55.84	7.8147	

Level of Significance = 0.05, Cv >Tv, reject the Null hypothesis

Table 6 shows that there is a significant relationship between the two variables. Thus, the graduates in their chosen fields of specialization have greater relevancy to their present job after they had graduated from their respective courses.

Table 7 Useful Competencies Learned by Graduates

Items Rated	Rating	Description	Rank
A. COMPETENCIES			
Computer Skills (ex. Word, Excel, PowerPoint)	3.8	Better	1
Human Relations Skills	3.7	Better	2
Oral Communication Skills	3.6	Better	3.5
Writing Skills	3.6	Better	3.5
Entrepreneurial Skills (capacity to start own business)	3.5	Better	6.5
Information Technology Skills (office equipment's/gadgets)	3.5	Better	6.5
Problem Solving Skills	3.5	Better	6.5
Technical Skills (related to course)	3.5	Better	6.5
AVM	3.7	Better	

Table 7 shows that the graduates had rated "better" of the competencies they learned from the school. This is to mean that the students believed that the school has exerted a large effort in making their students become a valuable labor force.

CONCLUSION

1. Majority of the respondents are gainfully employed and landed a job from less than a month to six months as walk in applicants.
2. Most of them are contractual basis and are working in the Philippines.
3. Majority are working as rank and file in their respective place of work.
4. Working environment plays a big role in staying their first job, while salaries and benefits and career challenge are their bases in accepting the current job.
5. Moreover, the graduates landed a job related to their field of specialization.
6. Computer skills, Oral communication Skills, writing Skills and Human Relation Skills were deemed to be most useful competencies learned by the graduates from BISU- Balilihan that have greatly contributed to their job placement.

RECOMMENDATIONS

It is recommended that the university will make programs/activities designed to advance more on student's computer skills, oral communication skills, writing skills and human relation skills

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ACCEPTABILITY OF THE RE-NATIONALIZATION OF THE DEVOLVED HEALTH SERVICES AND FACILITIES ACT

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ABSTRACT

This study determined the level of acceptability of the health sectors in Boac, Marinduque on House Bill No. 7326 otherwise known as the "Re-nationalization of the Devolved Health Services and Facilities Act." The researchers gathered data from 149 respondents who were selected via Slovins method. The researchers used the descriptive method of research in gathering the information needed to assess the level of acceptability of the health sectors on House Bill No. 7326. Data were gathered through personal visit and handling of questionnaire to the people of Provincial Department of Health, Barangay Health Offices and the Community of District 1 Boac, Marinduque. Results showed that section 4 (re-nationalization) was moderately accepted by the respondents while section 5 (authority to use income) resulted to "accepted" and section 6 (appropriations) resulted to "moderately accepted." In conclusion, the study showed that House Bill No. 7326 otherwise known as "Re-nationalization of Devolved Health Services and Facilities Act" was generally moderately accepted.

Keywords: devolved, facilities, health, re-nationalization, services

INTRODUCTION

In 1991, the Local Government Code was introduced by Senator Aquilino Pimentel which concerns to the major devolution of national government services including the health sector reform. During 1992, the Philippine Government devolved the management and delivery of health services from the National Department of Health to locally elected provincial, city and municipal governments. The aim of decentralization is to widen decision-making space of middle level managers, enhance resource allocations from central to peripheral areas and to improve the efficiency and effectiveness of health services management. The findings of the historical review of devolution in the Philippines reveals some consistencies with the international literature, which describe some negative effects of decentralization, and provide a rationale for the Philippines in undertaking a second wave of reform in order to 'make devolution work'.

Despite twenty-seven years of the decentralization experiment in the Philippines, the literature on its impact on health remains limited. According to Hon. Tricia Nicole Q. Velasco – Catera and Hon. Lord Allan Jay Q. Velasco; which seeks to re-nationalize the hospitals and other health institution in the Province of Marinduque, and place the same under the direct control, management, and supervision of the Department of Health (DOH), The Local Government Code of 1991 was promulgated with the laudable objective of providing more responsive and accountable services to the public. In pursuit thereof, health services were devolved to the local government units (LGUs). Thus, government hospitals in the province of Marinduque were placed under the supervision and control of the provincial government. It was emphasized, however, that it is the national government, through the Department of Health, which has the proven expertise to manage these hospitals and to maximize the use of their resources for the benefit of patients served by such hospitals.

Velasco (2017) mentioned that hospitals are lacking proper facilities, sufficient diagnostic tools, competent personnel, and specialized medical services brought about by the neglect and mismanagement of the responsible officials have resulted in the failure of these hospitals to serve the needs of the people of Marinduque. Due to the inability of the hospitals to completely handle sensitive and complicated cases, patients are routinely advised to seek medical attention outside the province

This study will assess the level of acceptability on House Bill No. 7326 otherwise known as "Re-nationalization of Devolved Health Services and Facilities Act" introduced by Representative Joel Mayo Z. Almario. Being Humanities and Social Sciences (HUMSS) students we are expected to act and address things concerning about societal issues to promote the well-being of an individual. The researchers felt the need to discuss about the re-nationalization of devolved hospitals because local government units failed to carry out what is stated in local government code of 1991. This research will be able to determine the level of acceptability of the health sectors on House Bill No. 7326 in the province of Marinduque specifically the community and Barangay Health Workers in District 1 of Boac and the Provincial Department of Health.

STATEMENT OF THE PROBLEM

The study aims to acquire knowledge about the level of acceptability of the health sectors on House Bill No. 7326.

Specifically the study sought answers to the following:

1. What is the level of acceptability of the health sectors in Boac, Marinduque on House Bill No. 7326 in terms of:
    1.1 Section 4 (Re-nationalization)
    1.2 Section 5 (Authority to Use Income)
    1.3 Section 6 (Appropriations)
2. What are the perceptions of the respondents to the proposed re-nationalization of health services and facilities?
3. What are the implications of the findings of the study on the ongoing deliberation of House Bill No. 7326?

METHODOLOGY

Descriptive Method of research was used in conducting the study for it is believed to bring appropriateness and reliability. According to Ritchie et al. (2013), using the descriptive method abled the researchers to observe a large mass of target population and make required conclusions about the variables. The mentioned research design is applicable as the study involves data gathering and interpretation of gathered information.

The research was conducted at the Provincial Department of Health, chosen Barangay Health Offices, and the Community of District 1 Boac, Marinduque where the following barangays are located: Maligaya, Amingon, Isok I and II, Mercado, Murallon, Mataas na Bayan, Tabi, Poras, Pili, Lupac, Tabigue, Tampus, Mansiwat, Santol, Laylay, Bangbangalon, Ihatub, Balaring, Bunganay, Cawit, Duyay and Tugos.

The total accumulated respondents of the study is 149 selected via Slovins method; 100 coming from the Community, 44 from the Barangay Health Workers, and 5 from the Provincial Department of Health of District 1 Boac, Marinduque.

The researchers asked the approval of the head of the following organizations through written request for the schedule of performing the survey. After distributing the questionnaires to the target respondents, the data that had been amassed were tallied, tabulated, analyzed and interpreted.

REVIEW OF LITERATURE

Most local and foreign studies and literatures contain very clear agreements and acceptability on re-nationalizing devolved healthcare units. Several countries with devolved functions proved to have garnered negative results on quality service, staff count and performance, lack of medical equipment and the likes. Therefore, patients and officials suggest re-nationalizing, if not revising the code, for the betterment of the public's health as mentioned by Capuno (2017).

Re-nationalization would mean having to transfer back the responsibility from the LGUs to the national government. As mentioned by Lawas (2015), devolved hospitals and other healthcare units were outnumbering DOH-retained hospitals and even then, the performance and accessibility of the DOH hospitals were of higher quality than devolved ones. This resulted to the public preferring to re-nationalize health units.

According to the Senate of the Philippines (2017), in terms of funding, since devolution was a rushed decision, the cut for health expenditure went down leaving a low budget on health in the Philippines. If the devolved hospitals were to be reverted to the National Government, its funds will be infused under the annual General Appropriations Act (GAA) like all the hospitals retained by DOH. Upon implementation of the Senate Bill No. 626, re-nationalized hospitals and rural health units will be authorized to use the income they derived from their operation to improve and upgrade the services they provide as long as it is approved by the Department of Health (DOH).

Devolution remained to be obscure and challenging as it was unclear because corresponding appropriations were not devolved so the LGUs were saddled with providing appropriations but what is important is that the appropriations for these hospitals must be provided in the GAA; bigger appropriations to ensure better services to the people. As observed by Capuno (2017), recurrent functional conflicts among local governments and the financial conflicts between local governments and the national government under decentralization to the formulation and implementation of the Local Government Code of 1991 sought that even if it is avoidable, it still persists because decentralization was pushed too far, leading to fragmentation in service delivery, each piece inefficiently assigned to a different local government.

According to the Liga ng mga Barangay saPilipinas (LnB) (2018), even though most people agree with the existing acts, others are still trying to defend the Devolution of Health Services. The negative effects of devolution on health care systems in developing countries have been well documented but the innovative and effective programs some LGUs have implemented in their communities show that devolution can actually work, under certain conditions. Executive Order 444 presented an opportunity to examine these conditions and propose ways to fix, and not abandon, the process in the devolution of health services.

If the discharge of basic healthcare services were to revert back to the national government, LGUs would be freed from financial burden while they upgrade and standardize healthcare throughout the country. It would also ensure that the public will receive the kind of health services they deserve without most of the people having to travel to far places for immediate and efficient health services as claimed by Velasco (2017). The DOH created specific guidelines and indicators that will determine appropriate and effective courses of action. DOH-retained hospitals are more likely to provide quality healthcare than private hospitals because of the lack of attention or budget given to them therefore the re-nationalization bill is highly encouraged.

FINDINGS

Table 3. Level of Acceptability of the Respondents on Section 4 of House Bill No. 7326 otherwise known "Re-nationalization of Devolved Health Services and Facilities Act"

SECTION 4. *Re-nationalization*	**Barangay Health Work**	**Community**	**Department of Health**	**TOTAL**	
	WM			**WM**	**VD**
All health services and facilities devolved to the municipal and provincial levels are hereby re-nationalized or returned to the	3.36	3.7	1.8	2.95	***Moderately Accepted***
For this purpose, the following provision of the Local Government Code or RA 7160 are hereby deleted and declared no longer enforceable and effective: SECTION 17. Basic Services and Facilities. – (b) Such basic services and facilities include, but are not limited to, the following: (3) For a Province: (iv) Subject to the provisions of Title Five, Book I of this Code, health services which include hospitals and other tertiary health	3.11	3.47	1.8	2.79	***Moderately Accepted***
b) SECTION 102. Creation and Composition. – (a) There shall be established a local health board in every province, city, or municipality. The composition of the local	3.25	3.55	1.8	2.87	***Moderately Accepted***
(1) The provincial health board shall be headed by the governor as chairman, the provincial health officer as vice-chairman, and the chairman of the committee on health of the sangguniang panlalawigan, a representative from the private sector or non-governmental organizations involved in health services, and a representative of the Department of Health in the province, as	3.18	3.6	2.00	2.93	***Moderately Accepted***
(3) The municipal health board shall be headed by the municipal mayor as chairman, the municipal health officer as vice-chairman, and the chairman of the committee on health of the sangguniang bayan, a representative from the private sector or non-governmental organizations involved in health services, and a representative of the Department of Health in the municipality, as	3.30	3.69	2.00	2.93	***Moderately Accepted***
c) Other related provisions of the Local Government Code that pertain to devolved health services and facilities to municipalities and	3.20	3.64	1.8	2.88	***Moderately Accepted***
TOTAL	3.23	3.61	1.83	2.89	***Moderately Accepted***

Table 3 shows the level of acceptability of the respondents on House Bill No. 7326 entitled "Level of Acceptability of the Health Sectors on House Bill No. 7326 otherwise known as Re-nationalization of Devolved Health Services and Facilities Act" regarding Section 4 (Re-nationalization).

It is found out that the provision under Section 4 which states that "all health services and facilities devolved to the municipal and provincial levels are hereby re-nationalized or returned to the national government" is dominantly accepted by the respondents except for the PDOH. This statement garnered the highest weighted mean because the Barangay Health Workers claimed that the public, especially the marginalized, will gain more benefits. The community, on the other hand, believes that more funds can be concentrated to other priority projects of the province. It will also be certain that the hospitals will be at par with DOH standards.

The statement with the lowest weighted mean states that "Section 17 paragraph (b) (3) (iv) of the Local Government Code or RA 7160 is hereby deleted and declared no longer enforceable and effective" for the community believes that re-nationalizing health services and facilities is not an easy task especially for the government. Some of the respondents also pointed out that devolution improved health facilities and services in other provinces. This provision is dominantly accepted by the respondents except for the PDOH.

Having been the ones with higher appreciation, the community claimed that re-nationalizing would regulate the hospitals and increase the number of professional doctors. Moreover, they also believe that the services will be more accessible to the public. The PDOH, which were at low appreciation, believed that the process will be difficult to execute. It is therefore found out that the level of acceptability of Section 4 of House Bill No. 7326 is 2.89 which can be verbally described as *Moderately Accepted*.

Table 4. Level of Acceptability of the Respondents on Section 5 of House Bill No. 7326 otherwise known "Re-nationalization of Devolved Health Services and Facilities Act"

SECTION 5. ***Authority to Use Income***	**Barangay Health Workers**	**Community**	**Provincial Department of Health**	**Total**	
	WD			**WD**	**VD**
Re-nationalized hospitals and Rural Health Units/Centers are hereby authorized to use their income derived from their operations to improve or upgrade their services: Provided, that the supporting financial and work plans are first approved by the Secretary of Health.	3.43	3.74	3.6	3.59	Accepted

Table 4 indicates the level of acceptability of the respondents on House Bill No. 7326 entitled "Level of Acceptability of the Health Sectors on House Bill No. 7326 otherwise known as Re-nationalization of Devolved Health Services and Facilities Act" regarding Section 5 (Authority to Use Income).

The community, with higher appreciation of 3.74, claimed that more funds can be allotted to improve the health services and facilities if it will be given to the national government. Problems will also be addressed quicker as stated by the respondents. It is therefore found out that the level of acceptability of Section 5 of House Bill No. 7326 is 3.59 which can be verbally described as *Accepted*.

Table 5. Level of Acceptability of the Respondents on Section 6 of House Bill No. 7326 otherwise known "Re-nationalization of Devolved Health Services and Facilities Act"

SECTION 6. Appropriations	**Barangay Health Workers**	**Community**	**Provincial Department of Health**	**Total**	
	WM			**WM**	**VD**
The cost of the devolved health services and facilities shall be deducted by the Department of Budget and Management from the Internal Revenue Allotment of the Local Government Units and shall be used as funding source to implement the provision of this Act.	3.59	3.55	3.00	3.38	***Moderately Accepted***
Any deficiency shall be charged against the Organizational Adjustment fund and appropriations saving/ reserves.	3.84	3.45	3.00	3.43	***Moderately Accepted***
Sums as may be needed for its continued implementation shall be included in the Annual General Appropriations Act.	3.00	3.37	3.00	3.12	***Moderately Accepted***
The Internal Revenue Allotment of Local Government Units in the succeeding years shall be the net of the cost of devolved health services and facilities.	3.14	3.55	3.00	3.23	***Moderately Accepted***
TOTAL	3.39	3.48	3.00	3.29	***Moderately Accepted***

Table 5 presents the level of acceptability of the respondents on House Bill No. 7326 entitled "Level of Acceptability of the Health Sectors on House Bill No. 7326 otherwise known as Re-nationalization of Devolved Health Services and

Facilities Act" regarding Section 6 (Appropriations).

It is found out that the provision under Section 6 which states that "any deficiency shall be charged against the Organizational Adjustment fund and appropriations saving/reserves" is dominantly accepted by the respondents except for the Barangay Health Workers. This statement garnered the highest weighted mean as the respondents believe that the deficiency of the allotted funds is a result of corruption.

The statement with the lowest weighted mean states that the "sums as may be needed for its continued implementation shall be included in the Annual General Appropriations Act" for the respondents are convinced that the only problem is with the current officials handling the health services and facilities. This is unanimously accepted by the respondents.

The community, being the ones with higher appreciation believes that the re-nationalization of health services and facilities will benefit the public while the PDOH, with the lowest appreciation claimed that there are still protruding doubts if the needed funds to efficiently implement the act will be sufficient. It is therefore found out that the level of acceptability of Section 6 of House Bill No. 7326 is 3.29 which can be verbally described as Moderately Accepted.

Table 6. Level of Acceptability of the Respondents on House Bill No. 7326 otherwise known "Re-nationalization of Devolved Health Services and Facilities Act"

	Barangay Health Workers	Community	Provincial Department of Health	Total	
	WM			WM	VD
SECTION 4. Re-nationalization	3.23	3.61	1.83	2.89	***Moderately Accepted***
SECTION 5. *Authority to Use Income*	3.43	3.74	3.6	3.59	***Accepted***
SECTION 6. *Appropriations*	3.39	3.48	3.00	3.29	***Moderately Accepted***
TOTAL	3.35	3.61	2.81	3.26	***Moderately Accepted***

Shown in Table 6 is the level of acceptability of the respondents on House Bill No. 7326 entitled "Level of Acceptability of the Health Sectors on House Bill No. 7326 otherwise known as Re-nationalization of Devolved Health Services and Facilities Act."

It is found out that Section 5 (Authority to Use Income) is dominantly accepted by the respondents except the Barangay Health Workers. This section gained the highest weighted mean as the respondents pointed out that the allotted funds will be focused on the improvement of the facilities and the income will be used for the enhancement of services.

Section 4 (Re-nationalization) is revealed to have the lowest weighted mean for it is claimed by the respondents that the distribution of attention from the DOH will not be fair throughout the provinces once health services and facilities are re-nationalized. This section is accepted by the community, moderately accepted by the Barangay Health Workers and less accepted by the PDOH.

The community has higher appreciation of 3.61 because they stated that re-nationalization is the only solution to the problem that has lasted since year 1991. The PDOH which has the lowest appreciation believe that devolution can still improve the health services and facilities. It is therefore found out that the overall level of acceptability of House Bill No. 7326 is 3.26 which can be verbally described as Moderately Accepted.

Table 7. Perceptions of the Respondents on House Bill No.7326 otherwise known "Re-nationalization of Devolved Health Services and Facilities Act"

STATEMENTS	BARANGAY HEALTH WORKERS	COMMUNITY	PROVINCIAL DEPARTMENT OF HEALTH	F	D	R
More funds can be concentrated to other priority projects of the province and we can also be guaranteed that the hospital will be at par with DOH standards.	2	7	0	9	8	3
Re-nationalizing health services and facilities is not easy especially for the government; the process of it will be difficult to execute and devolution improved health facilities and services in other provinces.	3	2	1	6	5	5
There are still doubts if the needed funds to efficiently implement the act will be sufficient.	4	3	1	8	7	4
The deficiency of the allotted funds is a result of corruption and the only problem is the current officials handling the health services and facilities.	0	9	0	8	9	3
Re-nationalizing would regulate the hospitals and increase the number of professional doctors and the basic health services can be more accessible to the public.	6	19	0	25	21	2
It is uncertain that the focus of the DOH will be fairly distributed throughout the provinces if it will be re-nationalized.	0	9	1	10	8	3
Re-nationalization is the only solution to the problem that has lasted since year 1991.	0	10	0	10	8	3
The country is currently leaning towards federalism where decentralization is the goal so it would be contradictory to the proposed House Bill.	0	5	0	5	4	6
More funds could be allotted to improve the health services and facilities if it is given to the national government and problems will be addressed quicker.	6	29	1	36	31	1
TOTAL	21	93	4	118	100	4

Legend:
F – frequency
P – percentage
R – ranking
A – advantage
D – disadvantage

Table 5 presents the perceptions of the respondents on House Bill No. 7326 entitled “Level of Acceptability of the Health Sectors on House Bill No. 7326 otherwise known as Re-nationalization of Devolved Health Services and Facilities Act.”

It is found out that majority (31%) of the respondents perceived that more funds could be allotted to improve the health services and facilities if it will be given to the national government and problems will also be addressed quicker. About 21% of the respondents believe that re-nationalizing would regulate the hospitals and increase the number of professional doctors. Basic health services, in this case, can also be more accessible to the public.

The statement with the lowest percentage of 4%, as claimed by the respondents, suggests that the country is currently leaning towards federalism where decentralization is the goal therefore visible contradictions toward the proposed House Bill is established. This shows that very few respondents were able to give such a response since majority prefers re-nationalizing devolved health services and facilities.

Implications of the Findings of the Study to the Ongoing Deliberation on House Bill No. 7326

The level of acceptability of the Health Sectors on House Bill No. 7326 otherwise known as “Re-nationalization of Devolved Health Services and Facilities Act” in selected barangays of District 1 Boac, Marinduque did not reach the optimum level of acceptance. Hence, there is a need to revise the proposed House Bill introduced by Rep. Joel Mayo Z. Almario. The probable cause of this is the uncertainty that the focus of the DOH will be fairly distributed throughout the provinces once it is re-nationalized. As an effect of this, the basic health services and facilities of the municipal and provincial level will remain devolved to the local government units. The possible remedy is for the LGUs to prioritize the health services and facilities in the provinces where devolution is not successful. The area affected in the study is the basic health services and facilities in the province of Marinduque specifically in District 1 of Boac.

CONCLUSION

The study aimed to determine the level of acceptability of House Bill No. 7326 introduced by Joel Mayo Z. Almario in which is considered to be a possible solution to the various health problems concerning the provincial hospitals in Marinduque.

Based on the end result obtained in the study, the researchers therefore conclude that:

1. Section 4 (Re-nationalization) got the lowest weighted mean though it is still considered as moderately acceptable.
2. Section 5 (Authority to Use Income) got the highest weighted mean and is acceptable.
3. Section 6 (Appropriations) garnered a weighted mean of 3.29 which is moderately acceptable.
4. The overall mean of House Bill No. 7326 is 3.26 which can be verbally interpreted as moderately accepted.
5. Majority of the respondents perceived that more funds could be allotted to improve the health services and facilities if it is given to the national government.

RECOMMENDATION

Based on the findings, the following recommendations are offered:

1. Since the respondents of this study were the Community, Barangay Health Workers, and Provincial Department of Health, other researchers may conduct the same study and add more variables.
2. Since it is found out that the second statement from Section 4 has the lowest weighted mean, it is recommended that the person behind the proposed house bill revises this statement in consultation with the national government especially the DOH.
3. Since it is found out that the third statement from Section 6 has the lowest weighted mean, it is recommended that the person who proposed the bill should make sure that the officials will be able to sustain the needed funds in re-nationalizing devolved health services and facilities.
4. Since it is found out that Section 4 has the lowest weighted mean, it is recommended that the person who proposed the bill should consider revising the house bill making sure that the devolved health services and facilities across different provinces will get adequate

attention from the national government if re-nationalization is pushed through.

5. Since Section 4 and 6 are Moderately Accepted, the person who introduced House Bill No. 7326 can use this study as basis to improve the contents of the said house bill.
6. Since this study focused on the acceptability on Section 4, 5, and 6 of House Bill No. 7326 otherwise known as "Re-nationalization of Devolved Health Services and Facilities Act", future researchers may conduct the same study with different respondents such as Doctors, Nurse, and Patients of devolved local public hospitals and health centers.
7. Future researchers may conduct related studies to other municipalities in the province.

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ENGAGING BSBM FACULTY MEMBERS IN EXPERIENCIAL LEARNING APPROACH TO TEACHING ENTREPRENEURSHIP101

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ABSTRACT

Some University instructors have experienced the challenges of trying to convey entrepreneurship education in the classroom. As stated in numerous studies, the key to a successful entrepreneurship education is to find the most effective way to manage the teachable skills and identify the best match between student needs and teaching techniques, there is no universal pedagogical recipe to teach entrepreneurship and the choice of techniques and modalities depends mainly on the objectives, contents and constraints imposed by the institutional context. An overview of the literature on entrepreneurship showed that experiential learning approach to teaching entrepreneurship which involves active teaching methods can be considered significant to students' development of entrepreneurial interest and business startup potentials. This paper presents data on the extent to which experiential learning approach to teaching entrepreneurship could be an effective way to impart entrepreneurial and business literacy. The study was based on the assumption that a successful entrepreneurship education depends partly on the method of teaching that would develop student's entrepreneurial interest and self-efficacy. The study made use of a descriptive research method augmented by interviews of teaching and learning experiences. Data were collected through "triangulation" such as study of documents, investigating related literatures and structured interviews among 9 faculty members and 35 undergraduate students from the Department of Management Studies of Cavite State University-CCAT Campus, Rosario Cavite. Target population was selected by means of random sampling and representative sample. This study has shown that traditional approaches were not as effective as experiential approaches. Further analysis showed that the adoption of experiential learning approach to teaching entrepreneurship enhanced students' appreciation of the entrepreneurial skills needed to run a successful business. Learners can participate in more challenging entrepreneurial activities, gain experiences which provides insights into discovering and creating entrepreneurship opportunities.

Keywords: Entrepreneurship opportunities, Experiential learning, Student business startups

INTRODUCTION

The complexity of the entrepreneurship process requires students to be more engage in entrepreneurship education. Current evidence seems to suggest that there is a gap between the perceived desirability of entrepreneurship among students and actual self-employment and startup rates among graduates. Entrepreneurship studies revealed several problems such as the choice of business ideas, to start-up phase of putting up the enterprise. While most of the studies on the effectiveness of entrepreneurship education have focused on the viewpoint of academics, it is important to obtain the perception of students (Gerba, 2012). Henry et. al. (2005) point out that the two important objectives of entrepreneurship education programs are (1) to increase the students' awareness and understanding of the process involved in initiating and managing a new business, and (2) to increase students' awareness of small business ownership as a serious career option. Entrepreneurship education is not only about teaching how to run a business, but it is also about encouraging creative thinking and promoting a strong sense of self-worth and accountability. Different from some specialized courses, entrepreneurship education demand that teachers change the traditional teaching methods and use lots of teaching forms to make students participate in and obtain the idea and essence of entrepreneurship education. Solomon et al (2002) affirmed that the most popular teaching methods in entrepreneurship education are creation of business plans, case studies and lectures. However, Hytti and O'Gorman (2004) suggest different view as they argued that there are many ways to offer entrepreneurship education, depending on the objectives of such education. Although traditional or passive methods are the most popular, various literatures argued on its effectiveness to give students a better understanding of the concept of entrepreneurship. An overview of various literatures on entrepreneurship showed that experiential approach to teaching entrepreneurship which involves active teaching methods can be considered significant to students' development of entrepreneurial interest and business startup potentials. The most widely recognized theory of experiential learning is Kolb's Experiential Learning Theory (ELT) which describes the process as one where the individuals uses his or her experience to transform activities into knowledge and development (kolb, 1984; Torbert, 1972). The ELT theory is typically represented by a four-stage learning cycle in which the learner touches all the bases; 1) concrete experience; 2) reflective observation; 3) abstract conceptualization; and 4) active experimentation. An overview of the literature on entrepreneurship showed that experiential approach to teaching entrepreneurship which involves active teaching methods can be considered significant to students' development of entrepreneurial interest and business startup potentials. While the key to a successful entrepreneurship education is to find the most effective way to manage the teachable skills and identify the best match between student needs and teaching techniques, there is no universal pedagogical recipe to teach entrepreneurship and the choice of techniques and modalities depends mainly on the objectives, contents and constraints imposed by the institutional context. Therefore, it is very important for the educators to continuously improve their methods and teaching styles. This paper explores the perceived effectiveness of teaching methods in entrepreneurship education from the perspective of the University undergraduate students.

STATEMENT OF THE PROBLEMS/ OBJECTIVES

This paper addresses several research questions: What are the problems encountered by the faculty in teaching entrepreneurship? What type of instructional approach has the greater impact on the students? What entrepreneurial activities can be done in the classroom? Do experiential learning methods and techniques have a greater impact on students' entrepreneurial competencies? Is the impact positive or negative?

The main objective of this study was to assess the impact of the traditional (passive) approach and experiential (active) learning approach to teaching entrepreneurship that will improve entrepreneurship education.

The paper was organized from the following specific objectives:

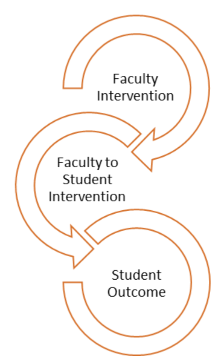
- Examine the problems encountered by BSBM faculty members in teaching entrepreneurship101.
- Assess students' classroom experiences on the traditional approach as compared to experiential learning approach in entrepreneurship101.
- Determine the possible interventions to address faculty and students' engagement in entrepreneurial interest.
- Introduce a number of experiential teaching methods and techniques.
- Assess the impact of experiential learning activities among the students taking up entrepreneurship101.

METHODOLOGY

Target Subject/Participants

The study utilized 9 faculty members and 35 students of entrepreneurship management (ENTRP101) of the Department of Management Studies of the Cavite State University-CCAT Campus, Rosario, Cavite in the academic year 2018-2019.

Figure 1
Action Research Paradigm



Data Collection Technique

Data was collected through the use of self-administered questionnaire in a survey, interview and focus group discussions to document students' interaction in a period of 6 weeks.

Data Analysis

The study made used of the descriptive research methods augmented by interview to thoroughly understand ideas and experiences. Assessment of student's experience was used to assess the effectives of the intervention conducted in this action research. Furthermore, the researcher used Likert-type structure to measure students' experience on various criteria. Moreover, the researcher used the below matrix to qualify responses.

Range		Descriptive Value
1.00	1.79	Highly Disagree
1.80	2.59	Disagree
2.60	3.39	Somehow Agree
3.40	4.19	Agree
4.20	5.00	Highly Agree

FINDINGS

Faculty have noted several concerns most importantly an ongoing conflict between delivery of the entrepreneurial skills necessary to plan, create and launch the business and the requisite teaching of core discipline. A focus group discussions were made by BSBM faculty members to examine the problems encountered in teaching entrepreneurship, some of the key problems identified were the qualification of faculty; the challenge for most instructors from non-business faculty; the experiences of faculty who came to teaching of entrepreneurship from multi-disciplinary or diverse backgrounds; and the challenge on what to teach or the contents of the syllabus on Entrepreneurship101. More so, the faculty assigned to teach entrepreneurships have found teaching experiences that includes major issues among students taking up Entrepreneurship classes such as dealing with initial conflict of the students with their group members, communication difficulties and overcoming discouragements on startup challenges. Other concerns related to entrepreneurship learning are present technological facilities, university culture and communication, characteristics of teachers and learners, and student's budgetary requirements.

Based on the case study conducted by Mason and Arshed (2013), existing approaches to entrepreneurship education are the subject of two criticisms. The first is that the focus is on teaching 'about' rather than 'for' entrepreneurship. Here the emphasis is on the scholarly consideration of such topics as who is an entrepreneur, opportunity identification, the start-up process and the economic impact of entrepreneurship. The second is that these courses are not designed to address issues of entrepreneurial intent and capability and so are unlikely to influence graduate entrepreneurial activity. This contrasts with teaching 'for' entrepreneurship, where the specific objective is to stimulate entrepreneurship among students. However, this approach has been criticized for the dominance of management content and, specifically, the emphasis on the business plan. Peltonen (2008) emphasizes that it is very vital for lecturers to become more Entrepreneurial. If entrepreneurial learning should be improved among students. Particularly, lecturers need to act in an entrepreneurial way in discovering opportunities, and innovatively exploiting them. Entrepreneurship lecturers should apply innovative teaching methods, cope with various challenges of teaching entrepreneurship and engage students in the process and challenges of entrepreneurship learning (Adedoyin, 2010). Furthermore, entrepreneurship lecturers should have a strong motivation through the whole process of instructional delivery (Fiet, 2000), self- efficacy highly improves teachers' motivation and abilities to teach (Tschannen-Moran et al.,1998)

Table 1. Comparison of Students' Classroom Experiences on Traditional Learning Approach vs. Experiential Learning Approach

CRITERIA	Traditional Approach		Experiential Learning Approach	
	Numerical Value	Descriptive Value	Numerical Value	Descriptive Value
Studying entrepreneurship is boring	2.43	Somehow agree	1.80	Somehow agree
Studying entrepreneurship is unimportant	1.80	Disagree	1.37	Disagree
Easily distracted in entrepreneurship class	2.63	Somehow agree	2.10	Somehow agree
Learning entrepreneurship is tiresome	2.47	Disagree	2.13	Disagree
Difficulty in idea formulation	3.03	Somehow agree	2.55	Somehow agree
Instructor in entrepreneurship is boring	2.30	Disagree	1.79	Disagree
Instructor in entrepreneurship lacks student engagement	2.40	Disagree	1.90	Disagree
The classroom is conducive for learning	3.00	Somehow agree	3.30	Somehow agree
The class provides opportunity to freely express ideas	3.77	Agree	3.90	Agree
Can easily solve problems/ challenges in entrepreneurship	3.17	Somehow agree	3.73	Somehow agree
Can easily formulate entrepreneurial strategies in various settings	3.20	Somehow agree	3.87	Somehow agree

Table 1 shows the comparison of students' evaluation on classroom experiences based on traditional and experiential learning approaches. The results were supported with observations and interview sessions with the respondents. The experiential activities were rated higher by the students but thorough analysis of the data revealed some interesting information such as studying entrepreneurship is boring; the students were easily distracted in class; and they experienced difficulty in idea formulation. One of the reasons the present day education is boring is because of its nature, which is more professor-teaching rather than student-learning. Even though the subject and the topic can be interesting to students, however they are getting bored listening to monologues. Entrepreneurship education should not be overloaded with theoretical discussions, but more of active approaches to help students embark or explore business opportunities.

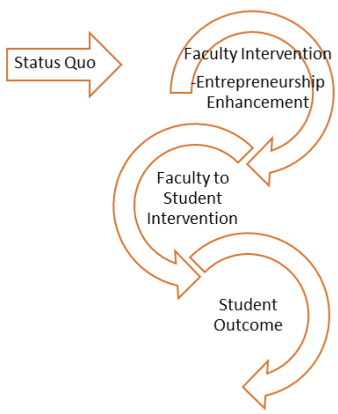


Figure 2 Intervention Paradigm

The initial phase of the intervention was to assign faculty with Master degree in Business Administration with relevant experience in business to handle Entrepreneurship101 subject. The usual trend was to load the subjects to instructors with diverse backgrounds, who are on a part time basis and include in their teaching load the subject Entreprenurship101. The challenge is that they have no business background, no orientation either from the Head of the department on how to teach Entrepreneurship. From the problems identified, a thorough review of the syllabus was spearheaded by the New Chairperson of the Department of Management Studies with a degree of Doctor in Business in administration. Together with the faculty of the Business Management program they were able to discuss the qualification needed of the faculty handling specific subjects for Business Management course in consonance with CMO#17 s. of 2017 "The new curriculum of the BSBA major in Marketing Management".

Various experiential approach to teaching Entrepreneurship were introduced and applied and the results were very positive on the part of faculty and students. Among these were 1) The use of team-based learning wherein student teams brainstorm for product ideas and feeding off one another's ideas to create a list of potential products and finally narrowing it down to one product to be launched. Team-based learning also provides students with an opportunity to apply business and course concepts, practice communication, social skills and dynamics of teamwork in a safer environment. 2) Marketing simulation that allows the students to develop and execute a complete marketing strategy including Market opportunity analysis; Brand development; Advertising; Pricing; Basic sales force management decisions and Simplified profit analysis. 3) Direct teaching-learning methods such training in extra-curricular activities and Small business mentoring. 4) Practical-operational teaching methods that include practical experience on business venture approach to learning which expose students to opportunities in dealing with complexities inherent in entrepreneurship. 5) Market research and analysis were conducted before the student teams decided on their would-be product. And lastly, 6) constant monitoring on the development process of entrepreneurship learning.

CONCLUSIONS

Utilizing the experiential teaching methods, learners can participate in more challenging entrepreneurial activities, and consequently gain experiences which provide some insights into discovering and creating entrepreneurship opportunities. Active learning makes the learning process more engaging for both instructors and students and it also contributes to cultivate students' communication skills, teamwork ability, creativity and critical thinking. Moreover, it enables them to start and manage their small business ventures successfully. The experiences brought in by mentors added another dimension to the entrepreneurial learning by helping the student project teams accomplish their project goals thereby bringing the product from creation to the point of sales. The mentors took a lot of effort in assisting the students by taking them through understanding and learning first hand, what the real business is and how the business operates. The various contributions extended by the mentors include: financial advice and analysis on pricing, costing, scenario analysis; sales pitch and marketing; how to do a good business and marketing plan; strategic thinking, creating a value proposition and communicating this to customers; time management; getting the teams focused on the outcome while still considering all other options. Findings and experiences in facilitating the process of experiential learning show that more research is needed to continue and track the processes that are involved in entrepreneurial learning.

RECOMMENDATIONS

The author suggests that Entrepreneurship development in Universities should include the enrichment of learning experiences of the students so as to make it worthwhile and interesting. Practical lessons should be spelt out specifically in the entrepreneurship curriculum, all facilitators in the programs should first be given practical training in various areas, and implement suggested experiential approaches in teaching entrepreneurship. This will be best accomplished by ensuring that the teaching strategy employed allows students to experience feelings of achievement, recognition, responsibility, and personal growth. There is a need for further studies which, as we have sought to do here, share experiential approaches to entrepreneurship learning and reflect on design, delivery and learning outcomes. It is hoped that these teaching methods and strategies will take the understanding and practice of entrepreneurship ideas to higher level and equip students with a wide range of skills required to meet the standard of employers of labor and industry if not self- employed. This will no doubt reduce our high unemployment levels to manageable proportions.

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DEVELOPMENT AND VALIDATION OF A LEARNING PACKAGE IN STATISTICS

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ABSTRACT

This study was conducted to determine the level of performance of the Bachelor of Arts Third Year students of the Ilocos Sur Polytechnic State College in Statistics as basis for the development of a Learning Package. The descriptive – developmental research design was utilized since a learning package was developed and validated by expert evaluators. The data gathering tool used in this study was a teacher made test to determine the level of performance of the students and a questionnaire on the validity of the learning package. Weighted mean and t-test for correlated samples were used in treating the data. Findings revealed that the over-all performance of the students in the pre-assessment test is described as "fair" and their level of performance in the post – assessment test is described as "excellent". Further that there is a significant difference in the pre – assessment and post – assessment test. The developed learning package has a very high validity with regards to face, content and usability. The very high face and content validity of the learning package implies that it can cater to the needs of students who are challenged to have mastery in Statistics. The very high usability of the learning package implies that it is ready to be used in Statistics class.

Keywords: Learning Package, Assessment, Performance, Statistics, Students

INTRODUCTION

Statistics is a branch of mathematics concerned with collection, classification, analysis, and interpretation of numerical facts, for drawing inferences on the basis of quantifiable likelihood (probability). This is concerned with introducing the statistical methods most often used in students' respective fields, a way to ensure that the training of the students in school is parallel or relevant to their future career. Many statisticians are involved in teaching statistics either formally in college classroom or informally in an industrial setting. Regardless of the setting, a major concern of those who teach statistics is how to ensure that the students understand statistical ideas and can apply what they learn to real-world situations. Although teachers of statistics often express frustration about difficulties students have learning and applying course material. Many may be unaware of the growing body of research related to teaching and learning statistics. Focus in the struggle for improvement in the quality of statistics education is an essential part of education system whether centered on content that should be incorporated in the course or on pedagogical issues.

The International Statistics Institute (ISI) by the Round Table Conference on Assessment in Statistics recommends that development of books and educational materials in statistics be required to make sure that new resources are available as one of the steps in improving the quality of statistics teaching and learning process. This further supported by Boado (2009) who stated that the assurance of efficient and effective teaching is through the development and use of different teaching aids or educational technologies.

Competence in statistics is positively correlated with research skills, and research skills are an essential part of all branches of arts and sciences. From this insight, the researcher attempts to pursue on the development of a learning package as one way of addressing the difficulties of students in Statistics and to provide additional and latest reference material that is design based on the course syllabus of the Bachelor of Arts students.

OBJECTIVES OF THE STUDY

This research study determined the level of performance of the students in Statistics as basis for the development of a learning package.

Specifically, it answers the following questions:

1. What is the pre-assessment performance of the students in Statistics along:
   1.1. Introduction to statistics;
   1.2. Data presentation;
   1.3. Measure of central tendency;
   1.4. Measure of variability;
   1.5. Normal distribution and probability;
   1.6. Hypothesis testing?
2. What learning package in Statistics can be developed?
3. What is the level of performance of the students (Post-assessment) after using the learning package along the identified dimensions?
4. Is there a significant difference between the pre-assessment and post-assessment performance of the students?
5. What is the level of validity of the developed learning package in Statistics with regards to:
   5.1. face and content validity; and
   5.2. usability?

METHODOLOGY

Research Design

The study utilized the descriptive-developmental research design because it focused on the present or existing situations. It assessed the level of performance of the students in Statistics, developed a learning package that improved students' performance and validated the developed learning package thus the descriptive developmental research design was used.

Respondents and Locale

The respondents of this study were the 83 Bachelor of Arts 3rd Year students who were enrolled in Statistics 1 in the second semester of academic year 2017-2018 at Ilocos Sur Polytechnic State College, Tagudin Campus. In addition, five (5) expert evaluators who have been teaching Statistics for at least three years and at least a masters' degree holder in relevant field were the respondents to validate the learning package. Total enumeration was used.

Instrumentation and Data Collection

The data gathering tool used in this study was a modified teacher made test which was lifted from the book of Alferez and Duro (copyright 2006) to determine the level of performance (pre-assessment) of the students in statistics as basis for developing a learning package.

Statistical Treatment

All data were tabulated, computed and analyzed. Mean was used in determining the performance of the students in Statistics, t-test for correlated samples was used for the significant difference between the pre-assessment and post-assessment and weighted mean was used for the validity of the learning package.

FINDINGS

Pre-assessment Performance of the Students in Statistics

Table 1. Level of Performance of the students in the pre-assessment test

Chapter	Mean	DER
I. Introduction to Statistics	8.34	Good
II. Data Presentation	7.67	Good
III. Measures of Central Tendency	5.24	Fair
IV. Measures of Variability	4.18	Fair
V. Normal Distribution and Probability	3.63	Poor
VI. Hypothesis Testing	4.01	Poor
Over – all mean	**33.07**	**Fair**

Table 1 reveals that the over-all performance of the students in the pre-assessment test is described as "fair" and the last two chapters show that the students have very little knowledge about probability and hypothesis testing. This implies that the students are beginners and needs a simplified, contextualized and direct approach learning material or reference to enjoy and learn better the subject.

Learning Package in Statistics

The results of the pre-assessment test of the students were the basis in the development of the Learning Package. The learning package is a simplified instructional material that aims to enrich and improve the performance of the students in Statistics. This is an additional reference and instructional material in teaching the subject.

I. Rationale

This Learning package is written for the students to learn Statistics in a more simplified and direct manner approach. It has a vital role in motivating students, enhancing their mastery and increasing their performance in the subject.

The topics are arranged based on the course syllabus of Statistics 1. Exercises are given every after a topic for the students to apply immediately the concept they have learned. Performances of the students are assessed again by the chapter test at the end of each chapter.

II. Objectives

The learning package aims to:

1. increase student's enthusiasm in learning the subject;
2. serve as a reference material to the students especially to the beginners;
3. help students develop their statistical skill and literacy;
4. develop statistical decision-making ability based on the data statistic; and
5. develop logical and critical thinking as well as problem solving abilities of students.

III. Parts

1. The cover

   The cover of the learning package contains the title and the name of the researcher. It also shows the different symbols used in Statistics.
2. Introduction

   This part gives the learners/students overview to the learning package. This includes the purpose and objectives of the learning package and the things that the learners/students will encounter in using or reading the learning package.
3. Table of Contents

   This part contains the list of parts, chapters, and topics with corresponding pages.
4. The contents

   The Learning Package includes the following six chapters in the Statistics syllabus of the College of Arts and Sciences at the Ilocos Sur Polytechnic State College were adapted:

   a. Introduction to Statistical Concepts;
   b. Data Presentation;
   c. Measures of Central Tendency;
   d. Measures of Variability;
   e. Normal Distribution and Probability; and
   f. Hypothesis Testing.

Examples with detailed solutions are provided for every topic discussed. These examples are expected to help the students understand easily the topics presented.

Exercises are provided in each chapter. These exercises aim to check the learning of the students in the topics learned in each chapter.

A multiple-choice test is provided at the end of each chapter which will serve as the post test.

5. List of References

Post–assessment performance of the students in Statistics

Table 2. Level of Performance of the students in the post -assessment test

Chapter	Mean	DER
I. Introduction to Statistics	12.86	Very Good
II. Data Presentation	13.02	Excellent
III. Measures of Central Tendency	13.75	Excellent
IV. Measures of Variability	12.13	Very Good
V. Normal Distribution and Probability	14.11	Very Good
VI. Hypothesis Testing	15.18	Very Good
Over – all mean	**81.05**	**Excellent**

Table 2 shows that the students performed excellently in chapters II and III and have very good performance in the other remaining chapters. The table reveals that the over-all performance of the students is excellent. This implies that the use of the learning package helped the students understand better their lessons in Statistics. The contextualized examples given, exercises every after the topic and chapter test really enhanced and developed the skills of the students in collecting, presenting, analyzing, computing and interpreting data.

The result of the study is parallel to the study of Adepo and Falade (2006) that teaching can only be effective when adequate and relevant instructional materials are needed are used. According to Prvan et.al., (2002), the range of learning and assessment used in statistics has been extended to include group discussions, real – life simulations, problem solving and worksheets. They believe that assessments usually focus on the statistical ideas and learning activities also needs to include an emphasis on the student's understanding and learning of statistics.

Significant Difference between the pre-assessment performance and post - assessment performance of the students.

Table 3. Significant difference between pre and post assessment test.

Paired Samples	Mean	t- computed Value	t-critical value Interpretation	
Pre-assessment	33.07	-76.48	1.63	Significant
Post-assessment	81.05			

As reflected in table 3, there is a significant difference between the pre- assessment and post – assessment test of the students. The mean of the post – assessment test is far higher than the pre-assessment test. This implies that the learning package is very effective to use in teaching and in learning the subject.

This finding attests the veracity of the findings of Cortez (2017) that there is a great disparity between the pre-test scores and post-test scores of the respondents of the students. Lorenzana as cited by Cortez (2017) stated that his developed Strategic Intervention Material was very effective in improving the performance of his students in English grammar.

Level of Validity of the Learning Package

Face Validity

Table 4 presents the level of validity of the learning package. As to the face validity, the overall mean is rated 4.0 with a descriptive equivalent rating of highly valid. This means that the general appearance of the learning package is attractive and presentable. Moreover, the language used in terms of grammar, subject – verb agreement, and parallelism is correct and can be easily understood by the intended users and the paragraph construction follows a correct lay out that make the appearance of the text on the sheets to be balance.

This is parallel to Rivera's (2010) interpretation that the high face validity means that the instructional plan is clearly and neatly printed, the language used is appropriate in terms of vocabulary, the words used can be easily understood and the students can easily understand the activities presented in the instructional plan.

Table 4. Level of validity of the learning package

Indicators	Mean	DER
Face Validity		
General Appearance. This includes neatness, alignment, typing and attractiveness	3.8	HF
Grammar. This includes correct tense, agreement and parallelism	4.4	VHV
Lay-out. This includes spacing, indention and balance on sheet	3.8	HV
Sub-Mean	**4.0**	**HV**
Content Validity		
The activities in the learning package are representative of the concepts of the topics in Statistics	4.6	VHV
The learning package is well-represented by the objectives of the syllabus in Statistics	4.2	VHV
The language used is appropriate to the vocabulary level of the tertiary/college students	4.8	VHV
Organization		
Logical Arrangement	4.4	VHV
Statement	4.6	HV
Clarity an Accuracy	4.6	HV
Consistency and Conciseness	4.2	VHV
Sub – Mean	**4.45**	**VHV**
Grand Mean	**4.51**	**VHV**

Legend: VHV – Very Highly Valid VH – Very Highly Valid

Content Validity

It is depicted in table 4 that the content validity of the learning package is 4.45 with the descriptive equivalent of very highly valid. This implies that the activities and topics presented in the learning package represent the topics in the subject as depicted in the Statistics syllabus. It further implies that the language or vocabulary used in the learning package is consistent, clear, accurate and concise and suits the level of the students (tertiary/college level) and the topics are logically arranged.

Relatedly, the findings of Lorenzana (2014) in his study that the Strategic Intervention Material which was developed on English Grammar for grade 8 of Tagudin National High School was very much acceptable to alleviate the performance of the students in English grammar. This also support Balbalec's (2009) statement in her study that the very high content validity of the worktext in Algebra Data Analysis indicates that the worktext is well organized, well – designed, prepares the students for algebraic representations, technically appropriate, and suitable to the level of reading and learning of the students. Thus, the worktext can be used by the students and will also provide a well – round supplementary material for teacher's use.

Level of Usability of the Learning Package

As shown in table 5, the level of usability of the learning package is 4.64 with a descriptive equivalent of very much valid. The very much valid usability of the learning package denotes that the learning package contains a complete and precise instruction of the course and it can be used as reference material by college students who are the intended users of the learning package. Moreover, the learning package is printed on a durable material and the font size is suited to the intended users- the college students. The construction of the whole package is simple and clear and therefore, can be used by the students without hesitation or doubt or without the presence of an instructor. Therefore, the learning package can be used by both teachers and students in improving and or enhancing the performance of the students.

The result of the study is parallel to the study of Sobremonte (2017) that his Developed Module in Bartending is very much acceptable which mean that the module addresses the needs of the learners and is a good material to be used by the students, teachers and researchers for enhancing the teaching and learning process.

Table 5. Level of usability of learning pack

Indicators	Mean	DER
1) The learning package contains complete and precise instruction.	4.8	VMV
2) The learning package is printed on durable material	4.2	VMV
3) The learning package can be reference material to college students	5.0	VMV
4) The font size is suited to college students	4.8	VMV
5) The learning package is simple and clear, and can be used without hesitation or doubt.	4.4	VMV
Over-all mean	**4.64**	**VMV**

Legend: VMV – Very Much Valid

Summary of the level of Validity of the learning package

Table 6 shows the summary of the level of validity of the learning package. The expert evaluators rated the learning package 4.0 or highly valid as to face, 4.45 or very highly valid as to content and 4.64 or very highly valid as to the usability. Overall, the rating of the learning package is 4.36 or very highly valid. The very high validity of the learning package means that it is ready to be used by the students and teachers to enhance learning in the subject.

Table 6. Summary of the level of validity of the learning package

Criteria	Mean	Descriptive Equivalent Rating
A. Face Validity	4.0	Highly Valid
B. Content Validity	4.45	Very Highly Valid
C. Usability	4.64	Very Much Usable
Over-all mean	**4.36**	**Very Highly Valid**

This finding agrees with Rivera (2010) interpretation that high validity means that the topics included in the material are important in developing mathematics competency of the students. It is also well-organize according to the sequence of topics. The learning activities and topics are very much designed to cater the needs of the students in learning mathematics.

CONCLUSIONS

Based on the result of the study, the following conclusions were derived:

1. Students generally have little background and knowledge about Statistics as evidence by their pre-assessment performance.
2. The developed learning package in Statistics is a valid supplementary reference material to improve the performance of the students as shown by the result of their post-assessment performance.
3. The very high face and content validity of the learning package implies that it can cater to the needs of students who are challenged to have mastery in Statistics.
4. The very high usability of the learning package implies that it is ready to be used in Statistics class.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are offered:

1. The developed learning package in Statistics can be utilized as a reference material in Statistics subject.
2. The learning package in statistics should be adopted by the instructors teaching statistics subject.
3. The developed learning package can be utilized as an instructional material in the extension program of activities of Ilocos Sur Polytechnic State College.
4. Educators should be encouraged to develop learning materials or instructional materials that will serve as additional reference material and will consequently help the students improve their performance.

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MATH- NO THANKS - IT ISN'T MY THING: LIVED EXPERIENCES OF LOW PERFORMING STUDENTS IN MATHEMATICS

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ABSTRACT

The primary intent of this qualitative phenomenological study was to give an in-depth description on the experiences of low performing students in Mathematics. This paper analyzed the experiences of low performing students in Mathematics which resulted to mathematics difficulty. Qualitative phenomenological study was used in the analysis of the experiences of 9 Mathematics Students. Interview transcriptions were cross-validated using respondent validation and member checking. These were used on the interpretations made. This study revealed major factors attributed to the experiences of low performing students in Mathematics. These are Students Behavior in Mathematics which are Negative attitudes towards the subject, motivation and prior experiences. Furthermore, Mathematics Skills and Visual – Spatial Skills were the main reason for their learning difficulties.

Keywords: learning difficulties, learning experiences, mathematics skills, students behavior, visual – spatial skills

INTRODUCTION

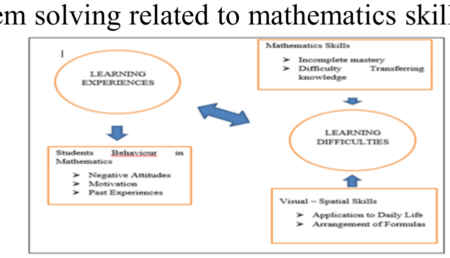
Mathematics is considered as the mother of all knowledge in both arts and sciences. It is necessary in almost every field: measurement in fashion, angles in sports, technology and economics. This perspective on Mathematics has gained more attention with the rapid advances of information and communication. Mathematics is not just computation but a tool for understanding structures, relationships and patterns to produce solutions for complex real life problems (Andaya 2014). Mathematics is a necessity for people of all ages to be successful in life. Despite the usefulness of mathematics in daily life, there are reasons that adversely affect the students' ability to comprehend and apply mathematics concepts. Hott et al. (2014) on their article reiterates that; the strategies and interventions to support students with Mathematics disabilities states in the absence of intensive instruction and intervention, students with mathematics difficulties and disabilities lag significantly behind their peers . Conservative estimates indicate that 25% to 35% of students struggle with mathematics knowledge and application skills in general education classrooms, indicating the presence of mathematics difficulty (Mazzocco, 2007). Leongson (2003) reveals that Filipino students excel in knowledge acquisition but fare considerably low in lessons requiring higher order thinking skills. This disappointing condition is evident in the performance of students in national and international surveys on mathematics and science competencies. The Third International Mathematical Science Study (TIMMS, 2000) examined patterns of students' achievement in mathematics and found out that the school effectiveness and teacher's competency impact learning and promote higher level of achievements (http://www.research.acer.edu.au. cgi.viewcontent.cgi). The quality of instruction and effective instructional design are necessary to alleviate problems related to teaching and learning mathematics (Dursun& Dede, 2004). College students are not exempted from the problem in learning and mastering mathematics. Hence, it is strongly recommended to address the difficulties faced by the students. According to Singha, et. Al, (2012) teacher should develop positive and good behavior relationship towards the students and stress classroom activities that involve active teaching-learning process and participation. Moreover, teachers should use modified, simple and interesting methods to teach mathematics such as portfolio making and by taking examples from real and daily life situations. A remedial instruction is badly needed especially on topics where students find very difficult. Moreover, their difficulties encountered were under computational skill /problem solving in all mechanics and heat topics. Results of the study suggested the need to address the difficulties especially on the contents faced by the participants very difficult. In such manner, Sweller (1994), on his cognitive load theory stated that snags on learning and problem solving difficulty can be worked out through instructional design. This implied that teachers teaching Mathematics should be innovative enough in designing instructions that would encourage maximum learning from the students both conceptual and computational skill. A remedial instruction is needed especially on topics where students performed very low. According to Ambrose (2004), tutorial activities are very advantageous in enhancing student comprehension because it provides them the challenge and resolve their wrong perception and intuition on physics content. Nevertheless, multiple interventions conducted in any forms expectedly would increase students' achievement level, in general overcome learning difficulties in Mathematics content subject. Finally, the teacher who is teaching mathematics in the tertiary level should have the insight on how to modify or improve the teaching-learning situations through a wise selection of objectives, contents and activities to acquire the ability to supplement the teaching methods and techniques that are needed in relation to the abilities and potentialities of the students.

Previous studies showed different reasons that could be attributed to such failure. One of the prevailing reasons is mathematics difficulty. It is strongly believed that students could still enhance their Mathematics performance. However, it is a must for every Mathematics teacher to comprehend the reasons why most students feel difficult about Mathematics. It is for this reason that the study was conducted to determine the lived experiences of low performing students in Mathematics.

FRAMEWORK OF THE STUDY

Throughout this study, the definition of mathematics learning difficulty and experiences is based from the National Council of Teachers of Mathematics. Students who struggle with mathematics learning regardless of their motivation, past instruction, and mathematical knowledge prior to starting school: demonstrate slow or inaccurate recall of basic arithmetic facts; answer problems impulsively, without inhibition; have difficulty representing mathematical concepts mentally; have poorly developed number sense; and have difficulty keeping information in their working memory. Students Behavior/ attitudes are regarded as an important/ key factor to be taken into account when attempting to understand and explain students' performance in mathematics.

Many students struggled to accomplish mathematics. (Garderen 2006). However, they still need to learn mathematics because of its importance in daily life (Kaufman 2008). They must be able to solve problem because problem solving is important for the development of human competencies (T. Subahan 2007). In real life, students need to learn mathematics because that is a basic way to survive in our daily life and mathematics is seen as the language. The primary and secondary mathematics curriculum emphasized on arithmetic, problem-solving, communication, mantic-thinking, connection-building and technology application skills (Curriculum Development Centre, Ministry of Education 2003; 2001). Mathematics skills such as language number fact, information and arithmetic are vital in problem-solving. Deficiency in any of these skills could cause difficulties in mathematics skills among students (Hill 2008). In Malaysia, studies showed that students felt difficult in mathematics because, they had difficulty understanding and retrieving concepts, formulas, facts and procedure (Zahrah et al. 2003) and lacked the ability to visualize mathematics problems and concepts (Tarzimah 2005). Weakness in understanding concepts, logic-thinking and lacking of strategic knowledge caused errors in problem-solving. Occurrence of similar errors signified difficulties. A part from that, error analysis showed that students were lacking in arithmetic and procedure knowledge as a result from weak conceptual understanding (Latha 2007). Mohd Johan (2002) stated that many students could not bring meaning to the problems and did not know how to plan and perform the problem-solving strategies. However, not many studies emphasized on the difficulties of mathematics problem solving related to mathematics skills deficit.



Purpose of the study

This study intends to investigate the lived experiences and factors affecting the learning difficulties and low performance of students in mathematics.

Specifically, the study aims to describe the following dimensions of mathematics performance:

1. Lived experiences of the low performing students in mathematics; and
2. Learning Difficulties that may be attributed to their low performance.

METHODOLOGY

Research Designs

Qualitative phenomenology method was employed in this study as its research design. This made this peculiar phenomenon, unique. Phenomenology is often considered central to the interpretative paradigm (Clark, 1998) and the science of essence of consciousness and focused on defining the concept of intentionally and the meaning of lived experience, from the first person point of view (Husserl, 1970). With the aid of an interview guide, in-depth interviews will be done to extract information about the lived experiences of low performing students in Mathematics. This article purports to give an in-depth description of the low performing students.

Participants and Research Site

The locus of this study is Ilocos Sur Polytechnic State College (ISPSC), Sta. Maria Campus, Sta. Maria, Ilocos Sur. ISPSC students who had low grades in any of the mathematics subjects across all programs during the academic year 2015 – 2016 were the possible respondents of the study. Out of the possible respondents, 3 students from Bachelor of Science in Agriculture, 3 students in College of Teacher Education and 3 students from Institute of Hospitality Management were involved in the study. Having an initial 9 interview subjects was selected based on phenomenology study inquiry and data saturation criterion. Purposive random sampling was used in the study and voluntary students were the respondents who had a GPA of 75%.

Instrumentation & Data Collection

The researcher employed qualitative interviewing as the data collection approach. A two-part research instrument was prepared in this study to gather relevant information. The first part is a robotfoto used to gather baseline data about participants' age, gender and course grades. The second part is a semi-structured interview guide that served as the prime data collection source. A copy was provided to participants that served as aide memoire during the interview process.

Individual interviews were recorded using a digital voice recorder to ensure more accurate data during transcription and enable researchers to focus on the interviewee. Also, brief notes were taken to clarify responses and help pose follow-up questions during interview sessions, and verify the correctness of data transcribed.

DATA ANALYSIS

Each recorded interview was transcribed by the researcher. To ensure accuracy of the transcription, spot-checking procedures were used. Beginning with initial reading and rereading of the field text to get naïve understanding. During cool analysis, anchors and phenomenal referents were marked to facilitate identification of themes within text. For the warm analysis, highlighted words were proof-read and analyzed to formulate categories and themes.

RESULTS

The cool analysis part consists of the identification of significant statements or the verbalizations of each respondent. These statements served as basis of the warm analysis part where data categories were formulated and themes evolved.

From the cool and warm analyses of respondents' verbalizations, experiences such as mathematics as a hard subject emerged among the six respondents. There were three (3) major themes which were extracted from responses of the participants, these experiences of Mathematics students may be classified as first, Negative Attitudes of Students in Learning Mathematics which can be seen through their feedbacks that they hate mathematics and describe it as boring. Secondly, Motivation and past Experiences that they were motivated to learn because of the understanding and patience of their instructors on the other hand, their past experiences from their teachers greatly affects their views towards mathematics. And thirdly, learning difficulties of students which were seen according to their Mathematical Skills and Visual – Spatial Skills.

Students Behavior in Mathematics

There are many factors that influence the students' behavior in mathematics. These factors evolve from their attitudes towards the subject mathematics, motivation and prior or past experiences about the subject. Attitudes are seen as cognitive and affective orientations or dispositions towards an object, idea, person, situation, et cetera (Fiske & Taylor, 2008). Following common approaches in attitudinal research within attitudes/ behaviors (Garcia, 2001), both self-concept (i.e., beliefs about one's ability to learn and perform tasks) and anxiety (i.e., feelings of tension that hinder learning processes and performance) are included in this conceptualization.

Negative attitudes were the prominent feature towards mathematical difficulties. It includes reactions among learners like an ample time to mettle numbers. Others may seem demotivated to know answers.

As one respondent narrated:

If our Teacher gives us a seatwork, I feel lazy to do the task, at first I will try to solve but when I don't know the answer, I will sleep inside the class.

Another verbalized:

I don't like numbers, it is very hard for me to understand and recall formulas. Maybe because I already set in my mind that I don't like Math.

Attitudes can be seen as more or less positive. A negative attitude towards mathematics relates to a negative emotional disposition which tend to make the student perform low in class.

This is also evident in the study of Eshum (cited by Mata, 2012) who found out that emotional dispositions have an impact on an individual's behaviour, as one is likely to achieve better in a subject that one enjoys and most likely to fail if they have a negative disposition about the subject.

Likewise, motivation may be one factor in mathematical manipulation and comprehension. Since multifaceted factors and their complexities contribute to the total adeptness required for the subject, most of the students are not motivated. There might be numerous array of 'how-to' but students who are not sparked with motivation may tend to see the subject difficult.

Nevertheless, the students identified several factors as important in their learning. Firstly, they wanted to succeed, were willing to work hard and were prepared to participate in the mathematics teaching and assessment processes. They have less positive attitudes but despite that, they still wanted to pass the course. The drive to pass the subject was strong.

As shared by one of them:

I always think that every time we will have an activity, I need to pass because I do not want to repeat the subject again. Although I am really hardened up with the subject, I am trying my best to participate just to compensate with my performance.

Similarly another respondent shared:

I am just relying with my confidence that although I am not sure with the answer I will try to go in front and solve the given task.

Indeed, motivation is really a factor to students' behavior towards mathematics and it is a factor to really improve one's self to perform better.

Aside from motivation, past or prior experience is another factor that students in Mathematics that contributes to their total understanding of the subject. The inclusion of their stay in the academe and their real life experiences in using numbers might determine their difficulties. It is making use of lesser number has a lesser chance of success in numerical operation.

As one of the respondents shared:

During my elementary days and even in high school, the way that teacher explains the subject is very hard for me to comprehend, maybe that is one reason why I am not use to numbers, she explains very fast that even if we did not understand she will proceed to the next topic.

Another respondent shared:

My experiences during my high school math maybe was one of the reason why I did not like math as a subject and did not pursue to study harder in the subject. Since most of the time, I rely with my classmates. If we had an assignment, I always copy answers from them. I did not exert effort to learn because I know that they will always help me in my quizzes and even exams.

One of the response also:

I have difficulty remembering, focusing and concentrating. I force myself to focus on the discussion yet I cannot really understand even before I was an elementary.

The aforementioned experiences greatly shows the views of the low performing students in mathematics.

Mathematics is indeed inherently difficult for most students. Difficulties were culled out among the students and their Mathematical skills and Visual-Spatial skills were perceived to be the factors that affect learning among learners.

Mathematics Skill

The mathematical skills that need to be enhanced would be their mastery skills in number operation. Without good skills in number operation, difficulties will arise and this will always be the worst enemy among learners. Besides, the difficulty in transferring the knowledge, from the process to the product may still be significant issue to settle. Difficulties in Mathematics Skills were incomplete mastery of the subject. The main ability of learning that might cause students learning difficulties in mathematics was the ability to memorize and recall the facts which is related in making connections to their thinking.

One of the respondent stated:

It is very difficult for me to recall things that I've learned. Especially in reciting tables. I got this problem since primary schools. Even to memorize and to recall working procedure also a great effort of me. But still I like mathematics. Mathematics is unique. I just hoped that one day Mathematics will be easier for me.

Another respondent shared:

I cannot understand especially on numbers what more if there is a variable given. It is just ok for me if I will just deal with addition, subtraction and multiplication but if there is already x and y and squares and square roots. I am having a hard time.

As one responded also pointed out:

I always make mistakes in managing the facts in the questions…I don't know which fact to use first….I am not sure how to make connection… which fact and formula to use ..What fact to look for….in fact I got so confused on how to solve the problem.

Everyone has the ability to learn mathematics, and some students learn and make connections more quickly than others. Everyone also has some mathematical skills, but some of them have potential far beyond what most people are prepared to believe. Mathematical skills in a child are often dormant and remain unnoticed both by the child and his or her teachers. This potential can be lost forever if it is not discovered and supported at the appropriate time. It may even be undermined by inappropriate experience (Borovik, 2006).

Visual – Spatial Skills

Among the skills that manifest in the Mathematical operations would be the visual-spatial skills.

This is the skill to visualize mathematical concept which emerged from the responses of the students. It includes application to daily life which serves as one reason for students learning difficulties in mathematics.

One respondent stipulated:

I cannot see the effects of Mathematics in my life, why do I need to study mathematics when in fact nothing will change if I am not good in math.

Another respondent verbalized:

Math is not for everyday use. I don't see the relevance especially when I go to market and buy. I am not going to say "pabili poh ng square root ng talong" or 1 kilo of meat square? So what is the use of learning math especially algebra and trigonometry when I cannot see its usefulness in my everyday living.

Another is the ability to transfer knowledge, According to them, they were struggling when trying to make connection. Most of them failed to organize the information and to construct mathematical sentences which were important in the process of learning mathematics. This difficulty might be influenced by the respondents' ability to make coherent visual perceptions. Logic thinking and visual-spatial skill was said to underlie this ability. According to Garderen (2006), deficiency in visual-spatial skill might cause difficulty in differentiating, relating and organizing information. This could cause ineffectiveness in performing the problem-solving.

One of the responses was,

Solving math problems was difficult because you have to translate it into mathematical statements or phrases. Mahirap na nga sa mga numbers pano pa kaya sa mga sentences na itransform mo into equations. Madami ang ganun sa algebra kya sobra akong nahihirapan sa sa subject na yun.

Another said:

I got confused with statements, I really don't know how to put those statements into equations and vice versa. Same thing hindi ko na nga poh maintindihan ang English what more pa po kung ang sentence eh magiging number?

Ibrahim (1997) had declared that it was difficult to transform the problem into mathematical sentences. Also, Stendall (2009) had stated that, the abilities to make meaningful perceptions and to use memory effectively are important factors in learning skills and solving problems. Difficulty in recalling facts showed that students were facing difficulties (Miranda 2006).

As Gardner (1982) asserts that visual-spatial are the combined intelligence for Mathematical geniuses or inclined individuals. In the holistic view, when imbued with this skills, learners must see the real application of these numbers. Thus, the professions like engineers and statisticians, to name a few, might consider the application of these number in the most significant way – accuracy of measure or the desired data to determine the bases of their future decisions. And when students fail in this part, numbers will always be insignificant and they will never appreciate the subject at all. Mathematical theorems when proving requires formula to work with. Mastery of such formula, depending on the theorem that is being dealt with, instilled a versatile manipulation among learners. Hence, a teacher when taking a closer look on the paper of the students, can see the erratic answer due to poor memory and manipulation of formula – no acquisition of such skill in the side of the students.

DISCUSSIONS AND IMPLICATIONS

This study revealed three major factors attributed to the learning experiences of low performing students. These are negative attitudes towards the subject, motivation and past or prior experiences. The reasons for their learning difficulties were attributed by the mathematics skills and Visual – spatial skills. Although the findings may not necessarily reflect the experiences representative of more diverse population of low performing students in Mathematics, these provides a lesson which can be considered a valuable starting point in understanding the experiences of low performing students in Mathematics.

Learning Experiences of Students

Students' behaviour in Mathematics is the primary factor associated to the experiences of low performing students in Mathematics. This includes negative attitudes towards Mathematics, Motivation and past or prior experiences. How students behave in a classroom affects how much and how well they learn. Even one student acting out can interrupt all the students' learning. It's the teacher's job to manage the classroom in a manner that reinforces learning. Some educators use a system of rewards and punishments, while others skillfully form lesson plans that involve the students and help them learn effectively. From this, teacher should devise a way to simplify the task of the students. The teacher needs to identify the problem, figure out how to change the behavior, find a way to encourage students to follow a pattern of desired behavior and use this pattern consistently so all the students are focused on the lesson being taught.

Motivation also was associated in the learning experiences of the low performing students. Based on the significant role of motivation recognized in this study, teachers need to focus keen attention on motivating their students to promote their self-efficacies, always urging students to believe in their abilities to do well, and they (teachers) must also believe in their students. They must also ensure that students learn to ask for assistance whenever necessary. The implication is that if learners are not motivated to enable them to believe in themselves and ask for help, it could affect their dispositions for lifelong learning and their capacities to succeed in various difficult life situations. Teachers must be trained to integrate the essence of motivational beliefs and the need for students to use all kinds of strategies during instructions. In addition, teachers should assist their students to clearly understand the need for them to build up beliefs like task value, self-efficacy for learning and performance, intrinsic goal orientation, and control for learning beliefs as well as use of critical thinking, effort regulation, and peer and help seeking strategies to enhance their learning process. For instance, teachers can promote students' task value for lessons by stressing the value of education to students' future.

Mathematics Skill

Effective teachers attempt to support positive transfer by actively identifying the strengths that students bring to a learning situation and building on them, thereby building bridges between students' knowledge and the learning objectives set out by the teacher. Sometimes the knowledge that people bring to a new situation impedes subsequent learning because it guides thinking in wrong directions. In these kinds of situations, teachers must help students change their original conceptions rather than simply use the misconceptions as a basis for further understanding or leaving new material unconnected to current understanding. Learning with understanding is more likely to promote transfer than simply memorizing information from a text or a lecture. Many classroom activities stress the importance of memorization over learning with understanding. Many, as well, focus on facts and details rather than larger themes of causes and consequences of events. The shortfalls of these approaches are not apparent if the only test of learning involves tests of memory, but when the transfer of learning is measured, the advantages of learning with understanding are likely to be revealed. Students develop flexible understanding of when, where, why, and how to use their knowledge to solve new problems if they learn how to extract underlying themes and principles from their learning exercises. Understanding how and when to put knowledge to use—known as conditions of applicability—is an important characteristic of expertise. Open consultation should also need to be considered in order to determine and make connections to the teacher for better outcome of learning.

Visual – Spatial Skills

One of the biggest complaints in mathematics is the boredom factor especially when information were presented in sequential steps in a chalkboard and make no connections to real life. Teachers should make math instruction visual and engaging so that they will see the real life connections of mathematics in their life in that way they will learn to appreciate the essence of math and eventually improve their performance.

CONCLUSION

The primary intent of this study was to give an in-depth description on the experiences of Students in mathematics which resulted low performance. Moreover, based on the narrations of their experiences, lessons learned were also realized.

This study revealed that Students Behaviour is a major factor attributed to the experiences of Low Performing students in Mathematics. These are negative attitudes, motivation and prior or past experiences. Negative Attitudes towards Mathematics is the primary factor associated to the experiences of the Low Performing Students. Motivational factor was also associated to the experiences of Low Performing Students. And Prior experiences have something to do with their behaviour in the subject.

Meanwhile, this study revealed that their performance in Mathematics was associated to their difficulty as shown by their mathematics Skills and Visual – Spatial Skills.

Furthermore, this study also revealed that their experiences that mathematics is a difficult subject was due to their low level of performance in their mastery of the subject and they had difficulty in transferring the knowledge and not capable of seeing the application of mathematics in their lives. However, the motivation to finish the subject is very evident.

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FLIRTING BEHAVIOR OF ADOLESCENTS IN SCHOOL

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ABSTRACT

Flirting is extremely obvious especially in the schools and other educational institutions. This is large since there are full of young single people making their first attempts at mate selection. Learning-places are particularly conducive to flirting because the shared lifestyle and concerns of students and the informal atmosphere make it easy for them to initiate a conversation with each other. Simply by being a student, flirting partners automatically have a great deal in common, and do not need to struggle to find topics of mutual interest. This study was conducted to find out the flirting behavior of adolescents in school. It aims to answer the level of understanding on flirting; the manifestation of flirting in terms of verbal and non-verbal cues; and factors that influenced flirting. It is anchored to Freud Psychoanalytic Theory of Adolescent Development wherein physiological changes are related to emotional changes, especially an increase in negative emotions and other forms of a misdemeanor (Gines et.al, 2003). A descriptive-survey method with the aid of a self-constructed questionnaire composed of fifty (50) questions as gathering tool was used to the one hundred ninety-six (196) respondents inquiring the perception to determine their own views towards possible reasons or purpose of why adolescents flirt. The researcher achieved the following findings: flirting viewed as ordinary and normal activity of adolescence when it comes to the level of understanding of flirting behavior; it is part of the usual routine where the respondents were mindful to the indications of flirting doings in school, and the technology and mass media influenced the behavior of adolescents. It is recommended that there should be an intervention plan involving the parents, teachers, school administrators and stakeholders to build a positive relationship to promote a safe, healthy sexual behavior and equality in a romantic relationship.

Keywords: Adolescents, Behavior, Flirting, Peer, School, Sexuality

INTRODUCTION

Flirting is accepted in the society at present, unlike in the past that the individual who shows a romantic or sexual interest towards another is a disgrace and degrading of morality especially on the part of a woman. In most Asian country culture, flirting or showing romantic or sexual interest and attractiveness that provoke the attention of opposite sex is given a dejected morality to a person since it is atypical of a conservative attitude.

According to Givens (2010), an anthropologist, he spent time observing by always at the bars in order to examine the different acts of flirting. He found out that women smiled, gazed, swayed, giggled, licked their lips, and aided and abetted by the wearing of high heels, they swayed their backs, forcing their buttocks to tilt out and up, and their chests to thrust forward are signs of flirting. He also mentioned that some flirters appear to want, to prolong the interaction, regardless of where it might lead. Some people flirt just to satisfy themselves. Furthermore, Perper (2000), a social psychologist, offers new insights that people behave the way they do when they meet, flirt, touch, and fall in love.

The huge influence of flirting is greatly affected by the increase of unwanted pregnancy, early marriage life and having town family at a young age. Through the natural process of flirting, the intensity of attractiveness of the two opposite gender may lead to pre-marital sex. This is the primary reason for having unwanted babies and the unprepared marriage life of the students. Early marriage may result in a higher rate of students who do not finish their studies. Most of them were forced to discontinue education in order to find any job to provide the basic needs of their own family.

Nowadays, it is evident all over the country, the diversity of a woman in the past as compared to the present. Flirting is extremely noticeable especially in the schools and other educational institutions (Fox, 2004). This is large since there are full of young single people making their first attempts at mate selection. Learning-places are particularly conducive to flirting because of the shared lifestyle and concerns of students, and the informal atmosphere, make it easy for them to initiate a conversation with each other. Simply by being students, flirting partners automatically have a great deal in common, and do not need to struggle to find topics of mutual interest (Amory, 2011).

As observed, the Bohol Island State University, Candijay Campus, Cogtong, Candijay, Bohol is one of the universities in the Philippines that shows common form of social interaction whereby one person obliquely indicates a romantic or sexual interest towards another and that is very visible on the sight of the people most especially by the faculty and staff of the university. This is the main reason why the researcher is very interested to make a study so that if not solve at least it helps the faculty and staff, the students and the community to fully understand the flirting behavior of adolescents in school.

LITERATURE BACKGROUND

Flirting is associated with such words as flit and flick, emphasizing a lack of seriousness; on the other hand, it has been attributed to the old French “conter fleurette”, which means "to (try to) seduce by the dropping of flower petals, that is to speak sweet nothings (Oxford English Dictionary, First Edition).

The Psychoanalytic Theory of Adolescent Development of Sigmund Freud as cited by Gines et.al (2003) paid relatively little attention to adolescent development only to discuss it in terms of psychosexual development. Freud maintained that the individual goes through the earlier experiences of mankind in his psychosexual development. Thus, the stages of psychosexual development are genetically determined and are relatively independent of environmental factors. Furthermore, he believed that adolescence was a universal phenomenon and included behavioral, social and emotional changes; not to mention the relationships between the physiological and psychological changes, and the influences on the self-image. He also stated that the physiological changes are related to emotional changes, especially an increase in negative emotions, such as moodiness, anxiety, loathing, tension and other forms of an adolescent misdemeanor.

An evolutionary psychologist at the University of New Mexico in Albuquerque, Gangestad (2008), studied how people choose their mates. He observed that flirting is a negotiation process that takes place after there has been some initial attraction. Two individuals disclosed the information that they are attracted and then try each other on a display of attributes. He further explained that flirting becomes something that enhances the attraction and develops another level of relationship. Like any other language, flirting may be deployed in ways subtle, adolescent or suave. Nevertheless, it has evolved just like pleasant spurs and lion manes to advertise oneself to the opposite sex.

The National Demographic and Health Survey (2011) affirmed that teenage pregnancy in the Philippines has been steadily increasing over a 35 -year period. Among the factors that could help explain this trend are the younger age at menarche, premarital sexual activity at a young age, the rise in cohabiting unions in this age group and the possible decrease in the stigma of out-of-wedlock pregnancy (Natividad 2014). It only shows the age declination of the females having own family is increasing. The researcher of this study wants to determine whether flirting affects early marriage and unwanted pregnancy.

Furthermore, Simpson (2008) in his book entitled, “Why We Flirt,” says, a lot of people feel flirting is part of the universal language of how we communicate, especially nonverbally. With a lot of it, especially the nonverbal stuff, people may not be fully aware that they’re doing it. People may emit flirtatious cues and not be fully aware of how powerful they are.

STATEMENT OF THE PROBLEM

The purpose of this study is to identify the flirting behavior of adolescents in School. Specifically, it aims to answer the following questions:

1. What is the profile of the respondents in terms of:
    - 1.1 Age;
    - 1.2 sex
    - 1.3 year level; and
    - 1.4 course taken?
2. What is the level of understanding on flirting behavior as perceived by the respondents?

3. What flirting behavior of adolescents ages 14- 19 is manifested in terms of:
   3.1 Verbal cues; and
   3.2 Non-verbal cues?
4. What factors influenced the flirting behavior:
   4.1 Personal;
   4.2 Peer;
   4.3 Family;
   4.4 Economic; and
   4.5 Technology and Mass Media?

RESEARCH METHODOLOGY

Descriptive-Normative Survey Method is used with the aid of a self- constructed questionnaire as a gathering tool. The researcher collects the necessary information through a fifty (50) questions inquiring the respondents' perception to determine their own views towards possible reasons or purpose of why adolescents flirt. There are no wrong answers because everyone entitles to his own views. Through this process, the collected data and information existed.

This study focused on the selected students of the Bohol Island State University, Candijay Campus, Cogtong, Candijay, Bohol, Philippines. The said participants were the second year up to fourth year high school and college level. The researcher made a trial through a Focus Group discussion (FGD). The participants were divided into two groups. The first group composed of females and the second group is composed of males. There were 131 females and 65 male participants included in the study. The researcher used Purposive Sampling in order to choose which participant is belonging to the group. With this method, only those who can provide the necessary information will be included in the study. Through observation and interview, the researcher is able to determine in the sample. The process draws the necessary information easier and faster because it does not need comprehensive processing in selecting the respondents.

For statistical purposes, the answers on the Level of Understanding, Flirting Behavior of Adolescents and the Factors influencing the Flirting Behavior, were categorized as Strongly Agree, Agree, Neutral, Disagree, and Strongly disagree, with weight equivalents of 5, 4, 3, 2 and 1 respectively from which the weight means were derived. To further test the significant result, Multiple Comparison using Tukey Significant Difference (TSD).

RESULTS AND DISCUSSIONS

This study was conducted among the students' ages 14- 19 of Bohol Island State University, Candijay Campus. The findings are herein presented and analyzed in light of the various aspects of the research problem.

Table 1. Profile of Respondents
N=196

Items	F	%	Rank
1. Age			
14	29	14.80	5
15	4	2.04	6
16	35	17.86	3
17	34	17.35	4
18	53	27.04	1
19	41	20.92	2
2. Sex			
Male	65	33.16	2
Female	131	66.84	1
3. Year Level			
First year	88	44.90	1
Second year	11	5.61	3
Third year	87	44.39	2
Fourth year	10	5.10	4
4. Course Taken			
HIGH SCHOOL	36	18.37	3
BSCS	5	2.55	7
BSERM	11	5.61	4
BSF	10	5.10	5.5
BSMB	10	5.10	5.5
EDUCATION	68	34.69	1
BHRST	56	28.57	2

In order to find out the reliability of the respondents as a source of basic information, a look was made into their personal profile such as the age, gender, year level and course is taken.

Age. Among the students fifty- three (27.04 percent) were 18 years old, forty- one (20.92 percent) were of age 19, there were thirty- five (17.86 percent) of 16 years, twenty- nine (14.80 percent) of them were of age 14, and four (2.04 percent) of 15 years old. All the respondents belonged to the adolescence age, the most critical period for social adjustment and they have full of courage and energy to try and discover new things just to satisfy their longings to please them.

Sex. Majority of the students were females with one hundred thirty- one (66.84 percent), and there were sixty- five (33.16 percent) male respondents. These findings proved that there are many female students than the males in the campus population at present.

Year Level. There were eighty- eight (44.90 percent) students from the first year, eighty- seven (44.39 percent) were third year, eleven (5.61 percent) from second year, and ten (5.10 percent) respondents were the fourth year. Most respondents were from the first year which said to be the period of adjustment of the new environment and how to interrelate people around, and followed by the third year where they believed that this is the most crucial year as a student.

Course Taken. Sixty- eight (34.69 percent) were taking an Education course, fifty- six (28.57 percent) from Bachelor of Hotel and Restaurant Service Technology (BHRST), thirty- six (18.37 percent) were High School students, eleven (5.61 percent) were taking Bachelor of Science in Environmental Resource Management (BSERM), ten (5.10 percent) of them were from Bachelor of Science in Fisheries (BSF) and Bachelor of Science in Marine Biology (BSMB), and five (2.55 percent) were Bachelor of Science in Computer Science (BSCS) students.

Table 2. Level of Understanding on Flirting Behavior as Perceived by the Respondent
N= 196

Items	Male			Female		
	WM	DV	Rank	WM	DV	Rank
1. Flirting shamelessly exhibits inappropriate behavior.	3.20	N	5	3.18	N	1
2. Girls have to be provocative to get boys attention.	3.29	N	3	2.40	D	9
3. Adolescents flirt for fun.	3.32	N	2	2.93	N	4
4. Adolescents flirt because it makes them feel they are popular.	3.17	N	7	2.74	N	8
5. Adolescents flirt to have people pay attention to them.	3.25	N	4	2.88	N	5.5
6. Adolescent flirt for love.	3.37	N	1	3.08	N	2
7. Adolescents flirt because they like partying and hanging out with the opposite sex.	3.18	N	6	2.88	N	5.5
8. When adolescents flirt they show public-displays of affection.	2.98	N	9	2.81	N	7
9. Adolescents flirt because they want to be the center of man's/ woman's attention.	3.03	N	8	2.97	N	3
10. Adolescents flirt because of sexual addiction.	2.78	N	10	2.24	D	10
Composite mean	3.16	N		2.81	N	

Legend:
1.00 – 1.80 - Strongly Disagree
1.81 – 2.60 - Disagree
2.61 – 3.40 - Neutral
3.41 – 4.20 - Agree
4.21 – 5.00 - Strongly Agree

The result showed a Neutral level as no significant degree of variance in the responses on the level of understanding among the respondents. Flirting is just as common activity for adolescence inside and outside the university. The respondents have a mutual understanding of flirting as an adolescent flirt for love and it exhibits inappropriate behavior.

Table 3. Manifestation of Flirting Behavior of Adolescents as Perceived by the Respondent
N=196

Items	Male			Female		
	WM	DV	Rank	WM	DV	Rank
Non- verbal cues						
1. Love to wear clothes which require cleavage.	3.35	N	4	2.32	D	10
2. Shows off way too much skin.	3.23	N	6	2.66	N	5
3. Are playful and childish.	3.06	N	8	2.71	N	4
4. Wears a lot of make-up.	2.86	N	10	2.39	D	9
5. Love to parade them.	2.97	N	9	2.63	N	7
6. Shows hips swaying.	3.09	N	7	2.49	D	8
7. Shows a coy look.	3.26	N	5	2.64	N	6
8. Love to flip their hair.	3.49	A	2	2.94	N	2
9. Show extended eye contact and smiling.	3.52	A	1	3.23	N	1
10. Leaning inward or toward you.	3.48	A	3	2.88	N	3
Composite mean	3.23	N		2.69	N	
Verbal Cues						
1. Ask about your interest.	3.48	A	2	3.19	N	1
2. Always gives you a compliments.	3.43	A	3	3.04	N	2.5
3. Using your name a lot in a conversation.	3.15	N	6	2.71	N	7
4.Ask your cell phone number/email ads	3.49	A	1	3.04	N	2.5
5.Ask you to watch movies together	3.08	N	8	2.75	N	6
6.Ask you for a date	3.14	N	7	2.69	N	8
7.Ask you to a party	3.18	N	5	2.76	N	5
8. Ask pictures of you.	3.40	N	4	2.78	N	4
9. Loves to talk in a whisper.	2.98	N	9.5	2.53	D	9
10.Strives to keep personal flattering remarks	2.98	N	9.5	2.51	D	10
Composite mean	3.23	N		2.80	N	
Overall Composite mean	3.23	N		2.74	N	

Legend:
1.0– 1.80 - Strongly Disagree
1.81 – 2.60 - Disagree
2.61 – 3.40 - Neutral
3.41 – 4.20 - Agree
4.21 – 5.0 - Strongly Agree

This table above reveals that the respondents were aware and familiar to the signs or cues of flirting doings of adolescents in school such as showing of extended eye contact and smiling, flipping of hair and leaning inward or outward towards someone, asked cell phone number or email address, and asking for a date and a party are indications of flirting.

These actions are very common for students and are not taken seriously. That is why awareness of these actions will be beneficial in order to avoid a negative effect on peers.

Table 4. Factors Influencing the Flirting Behavior of Adolescents as Perceived by the Respondents
N= 196

Items	Male			Female		
	WM	DV	Rank	WM	DV	Rank
Personal Factor						
1. They want to satisfy sexual curiosity.	2.54	D	5	2.38	D	5
2. They are depressed / lonely.	2.60	D	4	2.57	D	4
3. For money and material possession.	2.71	N	3	2.92	N	2
4. A way to get a passing grades from teachers.	2.97	N	2	2.79	N	3
5. They feel it is a source of energy and attractiveness.	3.43	A	1	3.07	N	1
Composite mean	2.85	N		2.75	N	
Peer Factor						
1.To gain friends	3.38	N	1	2.98	N	1
2. They are forced by their friends to join.	3.12	N	4	2.92	N	2.5
3. A friend was also flirting.	2.95	N	5	2.69	N	5
4. Wanted to impress their peers.	3.28	N	2.5	2.76	N	4
5. They feel that they belong to a peer group.	3.28	N	2.5	2.92	N	2.5
Composite mean	3.20	N		2.86	N	
Family Factor						
1. They don't have a good relationship with her mother.	2.22	D	4	2.27	D	5
2. To have parents pay attention to them.	3.12	N	1	2.95	N	1
3. Home life is unhappy.	2.12	D	5	2.29	D	4
4. A brother/ a sister are doing it.	2.74	N	2	2.57	D	2
5. Parents are not at home.	2.54	D	3	2.31	D	3
Composite mean	2.55	D		2.48	D	
Technology and Mass Media Factor						
1. Facebook or other social networking sites inhibits shyness to the opposite sex.	2.80	N	5	2.38	D	5
2. IM gives me the opportunity to experiment with my identity.	3.26	N	4	2.76	N	4
3. Sending provocative messages is easily sent through texting.	3.45	A	1	3.19	N	1
4. Flirting tips are easy to access through the net.	3.42	A	3	2.85	N	3
5. Of strong television and radio romantic influences.	3.37	N	2	3.10	N	2
Composite mean	3.26	N		2.86	N	
Overall Composite mean	2.96	N		2.73	N	

Legend:
1.0– 1.80 - Strongly Disagree
1.81 – 2.60 - Disagree
2.61 – 3.40 - Neutral
3.41 – 4.20 - Agree
4.21 – 5.0 - Strongly Agree

The respondents consistently exhibit the same viewpoint on the factor that influenced flirting behavior of adolescents, it further discloses the peer and, technology and mass media were the factors that influenced adolescence to act flirting.

CONCLUSION

It is concluded that flirting activities are just part of showing love and interest to a person wherein most of the young people are aware and familiar to the signs or cues when it comes to flirting doings especially in school. The influenced of the peer triggers them to flirt and do things regardless of how bad or good it is. Another factor that influenced them a lot is technology and mass media influenced the behavior of adolescents and same perceptions of the flirting behavior of adolescents.

RECOMMENDATION

In view of the foregoing conclusions, it is recommended that there should be an intervention plan or series of plans/ activities through the involvement of parents, teachers, and school administrators to build a strong and positive relationship to promote a safe, healthy sexual behavior and equality in romantic relationship. Peer Counseling Group should be organized so that adolescents can have a venue to share and established a peer support group as satellite of the guidance office in order to monitor the students well. Furthermore, seminars and symposia on sex education and reproductive health should be embedded in the student affairs program to fully equipped adolescence the necessary skills on how to deal and manage the risk associated with sexuality and other teen age issues.

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EFFECT OF MULTITASKING TO THE WORK PERFORMANCE OF ADMINISTRATIVE EMPLOYEES OF OCCIDENTAL MINDORO STATE COLLEGE LABANGAN CAMPUS: BOON OR BANE

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ABSTRACT

Since multitasking is seen as a prevalent practice in different institutions and organizations, this study was conducted to find out whether such practice exists in Occidental Mindoro State College specifically in the administrative units of Labangan Campus. Moreover, it was conducted to find out the level of frequency of multitasking, level of OMSC Labangan administrative employees' work performance, and the effect of multitasking to the work performance of OMSC Labangan administrative employees. The respondents are the 90 Labangan administrative employees of the College who were chosen randomly. Questionnaires checked and validated by experts were used to gather data. Gathered data were measured and analyzed using frequency, percentage, mean and regression analysis. Results revealed that OMSC Labangan Administrative employees attend to almost sixteen different tasks daily including: preparing reports, performing electronic tasks, doing communications, and attending to personal needs. In the frequency of multitasking regarding these tasks, findings reveal that preparing reports is done 'sometimes', as well as performing electronic tasks. Moreover, doing communications is 'often' done, the same with attending to personal needs. Generally, multitasking to these four indicators is 'often' performed. Findings also enunciate that respondents have 'high' level of output quality being offered, 'moderate' level of timeliness and very high level of completed tasks. Lastly, data revealed that multitasking only has a 'significant' effect when it comes to doing communication and has 'no significant' effect in other three indicators: preparing reports, performing electronic tasks and attending to personal needs. These findings of the study suggest that OMSC Labangan administrative employees should further intensify this research study by closely looking into the actual work performance of the units and by having a more detailed evaluation of how they do their tasks to arrive at a more efficient way of delivering quality service to clients.

Keywords: multitasking, preparing of reports, timeliness, work performance, work quality

INTRODUCTION

Office Administration entails a set of day to day activities related to financial planning, maintaining personnel records, processing of payroll, record keeping, maintaining files, billing, distribution of data and logistics (Reddy, 2016). The effectiveness of administration will lead to the success of the whole organization – thus, the weight of pressure is also put into the shoulder of the administrative employees.

As the world of professionalism evolves, different organizations experience manpower shortage. Thus, employees are hired and being asked to work harder and for longer hours. Oftentimes, employees are being required to spend part or most of their day either rapidly switching from one task to another or altering two or more things at the same time which is called multitasking.

Multitasking can take place when someone tries to perform two tasks simultaneously, switch from one task to another, or perform two or more tasks in rapid succession. Gopher et al., (2000) mentioned that requiring an employee to multitask between a number of job duties is an efficient way to cut costs or the result of underprovided plantilla item, which is a common dilemma especially in government organizations.

According to Adleri et al., (2015), multitasking is a prevalent behavior when using personal computers or mobile platforms. Studies report that computer users have multiple applications open, and switch between them frequently Crook and Barrowcliff, (2001) and Czerwinski et al., (2004) which is also one of the common manifestations of multitasking.

Agypt & Rubin (2012) find that polychronic individuals report higher job satisfaction in organizations that require its employees to work on multiple tasks at the same time or interchangeably and on tasks that require multiple skill sets. Multitasking saves you time when there are tasks you can complete simultaneously, saves money and may increase productivity in workplace

At the same time, Bregman (2015) stated that we can multitask as long as we're doing two things that don't tax the same parts of your brain. Walsh (2015), also added that multitasking might improve our fitness regimen.

While multitasking may seem to be advantageous and beneficial to some multi-skilled employees, others find it under a great deal of stress and actually make them less efficient.

With the studies cited, the need to determine effect of multi-tasking in the employees work performance of Labangan Campus, Occidental Mindoro State College is deemed necessary. The researchers want to find out the effect of multitasking in the efficiency of service and in motivating the employees to be more productive or in causing stress and cognitive ability impairment that result to poor performance. Likewise, the effect of multitasking on the efficiency work performance of OMSC Labangan administrative employees wants to be identified.

OBJECTIVES OF THE STUDY

Generally, this study aimed to determine effect of multi-tasking in the OMSC administrative employees' work performance of Labangan Campus.

Specifically, this study sought answers to the following questions:

1. Determine the tasks OMSC Labangan administrative employees attend to in a day.
2. Determine the extent of multitasking of OMSC Labangan administrative employees as to:
   2.1. Preparing of Reports
   2.2. Electronic Tasks
   2.3. Communications
   2.4. Attend to personal needs
3. Determine the level of work performance of OMSC Labangan administrative employees as to:
   3.1 Work Quality
   3.2 Timeliness
   3.3 Completed Tasks
4. Determine the effect of multitasking in the work performance of OMSC Labangan administrative employees?

METHODOLOGY

Research design

A descriptive- correlation method of research was used in this study. It is the process of gathering, analyzing, classifying and tabulating data about prevailing conditions, practices, beliefs, processes, trends and cost-effect relationship of all variables to make accurate interpretation about data gathered with the aid of statistical techniques.

Respondents of the study

Respondents of the study were selected through random sampling. It consisted of 80 OMSC Labangan administrative employees to ascertain how many tasks they attend in a day, effect of multitasking in the work performance and to identify the relationship of multitasking on the efficiency work performance of OMSC Labangan administrative employees.

Data gathering procedure

Permission from OMSC officials and heads was secured before the conduct of the study. The questionnaires will be distributed to the respondents. Instructions were explained very well to the respondents. After all the questionnaires were retrieved, gathered data were analyzed using the appropriate statistical tools to be used.

Instrument

The study made use of a questionnaire validated by Dr. Wenceslao Paguia and Dr. Angelina Paquibot.

Data analysis

To determine the tasks of OMSC Labangan administrative employees, frequency count percentage was used. Weighted mean was used to o determine the extent of multitasking and work performance of OMSC Labangan administrative employees. Lastly, to determine the effect of multi-tasking to work performance, multiple regression was used.

FINDINGS

As the table 1 showed, there were two tasks which OMSC Labangan administrative employees do least like preparing documents through Microsoft PowerPoint with only 30%; and preparing documents through Microsoft Publisher with only 20%. The other sixteen (16), which attained a percentage of 50% and above are what OMSC Administrative employees perform in daily basis.

The table showed that 96% of OMSC Labangan administrative employees deliver documents to other offices and assisting people to answer their queries, 94% of employees prepares documents through Microsoft Excel; 92% of administrative employees received documents from other offices and go to people to ask queries; and 90% of administrative employees print documents, eat snacks, and accomplish personal-related tasks. Meanwhile, 88% of administrative employees edit documents; 86% of administrative employees go to the washroom. Additionally, 84% prepare documents through Microsoft Word and write on the logs of documents while 76% send and respond to messages through text messaging and 74% send and respond to messages through phone calls. Only 52% send and respond to messages through Email and Facebook; and lastly, only 30% of OMSC administrative employees prepare documents through PowerPoint and only 20% prepare documents through Microsoft Publisher.

The data above was supported by the findings of Adleri et al., (2015), revealing that multitasking is a prevalent behavior when using personal computers or mobile platforms. Studies report that computer users have multiple applications open, and switch between them frequently Crook and Barrowcliff, (2001) and Czerwinski et al., (2004) which is also one of the common manifestations of multitasking.

Table 1. Tasks that OMSC Labangan administrative employees attend to in daily basis

Task	Frequency	Percentage (%)	Rank
Prepare documents through Microsoft Word	42	84%	***11.5***
Prepare documents through Microsoft PowerPoint	15	30%	***17***
Prepare documents through Microsoft Excel	47	94%	***3***
Prepare documents through Microsoft Publisher	10	20%	***18***
Edit Documents	44	88%	***9***
Print documents	45	90%	*7*
Send/Respond to messages through Email	26	52%	***15.5***
Send/Respond to messages through Facebook Messenger	26	52%	***15.5***
Send/Respond to messages through Phone calls	37	74%	***14***
Send/Respond to messages through Text Messaging	38	76%	***13***
Receive documents from other Offices	46	92%	***4.5***
Deliver documents to other Offices	48	96%	***1.5***
Write on the logs of documents	42	84%	***11.5***
Assist people and answer queries	48	96%	***1.5***
Go to people to ask queries	46	92%	***4.5***
Eat snack	45	90%	*7*
Go to the washroom	43	86%	***10***
Accomplish personal-related tasks (e.g., DTR, Leave form, etc.)	45	90%	*7*

Table 2 presented the weighted mean interpretation of the extent of the multitasking performed by the OMSC administrative employees.

The above data showed that in preparing reports, the respondents often use the Microsoft Word (4.02), rarely create PowerPoint presentation (1.96), and they always use Excel (4.56) in preparing reports and rarely use the Publisher (1.66). Additionally, they often edit (4.42) and print reports (4.30). In general, the respondents sometimes prepare reports with only 3.50 as weighted mean.

For the electronic tasks, it was shown that the respondents do not necessarily send and respond to messages in Email or in Facebook because in those items, they only got 2.90 and 3.22 respectively which can be interpreted as 'sometimes'. On the other hand, it is revealed that they often send and respond to messages though text messaging and phone calls with the weighted mean of 3.80 and 4.00 respectively. Overall, the weighted mean for electronic tasks is 3.50 with interpretation of 'sometimes'.

The data also showed that communication got an overall frequency of 4.41 which is interpreted as 'often'. Data shows that respondents often receive documents from other offices (4.46); they often deliver documents to other offices (4.32); they often write the logs of documents (4.44); they always assist people and answer their queries (4.72); and they often go to offices to ask queries (4.10).

The data above was supported by the findings from the study of Woods (2018) that “If the staffs are expected to simultaneously complete multiple tasks then they may preferentially shed communication tasks in order to maintain their performance of physical tasks, leading to the appearance of poor communication skills.”

The data also showed that attending to personal needs got the highest overall frequency of 4.47 which is interpreted as ‘often’. Results reveal that the respondents often take their snacks (4.46); often go to the washroom (4.34) and always accomplish personal related-documents (4.60).

Table 2. Extent of the multitasking performed by the OMSC Labangan administrative employees

Preparing Reports	**Mean**	**Interpretation**
Prepare documents through Microsoft Word	4.02	Often
Prepare documents through Microsoft PowerPoint	1.96	Rarely
Prepare documents through Microsoft Excel	4.56	Always
Prepare documents through Microsoft Publisher	1.66	Rarely
Print reports	4.42	Often
Edit reports	4.30	Often
Overall	**3.49**	Sometimes
Electronic Tasks	**Mean**	**Interpretation**
Send/Respond to messages through Email	2.90	Sometimes
Send/Respond to messages through Facebook Messenger	3.22	Sometimes
Send/Respond to messages through Phone calls	3.86	Often
Send/Respond to messages through Text Messaging	4.00	Often
Overall	**3.50**	Sometimes
***Communication*s**	**Mean**	**Interpretation**
Receive documents from other Offices	4.46	Often
Deliver documents to other Offices	4.32	Often
Write the logs of documents	4.44	Often
Assist people and answer queries	4.72	Always
Go to people and answer queries	4.10	Often
Overall	**4.41**	Often
Attend to Personal Needs		
Eat snack	4.46	Often
Go to the washroom	4.34	Often
Accomplish personal-related tasks (e.g., DTR, Leave form, etc.)	4.60	Always
Overall	**4.47**	Often
Grand mean for the extent of tasks performed	**3.97**	Often

Scale: 1.00-1.50 Never 1.51-2.50 Rarely 2.51-3.50 Sometimes 3.51-4.50 Often 4.51-5.00 Always

As the table showed, it was revealed that the level of work performance of OMSC is high with a weighted mean of 3.81.

When it came to the respondents’ measure of work performance, results showed that the respondents have high level of work performance when it came to accuracy and completeness of their output (4.18); they also have high level of performance in producing commendable output; and they have moderate level of ability produce outputs with errors/mistakes. Overall, the level of their work performance when it comes to output quality is high with 3.67 as weighted mean.

When it came to timeliness, data revealed that respondents high level of ability to complete a task on time with mean of 4.16; they have high level of ability to complete all tasks within the day (3.96); they have high ability to comply long term outputs on time (3.88). On the other hand, it was revealed that there is only a moderate delay of tasks within the day due to the additional tasks (2.66); extension of tasks beyond office hours got a mean of 1.94 interpreted as low; extension of tasks until the following day got a mean of 2.76 interpreted as moderate; and extension of tasks until weekend got a mean of 2.64 interpreted as moderate. Generally, work performance is revealed to have only when it comes to timeliness got a weighted mean of 3.14 interpreted as moderate.

Lastly, when it came to completed tasks, there was an overall result of 4.63 interpreted as very high. Results revealed that respondents can complete top priority matters within the day very highly (4.76); forwarding of urgent document/ communications to concerned Offices/Persons are highly complied within the day (4.56) and following up of documents, reports, communications to the offices or persons involved are very high.

The data above was supported by the findings from the study of Agypt & Rubin (2012) which found that “polychronic individuals report higher job satisfaction in organizations that require its employees to work on multiple tasks at the same time or interchangeably and on tasks that require multiple skill sets.”

Table 3. Level of the work performance performed by the OMSC Labangan administrative employees

Descriptive Statistics		
Work Quality	**Mean**	**Interpretation**
Output is accurate and complete	4.18	High
Output is commendable	3.78	High
Mistakes/Errors are committed	3.04	Moderate
Overall	**3.67**	**High**
Timeliness		
Able to complete a task on time	4.16	High
All daily tasks are completed within the day	3.96	High
Long-term outputs (eg. Quarter reports, annual reports, etc.) are submitted on time	3.88	High
Additional tasks delay actual duty within the day	2.66	Moderate
Actual daily tasks are extended until after office hours	1.94	Low

Actual daily tasks are extended until after office hours	1.94	Low
Actual daily tasks are extended until the next day	2.76	Moderate
Weekends are used to complete the tasks	2.64	Moderate
Overall	**3.14**	Moderate
Completed Tasks	**Mean**	**Interpretation**
Top priority matters are completed within the day	4.76	Very High
Urgent documents/communications are forwarded to concerned Offices/Persons within the day	4.56	Very High
Documents/Reports/Communications are followed up into Offices and persons involved	4.58	Very High
Overall	**4.63**	**Very High**
Level of Work Performance	**3.81**	**High**

Data showed that among the given measurements for the work performance, it is only communication that multitasking has a significant effect of .295 which means that if we improve multitasking in communication, there will be an increased to .295. The rest has insignificant effect.

Table 4. Effect of multitasking on the work performance of OMSC Labangan administrative employees

Indicators	Beta Coefficient	Significance	Interpretation
Preparing Reports	.089	.089	Not significant
Electronic Tasks	-.081	-.081	Not significant
Communications	.317	.317	Significant
Attend to Personal Needs	-.013	-.013	Not significant

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings of the data gathered and the conclusions based on the finding of the respondents as well as the recommendations.

CONCLUSIONS

The following conclusions are derived based on the findings:

1. Out of 18 tasks, there are total of 16 that OMSC Labangan administrative employees attend to in a day which are related to: preparation of reports, electronic tasks, communication, and attending to personal needs. It means that administrative employees switch back and forth to these tasks within the day. Almost all of respondents deliver documents to other offices and assist people and answering their queries. On the contrary, few of administrative employees prepare documents on PowerPoint presentation and only very few prepare documents through Microsoft Publisher.
2. The respondents often commit to multitasking. OMSC Administrative employees sometimes prepare documents although they always prepare documents through Excel. On the other, they also commit to electronic tasks sometimes although often, they send and respond to messages through text messaging and phone calls. For communication, employees often perform communication-related tasks wherein, data showed that they always assist people and answer their queries.
3. Lastly, respondents often spend time in attending to their personal needs and it was seen that they always accomplish personal-related tasks and documents.
4. OMSC Labangan administrative employees have high level of output quality; they have moderate level of efficiency when it comes to timeliness; and they have very high level of performance in completing tasks. As overall level, OMSC Labangan administrative employees have high level.
5. Lastly, it was concluded that multitasking in communications has a significant effect to the work performance of OMSC Labangan administrative employees. The rest such as preparation of reports, doing electronic tasks, and attending to personal needs have no significant effect to the administrative employees of OMSC.

RECOMMENDATIONS

Based on the findings, the researchers recommend the following:

1. The administration should conduct trainings and seminars on how to better improve the work performance of OMSC Labangan administrative employees – not only focusing on system in work but also motivational and personality development.
2. OMSC Labangan Administrative employees should devise a better way of improving work performance rather than simply multitasking on tasks.
3. OMSC Labangan Administrative employees should further intensify this research study by closely looking into the actual work perfor-

mance of the units and having a more detailed evaluation of how they perform their tasks.

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TECHNOLOGY IN LANGUAGE TEACHING: AN ANALYSIS OF LEARNERS' AUTONOMY IN LANGUAGE TEACHING

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ABSTRACT

The increasing demand for professionals who can make sound decisions and use technology in performing their duties requires educational institutions to provide a learning environment that will support the students' language learning through technology utilization. This study was conducted to determine the extent of utilization of technology in language teaching among secondary students in science curriculum classes and determine if it develops the students' autonomy in language learning. A total of 166 respondents were randomly selected to answer a questionnaire on teacher's utilization of technology in language teaching and 150 were considered for the evaluation of their own use of technology in language learning. Twelve of them were selected for semi-structured interview. Data were treated and interpreted using a computer software. Findings revealed that teachers and students of English subjects often use technology in language teaching and learning. However, they were not able to utilize technology in its full potential since teachers rarely allow their students to use technology in the classroom and students rarely share their outputs online for possible comments. Nevertheless, the respondents agreed that both the teachers' utilization and students use of technology in language teaching and learning support and develop autonomy in language learning. Of these technologies, the use and watching or reading of PowerPoint presentations is considered the most helpful in developing learners' autonomy.

Keywords: autonomy, language learning, language teaching, technology

INTRODUCTION

The increasing demand for professionals who can make sound decisions and use technology in performing their duties requires educational institutions to provide a learning environment that will support the students' language learning through technology utilization. Learning a language in this 21st century no longer occurs in just the four corners of the classroom (Amiri, 2012). The technology has provided a progressive rich environment where they could have access to authentic materials even at home or in any other place (Reinders & White, 2016). This development calls for highly trained and skilled teachers who could cope up with the trends of technology utilization and use these skills in language teaching and in developing their students' ability to access, select and utilize information. However, though teachers believe that the use of information and communication (ICT) tools has benefits in their instruction, some are hesitant to use it as it could cause distraction among the students. Also, research found that the technical problems and the time-consuming preparation (Lee, 2016) arising from the application of technology in teaching causes frustration among the teachers (Andrade, 2014; Shyamlee & Phil, 2012; Zhelezivskaia, 2016). In addition, integrating technology in teaching is hindered by multiple challenges. Teachers face the issues involved in accessibility, availability and reliability of technology, the need for teacher and learner training on how to use the technology, and varying levels of the teachers and students' ability to use the technology Kern (2013). Nevertheless, the use of technology in teaching cannot be taken for granted, specifically in the development of learner's autonomy for language learning, a skill considered important in this 21st century.

REVIEW OF RELATED LITERATURE

Technology in Language Teaching

Technology has played a significant role in revolutionizing our world in so many ways. From commerce, health, security and finance to education, technology has changed the way people work, live and believe (Madhavaiah, Nagaraju & Peter (2013). Likewise, technology has changed the role of the teachers in the classroom. From being the main source of knowledge and information in the classroom, teachers became facilitators of the teaching and learning process (Greany, 2002).

Studies on ICT revealed that teachers believe that ICT use increases learner's motivation and enhances their self-efficacy and self-esteem (Altun, 2015; Tabatabaei, 2011; Zhelezivskaia, 2016). Also, students learn faster and easier than before because of the use of technology in teaching (Amiri, 2012; Madhavaiah, Nagaraju & Peter, 2013). This is supported by the study of Tri and Nguyen (n.d.) which confirmed that ICT use in language education improves listening, speaking, reading, writing skills, grammar and vocabulary. Likewise, the study of Nomass (2013) agreed with these findings and stated that using computer in the classroom increases students' interaction with learning, helps them develop their writing skills and improves their listening skills. In addition, the use of technology can be a platform where students can learn to work collaboratively (Wu, 2015), negotiate and understand another people's culture. In the study of Bradley, Lindstrom, Rystedt and Gustafsson (2011), the use of web-based writing platforms enabled the students to hear other students' cultural voices, negotiate meaning and extend understanding of the poetry of the students from other parts of the world. Through this, contexts of real culture have been delivered across the world which provided the students an opportunity for intercultural communication and appreciation of other culture without leaving one's country (Chane & Yang, 2014; Shao, 2011).

The use of ICT in the classroom does not only improve students' learning but also improve teachers' learning of content (Moore, 2009). With the wide array of information in the internet to read and use as reference materials, the teachers will be able to provide the most appropriate lesson content to the students (Brandstrom, 2011). In addition, the use of ICT also lessens the workload of the teachers (Greany, 2002). As facilitators of learning, they will have ample time to guide their students to be responsible learners. Hence, the teachers must be able to use the technology in pedagogy so that they will be able to use its features in its full potential (Kareem, 2017; Parvin & Salam, 2015; Riasati, Allahyar & Tan, 2012). Consequently, school administrators need to provide their teachers appropriate support and training on how to integrate technology in language instruction (Liu, Navarrete & Wivagg, 2014). The mere presence of the technology in the classroom will not guarantee their use in teaching. Instead, research found that hands – on activities and practical experience allowed for the improvement of the quality and effectiveness of instruction (Gilakjani & Leong, 2012; Laakkonen, 2011).

Moreover, the application of technologies in language teaching can provide a more relevant and useful feedback in language learning. Using teleconferencing, emails, group chat and the like, teachers and students alike can provide timely feedback to the output and performances of the students making the learning faster and easier (Pinkman, 2015; Zhao, 2003) and giving the students enough time to reflect on their output and learn from their mistakes.

Learners' Autonomy in Language Learning

The teachers and students' ability to use technology will not guarantee success in language learning unless the teachers teach their students on how to apply them and become autonomous (Hayta & Yaprak, 2013). Autonomy is characterized by the learner's ability to take charge and be responsible of his own learning (Holec, 1981, cited in Reinders & White, 2016). However, the existing practices which require the students to follow standards and pass certain examinations provided a pressured environment that hinder the development of the learners' autonomy (Chan, Spratt & Humphreys, 2002). In the study conducted by Ustunluoglu (2009), students still considered their teachers as the dominant figure who decides on their classroom activities. Hence, they did not see themselves as sufficiently autonomous which resulted into not taking full responsibility of their learning. This could be attributed to the fact that the teachers prescribed the learning process and did not involve their students in setting goals and designing activities. In addition, research found that though the teachers want to their student to be autonomous in learning, they do not want to share with them the power of decision making inside the classroom. This can be explained by the education and training the teachers went through. Since they were not given an opportunity to be autonomous in their own learning, they do not know how to teach it among their students (Balcikanli, 2010).

Nevertheless, teachers need to help their students develop autonomy in learning. When students have autonomy in language learning and are provided with student-centered pedagogy, they become engaged and in control of their learning (Stanley, 2013; Tabatabaei & Gui, 2011). Likewise, students are less distracted by the distractions around them that could influence them not to study (Cutter, 2015). In addition, they will be able to view their role as important in language learning and go beyond the learning of the prescribed materials (Joshi, 2011). This will result into the development of their ability to work independently and to be reflective of their own learning (Hayta & Yaprak, 2013; Lee, 2011; Wood, 2011).

Technology plays a significant role in developing student's autonomy in learning (Clark, 2013). It increases their interest and motivation to use English because of the interaction with classmates and teachers (Pinkman, 2005). In the study of Lee (2011), the use of blog promoted learner autonomy and intercultural competence among the students. Likewise, the study of Stanlet (2013), found that integrating technology in secondary language teaching enhance the language learning of the students. This is also evident in the study of Softa (2011) who found that when students are in a learning environment like language laboratory, they reflected a more positive attitude and a feeling of relief when performing activities, and making or answering questions in English. In addition, when teachers allowed their students to use the technological learning environment through the internets and available software and resources, students become more in control of their learning and they learn how to select and use the authentic materials in creating their outputs (Haffner & Miller, 2011).

Other than learning, technology also help the students by being in control of their own performance and output. Using online lesson tutorial, the students can monitor and assess their own learning achievements and make necessary adjustments to improve their proficiency in language (Pavon, Saez & de Siqueira, 2011; Wojciechowska, 2015). In the study conducted by Palalas (2011) on mobile-assisted language learning, students learned to work collaboratively with their classmates, and provide feedback and assistance to a classmate in need.

With the premises that technology in language teaching could develop students' autonomy in language learning, it is important for the teachers to use technology in their language teaching. Likewise, students must be able to use technology properly to ensure that they develop the autonomy in learning language.

RESEARCH PROBLEM

This study aimed to find out the extent of utilization of technology and technology-based activities in language teaching among secondary students in a science curriculum class and determine if it develops the students' autonomy in language learning.

Specifically, it sought answers to the following questions:

1. How often do teachers utilize technologies and technology-based activities in language teaching?
2. How often do learners utilize technologies and technology-based activities in learning English language?
3. To what extent do technologies and technology-based activities utilized by the teachers support learners' autonomy in language learning?
4. To what extent do technologies and technology-based activities utilized by the learners develop their autonomy in learning English language?
5. Which among the technologies and technology-based activities utilized by the learners develop their autonomy in language learning?

THEORETICAL FRAMEWORK

This study is anchored on the model of convergence designed by Reinders and White (2106) as shown in figure 1. The model shows that while autonomy and technology were formerly separated, they have move together and started to exert mutual influences which affects language teaching and learning. As shown in the arrows, as the two domains come closer to fusion, autonomy reduces formality and learner becomes in control of their learning. Likewise, technology provides more locations for learning and a greater range of pedagogies teachers could choose from.

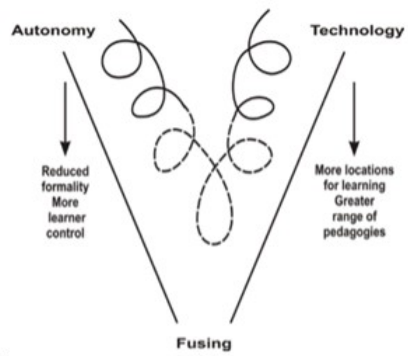

Figure 1. A model of convergence

This study is also guided by the Dimensions of Autonomy designed by Benson (2011) shown in table 1. The four dimensions include location, formality, pedagogy and locus of control. Location refers to the setting in which the learning takes place. Formality refers to the degree to which the learning is structured and/or linked to educational qualifications. Pedagogy refers to the senses in which teaching is involved. And, locus of control refers to how decisions are distributed between learners and others.

Table 1. *Dimensions of Autonomy (based on Benson, 2011)*

Dimension	Opposition	Refers to...	Other terms
Location	Out-of-class vs. in-class	The setting in which the learning takes place	After-class, extra-curricular, self-access, out-of-school, distance
Formality	Informal vs. formal	The degree to which the learning is structured and/or linked to educational qualifications	Non-formal, naturalistic
Pedagogy	Non-instructed vs. instructed	The senses in which teaching is involved	Self-instructed
Locus of control	Self-directed vs. other-directed	How decisions are distributed between the learner and others	Autonomous, independent, self-regulated

This study posits that if the students are equipped with the skills to properly use technology and are given opportunities to use these skills in learning, they will develop autonomy and will become more responsible learners.

METHODOLOGY

This study utilized a descriptive type of research where quantitative data were used to determine the extent of technology utilization in language teaching and in developing learners' autonomy.

Respondents

Respondents of the study were selected from the students of secondary school employing science curriculum. Random sampling was conducted among 275 students who participated in the study. Of these respondents, 166 were considered valid for the evaluation of teachers' utilization of technology in language teaching, and 150 were considered valid for the evaluation of their own use of technology in language learning.

Instruments

A questionnaire was used as the instrument in gathering data from the respondents. The questionnaire was based on the Dimensions of Autonomy designed by Benson (2011) which includes location, formality, pedagogy and locus of control. Likewise, the study used the questionnaire for technology in language education designed by Andrade (2014) as a guide in developing questionnaire that determined the extent of technology utilization in language teaching and learning of the teachers and students. The questionnaire underwent validation by experts and reliability test through a small sample. It was found reliable with a value of .947 Cronbach's Alpha.

Procedure

The questionnaire was distributed to the students upon the approval of the principal. After answering the questionnaire, a semi-structured interview was conducted among the selected participants to validate their answers.

Data Analysis

Scoring the questionnaire was done using a four–point Likert Scale where one is the lowest and four is the highest. To determine the frequency of technology use and the extent of its support and development of learners' autonomy, weighted mean was used. To find out the technologies mostly use by the students, frequency, percentage and ranking were used.

RESULTS AND DISCUSSION

Language teachers' frequency of utilization of technologies and technology-based activities in language teaching

Table 2 reveals that the teachers of English subjects in the Science High School often use technologies in teaching language to their students with an overall mean of 2.80. The highest mean was 3.63 for the use of PowerPoint presentation in teaching English language to the students. It supports the statement of Greany (2002) that from being the main source of knowledge and information in the classroom, teachers became facilitators of teaching and learning process, in this case with the help of a technology.

However, it was found out that the teachers rarely use the computer laboratory (m=1.82), allow students to use cell phones, tablets and laptops in doing tasks inside the classroom (m=2.34) and give links to website where students can access materials for their lessons (m=2.44). These prove that teachers consider the students' use of technology inside the classroom a distraction to learning process. It agrees with the statement of the selected students that "*our teachers do not allow us to use cell phones or laptops inside the classroom during classes because they think that we will just browse our Facebook account or watch videos on Youtube*".

Table 2. Language teachers' frequency of utilization of technologies and technology-based activities in language teaching

Technology	M	Int.
My teacher uses *Powerpoint presentations* projected on the board in teaching English language.	3.63	Always
My teacher uses *video presentations* in teaching English language.	2.85	Often
My teacher uses *authentic materials* in teaching English language.	2.78	Often
My teacher uses the *computer laboratory* in teaching English language.	1.82	Rarely
My teacher uses *websites or blogs* in preparing lessons for our class.	2.50	Often
My teacher posts her lessons, students' assignments and other activities to her *website or blog* for our access.	2.33	Rarely
My teacher has a *Facebook group* where she communicates or provide feedback to our outputs.	2.67	Often
My teacher allows us to use our *cell phones, tablets and laptops* in doing our tasks inside the classroom.	2.34	Rarely
My teacher gives us *links to websites* where we can access materials for our lessons	2.44	Rarely
My teacher uses module in teaching English language to us.	3.07	Often
My teacher uses *problem-based activities* in teaching English language to us.	3.12	Often
My teacher uses *different tools* in evaluating our performance.	2.85	Often
In addition to books, my teacher allows us to select materials from *various resources* in preparing our outputs.	3.08	Often
My teacher involves us in creating *rubrics* for the assessment of our outputs.	2.80	Often
My teacher considers our suggestions on *how and when* to submit an output.	3.35	Often
My teacher allows us to *select our partners or group mates* in classroom activities.	3.17	Often
Overall Mean	2.80	Often

Language learners' frequency of utilization of technologies and technology-based activities in language learning

With an overall mean of 3.01, the learners often use technologies/strategies in learning English language as shown in table 3. They always collaborate with partner or group mates in classroom and outside the classroom activities with the highest mean of 3.58. This result validates the findings of Clark (2013) and Pinkman (2005) that technology plays an important role in developing learner's autonomy and it increases their interest and motivation to interact with their classmates and teachers. The students admitted that "our teachers always give us group activities to do inside the classroom. Sometimes, we are also given group activities to be accomplished outside the classroom".

However, the learners rarely post their lessons, assignment and other activities to their own website or blog to be accessed by others. During the interview, one student admitted that "I am afraid to post my outputs online because other people might see it and criticized me". This is a manifestation that the students believe in the value of sharing accurate information online. As such, if they are not sure of their outputs, they will not share it to online community.

Table 3. Language learners' frequency of utilization of technologies and technology-based activities in language learning.

Technology	M	Int.
I read/watch *PowerPoint presentations* to learn English language.	3.39	Often
I watch *video presentations* to learn English language.	3.25	Often
I read/watch *authentic materials* online to learn English language.	2.98	Often
I go to the *computer laboratory* to learn English language.	2.54	Often
I browse *websites or blogs* in researching references for my outputs in English class.	2.98	Often
I post my lessons, assignments and other activities to my own *website or blog* to be accessed by others.	2.14	Rarely
I am a member of *Facebook group* where I communicate or provide feedback to the outputs of my fellow students.	2.98	Often
I use my *cell phones, tablets and laptops* in doing tasks inside the classroom.	2.78	Often
I use *links to websites* to access materials for our lessons.	2.90	Often
I use module in learning English language.	3.10	Often
I participate in *problem-based activities* in learning English language.	3.04	Often
I use *different digital tools* in presenting my outputs.	3.15	Often
In addition to books, I select materials from *various resources* in preparing my outputs.	3.08	Often
I participate in creating *rubrics* for the assessment of our outputs.	2.89	Often
I give suggestions when asked on *how and when* to submit an output.	3.31	Often
I collaborate with my *partner or group mates* in classroom and outside the classroom activities.	3.58	Always
Overall Mean	3.01	Often

Extent of support of the technologies and technology-based activities utilized by the teachers to the learners' autonomy in language learning

Table 4 discloses that teachers use of technologies in language teaching support the learners' autonomy in language learning to a high extent with an overall mean of 2.88. The highest was in the use of PowerPoint presentations in teaching English language with a mean of 3.60. It supports the statement of Brandstorm (2011) that the internet is a good source of a wide array of information to read and use as reference materials which could help the teachers provide the most appropriate lesson content to the students. Reference materials downloaded from the internet can be used by the teachers in creating PowerPoint Presentations.

However, the use of computer laboratory (m=2.10), cell phones, tablets and laptops (m=2.42) support their autonomy in language learning to a low extent only. It shows that although the teachers consider the use of technologies in teaching the students, they are not open to allowing the students to use it inside the classroom as it might cause distractions.

Table 4. Extent of support of the technologies and technology-based activities utilized by the teachers to the learners' autonomy in language learning.

Technology	M	Int.
My teacher uses *Powerpoint presentations* projected on the board in teaching English language.	3.60	Very high extent
My teacher uses *video presentations* in teaching English language.	2.95	High extent
My teacher uses *authentic materials* in teaching English language.	2.91	High extent
My teacher uses the *computer laboratory* in teaching English language.	2.10	Low Extent
My teacher uses *websites or blogs* in preparing lessons for our class.	2.56	High extent
My teacher posts her lessons, students' assignments and other activities to her *website or blog* for our access.	2.54	High extent
My teacher has a *Facebook group* where she communicates or provide feedback to our outputs.	2.74	High extent
My teacher allows us to use our *cell phones, tablets and laptops* in doing our tasks inside the classroom.	2.42	Low Extent
My teacher gives us *links to websites* where we can access materials for our lessons	2.54	High extent
My teacher uses module in teaching English language to us.	3.12	High extent
My teacher uses *problem-based activities* in teaching English language to us.	3.07	High extent
My teacher uses *different tools* in evaluating the our performance.	2.96	High extent
In addition to books, my teacher allows us to select materials from *various resources* in preparing our outputs.	3.04	High extent
My teacher involves us in creating *rubrics* for the assessment of our outputs.	2.93	High extent
My teacher involves us in creating *rubrics* for the assessment of our outputs.	2.93	High extent
My teacher considers our suggestions on *how and when* to submit an output.	3.38	High extent
My teacher allows us to *select our partners or group mates* in classroom activities.	3.24	High extent
Overall Mean	2.88	High Extent

Extent of development of the learners' autonomy in learning English language using technologies and technology-based activities

Table 5 presents the students' perceptions on the extent of development of their autonomy in learning English language using technologies. Almost half of the respondents (69 or 46%) believed that they have developed their autonomy in language learning to a high extent. It supports the findings of several studies that ICT use increases learner's motivation and enhances their self-efficacy and self-esteem (Altun, 2015; Tabatabaei, 2011; Zhelezivskaia, 2016).

However, 15 or 10% of them believed that they have developed their autonomy using technologies to a very low extent. It agrees with the statement of one student during the interview that "I still believe that my teacher can give me the right lesson and not the use of technology…my teacher knows what is best for us". It supports the findings that students still considered their teachers as the dominant figure who decides on their classroom activities (Ustunluoglu, 2009). Hence, they do not see themselves capable of studying English language on their own.

Table 5. Extent of development of the learners' autonomy in learning English language using technologies and technology-based activities.

Development of autonomy in language learning	Frequency	Percentage
Very high extent	32	21.33%
High extent	69	46.00%
Low extent	34	22.67%
Very low extent	15	10.00%
Total	**150**	**100%**

Technologies and technology-based activities utilized by the students in the development of their autonomy in language learning

When asked to rank which among the technologies they used contributed much to the development of their autonomy in language learning, table 6 revealed the first five selected by the respondents. More than half (82 or 54.7%) of the respondents chose reading or watching PowerPoint presentations as the number one contributor to the development of their autonomy in language learning. This is followed by watching video presentations (52 or 34.7%), using different digital tools in presenting outputs (35 or 23.3%), reading or watching authentic materials (33 or 22%), and collaborating with partner or group mates in activities (29 or 19.3%), respectively. It proves that the use of technology can be a platform where students can learn to work collaboratively (Wu, 2015), whether inside or outside the classroom.

These findings could enlighten the teachers to realize that the students nowadays are more open to technology utilization, and this can be used for teaching and learning purposes.

Table 6. Technologies and technology-based activities utilized by the students in the development of their autonomy in language learning.

Technology	Rank	F	P
Reading/watching PowerPoint presentations	1	82	54.7%
Watching video presentations	2	52	34.7%
Using different digital tools in presenting outputs	3	35	23.3%
Reading/Watching authentic materials	4	33	22.0%
Collaborating with partner or group mates in activities	5	29	19.3%

CONCLUSIONS

Based on the finding of this study, the researcher has drawn the following conclusions:

1. The teachers often utilize technologies and technology-based activities in teaching language.
2. The students often utilize technologies and technology-based activities in learning English language.
3. The use of technology supports and learners' autonomy in language learning to a high extent.
4. The use of technology develops learners' autonomy in language learning to a high extent.
5. The use of PowerPoint presentations is considered the most helpful in developing learner's autonomy in language learning.

RECOMMENDATIONS

Based on the conclusions, this study has the following conclusions:

1. The teachers may consider allowing the use of technology inside the classroom to maximize the full potential of its utilization.
2. In addition to PowerPoint presentations, the teachers may utilize other technologies in teaching English language to develop learners' autonomy in learning the English language.
3. An action research on the effect of technology in teaching and learning language may be considered for future studies.

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INSTRUCTIONAL AND STUDENT SUPPORT SERVICES IN A UNIVERSITY: LEVEL OF ADEQUACY AND USERS' LEVEL OF SATISFACTION

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ABSTRACT

This study aimed to determine the level of adequacy of the student support services and level of satisfaction felt by the fourth year college students of Bohol Island State University (BISU) – Candijay Campus specifically, in terms of Student Welfare, Library, Laboratories, ICT, Guidance and Counseling, Security, and Co-curricular Activities. Moreover, it geared towards finding the level of satisfaction regarding student support system and the immediate needs relative to the student support services. Null hypothesis was statistically tested for rejection or acceptance at .05 levels of significance among the students response in the aspects of level of satisfaction toward support services and problems met. Descriptive method with a modified questionnaire was used. Respondents were the 100 fourth year college students enrolled in the different degree courses offered in school. Salient areas were identified in the student support system that require preferential attention by the school administration: the student welfare services on provision of scholarship, increased number of copies and acquisition of new edition of references in the library, provision of first aid medicines and efficient medical/dental services, laboratories and THE-HE needs improvement in their rooms, equipment and chemicals, the need of additional ICT facilities and availability of enough computer units, the co-curricular activities responded positively due to sports, literacy, musical and organized co-curricular student organizations and the security services are adequate. Results revealed that the responses of the different groups of students do not vary significantly, meaning, their perceptions of the present status of the student support services are congruent which could be established as a fact. The researchers recommended that school should conduct a regular assessment of the status of the student support services to produce globally competitive graduates, additional budget allocations for these identified deficiencies, acquisition of additional updated references and a computer with Internet connection in the library opened until 8:00 P.M and even half day on Saturday, spacious computer laboratory with internet connected computer units, provide a standard, tiled flooring and stainless sink with adequate water supply THE-HE laboratories, the HE kitchen with refrigerator, oven, cabinets for storing kitchen utensils and others to provide technical skills satisfactorily, accessible medical clinic with consistent services of the doctor, dentist or nurse for treatment and first aid consultations, construction of additional facilities like tennis and basketball court, swimming pool, and others, in-charge of the different student services should always available and updated with their functions, a visible separate parking area for the faculty, employees and students' safety and there should be two guards on duty for night and day to ensure the safety of many including peace and order maintenance inside the campus. An intervention measure plan is herein proposed.

Keywords: Academic Performance, BISU System, Level of Satisfaction, Student Support Services

INTRODUCTION

Human resource is one of the major factors in achieving development amidst an increasingly competitive and borderless world. By this, Higher Education Institutions (HEI's) are facing tougher global competition in terms of the quality of graduates produced and major educational reforms have taken their toll to address the quality, efficiency and equity issues related to higher education. The kind of graduates that higher educational institutions produce is crucial if these reforms are to be sustained. These concerns mandated institutions to raise the standard by making the system efficient, effective relevant and responsive to the needs of the learners who belong to the present modern society.

To address this issue, Bohol Island State University system of the province of Bohol (BISU) strives its best to conceive this idea by strengthening its whole system so that they can work even better towards improving the quality of the programs it offers. As one of the five campuses of BISU, Candijay Campus has continuously worked hard to be in cognizance with the attainment of the ultimate vision, mission and objectives of the whole system. As much as BISU-Candijay campus endeavored through these years to maintain its quality of instruction, it likewise, has to provide efficient student support services to effectively produce a wholesome learning environment and atmosphere for the students.

The result of the study would hopefully determine the efficiency of the student support system of BISU-Candijay campus and become then, the benchmark for the school administration to attend to the needs of the students as support to their learning conditions.

Findings will serve as bases in proposing strategies and measures to correct the identified deficiencies and weaknesses.

THEORETICAL BACKGROUND

According to the revised edition of the "Principles of Learning" authored by Herman Gregorio, learning difficulties of learner may be due to many factors. One of these factors is the condition in which learning takes place. This includes the classroom, textbooks, equipment, school supplies, and other instructional aids. The conditions for learning must be favorable and adequate if teaching is to be denied that the type and quality of instructional materials and other support services play an important role in the instructional effectiveness of the school.

Legal Bases. The aforementioned theory of learning is legally supported by the provision of the Philippine Constitution of 1987 specifically states in Sec. 2 (1) of the Article XIV that the State must establish, maintain, and support a complete, adequate and integrated system of education relevant to the needs of the people and society.

There is no argument that education is a vital and fundamental aspect of civilized society. Without the befit of education, people would be unable to earn an adequate livelihood, enjoy life to the fullest, or fulfill the duties and responsibilities of good citizenship.

Vision and Mission of BISU system. Anchored on the provision of the Constitution, the school has envisions to become a dynamic hub of socio-technological program offerings for the formation of competitive human resource by 2010 for Bohol and the world (BISU Student Manual).

In line with this vision, BISU system commits to provide the clientele socio-technical expertise through innovative education. To realize this, the system behooves that its students should be provided with the adequate and satisfactory support services that would cater the students of their needs while striving to obtain better academic performance. It is, therefore imperative that as study should be conducted to assess these aspects.

Quality of Higher Education. The increasingly competitive environment has also led a number of higher institutions to monitor levels of student satisfaction. Measuring student satisfaction as an indicator of quality is consistent with a Total Quality Management Approach (TQM).

Wiklund and Wiklund (1999) report that several universities are now adopting TQM. As a result, customer focus has become the core value for many, while the precept that students are customers is not universally accepted. There has been growing support for the use of student satisfaction surveys as an indicator of the quality of services. The use of these surveys has led to measurable improvements in teaching quality.

As such, student feedback can be used as an effective tool for quality enhancement. Harvey (1995) also advises that student satisfaction goes hand in hand with the development of a culture of continuous quality improvement. It has been argued that any quality management tool must serve two functions; one of accountability and one of enhancement. While the quality assurance approach serves the accountability function. Internal mechanisms are required to best serve the quality enhancement function.

Jackson (1996) stresses that the function of enhancement is fulfilled when institutions are better able to understand the strengths and weaknesses in their policies, practices and procedures. Soliciting feedback from the students on their entire learning experience enables this understanding to be achieved. Furthermore, if used appropriately, it enables student vies to be integrated into quality enhancement decisions.

The students' evaluation of the instruction, curriculum, and support services in their degree program helps shape the curriculum and embodies the purpose of higher education. Forrest (1998) emphasizes that the evaluation of the college/ university experience is a "systematic attempt for making inferences about the learning and development of student…. The process of defining, selecting, designing, collecting, analyzing and using information to increase students' learning and development". Students should be given pedagogical space to develop their own voice in resolving conflicts that exist in their educational experience.

In the realm of higher education, there have been concerted efforts worldwide to analyze and evaluate student evaluation of students' experience with the school and its services. Like many other multilingual and multicultural countries, the Philippines continue to grapple with multifaceted issued, problems, and challenges in her higher education sector.

In the last decade, state colleges and universities have undergone significant changes in policies, organization, staffing, funding and management.

Managing quality in higher education. The massive expansion of student numbers and changes in government funding has put the issue of quality firmly on the agenda of higher education institutions (1998). With the introduction of increased tuition fees which began in the late 90's, the students view themselves as paying customers, demanding value for money and the right to be heard (1996). As in many other parts of the world, the general public began to demand greater accountability and called for valid, reliable, and comparable performance data on the quality of service in higher education (1997).

In response to these demands, the concept of quality assurance among state colleges and universities were established to ensure all government-funded education is of approved quality, to encourage improvements in the quality of education and to provide public information on the quality of individual higher education programs.

In most cases, quality is assessed at subject level by peer review against six aspects of provision: curriculum design, content and organization; teaching, learning and assessment; student progression and achievement; student support and guidance; learning resources; and quality management and enhancement.

As the results of these quality audits are published, the quality assurance system provides a comparative indicator of the quality of higher education provision that is necessary in a climate of greater accountability. Given the increasingly competitive environment in education, these audit scores are very important to the institution.

Related studies. The following research readings and studies were reviewed to provide insights into the focus of the problem. Perry and Smart (1997) observe that higher education will provide an essential infrastructure with which a country can harness its technological and creative potentials. Similarly, educators emphasize that in today's world of accelerating growth and change, the ultimate goal of education should be a lifelong learning. As Pederson (2002) puts it, lifelong learning is an essential element in securing increased economic growth, development of adequate qualifications of the labor force as well as the inclusion of all segments of the population in the rapidly changing labor market and society at large. In this light, it becomes a way to analyze the students' perspective, how college/university students experience academic life in and of the classroom.

Light and Cox (2001) acknowledge the importance of good evaluation in higher education as they realize that there have been two important developments in higher education: The emphasis on generic skills (especially learning to learn) and the change of focus from teaching to learning. They observe that what has been seriously underestimated is the role of evaluation activities in enabling students to understand more about the way they learn from the different styles of teaching and the different environments and the learning resources they encounter.

Evaluation research in higher education can help learners become more effective lifelong learners when the constraints and supports of formal courses are behind them and they take full control of their own learning.

It is generally accepted that assessment plays a key role in the quality of student's school life and studies. There must be close congruence between espoused learning outcomes and assessment design to drive student learning towards the desired learning outcomes (1992). Students are not the only stakeholders in the assessment process. The school also requires feedback in order to monitor quality of services rendered to the students (1991). The most direct source of information about the 'quality' of the learning experiences in higher education is the student. James (2001) notes:

Students are well-equipped to judge the quality of certain aspects of higher education and we should trust their intuitions on these matters. Generally speaking, students are in a reasonable position to judge the more tangible, short-term components of the experience and to judge aspects of the process of higher education. Most institutions seek student feedback through internally designed instruments including student evaluations of teaching and courses. Colleges and universities are keen to obtain student feedback on all aspects of school life, and strive to respond to comments and complainants by ongoing review and improvements to the services provided to students. The school aims to offer the best possible environment and learning experience to encourage students to perform to their full potential. By listening to student's concern and responding to them, it demonstrates that their concerns are heard and the school is seen to be interested and responsive. The study conducted by Kaur (2003) indicated that the use of student journal as a course evaluation technique provides a longitudinal and insightful findings indicate that student journals can offer much in the way of qualitative date which can be used to complement other data collected for evaluating course experience such as questionnaires and interviews. Another advantage was that, the student journal provides a wealth of information that other qualitative data would not be able to glean form students. It offers an unusual freedom of expression not warranted by traditional course evaluation tools.

Student journals are cognitive tools that generate much reflection and objectivity on respondents' part as it allows them to discuss issues close to their hearts and yet warrants them to confidentially and consciously seek. The use of student journals for evaluating course experience of students can leave a powerful impact on researchers as it helps them experience something unusual in the collection of insightful and reflective journals. It allows individual respondents to shine through as they discuss their holistic academic experiences and perspective on learning.

OBJECTIVES

The specific objectives of the study are:

1. Determine the level of adequacy of the instructional and student support services in terms of:
   1.1. Student welfare,
   1.2. Learning center / Library,
   1.3. Health/Medical/Dental,
   1.4. Laboratories (Sciences),
   1.5. ICT/ Internet,
   1.6. Guidance and Counseling,
   1.7. Security, and
   1.8. Co-curricular activities.
2. Determine the level of satisfaction of the student-respondents toward the student support services.
3. Identify the immediate needs of the students relative to the student support services.
4. Determine if there is a significant difference between the level of satisfaction of the students toward support services and Immediate Needs with respect to their colleges.
5. Develop intervention measures to improve student support services.

RESEARCH METHODOLOGY

Design

This study utilized the descriptive method with the aid of a modified questionnaire as the main data gathering instrument. The descriptive method is most appropriate because it is used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation". A descriptive research is directed towards the ascertainment of prevailing conditions and involves essentially a quantitative description of the general characteristics of a group.

Table 1. Distribution of Respondents

Respondents	Questionnaires Distributed	Questionnaires Retrieved	Percentage
College of Education	52	52	100.00
College of Hotel and Restaurant Management	10	8	80.00
College of Fisheries And Marine Sciences	28	28	100.00
College of Computer Science	13	12	92.31
Total	**103**	**100**	**97.09**

Instrument/Tool

The present study adopted the researcher-constructed questionnaire designed to measure the student's judgement on the level satisfaction on the students support services and the level of efficiency.

The questionnaire used the 5-point Likert scale. To each item, the students were asked to rate the quality of the various student support and administration services afforded to them.

The qualitative scales used were the following:

A. Level of Adequacy		
Degree	**Meaning**	**Equivalent**
Very Adequate	Has met more than the expectation	5
Adequate	Has just met the needs of the students in most cases	4
Moderately Adequate	Has fell short of the needs of the students	3
Less Adequate	Has not meet the needs	2
Very Inadequate	None of the services is available	1

B. Level of Satisfaction		
Degree	**Meaning**	**Equivalent**
Very Satisfied	Has served beyond expectation	5
Satisfied	Has met expectation	4
Moderately Satisfied	Has fell short of the needs of the students	3
Not Satisfied	Has not met with the needs	2
No Service At All	Service not available	1

Data Gathering Procedure

The researcher initially secured the permission for the conduct of the study from the President of the BISU System with the endorsement to the Director of BISU- Candijay Campus. The researcher personally distributed the questionnaire to the respondents to obtain a maximum number of retrieved questionnaire forms. The respondents were given one day to accomplish the forms and returned on an agreed date. The researcher personally administered the questionnaires to the fourth year students with help of the instructors and explained the objectives of the study to come up with the reliable and accurate responses and a hundred percent retrieval of the copies.

Data Analysis

The data gathered were analyzed and interpreted through projection and deduction inferred from the percentages. To obtain the percentages, it was computed using the simple percentage formula, thus:

$$\text{Percent} = \frac{f}{n} \times 100$$

Where:

f = frequency
n = number of cases

The following weights were assigned to the scales with their corresponding equivalents:

The weighted mean was computed using the hypothetical mean range formula:

$$U = \sum (f * x) / N$$

Where:

U = Weighted mean
∑ = sum of
f = frequency of responses under each scale
N = the number of respondents set for each scale

Range	Description
4.21-5.00	Very Adequate, Very Satisfied
3.41-4.20	Adequate, Satisfied
2.61-3.40	Moderately Adequate, Moderately Satisfied
1.81-2.60	Less Adequate, Not Satisfied
1.00-1.80	Very Inadequate, No Service at all

The Findings

Table 2. Level of Adequacy on the Student Support Services

Items	Education		HRST	
	n=52		N=8	
	WM	Des	WM	Des
STUDENT WELFARE				
Provide academic scholarship	4.38	A	4.63	VA
Equal opportunity for all students to work as students	2.98	MA	4.13	A
Composite Mean	**3.46**	**A**	**4.38**	**VA**
LEARNER CENTER / LIBRARY				
Copies of reference books	2.98	MA	3.75	A
Library hall/area	2.95	MA	4.13	A
Recent/new edition of reference books	2.60	LA	3.38	MA
Services rendered to the students	2.97	MA	3.88	MA
Composite Mean	**2.88**	**MA**	**3.78**	**A**
HEALTH/MEDICAL DENTAL				
Medical clinic	3.28	MA	4.38	VA
Medical doctor/ Dentist/ Nurse	3.16	MA	4.13	A
Medicines / First Aid	2.47	LA	3.88	A
Services or treatment rendered	2.21	LA	3.38	MA
Composite Mean	**2.78**	**MA**	**3.94**	**A**
LABORATORIES (ANY SCIENCES)				
Laboratory rooms	3.26	A	3.50	A
Laboratory equipment	3.02	A	3.00	MA
Chemicals	2.98	MA	2.75	MA
Composite Mean	**3.09**	**MA**	**3.08**	**MA**
LABORATORIES (THE-HE)				
Home furniture	3.29	A	3.13	MA
Appliances	3.07	A	3.5	A
Home cooking utensils	36.6	A	3.50	A
Composite Mean	**3.33**	**MA**	**3.38**	**MA**
ICT/INTERNET				
Computer rooms/center	3.5	A	3.75	A
Computer units	3.00	MA	3.13	MA
Internet Connection	1.09	VIA	1.25	VIA
Services rendered	2.36	LA	3.00	MA
Composite Mean	**2.49**	**LA**	**2.78**	**MA**

Items	Education		HRST	
	N=52		N=8	
	WM	Des	WM	Des
GUIDANCE AND COUNSELING				
Guidance Office	4.02	A	4.75	VA
Special counseling room	1.83	A	3.75	A
Number of guidance counse-lors	3.72	A	4.63	VA
Services rendered	3.19	A	4.13	A
Composite Mean	**3.19**	**A**	**4.31**	**VA**
CO-CURRICULAR ACTIVITIES				
Sports	4.17	A	5.00	VA
Student organization	4.16	A	5.00	VA
Literary and musical	4.05	A	5.00	VA
Composite Mean	**4.13**	**A**	**5.00**	**VA**
SECURITY				
Maintenance of school peace and order	4.00	A	4.63	VA
Number of security guards	2.98	A	4.63	VA
Disciplinary measures/rules	3.24	A	4.25	VA
Services rendered	3.29	A	4.00	VA
Composite Mean	**3.38**	**MA**	**4.38**	**VA**

Items	Fisheries		Computer	
	N=28		N=12	
	WM	Des	WM	Des
STUDENT WELFARE				
Provide academic scholar-ship	3.64	A	3.17	MA
Equal opportunity for all students to work as students	3.18	MA	2.67	MA
Composite Mean	**3.41**	**A**	**2.92**	**MA**
LEARNER CENTER / LIBRARY				
Copies of reference books	3.07	MA	2.75	MA
Library hall/area	3.14	MA	3.00	MA
Recent/new edition of refer-ence books	2.96	MA	2.67	MA
Services rendered to the students	3.54	A	3.08	MA
Composite Mean	**3.18**	**MA**	**2.88**	**MA**
HEALTH/MEDICAL DENTAL				
Medical clinic	4.00	A	3.00	MA
Medical doctor/ Dentist/ Nurse	3.39	MA	2.50	LA
Medicines / First Aid	3.32	MA	2.50	LA
Services or treatment ren-dered	3.50	A	2.5.	LA
Composite Mean	**3.55**	**A**	**2.63**	**LA**
LABORATORIES (ANY SCIENCES)				
Laboratory rooms	3.04	MA	2.83	MA
Laboratory equipment	2.79	MA	2.42	LA
Chemicals	2.71	MA	2.08	LA
Composite Mean	**2.85**	**MA**	**2.44**	**LA**
LABORATORIES (THE-HE)				
Home furniture	3.14	MA	1.92	LA
Appliances	3.07	MA	1.83	LA
Home cooking utensils	3.43	A	1.67	VIA
Composite Mean	**3.21**	**MA**	**1.81**	**LA**
ICT/INTERNET				
Computer rooms/center	3.29	MA	2.75	MA
Computer units	2.75	MA	2.58	LA
Internet Connection	1.46	VIA	1.00	LA
Services rendered	2.79	MA	2.33	LA
Composite mean	**2.57**	**A**	**2.17**	**LA**

Items	Fisheries		Computer	
	N=28		N=12	
	WM	Des	WM	Des
GUIDANCE AND COUNSELING				
Guidance Office	4.14	A	3.92	A
Special counseling room	2.82	MA	2.5	LA
Number of guidance counse-lors	3.79	A	3.42	A
Services rendered	3.39	MA	3.17	MA
Composite Mean	**3.54**	**A**	**3.25**	**MA**
CO-CURRICULAR ACTIVITIES				
Sports	4.18	A	3.67	A
Student organization	4.29	VA	3.67	A
Literary and musical	4.04	A	3.33	MA
Composite Mean	**4.17**	**A**	**3.56**	**A**
SECURITY				
Maintenance of school peace and order	3.54	A	3.75	A
Number of security guards	3.61	A	3.42	A
Disciplinary measures/rules	3.71	A	3.33	MA
Services rendered	3.64	A	3.25	MA
Composite Mean	**3.63**	**A**	**3.44**	**A**

1. Level of adequacy on the student support services student welfare services. "Provision of scholarship" was rated Adequate by the four groups with an average weighted mean of 3.84; and the opportunity for all students to work as student was Moderately Adequate or an average weighted mean of 3.24.
2. Scholarship is adequate to the students since BISU system is a government state college which gives the poor but deserving students to take college education. The school offers opportunities for students to work while studying as an alternative form of scholarship but the administration has to screen students to avail of this privilege.
3. Learning center or library services which include copies of reference books, library hall/ area, recent new edition of reference and services rendered to the students are all having an average rate of moderately adequate.
4. From the finding, it is inferred that the school has a library and facilitate the students need a more efficient service and enough number of library materials of recent edition.
5. Health/Medical-dental. There is an existence of medical clinic which the students answered Adequate but the medical officer, medicines and services were moderately adequate. Therefore, these services are lacking in this school. There is a lot more of work to improve with the medical and dental services of the school.
6. Laboratories (any Sciences). All the items under this, like the rooms, equipment and

chemicals are all having an average rate of moderately adequate. This means that the students want these facilities as these are necessary and basic to their practicum in Sciences.

7. Laboratories (THE-HE). The home furniture, appliances and home cooking utensils yielded an average rating of moderately adequate. It could be implied from the data that there is a lack of these equipment to prepare the students especially those taking up Education to home their skills as teachers.
8. ICT/Internet. It has been observed personally that there is a lack of ICT facilities in the school. There are computer units but not enough to serve the total number of student population. Much more, there is an immediate need to connect to the internet which is very important nowadays to keep the students posted with the recent development around the world.
9. Guidance and counseling. It is understood that the school has a guidance office and counselors but the services should be enhanced to give satisfaction to the need of the students. It is necessary that there should be a special counseling room as part of their services.
10. Co-curricular activities. There is a positive response to these services as found out that the sports, student organization and literary and musical activities are Adequate.
11. Security. The security services are adequate. This is essentially required since this amenity is very imperative to the safety of the students and other personnel inside the school.

Table 3. Level of Satisfaction on the Student Support Services

Items	Education		HRST	
	n=52		N=8	
	WM	Des	WM	Des
A. STUDENT WELFARE				
Provide academic scholarship	3.64	S	1.75	NS
Equal opportunity for all students to work as working	2.91	MS	3.13	MS
Composite Mean	**3.28**	**MS**	**2.44**	**LS**
B. LEARNING CENTER/LIBRARY				
Copies of reference books	2.74	MS	3.38	S
Library hall/spacious area	2.86	MS	4.00	S
Recent/new edition of references	2.52	LS	3.25	MS
Services rendered	2.79	MS	3.63	S
Composite Mean	**2.73**	**MS**	**3.56**	**S**
C. HEALTH/MEDICAL DENTAL				
Medical clinic	3.21	MS	4.50	VS
Medical Doctor/Dentist/nurse	2.67	MS	4.13	S
Medicines/First Aid	2.38	LS	3.5	S
Services or treatment rendered	2.21	LS	3.63	S
Composite Mean	**2.62**	**MS**	**3.94**	**S**
D. LABORATORIES (ANY SCIENCES)				
Laboratory rooms	3.24	MS	4.50	VS
Laboratory equipment	3.02	MS	2.13	LS
Chemicals	2.98	MS	2.00	LS
Composite Mean	**3.08**	**MS**	**2.88**	**MS**
E. LABORATORIES (THE-HE)				
Home furniture	3.33	MS	2.88	MS
Appliances	3.09	MS	3.00	MS
Home/Cooking utensils	2.84	MS	3.13	MS
Composite Mean	**3.28**	**MS**	**3.00**	**MS**
F.ICT/INTERNET				
Computer rooms/center	3.29	MS	3.13	MS
Computer units	2.74	MS	3.88	S
Internet connection	1.17	LS	1.75	NS
Services rendered	2.34	LS	3.13	MS
Composite Mean	**2.39**	**LS**	**3.00**	**MS**
G. GUIDANCE AND COUNSELING				
Guidance office	3.76	S	4.75	VS
Special counseling room	2.19	LS	3.25	MS
Number of guidance counselors	3.22	MS	4.25	VS
Services rendered	3.21	MS	3.63	S
Composite Mean	**3.09**	**MS**	**3.97**	**S**
H. CO-CURRICULAR ACTIVITIES				
Sports	4.00	S	5.00	VS
Student organization	3.97	S	5.00	VS
Literary and musical	3.98	S	4.88	VS
Composite Mean	**3.98**	**S**	**4.96**	**VS**
I. SECURITY				
Maintenance of school peace and order	3.41	S	4.38	VS
Number of Security guards	2.55	LS	4.25	VS
Disciplinary measures/rules	3.00	MS	4.25	VS
Services rendered	3.03	MS	3.88	S
Composite Mean	**3.00**	**MS**	**4.19**	**S**

Items	Fisheries		Computer	
	N=28		N=12	
	WM	Des	WM	Des
A. STUDENT WELFARE				
Provide academic scholarship	2.86	MS	3.08	MS
Equal opportunity for all students to work as working	3.57	S	2.33	LS
Composite Mean	**3.21**	**MS**	**2.71**	**MS**
B. LEARNING CENTER/LIBRARY				
Copies of reference books	3.68	S	2.75	MS
Library hall/spacious area	3.29	MS	3.08	MS
Recent/new edition of references	2.86	MS	2.42	LS
Services rendered	3.57	S	2.92	MS
Composite Mean	**3.35**	**MS**	**2.79**	**MS**
C. HEALTH/MEDICAL DENTAL				
Medical clinic	3.36	MS	2.42	LS
Medical Doctor/Dentist/nurse	3.39	MS	2.25	LS
Medicines/First Aid	3.43	S	1.83	LS
Services or treatment rendered	3.25	MS	1.83	LS
Composite Mean	**3.36**	**MS**	**2.08**	**LS**
D. LABORATORIES (ANY SCIENCES)				
Laboratory rooms	3.54	S	2.67	MS
Laboratory equipment	2.93	MS	2.17	LS
Chemicals	3.18	MS	1.67	NS
Composite Mean	**3.21**	**MS**	**2.17**	**LS**

Items	Fisheries		Computer	
	N=28		N=12	
	WM	**Des**	**WM**	**Des**
E. LABORATORIES (THE-HE)				
Home furniture	3.32	MS	1.75	NS
Appliances	3.32	MS	1.83	LS
Home/Cooking utensils	3.54	MS	1.67	NS
Composite Mean	**3.39**	**MS**	**1.75**	**NS**
F.ICT/INTERNET				
Computer rooms/center	3.54	MS	1.67	NS
Computer units	3.5	S	2.33	LS
Internet connection	1.32	NS	1.08	NS
Services rendered	2.68	MS	1.92	LS
Composite Mean	**2.59**	**LS**	**1.99**	**LS**
G. GUIDANCE AND COUNSELING				
Guidance office	3.89	S	3.17	MS
Special counseling room	1.86	LS	2.25	LS
Number of guidance counselors	4.18	S	3.00	MS
Services rendered	3.57	S	2.83	MS
Composite Mean	**3.38**	**MS**	**2.81**	**MS**
H. CO-CURRICULAR ACTIVITIES				
Sports	3.86	S	3.58	S
Student organization	3.89	S	3.58	MS
Literary and musical	3.96	S	3.08	MS
Composite Mean	**3.90**	**S**	**3.42**	**S**
I. SECURITY				
Maintenance of school peace and order	3.61	S	3.58	S
Number of Security guards	3.57	S	3.17	MS
Disciplinary measures/rules	3.54	S	3.08	MS
Services rendered	3.57	S	3.25	MS
Composite Mean	**3.57**	**S**	**3.27**	**MS**

1. Level of satisfaction on the student support services. On student welfare services. The average rating of all the items under this aspect were moderately satisfactory which includes provision of the academic scholarship and equal opportunity for all students to work as student employee.
2. Learning Center / Library. The average rating from the weighted mean of the four groups of respondents was moderately satisfied which means that there is an immediate need to provide improvement to the library and its services.
3. Health / Medical – Dental services. The students felt moderately satisfied with the medical/dental services which were found out to be moderately adequate also. It is still an indication that this area should be given preferential attention by the school administration.
4. Laboratory (any Sciences) and THE-HE. It could be understood that there is a laboratory room since the students perceived that they are satisfied but the equipment and chemicals were proven to be less satisfactory so with the Technology and Home Economics equipment. There is a dire need to look into these as they are very necessary to the academic success of the students.
5. ICT/ Internet. Computer units are available, but the problem lies on its numbers. These could not cater to the ICT needs of the students. The students therefore, are demanding for a more efficient service for they are competing with the outside work of which everything now a days cannot be processed without computers. Much more, they should be connected to the Internet to keep track with the recent events of the times. Additionally, these facilities are needed in their academic lessons, assignments and researches.
6. Guidance and counseling. The students are not moderately satisfied if not, less satisfied with the guidance services. There is a guidance office and there are guidance counselors but what is needed in this area is its adequate and efficient services. It could not serve students satisfactorily if it lacks facilities like the counseling room where students and the counselor could heartily and confidentially discourse about certain matters. Without this, the guidance office cannot function to what it is intended to be.
7. Co-curricular activities. It has been found out that these activities are adequate so the students are satisfied with this area. Activities should be monitored by the school administration to efficiently cater the development of students' personality and their specified skills.
8. Security. Generally, it has been found out in the average rating that the students are satisfied with the security services of the school.

Immediate needs. On the student welfare, the availability of scholarship was found out to be more pressing than additional opportunities for student labor, while additional copies of reference materials and updated edition of these books should preferably has to be given action.

One health/medical/dental clinic, the most pressing limitation was the additional number of medicines following the additional number of doctors, dentist and nurses to give a better service to the students.

While on the laboratories for any sciences, it was felt by the students that additional laboratory equipment were foremost among the needs.

While on ICT, it was revealed that the students need to have an internet connection which is followed by the need for computer units and efficient services.

On guidance and counseling, the respondents felt the need to have an exclusive counseling room followed by improved services.

Security. It was perceived that there's a need to maintain the peace and order of the campus and should impose strict disciplinary measures.

Analysis of variance on the level of satisfaction on the students support services. The overall variance among the perceptions of the four groups of respondents on the immediacy of the needs of the student support services were insignificant which accepted the null hypothesis on this aspect.

It means that the perceptions of the four groups of respondents did not vary significantly. All the respondents have more or less the same feeling and perception on the level of satisfaction of the students support services. They fell that the services are inadequate which resulted to low satisfaction of the respondents.

Analysis of variance on the immediacy of needs on the students support services. The overall variance among the perceptions of the four groups of respondents on the immediacy of needs of the student support services was insignificant which accepted the null hypothesis on this aspect.

This finding implies that all the four groups of respondents have similar perception on the immediacy of the needs of the students support services. They feel that there is a need to improve almost all the services in school.

CONCLUSIONS

The study concludes that:

1. The student welfare services which include the provision of scholarship and offering of working opportunities to the students to work while studying.
2. The learning center or library services be improved which include the increased number of copies of reference books, enhancement of the library hall / area, acquisition of recent new edition of references and efficient services to be rendered to the students;
3. The medical/dental services be improved including the availability of doctor, dentist and nurse and the provision of first aid medicines and efficient medical services.
4. Laboratories (any Sciences) and THE-HE. All the items under this like the rooms, equipment and chemicals and the equipment need to be improved. This means that the students want these facilities as these are necessary to their practicum in Sciences and THE.
5. There is a dire need of additional ICT facilities including the Internet connection. There are computer units but these are not enough to serve the total number of student population to keep the students posted with the recent development around the world.
6. It is understood that the school has a guidance office and counselors but the services should be enhanced to give satisfaction to the need of the students. It is necessary that there should be a special counseling room for the counselor and counselee to interact openly and confidentially.
7. The co-curricular activities of the school have been positively responded which means that the school has conducted sports, literary and musical activities and organized co-curricular student organizations which supplement the classroom activity of the students.
8. The security services are adequate but still has to be given further importance since this area is crucial in maintaining the safety of the students and all school personnel inside the university premises.
9. Level of satisfaction of the respondents on student services did not differ across colleges.

RECOMMENDATIONS

1. The school should conduct a regular assessment of the status of the student support services if global learning and quality graduates are to be desired.
2. Additional budget for these identified deficiencies should be allotted by the school administration giving preferential attention to the improvement and enhancement of the following identified areas:

   a. Acquisition of additional number of updated books and references in the library. A computer with Internet connection should be made available in the library. The library should be opened until 8:00 P.M. and even half day every Saturday.
   b. For the ICT services, there should be a spacious computer laboratories/rooms with enough number of computer units

which have access to the Internet and adequate to serve the number of enrollees. For the THE-HE laboratories, the school should provide a better and well-constructed, permanent, spacious, tiled or stainless sink and tiled flooring with adequate water supply, light and proper ventilation.

c. For the laboratories, the HE kitchen laboratory should be equipped with appliances such as refrigerator, oven and other kitchen facilities to give the student satisfactory learning environment so practicum skills could be developed effectively. There should be cabinets for storing kitchen utensils.
d. The medical clinic should always be accessible to the students for treatment and first aid consultations. The services of the doctor, dentist or nurse should be consistently available. First aid medicines should be availed by the students.
e. Additional facilities like tennis court, basketball court, swimming pool, and other sports facilities be constructed for sports use.
f. For safety of the students and employees, a separate parking area for the faculty and employees and the students should be allocated.
g. All In-charge of the different student services should always be available, approachable and be updated with their functions and how they treat their clients (students).
h. There should be two guards on duty every night and day to ensure the safety of the students and personnel, so as to secure the facilities and to maintain peace and order inside the school campus.

3. An intervention measure plan is herein proposed to serve a guide to the school administrators and other stakeholders of the immediate need for improvement of the different areas identified in this study. There is an urge that this plan be implemented by the concerned authorities the soonest possible to give the students satisfaction of the services that the school is supposed to offer.
4. It is encouraged that a parallel study on this matter or follow up study of the implementation of the intervention measure plans proposed by this work will be conducted in the near future.

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CHALLENGES ENCOUNTERED AND ECOLOGICAL AWARENESS IN THE IMPLEMENTATION OF THE NATIONAL GREENING PROGRAM IN PUBLIC ELEMENTARY SCHOOL

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ABSTRACT

National Greening Program (NGP) has been declared as a government priority. The missions are food security, poverty reduction, environmental stability, biodiversity conservation and climate change mitigation and adaptation. However, many people expressed dissatisfaction with the National Greening Program and despite the stellar numbers; the NGP has been criticized for lack of transparency and inaccurate reporting (Albano & Leviste, 2016). This study aims to determine the perceived challenges in the implementation of NGP in school. The researchers used descriptive- survey and correlational research methods in order to ascertain the relationship between the respondents' profile including their perception of the challenges and ecological awareness of the program. The researchers' utilized a modified and adopted questionnaire from Inocian (2015) in his study "Gulayan sa Paaralan" in response to sustainable development", and researcher made questionnaire for ecological awareness and perceived challenges of the respondents in the implementation of NGP. After a comprehensive analysis of the result of this study, it was found out that there is a relationship on the perceived effect of NGP implementation and the level of ecological awareness. On the other hand, there is no connection between the perceived effect of NGP implementation and challenges encountered. The respondents were highly aware of the national greening program in school but it was not given priority from the administration. NGP in school is very important, that is why the implementation of this program should be strictly enforced (Akaateba & Yakubu, 2013). The researchers recommended that there should be a strict implementation and evaluation of the National Greening Program in school; strict monitoring and supervision will be conducted regularly, and teachers should include NGP in their regular activity at least one (1) hour daily to ensure the achievement of the program.

Keywords: Challenges, Ecological, Elementary, Gulayan sa Paaralan, National Greening Program, School

INTRODUCTION

The demands of our growing population have done much damage to the environment. The changes in weather and climate at present are very evident not only in the country but in also worldwide (Akaateba & Yakubu, 2013). Humans are using up more resources and nature cannot replenish those resources fast enough to supply our needs (Blanc, 2017).

The Philippines remains one of the highest priority countries in the world for conservation action because its biodiversity is amazingly rich, but it is alarmingly endangered (Cervantes, 2014). In Bohol, the poor are heavily dependent on natural ecosystems and resources for their livelihood, but they are also vulnerable to environmental hazards and their health suffers directly from the impacts of pollution. This is a challenge of the province on how to sustain and safeguard the source of most people (https://www.innovations.harvard.edu/bohol-ecotourism-development-program).

National Greening Program declared by President Benigno Simeon C. Aquino III in 2011 as a government priority program to promote food security, poverty reduction, environmental stability, biodiversity conservation and climate change mitigation and adaptation. However, Albano and Leviste (2016) expressed their dissatisfaction with the National Greening Program. DepEd also reveals dissatisfaction to the program and some other schools do not implement the program due to the different factors.

Thus, the foregoing contexts triggered the researcher to conduct a study on the challenges encountered and ecological awareness in the implementation of the National Greening Program in school. It is believed that implementing the said program in the school is a challenge assuming that is easier said than done. However, the result will serve as the basis for its full implementation of a sustainable future.

RELATED LITERATURE

The National Greening Program is a government priority program to reduce poverty, promote food security, environmental stability and biodiversity conservation and enhance climate change mitigation and adaptation. Headed by the Department of Environment and Natural Resources (DENR) and follows the convergence approach where 13 government agencies including the Department of Education (DepEd) are putting their efforts and resources to plant trees and keep the school surrounding the green.

The study on NGP of Tiongco, Vista, Cororaton, Inocencio, & Manalang (2016) on the Impact Assessment of the National Greening Program of the Department of Environment and Natural Resources: Scoping or Process Evaluation Phase in the provinces of Zambales, Negros Occidental, and Dinagat Islands. Key results showed that the NGP household recipients experienced some marginal increase in average real income, though it was not statistically significant. The same is true when comparing NGP household recipients versus non-NGP household recipients. Propensity score matching results revealed that the effects of NGP on the local people have evidently induced bigger household size, the higher number of working household members, and positive perception on NGP activities.

The Theory of Change (Kirkpatrick, 1950 as cited by Grantcraft, 2006) is guiding the development of a monitoring and evaluation framework for the second phase of the world's reforestation programs. This theory developed backwards; the desired change defined first, setting the scene for the strategy, activities and outputs that will lead to it. A systematic process shows how a program can meet its objectives to change people's lives even after the program ends. It should effectively describe and explain the impact of the program for a beneficiary point of view.

Moreover, Ecological Modernization Theory (Mol & Spaargaren, 2015) is considering in this study. The point of view of this theory is to extend a formative avenue to deal with environmental problems, with a central function assigned to science and technology. As a framework, the notion of ecological modernization can be accustomed at two degrees. First, it utilized as a theoretical concept to analyze those modernizations to the central institutions in a contemporary society considered required solving the ecological crisis. Second, ecological modernization utilized to describe a more pragmatic political program to redirect environmental making policy. In the sense of the first definition, ecological modernization stands for a major changeover, or "ecological switch" of the industrialization procedure into a direction that takes account of the need to maintain to sustenance base. As with sustainable development, ecological modernization indicates the capability of defeating environmental crises without departing the course of modernization (Gibbs, 1998).

The Republic Act No. 8491, Chapter III of Section 40 stated that the national motto should be maka-Diyos, makatao, makakalikasan at makabansa. Makakalikasan means a person who is concerned with the maintenance of ecological balance and the conservation of the environment (Collins English Dictionary). The Vision, Mission, and Core Values (Deped VMV) "makakalikasan" states the cares for the environment and utilizes resources wisely, judiciously and economically (DepEd Order No. 36, s.2013).

In addition, DepEd Order No. 5, s. 2014 integrates the "gulayan sa paaralan", ecological solid waste management and tree growing and caring as key components to attain the goals on poverty reduction, food security, biodiversity conservation and climate change mitigation and adaptation.

The Regional NGP coordinators, Edukasyong Pantahanan at Pangkabuhayan (EPP), and Technology and Livelihood Education (TLE) supervisors, and school health personnel shall provide technical assistance to the division NGP coordination as well as monitor the implementation of the program. The school heads shall take the lead in the implementation by integrating it in their

School Improvement Plan (SIP), and in other co-curricular activities to ensure the sustainability of the program. This inclusion is part of the performance evaluation indicators among the teachers. This may serve as the betterment of the nation in terms of sustainable development.

This is a multi-agency program addressing everyone to be responsible and to take good care of this planet.

STATEMENT OF THE PROBLEM

The main thrust of the study was to determine the challenges encountered and ecological awareness in the implementation of the National Greening Program in public elementary schools of Ubay, Bohol, Philippines during the School Year 2018-2019. This study aims to answer the following questions:

1. What is the respondents' level of ecological awareness on the NGP implementation in school?
2. What are the challenges encountered by the respondents in the implementation of NGP?
3. What are the effects of the National Greening Program implementation in school?
4. Is there a significant relationship between the effect of NGP implementation and level of ecological awareness and challenges encountered by the respondents in implementing NGP?

RESEARCH METHODOLOGY

This study used descriptive survey and correlational research methods in order to determine if there is a relationship between the variables. The questionnaire was a modified and adapted from Inocian (2015) in his study on Gulayan sa Paaralan in Response to Sustainable Development and a researcher-made questionnaire for the third part which comprises five different categories such as administrative support, physical features, availability and types of planting materials, gardening model and guidelines for its successful monitoring.

The questionnaire employed for effects of National Greening Program is adopted from Inocian (2015) in his study on Gulayan sa Paaralan in response to Sustainable Development" which composed of sixteen items; there were fifteen items for ecological awareness of the respondents on NGP operations and twenty-five items on the challenges encountered on the NGP implementation.

The participants of the study were the 135 Grades IV-VI EPP teachers in the elementary school of the District of Ubay, Bohol, Philippines. Questionnaires distributed personally to the respondents with enough time to answer the questions and then, retrieved the answered questionnaires of each school. The gathered data tallied, tabulated, collated and subject to descriptive and inferential statistics for the purposes of analysis and interpretation in accord to the specific problems of the study. The data gathered were quantified using a 4-point scale where 1 means Strongly Disagree and 4 means Strongly Agree.

FINDINGS

Table 1.Profile of the Respondents

1.1 Age	Frequency	Percentage (%)	Rank
21-25 years old	10	7.41	4
26-30 years old	41	30.37	1
31-35 years old	34	25.19	2
36-40 years old	30	22.22	3
41-45 years old	2	1.48	7
46-50 years old	9	6.67	5.5
51 years old and above	9	6.67	5.5
Total	**135**	**100%**	
1.2 Sex			
Male	21	15.56	2
Female	114	84.44	1
Total	**135**	**100%**	
1.3 Civil Status			
Single	32	23.70	2
Married	103	76.30	1
Separated	0	0.00	3.5
Widow/ Widower	0	0.00	3.5
Total	**135**	**100%**	
1.4 Highest Educational Attainment			
Bachelor's Degree	23	17.04	3
Bachelor's Degree with MA Units	67	49.63	1
CAR in Master's Degree	44	32.59	2
Master's Degree Holder	1	0.74	4
MA Degree Holder with Units in Ph.D/Ed.D	0	0.00	6
CAR in Doctoral Degree	0	0.00	6
Doctorate	0	0.00	6
Total	**135**		
1.5 Number of Years in Service			
1 – 5 Years	55	40.74	1
6 – 10 Years	44	32.59	2
11 – 15 Years	15	11.11	3
16 – 20 Years	12	8.89	4
21 – 25Years	6	4.44	5
26 – 30 Years	3	2.22	6
31 years and above	0	0.00	7
Total	**135**	**100%**	

As shown in the table, female respondents dominated the population of the three districts of Ubay with one hundred fourteen (114) or 84.44% while there were only twenty-one (21) or 15.56% male respondents.

Most of the respondent's civil status with one hundred- three (103) were married while the thirty -two (32) respondents were single. There were sixty-seven (67) respondents earned Bachelor's Degree with MA Units followed by completed academic requirement in Master's Degree with forty-four (44).

Lastly, in terms of the respondent's teaching experienced, there were fifty-five (55) at bracket 1 – 5 years, while the bracket 6 – 10 years had forty -four (44) as ranked two, and the last in rank is at bracket 31 years and above. The district of Ubay, Bohol comprised with fresh and dynamic teaching force. The teacher -respondents considered having the ability to develop a great relationships with their peers, family, community and students.

Table 2. Level of Ecological Awareness Among Respondents During the National Greening Program Implementation in School

Statement	Teachers		
	WM	DI	Rank
I have changed some of my practices in terms of land cultivation.	3.56	HA	15
I am participative in ecological preservation practices in my community.	3.59	HA	14
I give importance of trees to prevent flood.	3.90	HA	4
I am able to determine what is or are the appropriate plants to be cultivated.	3.65	HA	13
I help preserve the habitats of different animals.	3.74	HA	11
I avoid cutting of trees.	3.85	HA	6
I am able to plant more trees.	3.73	HA	12
I am involved in the regular conduct of earthquake drill in school.	3.84	HA	8.5
I am aware that nature is an important habitat for the people	3.93	HA	1
I practice proper waste management (biodegradable and non-biodegradable/ no to burning of plastics).	3.83	HA	10
I avoid throwing of garbage in different bodies of water.	3.91	HA	3
I encourage my pupils to plant and care vegetables in school.	3.93	HA	2
I develop proper environmental values, skills and attitudes to my pupils.	3.90	HA	5
I dispose hazardous materials in safety places,	3.84	HA	8.5
I dispose hazardous materials in safety places.	3.84	HA	7
Average Weighted Mean (AWM)	**3.80**	**Highly Aware**	

The average weighted mean for this category was 3.80 and interpreted as Highly Aware. This means that the respondents were at the highest level of ecological awareness of the national greening program implementation in school. The department earnestly disseminated the information on greening program in school.

In connection, Vista, Coronation & Inocencio (2016) in their study on National Greening Program emphasized that it is a government priority program to reduce poverty, promote food security, environmental stability and biodiversity conservation and enhance climate change mitigation and adaptation.

Table 3.1. Challenges Encountered in Implementing the National Greening Program in School as to Administrative Support

Administrative Support			
National Greening Program is not strictly impose in school	2.44	D	1
NGP is not strictly imposed in school.	2.41	D	3
The school is less prepared in the implementation of prevention, preparedness and mitigation activities of the program.	2.39	D	4
The school seldom enforces the prohibition of burning.	2.41	D	2
Planting is done just for means of verifications (MOVs).	2.13	D	5
Average Weighted Mean (AWM)	**2.36**	**Disagree**	

The challenges encountered in implementing the national greening program in school. As to administrative support, the statement number 1 "National Greening Program is not strictly impose in school" got the highest weighted mean of 2.44 or described as Disagree, while the lowest was statement 5 "Planting is done just for means of verifications (MOVs)". Based from the results, this could mean that the school administration supported the National Greening Program, however, the dedication and commitment for this program was not a priority, this may lead to dissatisfaction of the program.

On other hand, Albano & Leviste (2016) expressed their dissatisfaction with the National Greening Program and despite the stellar numbers; the NGP has been criticize for lack of transparency and inaccurate reporting.

Table 3.2. Challenges Encountered in Implementing the National Greening Program in School as to Physical Features

Physical Features of NGP			
The school does not have enough space for vegetable gardening.	2.58	A	2
The school seldom practices the 5 R's (reduce, reuse, recycle, recover, repair) of a responsible waste management.	2.36	D	5
Segregation of wastes is not closely monitored.	2.39	D	4
The school lacks garden tools to be used in Gulayan sa Paaralan Project.	2.66	A	1
The school has no place for the hazardous materials.	2.33	D	6
It is an additional burden for the teachers in accomplishing the NGP report.	2.42	D	3
Average Weighted Mean (AWM)	**2.46**	**Disagree**	

In the physical features, the statement "The school lacks garden tools to be used in Gulayan sa Paaralan Project" got the highest weighted mean of 2.66 or described as Agree while the lowest in this category was the sthatement "The school has no place for the hazardous materials" with 2.33 or disagree. This means that there were schools that do not integrate this program as part of the school practices.

In addition, DepEd Order No. 5, s. 2014 integrates the "gulayan sa paaralan", ecological solid waste management and tree growing and caring as key components to attain the goals on poverty reduction, food security, biodiversity conservation and climate change mitigation and adaptation.

Table 3.3. Challenges Encountered in Implementing the National Greening Program in School as to Types of Planting Materials

Types of Planting Materials			
No available seedling in school	2.78	A	3
Seedlings planted are not of the best quality.	2.73	A	5
No seedling is donated by the Local Government Unit (LGU)	2.81	A	1
There is no nursery seed bank for the production of vegetables and fruit-bearing plants.	2.79	A	2
Plants are not closely cared and monitored.	2.76	A	4
Average Weighted Mean (AWM)	**2.77**	**Agree**	

On the types of planting materials, the statement "No seedling is donated by the Local Government Unit (LGU)" got the highest weighted mean of 2.81 or Agree, however, the lowest for this category with a weighted mean of 2.73 was statement "Seedlings planted are not of the best quality".

Taking into account the social, ecological and policy imperatives mentioned. Local Government Units (LGU) are mandated to provide full support for the program, not only in terms of tree planting, but also in the production of quality seedlings and the mobilization of government employees, students from early as Grade 5 up to college level as well as private sectors at least ten seedlings annually. The NGP also unifies and integrates all greening efforts (Aquino & Daquio, 2014).

Table 3.4. Challenges Encountered in Implementing the National Greening Program in School as to Gardening Model

Gardening Model used in the NGP			
The school initiates basic gardening to acquaint pupils with agriculture.	3.16	A	1
The school implements containerized gardening model.	3.08	A	3
The school uses patch gardening that characterizes plots in rectangular shape.	3.09	A	2
The school integrates vertical gardening that characterizes plants mounted on walls or trellises.	2.93	A	5
The school implements pocket gardening that characterizes to a small garden constructed at any side of the building fringes.	2.89	A	4
There is no gardening model technique in school.	2.42	D	6
Average Weighted Mean (AWM)	**2.93**	**Agree**	

In terms of gardening model, it can be deduced that the statement "The school initiates basic gardening to acquaint pupils with agriculture" got the highest weighted mean of 3.16 or described as Agree while the lowest in rank was "There is no gardening model technique in school' with a weighted mean of 2.42 or Disagree. School garden programs can be very beneficial not only to the school but also to the students' learning in academic, social, and health-related domains. The effect of school gardens or on the factors that promote the sustainability of these programs (Ozer, 2007).

Table 3.5. Challenges Encountered in Implementing the National Greening Program in School as to Guidelines for its Successful Monitoring

Guidelines for its successful monitoring			
Full support of the teachers, pupils and stakeholders.	3.16	A	1
Specific management on the program.	3.14	A	3
Active participation of parents and barangay officials in conducting the program.	3.07	A	4
Attribution of passion towards sustainable development.	3.15	A	2
Submission of the Monthly NGP Accomplishment Report	3.07	A	5.5
Consolidation on all environmental clubs in school with the main project for the environment.	3.07	A	5.5
Average Weighted Mean (AWM)	**3.11**	**Agree**	

On the guidelines for successful monitoring, there should be a constant or regular monitoring to the program to ensure the implementation, issues, problems and success.

There is a need of a monitoring and evaluation framework to guide the development of the program according to Kirkpatric (1950) as cited by Grantcraft (2006). The theory of Change developed backwards; the desired change defined first, setting the scene for the strategy, activities and outputs that will lead to it. A systematic process shows how a program can meet its objectives to change people's lives even after the program ends.

In overall, the average weighted mean was 2.72 and described as Agree. However, the highest weighted mean overall in terms of challenges encountered in implementing the national greening program in school was the Guidelines for its successful monitoring with AWM of 3.11 with the description of Agree. The lowest AWM of 2.36 was the Administrative support with the description of Disagree.

It connotes that the biggest challenge that the respondents encountered in implementing this program was the full support from the administration. Administration plays a significant role in the delivery and implementation of whole program. The school heads shall take the lead in the implementation by integrating it in their School Improvement Plan (SIP), and in other co-curricular activities to ensure sustainability of the program. This inclusion is part of the performance evaluation indicators among the teachers. This may serve as the betterment of the nation in terms of sustainable development.

Table 4. Effects of the National Greening Program in Schools

Statement	Teachers		
	WM	DI	Rank
It helps motivate the pupils to have a caring attitude for the environment.	3.88	SA	11.5
It helps to prevent global warming.	3.91	SA	3.5
It defeats ecological imbalance.	3.84	SA	16
It turns the school into refreshing scenery.	3.90	SA	5.5
It advocates on preserving the environment and making the world a better place to live in.	3.91	SA	3.5
It lessens the socioeconomic and environmental impacts of disasters such as climate change.	3.90	SA	5.5
It helps in keeping the school clean and green.	3.94	SA	1
It motivates the pupils to plant vegetables and trees inside the school campus.	3.92	SA	2
It displays awareness to pupils on proper segregation of wastes as to biodegradable and non-biodegradable.	3.89	SA	8.5
It minimizes the risks and disasters that might happen.	3.86	SA	15
It helps conserve energy and resources.	3.87	SA	14
It helps practice responsible waste management.	3.87	SA	13
It provides sustainable development to people while maintaining the quality of the natural environment.	3.89	SA	8.5
It provides some measures of hope for the recovery of our nature.	3.88	SA	11.5
It helps secure a clean and healthy environment for generations to come.	3.89	SA	8.5
It manifests pupils to maintain a renewed participation and action to protect, preserve, conserve and rehabilitate our environment.	3.89	SA	8.5
Average Weighted Mean (AWM)	**3.89**	**Strongly Agree**	

Table 4 presents the effect of the National Greening Program Implementation in Schools, the respondents Strongly Agree on the it helps in keeping the school clean and green (3.94), motivates the pupils to plant vegetables and trees inside the school campus (3.92), and even defeats the ecological imbalance (3.84). The average weighted mean for this category was 3.89 and interpreted as Strongly Agree. This implies that the respondents believed that NGP help the school improve its learning environment and prevent disasters and climate change.

As with sustainable development, ecological modernization indicates the capability of defeating environmental crises without departing the course of modernization (Gibbs, 1998). Furthermore, Huber et al, (1993) argues that an economy benefits when there is a move forward environmentalism.

Table 5. Relationship Between the Perceived Effect of NGP Implementation and the Level of Ecological Awareness and Challenges Encountered

Perceived Effect and…	R	p-value at α=0.05	Interpretation	Decision
Ecological Awareness	0.584	<0.001	Significant	Reject Ho
Challenges Encountered	-0.061	0.484	Not Significant	Accept Ho

Based on the result, the data gathered on the relationship between the perceived effect of NGP implementation and the level of ecological awareness and challenges encountered. It was found out that there is a significant relationship on the perceived effect of NGP implementation and the level of ecological awareness since the computed r of 0.584 is greater than the p- value of <0.001. This indicates that the teachers were affected in the level of ecological awareness, however since the respondents were highly aware in this program they should also understand the effect of NGP whether it is negative or positive.

On other hand, there is no significant relationship between the perceived effect of NGP implementation and challenges encountered this is due to the computed r of -0.061 is smaller than the p-value of 0.484. It entails that NGP implementation has no direct effect on the challenges encountered by the respondents.

Furthermore, it also affects in the quest for food and volumes of waste contribute to environmental risk (Akaateba & Yakubu, 2013). The National Greening Program in school is very important, that is why the implementation of this program should strictly enforce.

CONCLUSIONS

The respondents were very much aware of the national greening program implementation in school thus the respondents were knowledgeable of the outcome of this program. However, there is no direct effect of the program on the challenges encountered by the respondents. It further reveals that there is a need for full support from the administration to ensure its implementation and this may lead to the dissatisfaction of the program.

RECOMMENDATIONS

Based on the conclusions drawn from the study, the researcher came up with the following recommendations:

1. There should be a strict implementation and evaluation of the National Greening Program in school.
2. There should be close monitoring and supervision conducted by the school head.
3. Teachers should include NGP in their regular activity at least one (1) hour daily to ensure the achievement of the program.

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PATH MODEL ON THE USE OF FACEBOOK, PERSONALITY, AND MATHEMATICS PERFORMANCE OF STUDENTS: BASIS FOR THE DEVELOPMENT OF A LEARNING MATERIAL

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ABSTRACT

This study aimed to formulate a Path Model on the use of Facebook, personality, and mathematics performance of students which served as the basis in the development of a learning material. It made use of the descriptive-developmental research design and was conducted in three State Universities and Colleges (SUCs) of Ilocos Sur, Philippines. The data were gathered using the Big Five Inventory (BFI) developed by Oliver P. John. Data on personality was analyzed and evaluated online through the Personality Assessor site developed and created by a licensed social psychologist, Nathan W. Hudson while the other data were analyzed using SPSS and AMOS. Findings revealed that students spent 1-2 hours accessing their Facebook account for more than three times a day using their smartphones mostly at home, classroom, and library. They are engaged in Facebook activities like chatting, group discussion with friends and posting photos during their vacant time and before sleeping at night. Findings also revealed that majority of the students are extravert and agreeable people while a great number of them are highly neurotic, and averagely open and conscientious individuals. Path models developed revealed that the Facebook use of the students positively correlates to their openness to experience, extraversion and agreeableness personality while negatively correlates to their conscientiousness and neuroticism personality. Open and conscientious students perform better in mathematics while agreeable and neurotic students have lower mathematics performance. The content of the developed learning material in Mathematics aimed to help enhance the personality of the students that positively affect their Mathematics performance, through their Facebook activities.

Keywords: Facebook engagement, Facebook use, mathematics performance, path model, personality

INTRODUCTION

Mathematics is considered a vital foundation for technological and scientific knowledge that is considered essential towards the socio-economic development of the world. In order for one nation to survive the millennial challenge, it is important that the citizens be equipped with mathematical knowledge in order to become scientific thinkers and cope with the challenge of the era where technology mandates everything. However, the Philippines lags behind other countries as far as mathematics performance of students is concerned. In 1999 and 2003, the Philippines subjected itself for evaluation by the Trends in International Mathematics and Science Study (TIMSS). This resulted in the findings that the mathematics performance of Filipino students is significantly below the average and even placed third from the bottom. (Source: Trends in International Mathematics and Science Study 1999 and Martin et.al, 2004a and 2004b).

Considering the importance of mathematics in the success of technology era battle that the country is trying to get through, there is a need to design a tool that could help in the improvement of the students' performance in mathematics. To do so, educators must become active and sensitive to their students' needs in order to provide the necessary assistance and guidance. Looking into the challenges of this era could help in elevating the status of the country's mathematics performance.

Today's era gives birth to social networking sites that have stolen the study time of students. Facebook usage pervades today's society with millions of students engaged or addicted to it. People have been spending lots of their time uploading, downloading, or getting information concerning their career or academic works (Napoleon, E., 2013). The unstoppable growth of the internet makes a big impact on the development of the students' personality and academic performance. The latest Global Web Index summary in January 2015 showed that almost 40% of Facebook users are 16 to 24 years old and about 35% are 25 to 34 years of age. Data suggest that Facebook users are students who are active to socialize and interact in the website. Facebook has been a part of their daily activities and serves as avenue for them to communicate, share information, build and preserve relationships, and meet new friends. Students and teachers alike have established their comfort zones in this site. It serves not only as a place where they can relax and strengthen their acquaintances but has become a place for interaction and discussion. Evidently, it plays a great role in motivation, teaching, learning, and in the personality and academic performance of students.

In online social networking environments, students create profiles that provide personal information and photos and establish links with others. They engage in variety of forms of communication and information sharing which could be personal or educational. The rise of Facebook is tremendously bringing changes in the nature of social activities and relationships as well as in all aspect of a student's life. For the millennials, overall use of the Facebook site is already an integral part of their life. With this, student's use of social networking continues to create challenges and issues for higher education professionals and keeping abreast of these challenges has proved to be difficult because of the speed at which new technologies are being introduced (Mehmood, S, Taswir T., 2013).

On the other hand, students who are using Facebook all over the world exhibit different personality types as they differ in their personal values and characteristics. Several studies along this line have shown that these varied personality types of students create an impact on their academic achievements as personality has been recognized as a determining factor on how people prefer to learn. The type of personality of the students has a great tendency of affecting positively or negatively their academic performances.

Studies conducted outside the Philippines have reported that personality traits influence academic achievement. Furnham (2003) found out that conscientiousness has consistently emerged as a stable predictor of exam performance. The study conducted by Paunonen (2001) also revealed that the combinations of Big Five traits was found out to predict various educational outcomes. These findings confirm the general significance of personality traits to academic performance.

As established by results of various studies and putting them together, it is evident that the use of Facebook is being influenced by one's personality and both variables can positively or negatively affect the mathematics performance of the students. For example, according to a study conducted by Narmina Mahmudova (2014) students spending time on networking sites affect their grades negatively. The study highlighted the following networking sites such as Facebook, Twitter, Instagram that take a lot of time from students, thus limiting their time spent on studying and therefore negatively influencing their academic performance.

On the other hand, a study conducted by Jwaifell (2013) showed that the intensity of usage of social networking sites among Jordanian university students offered that these sites could be used as tools for interaction and communication between students and professors. Students further mentioned that they are engaged in social networking sites for academic purposes such as communicating with teachers, discussing new subject with classmates, and chatting about the general topics of their interest which have positive effect on their academic performance.

These varying effects of using social networking sites on students' academic performance lead to new studies and research activities as Mahmudova concluded that there is a little logical correlation highlighting that the time spent in social networking sites influences students' grade and that there is a third variable that affects students' overall GPA.

The relationship of the use of Facebook, personality, and academic performance can be established through a path model. This model will be used to predict the mathematics performance of the students using the use of Facebook and Personality as the independent variables or predictors. This model also explains the patterns of correlation between the three variables through Path Analysis, hence this study was conceived.

Finally, it is with high hopes that through the findings of this study, mathematics educators will be able to trace the advantages and disadvantages of using this social networking site on the student's mathematics achievement making it as a basis for designing a learning material. The pattern of relationship between the three variables used in this study will be the determinants in the activities that will be included in the learning material to be developed. Also, findings determine the personality traits that could predict the academic performance of the students and the extent of use of Facebook that contributes positive effect. Knowing the personality traits of students will help the teacher design appropriate teaching tools and techniques while the "Facebook" fever of the students could be utilized by educators to reach out to the 21st Century learners and realize the vision of today's educational quest.

STATEMENT OF THE PROBLEM

This study was conducted to determine the Structural Equation Model on the use of Facebook, Personality, and mathematics performance of students which served as bases in the development of a learning material in mathematics.

Specifically, it sought answers to the following questions:

1. What is the extent of Facebook usage of the students along the following?
    - 1.1 length of time spent in accessing Facebook,
    - 1.2 frequency of using or engaging in Facebook,
    - 1.3 gadgets used in accessing Facebook,
    - 1.4 place of accessing Facebook,
    - 1.5 time of accessing Facebook, and
    - 1.6 purpose of accessing Facebook?
2. What is the level of personality of the respondents in terms of the following dimensions of the Big Five Personality Traits:
    - 2.1 openness to experience (intellect),
    - 2.2 conscientiousness,
    - 2.3 extraversion,
    - 2.4 agreeableness, and
    - 2.5 neuroticism (emotional stability)?
3. What is the level of mathematics performance of the students?
4. Is there a significant relationship between the students' use of Facebook and their:
    - 4.1 personality, and
    - 4.2 mathematics performance?
5. Is there a significant relationship between the personality of the students and their mathematics performance?
6. What Path Model can be made to explain the pattern of correlation between the three variables used in this study?
7. What learning material in mathematics can be developed based on the Path Model?

METHODOLOGY

This study made use of the descriptive-developmental research design. The descriptive part deals with the results of the Facebook usage survey and the academic performance of the students. The result of the analysis of the relationship between the three variables under study was the basis for the developmental part of the research. The developmental part was the making of the learning material with interactive learning activities that were based on the results and findings of the study.

It has covered the three State Universities and Colleges (SUCs) situated in the province of Ilocos Sur, Philippines and GPower 3.1 was utilized in determining the sample size using a medium effect size with 0.01 level of significance.

The data needed in this study were gathered during the Second Semester of School Year 2016-2017. Standardized Inventory and Instruments, the Big Five Inventory (BFI) developed by Oliver P. John and other psychologist, which emerged from the preliminary lexical work of Galton in 1884 was used to gather and elicit data needed for this study. This Big Five Inventory (BFI) has gone through several reviews and critiquing by well-known psychologists like Oliver John, Laura Naumann, Srivastava, Goldberg and others. This consists of 44-item test developed by Oliver P. John and V. Benet-Martinez in 1998.

The percentile rank of the personality scores of the respondents was evaluated online through the Personality Assessor which was launched on June 24, 2011. This free online test for personality is designed, owned, and operated by Nathan W. Hudson, a social-personality psychologist at Southern Methodist University who studies adult attachment and personality development.

Documentary Analysis was employed in determining the level of mathematics performance of the students. These level were evaluated using the grading system used by the three State Universities and Colleges of Ilocos Sur.

The relationship between and among the variables was evaluated and described using the computed correlation coefficient.

Data collected were collated, organized, and subjected to the following statistical tools; **Frequency Count and Percentage** to describe the level of engagement on Facebook usage, personality traits of the students, and their level of mathematics performance; **Mean** to determine the score level of the students' responses on the BFI; **pearson r** to determine the relationship between the use of Facebook and personality traits, use of Facebook and academic performance, and personality and academic performance ; and **path analysis** using AMOS to determine the pattern of relationship and degree of interaction between the variables being studied so as to establish the **Path Model.**

FINDINGS

The following are the salient findings of the study:

Extent of Facebook Usage

Length of Time Spent on FB. A great number of students (54 or 26%) spend more than 3 hours to access their FB account while 15 (7%) spent more than 6 hours.

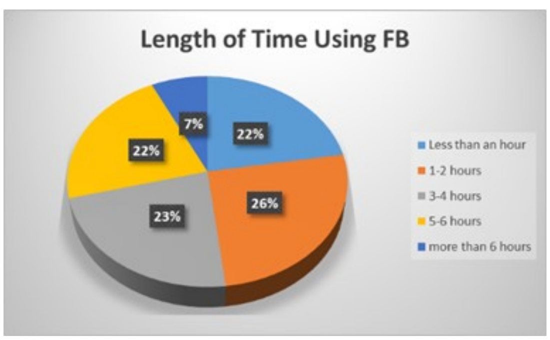

Figure 1

Frequency of Visiting Facebook. More than 50% of the students visit the Facebook site for more than three times a day. There are about 21% and above accessing their accounts for even more than 5 times a day. These findings revealed that the engagement of millennial learners in social media is now globally growing as supported by the research results of Pew Research Center posted by Maueve Duggan last August 19, 2015, reporting that 82% of online adults ages 18-29 use Facebook.

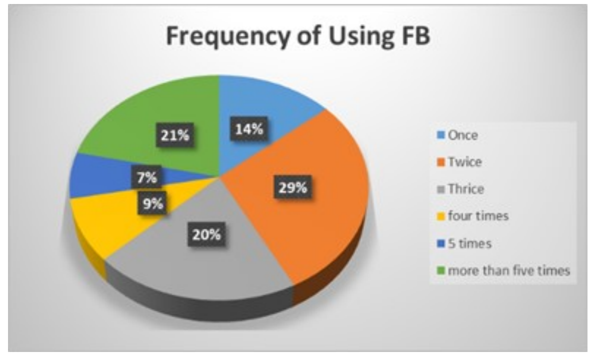

Figure 2

Gadgets used in accessing FB. Almost all (96.67%) student-respondents have direct access to their Facebook account through their upgraded smartphones. Some are also using their laptop, tablets, iPads, and personal computers.

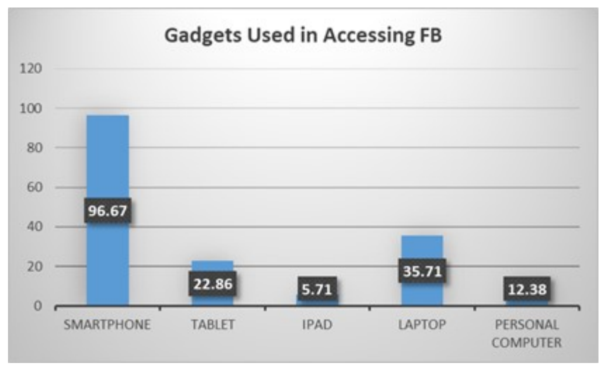

Figure 3

Place of Accessing FB. All the student-respondents access their Facebook account at home. Results further show that majority of the respondents are engaged in their Facebook activities inside their classroom (133 or 63.33%) and at the computer shops (117 or 55.71%), respectively. Some also use the library internet facilities (25 or 11.90%) for this purpose.

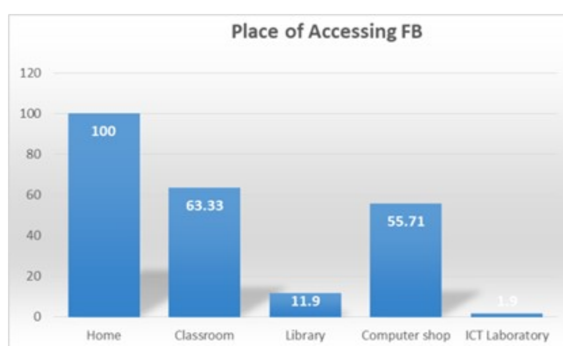

Figure 4

Time of accessing FB. The student-respondents are spend most of their free time in accessing and engaging themselves in Facebook sites. The free time and break time were utilized by most (186 or 88.57%) and majority (141 or 67.14%) of them, respectively.

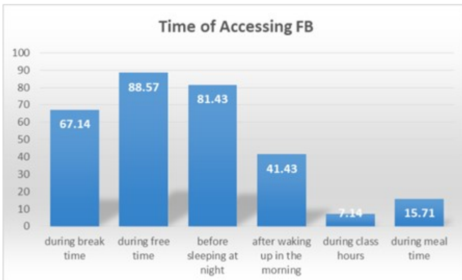

Figure 5

Purpose of accessing FB. The primary purpose of accessing Facebook where most of the respondents answered were group discussion with friends (185 or 88.10%) and (181 or 86.19%) for both – chatting and posting photos. Also, majority (123 or 58.57%) of the respondents access the Facebook site to upload music/video while a great percentage (102 or 48.57%) want to communicate with their teachers.

Friendships were strengthened through constant communication and sharing of thoughts and ideas. This has been the belief of almost all students in this millennial generation and is achieved through social networking sites. This claim was proven by the results gathered and presented in this study wherein most (185 or 88.10 %) of the respondents' purpose of accessing is for group discussion with friends and 181 (86.19%) for both chatting and posting photos.

The fear when in front of the teacher is lessened when they communicate through the social networking sites. Group chat has been popularized and the interaction between a teacher and a student has even made possible through Facebook.

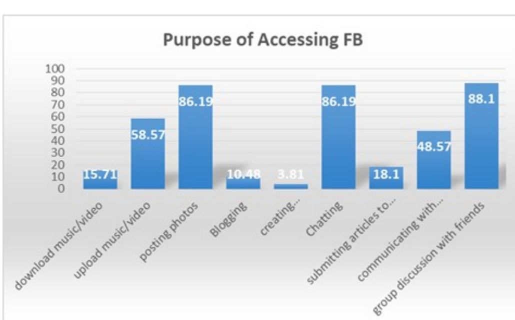

Figure 6

Level of Personality of the Students

Every individual has a unique personality that may change over a period of time. Figure 7 shows the level of personality of the students along the five areas as follows:

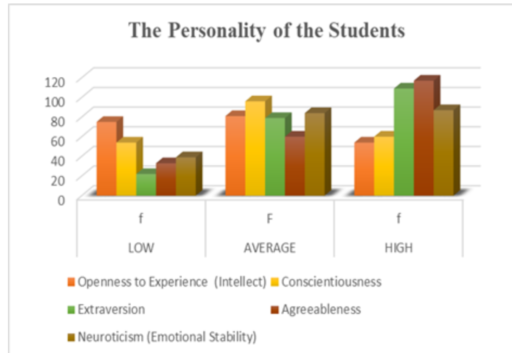

Figure 7

A great number of the students (81 or 38.57%) have "Average" level of openness to experience type of personality, a great percentage (96 or 45.71%) of them fall under "Average" level of conscientiousness type of personality while, majority of them are "Highly" extravert (109 or 51.90 %) and (117 or 55.71%) have "Average" level of agreeableness type of personality. Meanwhile, a marked percentage (81 or 41.43%) showed a high level of neuroticism personality.

Level of Mathematics Performance of the Students

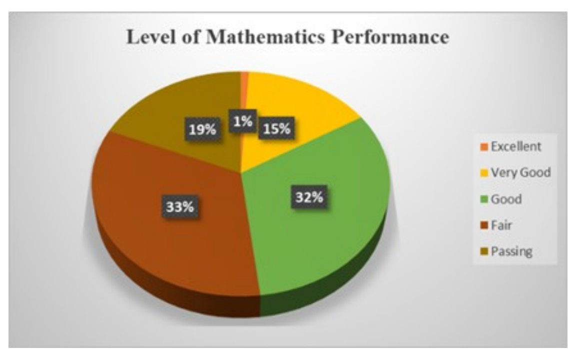

Figure 8

The mathematics performance of the students in general is "Fair" as reflected by the Mean Grade of 2.14. In addition, a great number of students have "Fair" (33%) and "Good" level of mathematics performance while two (about 1%) have a rating of 1.0 (Excellent).

Relationship between the Facebook Use of the Students and their Personality and Math Performance

Table 1. Correlation Coefficients Showing the Relationship between the Students' Use of Facebook (FB) and their Personality and Mathematics Performance

EXTENT OF FACEBOOK USE	Computed r					
	PERSONALITY					Mathematics Performance
	O	C	E	A	N	
A. Length of Time Spent on FB per day	-0.08	-0.12	-0.01	-0.19	0.06	0.07
B. Frequency of Visiting Facebook	0.03	-0.05	-0.07	-0.11	0.08	0.09
C. Gadgets Used in Accessing FB						
Smartphone	-0.10	0.05	0.03	-0.07	-0.02	0.05
Tablet	0.12	-0.03	0.01	-0.01	0.05	0.03
Ipad	-0.11	-0.14*	-0.10	-0.10	0.01	-0.03
Laptop	0.04	0.12	0.02	0.04	-0.03	-0.02
Personal Computer	0.16*	0.03	0.11	0.01	-0.18*	-0.02
D. Place of Accessing FB						
Home	0.02	0.01	-0.07	0.01	0.06	-0.01
Classroom	0.02	0.03	-0.07	0.04	-0.15*	0.08
Library	0.10	0.03	-0.13	0.06	-0.06	-0.21**
Computer shop	-0.07	0.02	0.11	0.04	-0.16*	-0.10
ICT Laboratory	0.15*	-0.07	0.07	-0.05	0.18**	-0.06
E. Time of Accessing FB						
during break time	0.03	-0.07	0.07	-0.02	-0.17*	0.02
during free time	-0.06	0.03	-0.03	0.03	-0.12	0.08
before sleeping at night	0.05	-0.08	-0.01	-0.03	0.11	0.19**
after waking up in the morning	0.04	-0.06	0.01	-0.02	0.08	-0.01
during class hours	-0.02	-0.05	-0.01	-0.05	0.01	-0.02
during meal time	0.05	-0.08	-0.07	-0.09	0.05	0.11
F. Purpose of Accessing FB						
download music/video	0.14*	0.11	0.13	0.03	-0.04	-0.05
upload music/video	0.16*	-0.01	0.18**	0.06	-0.10	-0.05
posting photos	0.17*	0.10	0.15*	0.18**	-0.10	-0.01
Blogging	0.15*	0.05	0.08	-0.09	-0.07	-0.06
creating polls/quizzes/surveys	-0.12	-0.08	-0.10	-0.14*	-0.05	-0.13
Chatting	0.09	0.09	0.22**	0.09	-0.15*	-0.10
submitting articles to website	-0.02	-0.06	0.08	0.04	-0.19**	0.02
communicating with teachers	0.11	-0.08	0.002	-0.03	-0.07	-0.01
group discussion with friends	0.15*	0.10	0.06	0.07	-0.04	-0.03

Legends: * - significant at 0.05 level
** - significant at 0.01 level

Personality
Openness – O Conscientiousness - C Extraversion - E
Agreeableness - A Neuroticism - N

On Openness

Among the variables used, the gadgets used (Personal Computer; r = 0.16), place of accessing FB (ICT Laboratory; r=0.15), and purpose of accessing the Facebook site (posting photos; r=0.17, upload music/video; r = 0.16, group discussion with friends; r=0.15, blogging; r=0.15 and download music video; r=0.14) showed significant positive correlation with the openness personality of the students.

On Conscientiousness

Among the different variables used, only the gadget used (ipad; r = - 0.14)) was found to be significantly negatively correlated to the level of conscientiousness of the students.

On Extraversion

The level of extraversion personality of the students is significantly correlated to the purposes of accessing Facebook which include: chatting (r = 0.22) upload music/video (r = 0.18), and posting photos (r= 0.15).

On Agreeableness

Posting photos (r = 0.18) has a direct significant relationship to the agreeableness personality of the students while creating polls/quizzes/surveys (r=-0.14) showed an indirect significant correlation. This was further supported by the results of the evaluation given by the Personal Assessor website (where their personality were evaluated online), revealing that the students place a huge emphasis on maintaining positive relationships with others and may hide their emotions in order to get along better with others. These data explain why the students prioritize chatting with their friends over their assignments and other responsibilities and duties in school.

On Neuroticism

Four variables (gadget used, place of accessing, time of accessing and purpose of accessing) were found to be significantly correlated to the neuroticism personality of the students. Results revealed that the gadget used, (personal computer) place of accessing (classroom, computer shop, and ICT Laboratory), time of accessing (during break time), and purpose of accessing (chatting and submitting articles to website) are significantly correlated to the students' level of neuroticism personality.

Mathematics Performance

Results revealed that among all the variables presented, only two (2) were found to be significantly correlated to the students' mathematics performance. Findings revealed that the place (library; r = -0.21) and time (before sleeping at night; r = 0.19) of accessing and engaging in Facebook affect the mathematics performance of the students.

Relationship between the Personality of the Students and their Mathematics Performance

Table 2. Correlation Coefficients between the Personality of the Students and their Mathematics Performance

PERSONALITY	Computed r
Openness	0.152*
Conscientiousness	0.236**
Extraversion	-0.079
Agreeableness	-0.253**
Neuroticism	-0.135*

Among the five personality traits, only extraversion was not significantly related to the mathematics performance of the students.

Both conscientiousness and openness have a highly significant direct relationship to the mathematics achievement of the students while agreeableness and neuroticism are negatively correlated with their mathematics performance.

The Path Models

Four models were developed showing the strength of relationship and the causal effects between and among the variables of this study.

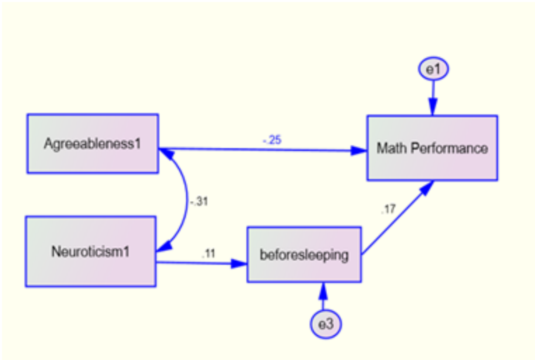

Figure 9

Model 1 or Figure 9 presents the strength of relationship between the personality traits, neuroticism and agreeableness, to the time in accessing Facebook. The model also shows that neuroticism can have an indirect effect on the mathematics performance of the students through the time of accessing Facebook. Agreeableness personality also has a direct negative effect on the mathematics performance of the students.

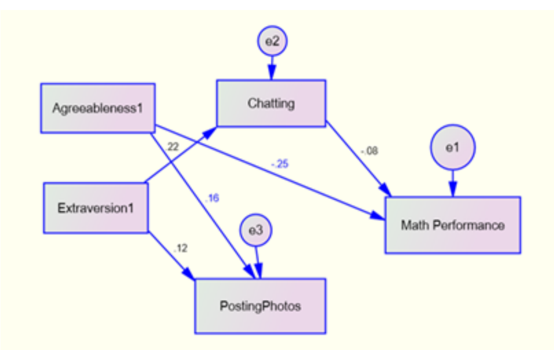

Figure 10

Model 2 shows that there is a direct effect of the agreeableness personality of the students to their mathematics performance. It also shows extravert students access their Facebook account to chat with their friends. The model shows that neuroticism personality has an indirect effect on the mathematics performance of the students through the mediating effect of the place of accessing Facebook. It was also noted in the model that when the students access their Facebook accounts inside the classroom, there is a positive effect on their mathematics performance.

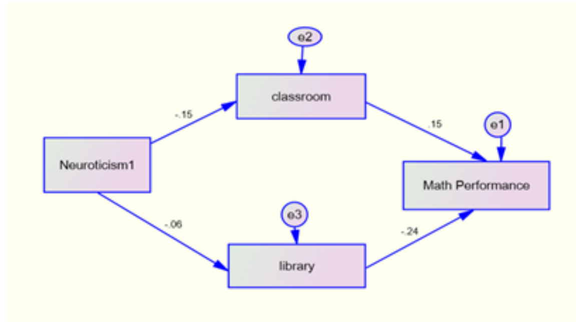

Figure 11

The model in Figure 11 suggests that neuroticism personality has an indirect effect on the mathematics performance of the students through the mediating effect of the place (classroom; r = 0.15 and library; r = -0.24) of accessing Facebook. The model also shows that neuroticism has a negative and positive effect on the mathematics performance of the students when it is accessed in the library and classroom, respectively.

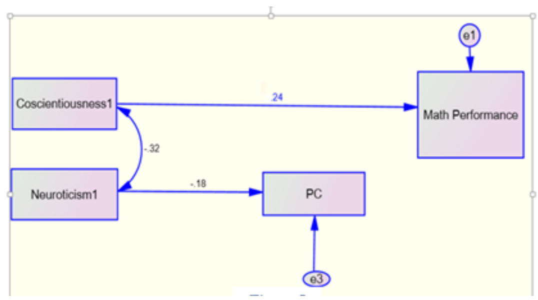

Figure 12

Model 4 or Figure 12 shows how the gadgets used affect the personality of students and the personality that has a direct effect on the mathematics performance of the students. This model presented the fact that conscientious personality has a direct effect on the mathematics performance of the students. However, the gadgets used showed no significant connection with their Mathematics performance.

CONCLUSIONS

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

1. A great number of the students are engaged in accessing their Facebook accounts anytime and anywhere inside and outside the school premises. It already forms part of their daily

activities most especially along their social acquaintances with their friends.
2. Majority of the students are friendly and spend most of their times with their peers, exerting their best efforts to please and doing things that make them acceptable to their friends.
3. The mathematics performance of the students need to be improved.
4. Using iPad in accessing Facebook makes the student lazy and less conscientious, while the purpose of accessing FB can determine their agreeableness and extraversion types of personality. The more they chat and upload and post their photos, the higher will be their level of agreeableness and extraversion personality. Also, the student will feel more emotionally stable when they access FB to share their ideas and opinions.
5. Students perform better in mathematics when they access their FB account before sleeping at night, implying that they have done all their assignments and other activities before logging into their accounts.
6. Open and conscientious students perform better in Mathematics while the more agreeable and more emotionally unstable the students are, the lower will be their mathematics performance.
7. Path Models can determine the strength of relationship between and among Facebook use, personality and mathematics performance of the students.
8. A learning material in Mathematics can help in enhancing the personality of the students and affects their mathematics performance by using the Facebook site.

RECOMMENDATIONS

Based on the findings and conclusions drawn in this study, the following recommendations were advanced:

1. Students may be given proper guidance on the proper place to access their Facebook accounts and the time of engaging in this activity. Their subject teacher may provide classroom policies to discourage students doing their Facebook activities inside the classroom or in the library. Activities may also be provided by their teachers in order to make the chatting and group discussion activities of the students in Facebook more productive.
2. Teachers should be made aware of the kind of personality of their students so that they will be able to provide the necessary strategy that suits the needs of these personality. The Guidance Office may design student activities that will help the students become “Average” in their agreeableness, extraversion and neuroticism and “High” in conscientiousness personality.
3. Interventions may be done in order to uplift the deteriorating mathematics performance of students such as development of a learning material that suits the personality and needs of the students.
4. Teachers may provide teaching interventions using the Facebook site taking into consideration how the use of Facebook can affect one’s personality and vice versa.
5. Students may be given activities at night using the Facebook site to ensure that they make first their assignments with their friends, thus making their chatting activities more productive and rewarding.
6. Since the type of personality of an individual has a direct or indirect effect on his mathematics performance, the activities inside the classroom may be carried over to the Facebook site with the aim to enhance the personality that positively correlates to the mathematics performance.
7. The relationship of the variables in the developed Path Model may be considered as basis for the development of teaching interventions and actions.
8. The developed learning material may be validated and evaluated by experts for better results and effect in the teaching and learning of Mathematics.

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MASTER TEACHERS' COMPETENCE AS INSTRUCTIONAL LEADERS: EFFECT TO TEACHERS' PERFORMANCE

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ABSTRACT

Teachers are expected to perform their tasks effectively, even when their students face difficulties outside the classroom, from unmet needs to mental health issues. The more needs students have, the more the teachers are expected to do their functions. They must do more than merely teaching academic lessons, manage classroom behaviour and keep an eye on helping students grow and develop socially in a healthy way. However, teaching performance in schools is enhanced with technical assistance from their immediate administrators and master teachers thus, improve learning competence of learners. The purpose of this study was to evaluate the effectiveness of the technical assistance to the level of teaching performance. The researchers' employed the descriptive survey method with the aid of modified questionnaire under the functions, duties and responsibilities of the master teachers from the Civil Service Commission and a documentary analysis of individual performance for the teachers' teaching performance. The study was conducted in the second congressional district of Bohol, Philippines to the master-teachers and public school teacher- respondents in the district. After a thorough analysis on the result of this study, it was found out that respondents succeed in the field of teaching qualification; technical assistance was provided as part of the compliance; and respondents accomplished their duties and responsibilities for the purpose of ensuring quality education. Furthermore, the respondents' perception on technical assistance has significant difference. Based on the findings, it was concluded that technical assistance was provided by the master teachers to the different schools, but it was not enough for an educational advancement of the teacher. Thus, it is recommended that master teachers need to consider on attending seminar- trainings to sustain and promote quality education as prescribed by the school; there should be regular technical assistance being done in order to cater the need for educational advancement and achieve the highest teaching performance.

Keywords: Classroom, Competence, Instructional Leader, Master Teachers, Teachers, Teaching Performance

INTRODUCTION

Learners are the ultimate purpose why teachers are in school. How far students learn matters on how teachers taught them. The effect of teacher's performance plays an important role in the teaching learning process however teaching experience must be guided by the right person (Astron, 1996). Teachers are expected to perform their task effectively even when their students face difficulties outside the classroom from unmet needs to mental health issues. The more needs students have, the more teachers are expected to perform their functions. They must do more than merely teaching academic lessons, manage classroom behaviour and keep an eye on helping students grow and develop socially in a healthy way. However teaching performance in school is enhanced with technical assistance from their immediate administrators and master teachers thus improve learning competence of learners (Biasong, 2013).

In the district of Trinidad alone has 29 schools but only 13 of these schools are handled by fulltime administrators the remaining schools are handled by a school in- charge who is handling an advisory class. The researchers triggered to conduct this study in order to help solved this prevalent issue.

The purpose of the study was to evaluate the effectiveness of technical assistance to the level of teaching performance and assess the competence of master teachers as instructional leaders. The study employed the descriptive survey method which will determine the different technical assistance tool and find out how it effect on teaching performance with the aid of a modified questionnaire under the functions, duties and responsibilities of the master teachers from the Civil Service Commission and a documentary analysis from Individual Performance Commitment and Review Form (IPCRF) for the teacher's teaching performance.

STATEMENT OF THE PROBLEM

The main thrust of this study was to determine the effectiveness of technical assistance in relation to the level of teaching performance in the district of Trinidad, Bohol and throughout the coverage area of the study.

Specifically, the study aims to seek answers to the following problems:

1. What is the demographic profile of the respondents based on :
    - 1.1 age
    - 1.2 sex
    - 1.3 educational attainment
    - 1.4 length of service
2. What technical assistance tool employed by the respondents as to:
    - 2.1 performance monitoring,
    - 2.2 mentoring and coaching,
    - 2.3 counselling,
    - 2.4 consultation
    - 2.5 instructional supervision
3. What is the level of teaching performance of the respondents?
4. Is there a significant relationship between the Master Teachers' Technical Assistance and the level of teachers' teaching performance?
5. Is there a significant difference between the Respondents 'Perception on the Master Teachers Technical Assistance to teachers and the Master Teachers Self – assessment?

RESEARCH METHODOLOGY

The study was conducted in the second Congressional District of Bohol, Philippines specifically Danao, Dagohoy, San Miguel and Trinidad district comprising the north eastern part of the province. There were 119 respondents: 35 master teachers and 84 teachers from among 22 schools as coverage area of the study.

The study evaluated the effectiveness of technical assistance to the level of teaching performance and assesses master teachers competence as instructional leaders. An enhance questionnaire from the master teachers jobs description from the Civil Service Commission was used to determine the different technical assistance tool utilized by master teachers to teachers and how it effect on their teaching performance on performance monitoring , coaching, counselling, consultation and instructional supervision.

Furthermore, to achieve the performance rating of respondents, the researchers used documentary analysis on the approved Individual Performance Commitment and Review (IPCR) from the school selected under this study.

FINDINGS

Table 1. Profile of the Respondents N=35; N=84

	Master Teachers			Teachers		
	F	%	Rank	F	%	Rank
1.1 Age						
21-25 years old	0	0.00	7	0	0.00	8
26-30 years old	0	0.00	7	6	7.14	5.5
31-35 years old	0	0.00	7	10	11.90	3.5
36-40 years old	6	17.14	4	19	22.62	2
41-45 years old	8	22.86	2	29	34.52	1
46-50 years old	7	20.00	3	6	7.14	5.5
51-55 years old	9	25.71	1	10	11.90	3.5
56 years old and above	5	14.29	5	4	4.76	7
Total	**35**	**100%**		**84**	**100%**	
1.2 Sex						
Male	2	5.71	2	4	4.76	2
Female	33	94.29	1	80	95.24	1
Total	**35**	**100%**		**84**	**100%**	
1.3 Highest Educational Attainment						
Bachelor's Degree	2	5.71	2.5	2	2.38	3
Bachelor's Degree with MA Units	31	88.57	1	77	91.67	1
Master's Degree Holder	2	5.71	2.5	5	5.95	2
MA Degree Holder with Units in PhD/EdD	0	0.00	3.5	0	0.00	4.5
Doctorate	0	0.00	3.5	0	0.00	4.5
Total	**35**	**100%**		**84**	**100%**	
1.4 Length of Teaching Experience						
1 – 5 Years	0	0.00	7	0	0.00	7
6 – 10 Years	1	2.86	5.5	13	15.48	3
11 – 15 Years	5	14.29	3.5	11	13.09	5
16 – 20 Years	12	34.29	1	19	22.62	2
21 – 25Years	11	31.43	2	28	33.33	1
26 – 30 Years	1	2.86	5.5	12	14.29	4
31 years and above	5	14.29	3.5	1	1.19	6
Total	**35**	**100%**		**84**	**100%**	

Table 1 demonstrates the profile of respondents that includes their age, sex, highest educational attainment and length of teaching experienced.

Most master teachers' respondents were at the age bracket of 41-55 which is 24 or 68.57% while teacher respondents were at the age of 31-45which is 58 or 69.04%. The period between early adulthood and old age, usually considered as the years of maturation in the physical and mental aspect of an individual. Meaning, it is often found through work.(Sterns&Huyck,2001). Thus respondents in this study were capable enough in maintaining standard of professionalism. Females dominated on the population of the teaching profession. Majority of the respondents earned degree units that succeed in the field of teaching qualification while their length of teaching experienced, master teachers served for 16-20 years. Experienced teachers taught 5 to 9 years or more (Atay, 2008; Bivona 2002). Respondents were proficient in their field of the teaching profession.

Table 2.1 Master Teachers' Technical Assistance to Teachers as to Performance Monitoring N1=35; N2=84

Statement	Master Teachers			Teachers		
	WM	DI	Rank	WM	DI	Rank
1. There is a quarterly monitoring conducted	3.60	SA	4	3.05	A	4
2. Oversees teachers performance	3.57	SA	2.5	3.14	A	3
3. Assist in the instructional monitoring of teachers in relation to pupil performance/ behavior in the classroom	3.57	SA	2.5	3.23	A	2
4. Performs regular class monitoring	3.49	SA	5	2.98	A	5
5. Participates every school activity	3.69	SA	1	3.36	SA	1
Average Weighted Mean (AWM)	**3.58**	**Strongly Agree**		**3.15**	**Agree**	

Table 2.1 shows master teachers technical assistance to teachers as to performance monitoring. Participating in every school activity has the highest mean. Whatever activity it involves instruction and performance monitoring. According to Robert Slaven (1998) effective teaching requires that teachers be constantly aware of the effects of their instruction. Monitoring skills can both increase teachers awareness of these effects and help them to make instructional changes as called for the information they collect.

Table 2 .2 Master Teachers' Technical Assistance to Teachers as to Mentoring and Coaching N1=35; N2=84

Statement	Master Teachers			Teachers		
	WM	DI	Rank	DI	WM	Rank
1. There is mentoring conducted	3.40	SA	4	2.63	A	5
2. Coach to improve performance of learners/ teachers	3.43	SA	3	2.83	A	2
3. Assist the school selection committee in the evaluation of credentials when hiring or promoting teachers	3.49	SA	2	2.81	A	3
4. Conduct post conferences with teachers for feedback on teaching learning process	3.26	SA	5	2.74	A	4
5. Help identify potential demonstration teachers	3.51	SA	1	2.87	A	1
Average Weighted Mean (AWM)	**3.42**	**Strongly Agree**		**2.78**	**Agree**	

Table 2.2 displays the master teachers technical assistance to teachers as to Mentoring and Coaching . Was found out that statement number 5 "Help identify potential demonstration teachers " got the highest weighted mean for both master teacher and teacher respondents. This means that teachers actively participate in every school activity. Participation is one of those things that teachers expected in them.

According to Howell and Mc Collum- Gahley (1986)(Cited by Cotton, 1998) noted that the most important part of continuous monitoring is not taking data, but making decisions.

Table 2.3 Master Teachers' Technical Assistance to Teachers as to Counseling N1=35; N2=84

Statement	Master Teachers			Teachers		
	WM	DI	Rank	WM	DI	Rank
1. Provides counseling to teachers	3.26	SA	5	2.74	A	4
2. Guide teachers to improve classroom instruction	3.43	SA	2	3.01	A	2
3. Give advice for instruction planning	3.32	SA	3	3.05	A	1
4. Support teachers needs in the making of instructional materials	3.51	SA	1	2.86	A	3
5. Help deal with problems and make important decisions	3.31	SA	4	2.69	A	5
Average Weighted Mean (AWM)	**3.37**	**Strongly Agree**		**2.87**	**Agree**	

The data above deals with the master teachers' technical assistance to teachers as to counselling. Based from the results, statement no.4 “Support teachers need in making of instructional materials'' got the highest weighted mean. Counselling is very important on the part of the teachers since it is a helping relationship between them to achieve the teaching and learning goals.

School counselling programs have significant influence on discipline problems. Baker and Gerler (2001) reported that students who participated in school counselling program had less inappropriate behaviours and have more positive attitudes toward school than those who did not join the program.

Table 2.4 Master Teachers' Technical Assistance to Teachers as to Consultation N1=35; N2=84

Statement	Master Teachers			Teachers		
	WM	**DI**	**Rank**	**WM**	**DI**	**Rank**
1. Conduct dialogue with teachers	3.37	SA	4	3.05	A	3
2. Handle meeting with teachers	3.43	SA	3	2.93	A	4
3. Lead Learning Action Cell	3.54	SA	1.5	3.10	A	2
4. Deliberate and update information regarding instructional problems for solution	3.23	SA	5	2.88	A	5
5. Initiates improvement in instructional programs	3.54	SA	1.5	3.18	A	1
Average Weighted Mean (AWM)	**3.42**	**Strongly Agree**		**3.03**	**Agree**	

In terms of master teachers Technical Assistance to teachers as to consultation, the result depicts that the item no.3 “Lead Learning action Cell” and item no. 5 “Initiates improvement in instructional program” got the highest weighted mean of 3.54.

It is believed that consultation is essentially about involving and developing people in an organization. Teachers will only be able to perform at their best if they know their duties, obligations and rights and have their opportunity of making their views known to management on issues that affect them.

According to Lewes and Spencer (2009) on their effective technical assistance principles, the providers generally should use a mixed methods approach. According to them it is of value using real time, face to face, onsite technical assistance offerings.

Table 2.5 Master Teachers' Technical Assistance to Teachers as to Instructional Supervision N1=35; N2=84

Statement	Master Teachers			Teachers		
	WM	**DI**	**Rank**	**WM**	**DI**	**Rank**
1. Act as instructional leader/ Lead in instructional planning/ Prepares school instructional plan	3.37	SA	2	3.12	A	4
2. Take charge of school reading ,recovery program, remedial or enrichment program	3.14	A	4	3.17	A	3
3. Conducts action research on school problems for solution	2.94	A	5	3.13	A	5
4. Carries regular teaching loads for the assigned grade subject	3.54	SA	1	3.30	SA	1
5. Performs class observation using process observation tools	3.29	SA	3	3.29	SA	2
Average Weighted Mean (AWM)	**3.26**	**Strongly Agree**		**3.20**	**Agree**	

With regards to the master teachers TA to teachers as to instructional supervision, the results reveals that item no.4 carries regular teaching loads for the assigned grade subject got the highest weighted mean.

Sule, Ameh, Egbai (2015) agreed that there should be a regular and continuous instructional supervisory practice rather than snappy, unscheduled and partial supervisions is what is urgently needed especially now that a lot of changes have been introduced into the school curriculum.

The level of Teachers Teaching Performance of the respondents as to teaching learning process, pupils' outcome, community involvement and professional growth and development has a very satisfactory rating with a frequency of 83 or 98.81% out of 84 respondents.

Technical assistance was given by the master teachers to their subordinates were determined according to performance monitoring; mentoring and coaching; counselling; consultation and instructional supervision.

According to Lewis and Springer (2009) on their effective technical assistance principles, the providers generally should use a mixed method approach. Many TA used combination of prescribed and customized training, some required and some mandatory.

Teachers on the other hand must have the skills in providing technical assistance in order to provide assistance effectively. These skills includes the facilitation skills , giving feedback skills, coaching skills, monitoring and analysis and skills for summative evaluation (Biasong,2013).

The master teachers technical assistance employed as to teaching learning process, on pupils' outcome , community involvement, professional growth and development has no significant relationship to the teacher respondents since the computed co relation value of 0.124-0.014,0.078,0.040,0.164, a p value of 0.263,0.902,0.478,0.721, and 0.136 respectively which is lesser than 0.05 level of significance. Thus the null hypothesis was accepted. It implies that technical assistance has no significant relationship to the performance level of the teacher respondents. Teachers still performed in school since they were mandated by law through the code of ethics for teachers.

Table 4 Relationship Between the Master Teachers' Technical Assistance Employed and the Level of Teachers' Teaching Performance

Technical Assistance and ……	R	p-value at α=0.05	Interpretation	Decision
Teaching-Learning Process	0.124	0.263	Not Significant	Accept Ho
Pupils' Outcome	-0.014	0.902	Not Significant	Accept Ho
Community Involvement	0.078	0.478	Not Significant	Accept Ho
Professional Growth and Development	0.040	0.721	Not Significant	Accept Ho
Overall Teaching Performance	0.164	0.136	Not Significant	Accept Ho

Table 5 Difference Between the Respondents' Perception on the Master Teachers Technical Assistance to Teachers

Variables	*Mean*		*Mean Difference*	*t-test value*	*p-value at α=0.05*	*Interpretation*	*Decision*
	Master Teachers	Teachers					
Performance Monitoring	3.58	3.15	0.431	8.02	<0.001	Significant	Reject Ho
Mentoring and Coaching	3.42	2.78	0.632	11.02	<0.001	Significant	Reject Ho
Counselling	3.37	2.87	0.495	8.62	<0.001	Significant	Reject Ho
Consultation	3.42	3.03	0.389	7.32	<0.001	Significant	Reject Ho
Instructional Supervision	3.26	3.20	0.063	1.12	0.264	Not Significant	Accept Ho
Overall Technical Assistance	3.41	3.01	0.399	9.22	<0.001	Significant	Reject Ho

On the respondents responses pertaining to the difference between their perception on technical assistance to teachers , it was found out that there is a significant difference on the respondents performance monitoring, mentoring and coaching, counselling and consultation. The results denotes that technical assistance was provided by the master teacher to the different school but it was not enough for the teachers respondents, as manifested by the smaller weighted mean.

On the other hand, there is no significant difference on instructional supervision on the respondents' perception. In this area there is slight difference on both respondents. On the part of the teachers instructional supervision has the highest mean of 3.20 while the master teachers lowest weighted mean of 3.26. This means that there is need of improvement in this category.

CONCLUSIONS

Based from the affirmation of the findings above, the following conclusions were formulated:

Technical assistance employed has no significant relationship since the computed Spearman's rho was smaller than that of the p – value of 0.05, thus null hypothesis accepted. Teachers performed as mandated by law through code of ethics of teachers. Furthermore, the respondents' perception on technical assistance has significant difference and self- assessment of master teachers as instructional leaders. Based on the results, it was concluded that technical assistance was provided by the master teachers to the different school but it was not enough for educational advancement of teachers in order to achieve the highest teaching performance, however needs support for sufficiency of the program.

RECOMMENDATIONS

1. Master teachers need to consider of attending seminar- training to sustain and promote quality education as prescribed by DepEd.
2. Technical assistance should be conducted on a regular basis in order to cater the need for educational advancement and achieve the highest teaching performance.
3. Master teachers should create technical assistance calendar of activities in order to focus on scheduled task for effective and efficient delivery of the program.

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AWARENESS ON PLAGIARISM AMONG UNIVERSITY STUDENTS

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ABSTRACT

Technology has been one of the major transformations in education in the decades. The educational landscape is becoming increasingly popular with the use of information technology. Nowadays, nearly all students are internet users and access to internet resources can help them meet their needs and arouse their interest to be more involved in the educational process. Hence, students of digital age are more vulnerable to plagiarism. A quantitative descriptive study was conducted to determine the level of awareness of plagiarism among university students. Convenience sampling was applied for this purpose and a total of 192 undergraduate students from one state university in the Philippines participated in the study. For data collection, a survey questionnaire was used. Findings revealed that while students were aware of plagiarism at the University and claimed that the issue of plagiarism had been addressed during their studies, there is still a low level of awareness among students about plagiarism policy and processes set within the University. However, it is noteworthy to mention that many student-respondents rarely engage with possible cases of plagiarism. The findings of the study suggest that a clear and effective plagiarism policy may be formulated and implemented at the University. Use of plagiarism detection and management software at the University is also encouraged. In order to promote academic integrity in a scholarly community, the University may recognize the need for an integrative multi-stakeholder approach to combat plagiarism.

Keywords: Academic Integrity, Plagiarism, Plagiarism Awareness, Plagiarism Detection Software, Turnitin, University Plagiarism Policies

INTRODUCTION

Scholasticism and academic integrity have been built up, confirmed and reaffirmed by new ideas, theories and experiments and the works of science for the benefit of mankind. Universities and higher education institutions are established to achieve this goal not only in order to create new ideas via research, fieldwork and other research techniques, but also to provide exceptionally talented and qualified graduates with high honesty, ethical standards and sense of professionalism in the service of their community.

Academic integrity breaches include a varied scope of prejudiced practices including plagiarism. Plagiarism is one of the most fervently scorned breaches of academic integrity as it undermines the reason that scholastic work will make a unique and honest contribution to an existing repository of knowledge (Bretag, etal., 2013). Despite the fact that copyright infringement happens at all dimensions of scholarship, the main focus in this study is on students' plagiarism. Students' plagiarism is viewed as a major issue and a severe violation of university standards which undermines the quality of the courses, the legitimacy and appropriateness of privileged codes, and universities ' overall reputation (Luke & Kearins, 2012; Park, 2004).

OBJECTIVES OF THE STUDY

Due to the prevailing role of technology in making education accessible across geography and time, this study explored the level awareness on plagiarism among tertiary students of a state university in the Philippines. Specifically, this study aimed to know the 1) students' perception to the seriousness of offense on the possible cases of plagiarism; 2) the students' experience/ engagement to possible cases of plagiarism; 3) the students' reasons for engaging to possible cases of plagiarism; 4) university students' awareness on plagiarism; and 5) the policy of the University on plagiarism.

LITERATURE REVIEW

Pritchett (2010) defines plagiarism as the introduction of someone else's words, thoughts, information, craftsmanship or plans – except if thought about basic knowledge – as one's own, without referencing the genuine author. According to Masic (2012), plagiarism is literally a form of stealing; taking work done by others and presenting it as coming from oneself. This constitutes unethical behaviour that is unacceptable (Elsevier, 2012).

Researchers around the world believe that plagiarism escalates in higher learning (Anderson, 2001; Braumoeller & Gaines, 2001; Groark, Oblinger & Choa, 2001; Fain & Bates, 2002) and is the most serious form of scholarly offense at all academic levels (Carroll, 2004; Decoo, 2002). Anney and Mosha (2015, p. 214) believed that plagiarism is so serious, a problem that might lead to the "doom of higher learning institutions; since it invalidates the purpose of education" in higher level.

Maina, Maina, and Jauros (2014) confirm that students engage in plagiarism. The advent of the Internet has subsequently made an abundance of data accessible to students for writing research papers (Weinstein & Dobkin, 2002). A few students utilize the accessibility of data on the web to improve the nature of their work. The existence of such an information range that is relatively easy to access makes it easy for students to copy other people's work without citation. Students' explanations behind their commitment of plagiarism included the growing competition and pressures to accomplish academically, the knowledge that other students are "getting away" with cheating and using plagiarism when it is easy to acquire other people's work (McCabe, 2004). Frequently, they blame their ignorance on issues related to plagiarism (Michalska, 2012). According to McCabe and Trevino (1996), while students know that plagiarism is not right, they often do not understand the various ways that constitute plagiarism. In addition, Pecorari (2003) pointed out that students, who had a very different perception of what is permissible with the re-use of source text, would need more than a brief definition of plagiarism to get a grasp on what it implies.

Another prevalent reason why students plagiarize work without credit is the inadequacy of time to accomplish their task or poor ability to manage their time well. Harris (2001) and Carroll (2005) claimed that students commit plagiarism due to meeting the deadlines. Issues with plagiarism appear to be particularly common as university students have to rapidly adapt to new standards about management of sources (McGowan, 2005), and a lack of instructional support (Murray & Kirton, 2006).

Weber-Wulff (2014) explains that in reducing and/or preventing plagiarism the detection, remedial and disciplinary measures that are applied are of primary importance in countering plagiarism In addition, Pecorari and Petric (2014) recommend that "teaching students explicitly about plagiarism […] teaching the source uses and referencing in greater depth;" is the most effective way of addressing plagiarism. Better learning practices, detection and disciplinary measures should be stated clearly (Heckler, Rice, & Hobson, 2013).

There are numerous studies done on institutional policies in higher academic institutions. Such policies explain the effects of plagiarism and how such practices can be reduced. They also provide explanation of how to make the issue clear and the sanctions fair to everybody (Grigg, 2010). Grigg recommends that institutions should put a clear demarcation in their policies on different types of plagiarism, their corresponding preventive measures, fair procedural disciplinary actions and clear instructions on how the institutions should counteract plagiarism.

METHODOLOGY

A quantitative descriptive study was conducted to determine the awareness of plagiarism among students.Convenience sampling was applied for this purpose. Cohen, Manion, and Morrison (2013) refer to convenience sampling as an opportunity sampling since individuals close to the study or researcher at collection time are chosen to serve as respondents. Students who participated in the training organized by the University Research and Development Services on "Turnitin: A Plagiarism Software" and willingly agreed to be involved in this study were invited to respond to a questionnaire and return it immediately upon completion. This administeration of the questionnaires was done for 14 days as the training was scheduled.A total of 192 completed questionnaires were collected.

Survey research was used to obtain primary quantitative data. The questionnaire is comprised of two parts. First part dealt with the demographic profile of the respondents in terms of sex. The second part dealt with the assessment of the students on plagiarism in the University in terms of their perception to the seriousness of offense on the possible cases of plagiarism; their experience/ engagement to possible cases of plagiarism; their reasons for engaging to possible cases of plagiarism; and their awareness on plagiarism and the policy of the University on plagiarism.

The Cronbach's Alpha Reliability Coefficient for this Likert-type questions as found to be satisfactory (Cronbach Alpha = 0.882), refer to Table 1.

Table 1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.882	0.882	27

FINDINGS

The below Table 2 indicates that out of 192 respondents 95 were female and 94 were male while three (3) respondents did not to respond.

Table 2. Distribution of Respondents in terms of Sex

Sex	Frequency	Percentage
Female	95	49.48
Male	94	48.96
Did not respond	3	1.56
Total	192	100

Students' Assessment on the seriousness of offense on the possible cases of plagiarism

Table 3 shows the assessment of the students with regard to the seriousness of offense on the possible cases of plagiarism. According to the respondents, plagiarizing and transferring work from others as your own(awm 3.22 and sd=1.05) , copying or borrowing all or part of someone else's work (awm 3.14 and sd= 0.97), copying from notes without referencing where it came (awm 3.03 and sd= 0.99), (awm 3.23 and sd= 0.96), allowing others to copy your work/ assignment (awm 2.96 and sd= 0.92), paying someone to do the assignment or academic work (awm 2.69 and sd= 1.13), the classmate or friend is the one doing the academic work for you (awm 2.66 and sd= 1.02), and doing a homework or academic work for a classmate / friend (awm 2.52 and sd= 0.96) were considered quite serious cases of plagiarism. During the interview, the respondents claimed that they knew that plagiarism was bad, but it was not clear what it was. Students also wanted to gain knowledge and understanding about correct referencing especially online resources.

Plagiarism involves transferring the work of another person as your own without recognizing the source (Carroll, 2002). Consequently, plagiarism may or may not be deliberate due to some students ' lack of knowledge of applicable quotation standards. The most basic form of plagiarism is to copy and use information as part of a task or essay without giving credit to the data source (Underwood & Szabo, 2003).

Table 3. Assessment of the student-respondents with regard to the seriousness of offense on the possible cases of plagiarism

Possible Cases of Plagiarism	AWM	sd	Interpretation
Copy the assignment and academic work of a classmate or friend.	2.69	0.87	Quite serious
Copying from notes without referencing where it came	3.03	0.99	Quite serious
Copying / borrowing all or part of someone else's work	3.14	0.97	Quite serious
Allowing others to copy your work/assignment	2.96	0.92	Quite serious
Do a homework or academic work for a classmate / friend	2.52	0.96	Quite serious
Your classmate or friend is doing the academic work for you	2.66	1.02	Quite serious
Plagiarizing and transferring work from others as your own	3.22	1.05	Quite serious
Paying someone to do the assignment or academic work	2.69	1.13	Quite serious
	2.86	**0.99**	**Quite serious**

Students' Experience/Engagement to Possible Cases of Plagiarism

Table 4 shows the assessment of the students with regard to the engagement to possible cases of plagiarism. According to the respondents, they were sometimes the assignment and academic work of a classmate or friend (awm=2.68, sd=0.75) and doing a homework or academic work for a classmate / friend (awm=2.64,sd=0.75). Some of the respondents rarely experience copying from notes without referencing where it came (awm=2.16, sd=0.86), / borrowing all or part of someone else's work (awm= 2.22, sd=0.86), allowing others to copy their work/assignment (awm= 2.40, sd=0.86) and let their friend/colleague do the work for them (awm= 2.07, sd=0.83). Never they were engaged or experienced paying someone to do their assignment (awm= 1.44, sd=0.82).

Bennett (2005), Overbey and Guiling (1999), Park (2003) and Sutherland-Smith (2005) noted that the students often plagiarize involuntarily because they are not completely mindful of what they consider to be plagiarism or know how to properly report their sources. Students cannot cheat if there is clear communication of ethical and academic integrity (McCabe, Trevino, & Butterfield, 1999).

Table 4. Students' experience/ engagement to possible cases of plagiarism

Possible Cases of Plagiarism	AWM	sd	Interpretation
Copy the assignment and academic work of a classmate or friend.	2.68	0.75	Sometimes
Copying from notes without referencing where it came	2.16	0.86	Rarely
Copying / borrowing all or part of someone else's work	2.22	0.86	Rarely
Allowing others to copy your work/assignment	2.40	0.86	Rarely
Do a homework or academic work for a classmate / friend	2.64	0.75	Sometimes
Your classmate or friend is doing the academic work for you	2.07	0.83	Rarely
Paying someone to do the assignment or academic work	1.44	0.82	Never
	2.23	**0.82**	**Rarely**

Students' Reasons for Engaging to Possible Cases of Plagiarism

Table 5 presents the factors that encourage students to engage in unethical academic behavior, plagiarism, which will later provide a means of developing effective prevention strategies. According to them, lack of time to complete a task or academic work, with the highest arithmetic weighted mean of 2.97(sd=0.87), is the main reason why students engaged to possible cases of plagiarism. They preferred to take the risk to obtain a better grade (awm=2.66, sd=1.01); the words of authors are best(awm=2.80, sd=0.92); plagiarizing is done by everyone and is not considered a serious academic offense (awm=2.74, sd=0.91), it took too much effort to paraphrase and quote (awm=2.68, sd=0.91), failure to understand how to complete an assignment or academic task (awm=2.67, sd=0.96), lack of interest (awm=2.60, sd=0.98) not proficient in using the English language (awm=2.59, sd=0.92),), low chance to be caught or reported (awm=2.56, sd=0.92), sanctions are minimal (awm=2.46, sd=1.03), and never was it taught how to quote and paraphrase(awm=2.24, sd=0.96) were **likely** the other reasons why students were engaged or engaging to possible case of plagiarism. Whilst, it was **unlikely** that copying at school was taught (awm=1.92, sd=0.98).

The study carried out by Hrasky and Kronenberg (2010) shows that strategies and expectations on education and communication are essential to the reduction of plagiarism. They mentioned eight main reasons why the students plagiarized; these were mainly due to poor time management, easy accessibility of the internet, and a desire for greater marks. Razera, etal., (2010) have suggested in line with their study that plagiarism happens for a myriad of reasons, among which the three most relevant reasons are inadequacy of training in research writing, insufficient time and low motivation.

Situational considerations can be part of the tendency of students to cheat or plagiarize, such as the difficult or boring nature of the work, fear of failure, lack of training and insufficient time for their studies and excessive schedule (Sheard et al., 2002; Razera,etal.,2010).

The sociological and technological factors which may add to increase the trend towards plagiarism are the following: poor awareness, peer pressure, absence of reprimand, lack of risk and pressure to do it (Ma, et al., 2007). Moreover, it has been found that the internet, as being used for the assignment to be successfully completed, is strongly related to plagiarism (Eccles, et. al., 2006). Another important factor influencing students'propensity to steal other's works is the extent of proficiency in English; the more proficient the student is in English, the lower the tendency for students to plagiarize(Eccles et al. 2006).Therefore, English as second language speakers are more likely than their native English speakers to engage in plagiarism. Therefore, non-native English speakers are more likely than their native English speakers to engage in plagiarism.

Table 5. Reasons for engaging to possible cases of plagiarism

Reasons for Engaging to Possible Cases of Plagiarism	AWM	sd	Interpretation
Lack of time to complete a task or academic work	2.97	0.87	Likely
Low chance to be caught or reported	2.56	0.92	Likely
Sanctions are minimal	2.46	1.03	Likely
Taking the risk to obtain a better grade	2.86	1.01	Likely

Reasons for Engaging to Possible Cases of Plagiarism	AWM	sd	Interpre-tation
It is done by everyone and is not considered a serious academic offense	2.74	0.91	Likely
Learned to copy at school	1.92	0.98	Unlikely
Failure to understand how to complete an assignment or academic task	2.67	0.96	Likely
Never was it taught how to quote and paraphrase	2.24	0.98	Likely
It took too much effort to paraphrase and quote	2.68	0.91	Likely
The words of authors are best	2.80	0.92	Likely
Not proficient in using the English language	2.59	0.92	Likely
Lack of interest	2.60	0.98	Likely
	2.59	**0.95**	**Likely**

Are students in the University aware of plagiarism?

From Table 6, it was noteworthy to mention that majority of the respondents were aware that plagiarism was existing in the University with a frequency count of 152 (79%); 32 (17%) were not aware of it and eight (8) or 4% opted not to respond on this question.

The plagiarism can occur anywhere but is reported more often in the early stages (Swazey, et al., 1993; Wadja-Johnston,etal., 2001; Krstic, 2015), and relatively few studies investigated the origins of plagiarism during undergraduate and early post-graduate studies. Early stages of training can be a critical time for preventing plagiarism if students begin to research actively. Plagiarism and cheating may continue in the research profession if not corrected, and may result in other wrongdoings (Lovett-Hopper, et. al., 2007; Park 2003).The plagiarism during training may form part of a wider range of dishonest behaviors designed to attain undeserved academic benefits (for example, cheating in an examination, borrowing for other author's work, or forbidden student collaboration) (Park, 2003).

Table 6. Awareness of students on plagiarism

Awareness on Plagiarism	Frequency	Percent
Yes	152	79
No	32	17
Did not respond	8	4
Total	192	100

Has the problem of plagiarism been addressed during your studies?

Majority of the respondents which comprised of 113 (59%) agreed that the problem of plagiarism been addressed during their studies while 40 respondents (21%) said that this academic issue was not addressed and the rest of the respondents were uncertain (with a frequency of 28 or 15%) and 11 respondents (6%) did not responded. This result was presented at Table 7.

Instructional strategies, as shown by research, can affect scholarly integrity of students (Whiteman & Gordon, 2001), it would be helpful to provide instructor in structuring tasks and examinations will help raise awareness, generate ideas and foster a culture of intolerant plagiarism across campuses. Campus-widespread training for instructors may give information on ways of discovering and disrupting dishonest behavior in the classroom and provide appropriate ways when instructors believe that plagiarism has committed.

McCabe, Butterfield and Trevino (2006) suggest that teachers can follow several classroom-based techniques to reduce scholarly dishonesty, including the clear sharing of expectations of plagiarism, policy-making with appropriate behavior, and encouraging students to follow these policies.

Table 7. The problem of plagiarism been addressed during their studies

Addressing Plagiarism	Frequency	Percent
Yes	113	59
No	40	21
Did not respond	28	15
Total	11	6

Is there, as far as you know, a policy for dealing with plagiarism in the university?

Though, respondents said that there was a written policy (56 or 29%) and an oral policy (37 or 19%) on plagiarism in the University, it was disheartening to find that many students were unaware of the plagiarism policies of the university (with a frequency count of 64 or 33%). Also, 22 respondents (11%) were not aware if there is such a policy and 13 (7%) opted not to respond.

Study findings (Brimble & Stevenson-Clarke, 2005) revealed the need for a clear policy on plagiarism among students and teachers. Although the documents and obligations drawn up formally are mentioned by Carroll and Appleton (2001) as only part of a holistic plagiarism prevention model, there may be several simple official procedures that will help to reduce plagiarism.

Sims (2002) said that improved academic integrity might be possible with formalization procedures. One of them is when, at the end of each task, students sign a statement that the written output was done without the student's external assistance; that there are references to all sources in the work; that if more than three words were cited or paraphrased in the output, use of quotation marks was observed in the papers. Furthermore, Carroll and Appleton (2001) maintain that plagiarism prevention measures must be defined and implemented by institutions in order to achieve relevant results.

Table 8. Awareness of the students on the University's plagiarism policies

University Policy on Plagiarism	Frequency	Percent
Yes, a written policy	56	29
Yes, an oral policy	37	19
No	22	11
Do not know	64	33
Did not respond	13	7
Total	192	100

If there will be a plagiarism checker to be implemented in the university, will you be willing to support it?

Out of 192 respondents, 166 (86%) of them support the implementation of plagiarism checker in the University; however, 12 (6%) disagreed on the implementation and 14 (7%) did not respond. According to the student-respondents, once implemented in the university, the plagiarism checker will "help students avoid plagiarism and become a good writer. It will assist them to produce an original work or masterpiece; avoid law suits and strengthen the integrity of the students ' work."

Table 9. Support on Plagiarism Checker

Support on Plagiarism Checker	Frequency	Percent
Yes	166	86
No	12	6
Did not respond	14	7
Total	192	100

CONCLUSIONS

Based on the collected, summarized and analyzed data, the following conclusions are being derived:

1. Majority of the respondents were female.
2. Students of the University were aware of potential cases and the seriousness of plagiarism offense. The respondents claimed that they knew that plagiarism was bad, but it was not clear what it was. Students also wanted to gain knowledge and understanding about correct referencing especially online resources.
3. It is noteworthy to mention that many students rarely engage in potential cases of plagiarism.
4. With regard to the reasons for engaging to possible cases of plagiarism, the factors stated usually are lack of time to complete an assessment task, problems with the use of English language, insufficient knowledge on plagiarism, they preferred to take the risk to obtain a better grade and that the authors' words are best. Furthermore, students feel the plagiarism policy of the University is not rigorous enough and is far too lenient to detect and punish people who contravene unjust practices.
5. Although students were aware that plagiarism exist at the University and claimed that the plagiarism issue was addressed during their studies, the findings show a low level of awareness among students about the plagiarism policy and processes set within the University. However, majority of them agreed to support the implementation of plagiarism checker in the University.

RECOMMENDATIONS

The following recommendations are suggested by the researcher based on the results of the study:

1. Since many students were not aware of the University's plagiarism policies, it is recommended that policies be made visible, publicized and published in order to make them easily accessible to all students at the University. Although it is visibly published in student manuals, academic policies and websites, it may be well oriented through organized educational programs. In addition, provide embedded material in the necessary freshman courses and develop school-based strategies to strengthen expectations about academic integrity in all courses and performance tasks.
2. Seminars, workshops and symposiums are strongly suggested to educate students about plagiarism and its implications, tools, techniques, and technologies for its prevention. Also, encourage the use of software for plagiarism detection and management at the University, such as Turnitin.
3. It is also recommended that a clear and effective plagiarism policy be formulated and implemented at the University. In order to promote academic integrity in a scholarly com-

munity, the University may recognize the need for an integrative multi-stakeholder approach to combat plagiarism. These suggestions could contribute to the development and awareness of plagiarism by higher education organizations. In this way, increasing issues on plagiarism could be dealt with more effectively in age of technology.

4. Finally, more studies on the problem of plagiarism and practical solutions are needed. This study could be further enhanced to include more respondents from various departments and universities. The overall view of plagiarism in higher education institutions could be carried out across the nation. The more scientific studies are conducted, the more ways the stakeholders can be informed of better prevention. This would help to put a stop to this growing problem of the age.

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DETERMINANTS OF BOARD PERFORMANCE EFFICIENCY OF STATE-OWNED TEACHER EDUCATION INSTITUTIONS IN THE BICOL REGION

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ABSTRACT

One of the measures of quality teacher education in the country is the performance of Licensure Examination for Teachers. The licensure ensures that teachers are sufficiently equipped with pedagogical skills and knowledge and competent enough in meeting all the challenges in the chosen profession. This study aimed to assess the determinants of Board Performance Efficiency of State-Owned Teacher Education Institutions in the Bicol Region. The predictors considered in this study were LET passers' personal and school profile (accreditation level, TEI distinction, and faculty qualification), the extent of implementation of student teaching along in-campus teaching, off-campus teaching and BEEd and BSEd passers board examination preparation along in-house review, mentoring and coaching and logistical support services. The study utilized the descriptive-correlational methods of research. Questionnaires and the results of the Licensure Examination for Teachers were the instruments used in gathering the data. These data were treated statistically using frequency count, percentage, ranking, weighted mean, multiple regression analysis, ANOVA, and Pearson's Chi-square. The findings revealed that age was a determinant of the BSEd LET performance efficiency but not among BEEd passers, whereas gender was a strong determinant of elementary LET performance efficiency but not among BSEd passers, and lastly, the school characteristics along accreditation level and TEI distinction were strong determinants of the LET performance efficiency of both BEEd and BSEd; and in-house review, off-campus teaching, and mentoring & coaching were strong determinants of the LET performance of both BEEd and BSEd passers. To improve the BEEd and BSEd LET performance, SUCs should work hard for the cultivation of their TEI distinctions by enhancing review of the program and conducting thorough assessment on the integration of three (3) areas of licensure examination into the curriculum contents. Furthermore, SUCs should identify and meet the needs of elementary and secondary pre-service teachers to improve the quality of education in the Philippines by means of instituting a definite program of supervision and other administrative support services aimed at upgrading quality instruction of student teaching .

Keywords: Licensure Examination for Teachers, Practice Teaching

INTRODUCTION

One of the measures of quality teacher education in the country is the performance of Licensure Examination for Teachers. The licensure ensures that teachers are sufficiently equipped with pedagogical skills and knowledge and competent enough in meeting all the challenges in the chosen profession.

The efficiency and quality of teacher education program in the Philippines can be traced in the standards mandated by the Commission on Higher Education that requires Teacher Education Institutions to promote relevant and quality graduates who are highly competent and recognized in the international arena. Every Teacher Education Institution (TEI) is required to follow and to anchor its programs on the standards of the Commission on Higher Education for the development of quality education.

To facilitate the attainment and fulfilment of the program's mission of providing professionally competent and morally upright Teacher Education graduates, Republic Act No. 7836 requires teachers to have a license for employment by passing the Licensure Examination for Teachers administered by the Professional Regulation Commission (PRC). The board examination for teachers has a strong emphasis on subject matter competence in elementary, general education and professional education subjects and an additional area for secondary education is the major field of specialization. Passing these areas has become a significant element to determine the extent of knowledge obtained by the graduates. This also ensures that student teachers are competent teachers. The reputation of the institutions is also affected by the passing percentage in the board exam of the graduates. Thus, the teacher's license or the eligibility of elementary, secondary as well as college professors is an important facet in delivering quality instruction. This has been noted by Montemayor (2009) that board examination is one of the indicators of teacher quality. Performance in licensure examinations reflects the quality of education the graduates had. Thus, the licensure test upon graduation is one of the factors that influence the overall effectiveness of teachers.

This study was designed to assess and evaluate TEIs performance in the attempt to consequently depict the teacher education situation of the Bicol Region. The objective nevertheless was to identify the determinants affecting the performance of the Teacher Education Institutions (TEIs) in Region V.

STATEMENT OF THE PROBLEM/ OBJECTIVES

This study focuses on the determinants of board performance efficiency of State Universities and Colleges (SUC) in the Bicol Region for 2014 and 2015. Specifically, it sought to provide answers to the following questions:

1. What is the profile of the LET passers in terms of: (a) Program; (b) age; and (c) gender?
2. What is the school profile of passers in terms of: (a) level of accreditation; (b) TEI distinction; and (c) faculty qualification?
3. How extensive is the student teaching implemented in terms of: (a) field study; (b) in-campus teaching; and (c) off-campus teaching?
4. What is the level of administrative support for board examination preparation along: (a) in-house review; (b) mentoring and coaching; and (c) logistical support services?
5. What is the level of board performance in Bicol for the last 2 years?
6. What personal and school characteristics significantly affect LET performance?
7. To what extent do student teaching and administrative support practices affect LET performance?

METHODOLOGY

The study utilized the descriptive-evaluative method of research employing comparative and correlational design. There were two groups of respondents comprising 52 teachers and 326 passers who took the teacher's exam once with the total of 378 respondents from five state universities and colleges in the Bicol Region. They were selected using proportionate stratified random sampling along with Slovin's Formula.

Those who took the Licensure Examinations for Teachers (LET) in August 2014, March 2015, and in September, 2015 were represented based on their availability. All of them answered the distributed questionnaires through personal interview, social media and phone call interview. Teachers were selected on the basis of their Field Study and Practice Teaching subjects taught and their appointment as lecturers during the LET reviews conducted by their respective schools.

Questionnaires and the result of Licensure Examination for Teachers from 2014-2015 were the instruments used in gathering the data. These data were treated statistically using frequency percentage, ranking, weighted mean, multiple regression analysis, and Pearson's Chi-Square.

FINDINGS

LET Passers Profile

Table 1 showed the personal profile of the three hundred twenty-six (326) LET passers in five SUCs located at central towns in the Bicol Region. Out of 326 passers, 170 (52%) belonged to BEEd and 156 (48%) to BSEd; 283 (87%) had ages ranging from 19 to 22 years old; and, 252 (77%) were female.

Table 1. Personal Profile of LET Passers

Profile		TOTAL	%
Program	BSEd	156	48
	BEEd	170	52
Age	19-22	283	87
	23-26	29	9
	27-30	9	3
	31-34	5	1

Profile		TOTAL	%
Gender	Male	74	23
	Female	252	77
	Total	**326**	**100**

The findings revealed that were more LET passers from BEEd than from the BSEd. The respondents believed that more BEEd graduates were motivated to take LET because of the growing need for qualified elementary school teachers. In terms of age, it indicated that, in general, the respondents belonged to graduates who studied in college at their typical ages proper to such level of education. They were able to finish their studies as ordinarily expected. As to the gender, it signified that the teaching profession has still been predominantly engaged in by females. It also signified that despite the fact that women have already entered into careers previously dominated by males, there has been no corresponding population of men entering into teaching profession particularly in elementary and high school. It could be attributed to the concept of teaching school children associated with care-giving which, in the family, would be typically carried out by women.

LET Passers' School Profile

Table 2A. LET Passers' School Profile

Profile		SCHOOLS A	B	C	D	E	TOTAL	%
Level of Accreditation	2		57			44	**101**	**31.0**
	3	52		53	120		**225**	**69.0**
	Total	**52**	**57**	**51**	**120**	**44**	**326**	**100.0**
TEI Distinction	COE				120		**120**	**37.0**
	COD	52		53			**105**	**32.0**
	NONE		57			44	**101**	**31.0**
	Total	**52**	**57**	**51**	**120**	**44**	**326**	**100.0**

Level of Accreditation. The data showed that 225 (69%) of the passers were from three schools with level 3 accredited program, whereas, only 101 (31%) passers were from level 2 accredited program. It meant that higher educational institutions with level 3 accredited program, where the majority of respondents graduated, had undergone the process of assessment and upgrading of the quality of education thereof and been duly recognized to have high standard of instruction, highly visible community extension program and research tradition, and strong faculty development.

TEI Distinction. There were 105 (32%) LET passers from two schools recognized as Centers of Development, 120 (37%) of whom were from one school distinguished as Center of Excellence, and 101 (31%) were from two schools without TEI distinction. It signified that the schools where the majority of respondents graduated were proven to have served as catalysts in the attainment and achievement of the program's mission to produce professionally competent and morally upright teacher education graduates. It further signified that the cited schools were able to demonstrate their aptitude to become centers of excellence in the future.

Faculty Qualification. Table 2B delineated the professional profile of TEI faculty members in terms of faculty appointment and educational attainment.

Table 2B. Profile of TEIs' Faculty Members

Profile	SCHOOLS A	B	C	D	E	T	%
Faculty Appointment							
Permanent Teaching Employees	9	4	4	9	13	**39**	**77.0**
Part-time Teaching Employees	2	2	3	2	3	**12**	**23.0**
Total	**11**	**6**	**7**	**11**	**16**	**51**	**100.0**
Educational Attainment							
With units in Master of Arts/ Sciences	4	2	1	0	4	**11**	**22.0**
Master of Arts/ Sciences	3	2	1	4	9	**19**	**37.0**
With units in Doctor of Philosophy/ Doctor of Education	3	1	1	0	1	**6**	**12.0**
Doctor of Philosophy/ Education	2	1	4	6	2	**15**	**29.0**
Total	**12**	**6**	**7**	**10**	**16**	**51**	**100.0**

In terms of faculty appointment, 39 (77%) of the faculty members of LET passers were permanent teaching employees compared with those appointed as part-time teaching employees as indicated in the frequency of 12 equivalent to 23%. It meant that there were more faculty members on permanent status at SUCs than those on part-time basis. It implied that employment of permanent faculty members at SUCs in the Bicol Region was a priority over that of part-time instructors.

In terms of educational attainment, most of the faculty were master's degree holder with 19 (37%) respondents while 6 (12%) of them had doctoral units. It meant that all faculty members met the minimum teaching requirement in the tertiary level of education.

LEVEL OF IMPLEMENTATION OF STUDENT TEACHING

Table 3 presented the level of implementation of student teaching along field study, in-campus teaching, and off-campus teaching. The five SUCs obtained the highest rank was along off-campus teaching (WM=4.39), followed by field study (WM=4.36) lastly, in-campus teaching (WM=4.34).

Table 3. Level of Implementation of Student Teaching

Aspects	Teachers AWM	LET Passers AWM	AM	I	R
Off-Campus Teaching	4.47	4.31	**4.39**	**HE**	**1**
Field Study	4.35	4.36	**4.36**	**HE**	**2**
In-Campus Teaching	4.50	4.17	**4.34**	**HE**	**3**
OAM	**4.44**	**4.28**	**4.36**	**HE**	

The foregoing result, generally, meant that student teaching was fully implemented particularly along off-campus teaching. It implied that student teaching served as the best avenue for student-teachers to engage in the application of their acquired knowledge and cultivated skills essential to their chosen profession. It also enabled them to translate their learning experiences of pedagogical theories, principles, and approaches into actual encounter with the learners thereby preparing them towards the achievement of their goal of becoming efficient teachers.

In harmony with the aforesaid findings, the study of Castro (2009) revealed that pre-service training helped students to master their chosen field of specialization along with the research conducted by Calicdan (2009) in Don Mariano Marcos Memorial State University. The latter found out that practice teaching was very satisfactorily conducted particularly in terms of helping student-teachers understand the educational principles of the teacher-education program. The practice teaching course provided students with practical learning experiences in which they could observe, verify, reflect and actually employ the different components of the teaching-learning process in an actual school setting.

Administrative Support for Board Examination

Tables 4A to 4C displayed the level of administrative support of SUCs for board examination along in-house review, mentoring and coaching, and logistical support services.

The level of administrative support along each of the indicators involved in every area was construed in relation to the outcome of the statistical computation of the obtained mean, to wit; 4.21 –5.00 for Highly Supported (HS); 3.41–4.20 for Supported (S); 2.61–3.40 for Moderately Supported (MS); 1.81–2.60 for Less Supported (LS); and, 1.00–1.80 for Not At All Supported (NAS). The general interpretation has been duly disclosed. Table 5D exhibited the summary table of said level of support.

In-House Review. Reflected in Table 4A was the perceived level of administrative support for board examination preparation along in-house review has an overall weighted mean of 3.19 interpreted as moderately supportive. Specifically, constructing conducive learning structure and review materials ranked first (WM=3.33) and "organizing in-house review for students parallel to actual examination" was on the last rank (WM=2.98).

The findings implied that the SUCs in the Bicol region had average level of support for the students through in-house review in preparation for the Licensure Examination for Teachers. The foregoing results indicated a wide room for the enhancement of administrative support especially along the conduct of review classes among students parallel to actual examination. The respondents had mutual conviction that LET review helps students to be more prepared for the board examination so as to eventually acquire higher passing rates.

The afore-cited findings are in harmony with the study conducted by Dicang (2007) where he mentioned that administrative support such as providing graduates a stay-in review could afford them with potentials in preparing for the LET. He also stated that the review is a refresher course of what the passers learned from their four year-study in college. Hence, taking review was deemed imperative to build their self-confidence and better prepare them for the said examination.

Table 4A. Level of Administrative Support for Board Examination Preparation along In-House Review

Indicators	Teachers WM	LET Passers WM	AWM	I	R
Constructs conducive learning structure and review materials	3.74	2.91	**3.33**	**MS**	1

Indicators	Teachers WM	LET Passers WM	AWM	I	R
Scouts qualified and competent LET lecturers/speakers from prominent universities in Manila	3.93	2.67	**3.30**	**MS**	2
Adopts review programs through institutional linkages	3.54	2.99	**3.27**	**MS**	3
Conducts free review for outstanding students (cum laude, magna cum laude, and summa cum laude)	3.39	2.72	**3.06**	**MS**	4
Organizes in-house review for students parallel to actual examination	3.10	2.86	**2.98**	**MS**	5
AM	**3.54**	**2.83**	**3.19**	**MS**	

Mentoring and Coaching. Data in Table 4B showed the level of administrative support for board examination along mentoring and coaching received an average rating of 3.55 weighted mean as interpreted as "supported". After ranking the different ratings provided by the teachers and LET passers, it could be noted that "facilitating a focus group review for consultations, tips, and extra notes" was on the first rank (WM= 3.97), while "organizing testimonial forum for graduate-examinees" got the lowest rank (WM= 3.14).

The general result indicated average level of support extended by SUCs to LET Passers along mentoring and coaching. It also signified certain inconsistency in the assessment of administrative support between teachers and students along the cited area. Furthermore, teachers could have perceived supplementary measures to employ in terms of providing upgraded and relevant contents of tutoring as indicated in their assessment rating lower than that of the students.

Table 4B. Level of Administrative Support for Board Examination Preparation along Mentoring and Coaching

Indicators	Teachers WM	LET Passers WM	AWM	I	R
Facilitates a focus group review for consultations, tips, and extra notes to get high performance in board examination	3.98	3.95	**3.97**	**S**	**1**
Provides quality and effective examination preparations to students	3.87	3.73	**3.80**	**S**	**2**
Includes LET mentoring or refresher course in Teacher Education Curriculum	3.09	3.77	**3.43**	**S**	**3**
Mobilizes field experts and top-notchers for mentoring and coaching	2.98	3.88	**3.43**	**MS**	**4**
Organizes testimonial forum for graduate-examinees	2.77	3.50	**3.14**	**MS**	**5**
AM	**3.34**	**3.77**	**3.55**	**S**	

Moreover, facilitating focus group review among students had been within the standards of the SUC concerned. It pointed to the regular assistance provided by the school through series of appropriate activities to keep the LET passers ready on the examination day. The result could, reasonably, be assumed beneficial to the LET passers as administrative support in terms of initiating focus group for the review consisting of tips -giving, information noting, and the like, thereby providing sufficient means to prepare so well for the examination. Nonetheless, the foregoing result indicated a place for enrichment of the support system extended by the concerned SUCs along strengthening focus group for reviews.

It was also worth noting that the teachers gave less rating than the LET passers along organizing testimonial forum for graduate-examinees. It further indicated that the latter may have their own send-off spree within their circle of friends regardless of whether an institution-devised program for testimonial gathering among graduate-examinees would be held.

The cited results are in harmony with the research of Hammond (2015) concluding that the National Board teachers may influence the learning of other teachers through mentoring, coaching, assistance and other related activities. The same findings also correspond to the statement of Hook (2016) that coaching and mentoring empower individuals, build teams, enhance collegiality and improve morale across the team. It helped improve the performance in getting the job done and make a direct contribution to the person's learning and development. Graham Dohanson (2016) also added that mentoring and coaching skills can craft effective dialogue and learning.

Logistical Support Services. Table 4C showed that the level of administrative support for board examination preparation along logistical support services for the LET takers has an average weighted mean of 2.64 with a moderately supportive rating. The respondents firmly believed that coordination of the SUCs with the PRC on the coverage & other pertinent issues surrounding the LET have an average support with a weighted mean of 3.54. This ranked first among the five indicators and interpreted as "supportive" level of administrative support. On the other hand, the respondents are convinced that extension of logistical support services such as providing food, supplies and the like should be improved. It generated a weighted mean of 1.85 weighted mean being at the lowest rank. The results also implied that coordination of SUCs with the Philippine Regulation Commission (PRC) helped passers to be acquainted with LET related issues and concerns. In the interview conducted, the coordination provided passers necessary information as to the program and coverage of exam and other pertinent issues and concerns surrounding the LET.

Table 4C. Level of Administrative Support for Board Examination Preparation along Logistical Support Services

Indicators	Teachers WM	LET Passers WM	AWM	I	R
Coordinates with the PRC on the coverage & other pertinent issues surrounding the LET	3.48	3.60	**3.54**	**S**	**1**
Conducts pre-orientation and assists students in filing LET application	3.59	3.43	**3.51**	**S**	**2**
Helps the LET examinees in the arrangement of transportation and accommodation.	2.05	2.27	**2.16**	**LS**	**3**
Assists students in locating the venue of examination for environment and transport familiarization.	1.94	2.3	**2.12**	**LS**	**4**
Extends logistical support services such as providing food, supplies and the like.	1.73	1.97	**1.85**	**LS**	**5**
AM	**2.56**	**2.71**	**2.64**	**MS**	

Furthermore, it indicated relative insufficiency of support and services in terms of providing supplies, foods, and other necessities during the examination. It further indicated a wide space for enhancement of assistance along the said area for the passers to be able to experience certain sense of being cared for by their alma mater for which their debt of gratitude and appreciation may occur.

In harmony with the above findings, Lucido (2015) contended that the linkages between the PRC and SUCs should be kept stronger and that relevant programs should further be strengthened. The author also mentioned that Teacher Education Institutions should provide constant support to LET examinees along logistics as it would boost their self- confidence and esteem.

Level of Performance of SUCs in the Licensure Examination for Teachers

Table 5 presented the level of LET performance of SUCs in the Bicol Region for three consecutive examination-periods, namely: September 2014, March 2015, and September 2015.

Data revealed that, in general, the over-all performance rating of SUCs in Bicol Region was 78.63% out of which 79.13% belonged to BEEd and 78.13% to BSEd classified as "average". The foregoing indicated that, generally, BEEd got higher rating than BSEd in the LET performance level. This result could reasonably be attributed to the experience of bigger burden among BSEd passers considering the necessity of additional areas for major specializations requiring sufficient amounts of time, preparations, and efforts to exert. As for the BEEd, only General and Professional Education subjects are required for thorough review to enable examinees to pass the LET.

Hence, the absence of additional areas for major specializations in the BEEd apparently would make it easier for its examinees to pass the LET than in the BSEd as evidenced by the higher number of LET passers among the BEEd examinees according to the previous LET results. In fact, based from the survey conducted by Philippine Business Education (2014), the elementary level Licensure Examination for Teachers got a higher passing result of 62.22% compared with the secondary level LET result of 57.73%.

Table 5. Level of 2014 and 2015 LET Performance

SUC/ National Passing %	BEEd 31.51%	BSEd 35.93%	Total Rating	RANK
A	78.93	79.36	79.15	**2**
B	79.11	77.15	78.13	**4**
C	80.64	77.20	78.92	**3**
D	79.82	79.58	79.70	**1**
E	77.16	77.34	77.25	**5**
Over-all Rating	79.13	78.13	78.63	

Legend:	Ranges	Level
	85>	High (H)
	75-84	Average (A)
	65-74	Low (L)
	<64	Very Low (VL)

Nevertheless, the cited findings of this research implied that the performance of SUCs in the Licensure Examinations for Teachers has been within the standard rating. These, however, signified a room for improvement of performance so that higher ratings can be achieved for the benefits of examinees and teacher-education program of the SUCs in the region.

The said findings are in accordance with CHED standards mandating that SUCs, to be recognized as COE or COD, should acquire a passing rate of 65%-75% from the board examination. Inferring there from, it could reasonably be pointed out that the SUCs in Bicol Region have been able to produce competent and quality teachers.

The same could be associated with the study of Mahinay (2013) whose research outcome revealed that the teacher-education performance in board examinations in Region V has been on satisfactory level.

Effects of Personal and School characteristics on LET Performance

As reflected in Table 6, the computed chi-square values of 22.870 for the correlation between age and elementary level LET performance showed greater P value of .087 while in the secondary level revealed lesser P value of .030. Thus, the effect of age was not significant on the elementary level LET performance but significant on secondary level LET performance. It clearly indicated that age did not matter among those who belonged to the BEEd program. Whether young or old, the BEEd passers showed up in proving their worth by passing the LET. However, age had important relationship with the BSEd LET performance results. It could then be inferred that the younger the age, the greater the possibility of satisfactory performance in the LET considering the intellectual stamina of young people as indicated in the results of the LET where majority of the passers belonged to 19-21 years of age.

Table 6. Relationship between Selected Personal and School Characteristics and LET Performance

Personal and school Characteristics	LET Performance (Elementary)			LET Performance (Secondary)		
	X^2 Value	*Sig*	*Cramers' V*	*X^2 Value*	*Sig*	*Cramers' V*
Age	22.870	.087	.371	99.665	.030	.594
Sex	28.571	.018	.390	15.840	.393	.260
Accreditation	25.625	.042	.562	29.323	.015	.612
TEI Distinction	25.625	.042	.579	330.961	.008**	.662

Legend: *Sig.= >.05* Not Significant (NS)
Sig.= ≤.05 * Significant (S)
Sig.= ≤.01 **Highly Significant (HS)
Sig.= ≤.001 ***Very Highly Significant (VHS)

The computed chi-square value of 28.571 for the correlation between gender and elementary level LET performance revealed lesser P value of .018 while the chi-square value of 15.840 between gender and secondary level LET performance registered greater P value was .393. The foregoing result generated a highly significant relationship between gender and elementary level LET performance and no significant relationship between gender and secondary level LET performance. It implied that gender had highly significant bearings upon the LET performance of BEEd passers but no significant bearings at all upon the BSEd passers.

The computed chi-square value of 25.625 for the correlation between accreditation level and elementary level LET performance and 29.323 between accreditation level and secondary LET performance displayed P values of .042 and .015 less respectively. This implies that the school profile along accreditation level had a significant effect on the LET performance of both BEEd and BSEd. These findings indicated important bearings of the SUCs' status as to their accreditation level on the performance of BEEd and BSEd passers in the board examination. The accreditation procedures ensured that certification practices were acceptable making higher education institutions competent enough in attaining high-level quality and/or excellence of the program being offered particularly along the area of curriculum and instruction where the licensure examination performance of the graduates was being evaluated.

The computed chi-square value of 25.625 for the correlation between TEI distinction and elementary level LET performance registered the P value of .042 less than .05 level of significance so that the null hypothesis of non-significance was rejected; alternatively, the computed chi-square value of 330.961 for the correlation between TEI distinction and secondary level LET performance obtained the P value of .008 which was much less than .05 level of significance so that the null hypothesis of non-significance was highly rejected. Therefore, the TEI distinction had a significant effect on the LET performance of both BEEd and BSEd takers. It implied that the performance of BEEd passers in the board examination has been importantly related to the school profile along TEI distinction. The citation of more LET passers from COEs than CODs only goes to show that, indeed, school profile along TEI distinction greatly matters in the LET performance particularly among BSEd passers.

Relationship among Student Teaching, Administrative Support and LET Performance

Table 7 presented the relationship between student teaching and administrative support and BEEd and BSEd LET performance, Pearson's Chi-squared Test was used. The summary of correlation results was presented in the said table in which decisions were patterned after Cramer's V of classifications.

The computed chi-square value of 110.461 for the correlation between field study and elementary level and 362.62 for the correlation between field study and secondary level of LET performance showed P value of .053 and .000 for BEEd and BSEd respectively. Therefore, field study had no significant effect on the LET performance for elementary but with significant effect for the secondary. It signified that field study was a factor highly contributing to the result of LET among the BSEd examinees. It further signified that the extent of implementation of field study particularly along adoption of deployment policies and procedures had been highly implemented in SUCs. The result could be ascribed to the mandated policies and standards for under graduate teacher education curriculum as stipulated in CMO 30 series of 2004. The student's acquired experiences during the classroom observation in Field Study course obtained significant information that helped them answer situational questions in the Licensure Examination for Teachers particularly along the professional education area.

Table 7. Relationship among Student Teaching, Administrative Support and LET Performance

Personal and school Characteristics	LET Performance (Elementary)			LET Performance (Secondary)		
	X^2 Value	*Sig*	*Cramers' V*	*X^2 Value*	*Sig*	*Cramers' V*
Field Study	110.461	.053	.271	362.62	.000	.954
In-Campus Teaching	83.476	.072	.193	197.15	.999	.173
Off-Campus Teaching	255.000	.000	.972	399.86	.000	.940
In-House Review	226.13	.000	.900	391.70	.005	.771
Mentoring & Coaching	281.25	.000	.897	696.76	.007	.821
Logistical Support	106.98	.564	.210	32.08	.562	.209

The computed chi-square values of 83.476 for the correlation between in-campus teaching and elementary level LET performance and 197.15 between in-campus teaching and secondary level LET performance showed P values of.072 and .999 greater than .05 level of significance so that the null hypothesis of non-significance was accepted. Thus, in-campus teaching did not have any significant effect on the LET performance of both programs.

A positive and significant relationship was noted (Table 7) between off-campus teaching and elementary level LET performance and off-campus teaching and secondary level LET performance (P value .000). This implies that the performance of the groups of passers in the board examination had been very importantly related to the practice teaching implementation of SUCs.

The computed chi-square values of 226.13 for the correlation between In-House Review and elementary level LET performance earned much lesser P value of .000 while 391.70 between In-House Review and secondary level LET performance obtained the lesser P value of .005. In-house review had a very highly significant effect on the LET performance of BEEd and highly significant effect on the LET performance of BSEd. This indicated that in house review was an essential determinant of the passers' LET performance. It further indicated that the learning structure and review materials constructed and utilized were proven very effective along with the hiring of qualified and competent LET lecturers/speakers from prominent universities in Manila, and utility of review programs through institutional linkages.

The computed chi-square values of 281.25 for the correlation between Mentoring & Coaching and elementary level LET performance revealed the much lesser P value of .000 while 696.76 between Mentoring & Coaching and secondary level LET performance obtained lesser P value of .007 than .05 level of significance so that the null hypothesis of non-significance was highly rejected. Thus, mentoring & coaching had very highly significant effect on the LET performance of BEEd and highly significant effect on BSEd. These findings pointed out that mentoring & coaching constituted an essential determinant of the passers' LET performance from both groups. These further pointed out that the BEEd and BSEd passers had greatly benefited from the focus group review facilitated for consultations, tips, and extra notes along with quality and effective examination preparations provided by the SUCs.

The computed chi-square value of 106.98 for the correlation between logistical support and elementary level of LET performance and 32.08 between the same area and secondary level LET performance registered P values of .564 and .562 greater than .05 level of significance so that the null hypothesis of non-significance was accepted. For this reason, logistical support did not have any significant effect on the LET performance of both programs. This implied that regardless of such support, the BEEd and BSEd passers made use of their learned knowledge, cultivated skills and positive attitude enforced by other determinants to successfully pass the examinations.

CONCLUSION

On the basis of the findings, the following conclusions were drawn:

1. The profile of the LET passers in terms of program, age and gender were predominantly Bachelor of Elementary Education, young, and mostly female.
2. The school profile of passers in terms of level of accreditation, TEI distinction and faculty qualification were from state universities with level 3 accredited programs and Center of Development (COD) and majority of faculty members were holders of Master's degrees in Arts or Sciences (MA/MS) and permanent teaching employees.
3. The implementation of student teaching along Field study, in-campus teaching and off-campus teaching were highly extensive from the perspective of both teachers and LET passers. It was very well executed and implemented in the sense that the LET passers were able to carry out their duties and responsibilities as student-teachers to the best of their capacity
4. SUCs' level of administrative support for board examination preparations has been fairly extended to the examinees. It indicated a wide room for improvement of support along mentoring and coaching, in-house review, and logistical services meant to enable the examinees to prepare so well for the board examination.
5. The 2014-2015 performance of the LET passers in both elementary and secondary of five SUCs in the Bicol Region was on average level.
6. The effect of age was not significant on the elementary level LET performance but significant on secondary level LET performance. Age did not matter among those who belonged to the BEEd program but had important relationship with the BSEd LET performance results while the effect of gender on elementary level LET performance was highly significant but insignificant on secondary level LET performance. In terms of school characteristic along accreditation level had a significant effect on the LET performance of both BEEd and BSEd and the effect of TEI distinction was significant on the LET performance of BEEd and highly significant on the LET performance of BSEd. It means that TEI distinction was a determinant on elementary level LET performance but a strong determinant on secondary level LET performance.
7. Among the different groups of variables involved, in-house review, off-campus teaching, and mentoring & coaching served as strong determinants of the LET performance of both BEEd and BSEd passers in the Bicol Region. Age and field study were deemed determinants of LET performance among BSEd passers whereas, gender was a determinant of said performance among BEEd passers.

RECOMMENDATION

Based on the conclusions of the study, the researcher recommends the following:

1. Male students should be encouraged to enrol in secondary education and take the examination immediately after graduation for the anticipation of expansion for senior high school. It is because the secondary school system still lacks male teachers. They can be encouraged through career guidance program particularly during senior high school years.
2. SUCs recognized as Center of Excellence should maintain and sustain their outstanding status and help other schools to improve the quality teacher education program in the localities and for the development of world-class scholarship, and national development through development of linkages with other universities and colleges whereby resources, manpower, and best practices of their programs could be shared together.
3. SUCs should ensure adoption of a laboratory school for the continuing training of student-teachers in campus.
4. TEIs should conduct a more intensive in-house review and encourage the LET repeaters to take the refresher course or review classes for free to increase their chances to pass the exam. Also, Pre-LET related activities must be organized such as, seminars and lecture-fora on enhancing abilities and skills in answering different types of questions in the context of teachers' licensure examination.
5. The Teacher Education Institutions (TEIs) must also review and implement school policy on admission and retention requirements for sustainability of LET performance. The school must monitor and evaluate the results of periodic Licensure Examination in order to improve and innovate strategies to increase number and percentage of LET passers.

6. SUCs should correlate LET takers' performance on General Education, Professional Education and Major Areas of Specialization with the program curriculum so that they could determine the relevance of the former to the latter for the improvement of teacher education program towards the sustenance of high accreditation level.
7. Due to the huge number of public schools offering Teacher Education Program, SUC should identify and meet the needs of elementary and secondary pre-service teachers to improve the quality of education in the Philippines. This can be done by means of instituting a definite program of supervision and other administrative support services aimed at upgrading quality instruction of student teaching.

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EFFECTS OF FACEBOOK AS AN EDUCATIONAL TOOL FOR MATHEMATICS LEARNING

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ABSTRACT

The study determined how the use of social networking site (facebook) affects students' performance in Mathematics 2 along five areas of technology, namely; learning pedagogy, motivation, interaction, interaction with students, students' interaction with mentors, and technology. The study employed descriptive-correlational methods of research. Descriptive method was employed to ascertain the pre/post-test performance of the experimental and control groups along polynomials and linear equations, and the perceived effects of facebook in the performance of the students in Mathematics. The correlational method was applied to find out whether there was a significant difference between their pre/post-test performance. Results revealed that the pre/post-tests performance of the respondents in Mathematics were very highly significantly different except in linear equations. Posttest performance of both the experimental and control groups among competencies were higher than their performance in the pretest. Respondents perceived that social networking sites were extremely beneficial in improving their performance, specifically in obtaining knowledge and skills along polynomials and linear equations. Modern instruments of distant communication were as well noted to be highly influential in improving academic performance of the students. Nevertheless, findings indicated that misuse/ abuse of facebook jeopardizes students' general welfare. Teacher's close supervision tied up with the inner sense of freedom and responsibility is thus recommended.

Keywords: Effects of Facebook, Social Networking Sites, Tool for Mathematics Learning

INTRODUCTION

"Everybody talks about using technology, but what is the effect on learning?" asked Shari McCurdy Smith, associate director of the Center for Online Learning, Research, and Service at the University of Illinois at Springfield" (Young, 2010).

As we go on to the twenty-first century, technology has been considered as one of the beneficial tools in the society, from communication, business, health care down to the benefits of technology in education. The term technology does not just refer to the machine itself, it is a "planned, systematic method of working to achieve planned outcomes – a process, not a product. Technology is the application to any of the processes, like food, finance, reporting, grade and others, that can also be used to support education in an institution."

Presently, computers are affordable to people. Many schools can now acquire them for their teachers to use in motivating and involving their students in a more collaborative way of teaching. With the outburst of the global network connecting millions of computers, more than 100 countries are linked into exchanges of data, news and opinions (webopedia). The evolving world of Internet communication, such as blogs, podcasts, chat, tags, and file swapping, also called as social networking, offers students new ways to research, create, and learn. Social Media or social networking is one of the most popular online activities used by people within and outside the country. Instagram, Twitter, Facebook and others could help them grow personally as well as professionally. With the use of this reachable trend of technology in the society, many people are now engaged in social networking sites, specifically Facebook, that connect individuals all over the world.

Radically speaking, almost every Filipino knows how to use the Facebook, primarily in the social world of college students, as proven by

StatCounterGlobal (2012) in their conducted survey, "Facebook is the top Social Network in the country with 73.91% users". Facebook enables people to be their real selves, to find new and old friends, to connect with their family or to update themselves on the trending issues/news in the world. By interacting online, people get to know each other more and this eventually leads to meaningful relationships. Facebook also provides them the chance to write about things that happen in their everyday lives, to upload their own photos and videos and share them with their friends and family members, and to give comments or opinions on what have been posted.

Networking sites are means to bring new opportunities, responsive followers and lifelong friends, but how do educators use it as a learning tool for teaching and learning? Integrating technology in the Philippine educational system has taken a lot of turns especially in teaching mathematics. In institutions that produce future educators, instructors themselves must be well equipped on how this major subject will be taught in elementary, secondary or even in tertiary level. Hence, many avoid this subject and this leads to decreasing number of students who enrol in math as their field of specialization or in math-related major.

Hence, this study on Facebook as a tool for Mathematics learning is looked into. The aim of this study is to know the effects of Facebook as a tool used in teaching Mathematics among teacher education students of Central Bicol State University of Agriculture - Pasacao Campus.

STATEMENT OF THE PROBLEM OR OBJECTIVES

This study attempts to determine the effects of Facebook in learning Mathematics 2 – Contemporary Math in Central Bicol State University of Agriculture - Pasacao Campus during the 2nd Semester of Academic Year 2014-2015.

Specifically, this study ought to provide answers to the following questions:

1. What is the pre-test performance of the experimental and control groups along:
   a. Polynomials; and
   b. Linear Equation?
2. What is the post-test performance of the same groups along the same competencies and topics?
3. Is there a significant difference between the pre-test and post-test performance between the experimental and control groups?
4. What are the effects of the social networking sites in the performance of the students in Mathematics 2 in terms of the 5 parameters of technology: the learning pedagogy; motivation; interaction with students; students' interaction with mentors; and technology?

METHODOLOGY

The study employed descriptive-correlational methods of research. Descriptive method was employed to ascertain the pre/post-test performance of the experimental and control groups along polynomials and linear equations, and the perceived effects of social networking sites in the performance of the students in Mathematics. The correlational method was applied to find out whether there was a significant difference between their pre/post-test performance.

The respondents of the study were the Education freshmen students of Central Bicol State University of Agriculture-Pasacao Campus during the second semester of academic year 2014-2015. All first year students who took Mathematics II (Contemporary Mathematics) have undergone a pre-test, from five sections, two of which have been selected for this study. The first group is the experimental group while the other is the control group. Experimental group were exposed on Blended Learning – the Social Networking Sites and traditional method of teaching, while the control group were treated as purely traditional way of teaching. A pre-test and a post-test were administered before and after a treatment.

FINDINGS

This chapter presents the discussion of the effects of social networking sites used as a tool in mathematics learning at the Central Bicol State University of Agriculture – Pasacao Campus. The discussion focused on the findings of the study in which the data were analyzed and interpreted in the light of appropriate statistical and research standard procedures.

Pre-test Performance of the Experimental and Control Groups

Tables 4A and 4B present the pre-test performance ratings of the experimental and control groups along polynomials and linear equations. Performance of the students in both control and experimental groups was considerably underscored. The information was needed to generate data and come up with the findings of this research.

The results were interpreted and categorized into the following mathematics learning competency levels: excellent (95-100), very satisfactory (89-94), satisfactory (82-88), moderately satisfactory (75-81), and needs improvement (74 and below).

Table 4A shows the pre-test performance result of the experimental group along polynomials and linear equations. Data reveal that, out of 50 items, the respondents earned 6.915 standard deviation and got a 72.5 performance level from the raw scores. The said level was categorized as "needs improvement" (NI) competency level. This indicates that, at the time of the pre-test, the students in the experimental group needed to improve along the areas of polynomials and linear equations. The result further indicates that the learners found it difficult to engage in critical analysis of some algebraic expressions, in the form of an indicated sum of terms involving only positive integral powers of the variables. It also implies that the learners encountered difficulty in illustrating the proper way of graphing solutions on the number line, citing significant applications of linear equations, and solving problems of linear equations.

Table 4A. Pre-test Performance of the Experimental Group along Polynomials and Linear Equations

SUBJECTS	NUMBER OF ITEMS	STD. DEVIATION	PL	LC
A. Polynomials	28	6.4	72.5	NI
B. Linear Equations	22	7.43	73	NI
TOTAL	**50**	**6.915**	**72.5**	**NI**

Table 4B illustrates the pre-test performance of the control group along polynomials and linear equations. The data show that, out of 50 items, the said group of respondents earned 5.82 standard deviation and got 73 performance level from the raw scores. The said level was categorized as "needs improvement" (NI) competency level.

Table 4B. Pre-test Performance of the Control Group along Polynomials and Linear Equations

Subjects	Number of Items	Std. Deviation	PL	LC
A. Polynomials	28	6.21	74.5%	NI
B. Linear Equation	22	5.44	71.5%	NI
TOTAL	**50**	**5.82**	**73%**	**NI**

The result indicates that the control group-students, at the time of the pre-test, needed to improve along the areas of polynomials and linear equations. It further indicates that the learners who belonged to the said group did not perform well in the critical analysis of some algebraic expressions in the form of an indicated sum of terms, which involved only positive integral powers of the variables. It also implies that the learners experienced perplexity in illustrating the proper way of graphing solutions on the number line, citing significant applications of linear equations, and solving problems of linear equations.

Post-test Performance of the Experimental and Control Groups

Tables 5A and 5B present the post-test performance ratings of the experimental and control groups along polynomials and linear equations. The result of the pre-test which was, generally, labelled as "needs improvement" was critically considered for the researcher to employ the necessary intervention.

In the context of this research, the intervention was the use of social networking sites, particularly Facebook, over which the extension activity exercises in Mathematics 2 class were posted for the consumption of the student-respondents who belonged to the experimental group. The control group was directed not to access the Internet, and remained within the traditional learning framework for the purpose of attaining accurate findings of the current research.

After the designated time frame, post-test was conducted for both the experimental and control groups. The performance rating from the result of the post-test was accorded the corresponding competency levels indicated herein. The performance rating results were taken from the computation of the mean along with the given standard deviations. The said level was interpreted as: excellent (95-100), very satisfactory (89-94), satisfactory (82-88), moderately satisfactory (75-81), and needs improvement (74 and below).

Table 5A depicts the post-test performance of the experimental group along polynomials and linear equations. Data reveal that, out of 50 items, the respondents got the standard deviation of 6.87 and the corresponding 82.25 performance level. The shown performance was categorized as "satisfactory" competency level.

Table 5A. Post-test Performance of the Experimental Group along Polynomials and Linear Equations

SUBJECTS	NUMBER OF ITEMS	STD. DEVIATION	PL	LC
A. Polynomials	28	7.89	88%	S
B. Linear Equations	22	5.86	77%	MS
TOTAL	**50**	**6.87**	**82.25%**	**S**

This indicates that the intervention was remarkably effective along polynomials and linear equations. The desired result of the intervention was indicated in the significant improvement of the performance level of the experimental group in the post-test. It also implies that the group's exposure to the social networking sites for the purpose of engaging in Mathematics extension activity exercises proved to be helpful. The research outcome further implies that, after the intervention, the experimental group was able to overcome their difficulty in illustrating the proper way of graphing solutions on the number line, citing significant applications of linear equations, and solving problems of linear equations.

The experimental group of students also improved, though only to a moderate degree, their learning ability to distinguish and apply the various linear equation lessons after the intervention, as indicated in the result of the post-test. In particular, the experimental group of students were able to identify equations that are true no matter what value is particularly plugged in for the variable. They could already, somehow, recognize a statement of equality and how to determine if a value was a solution, how to substitute the value for the unknown variable, and how to simplify both sides of the equation. Their academic improvement was fair enough to be able to make a true statement as to whether both sides of the equation were equal.

The improvement of learning ability of the students as indicated in the result of the post test that enabled them to demonstrate their mathematical skills along polynomials and linear equations, conforms with the ideals of the Theory of Constructivism. This theory views that learning is a process in which the learner actively constructs or builds new ideas or concepts based on current and past knowledge or experience. It may apply when individuals engage socially in talk and activity about shared problems or tasks. Along this line, the results of the current study did not jibe with the said theory , having revealed that the learners were not able to construct their analytical and critical ideas to solve the given problems.

Furthermore, the foregoing findings are founded on the Operant Conditioning Theory. According to Burrhus Skinner, the organism is in the process of "operating" on the environment, which, in ordinary terms, means it is bouncing around its world, doing what it does. During this "operating," the organism encounters a special kind of stimulus, called a reinforcing stimulus, or simply a re-inforcer. When the teacher posted on the wall regarding the lesson in Mathematics, learners became active participants. This special stimulus had the effect of increasing the "operant" -- that is, the desired behavior of the students after posting. This is operant conditioning: "the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior in the future."

In conformity with the foregoing theory, the academic performance of the students along polynomials and linear equations increased and improved because of the social networking sites used by the experimental group-students in their engagement in the electronic extension activity exercises.

Table 5B illustrates the post-test performance of the control group along polynomials and linear equations. Data show that, out of 50 items, the said group of respondents earned 7.215 standard deviation and an 80.5 performance level from the raw scores. The said level was categorized as "moderately satisfactory" (NI) competency level.

Table 5B. Post-test Performance of the Control Group along Polynomials and Linear Equations

SUBJECTS	NUMBER OF ITEMS	STD. DEVIATION	PL	LC
A. Polynomials	28	8.16	86%	S
B. Linear Equations	22	6.28	76%	MS
Total	**50**	**7.215**	**80.5%**	**MS**

The result indicates improvement of the learning performance of students who belonged to the control group. From "needs improvement" category to "satisfactory" competency level, the control group was able to display their learning experience in polynomials even without the designated intervention of social networking exposures. The said academic progress could be attributed to the students' diligence in studying their lessons despite the use of traditional learning methods. However, it should be noted that the experimental group-students who made use of the social media networks in learning polynomials had higher performance level than that of the control group-students.

The learning ability of the students who belonged to the control group was noted to have elevated to a moderate degree. From "needs improvement" category to "moderately satisfactory" competency level, the control group was able to perform its learning experience in linear equation without the social networking sites intervention. It indicates that the control group-students were able to experience learning through the application of traditional learning method. Moreover, the learning experience manifested in the result of the post -test could be attributed not only to the diligence employed by the concerned students but also to the traditional teaching approaches the teacher utilized in order to ensure that genuine transfer of learning would truly take place.

The research outcome further implies that even without technological intervention, the control group was able to overcome the difficulty in illustrating the proper way of graphing solutions on the number line, citing significant applications of linear equations, and solving problems of linear equations. The group also improved, though only to a moderate degree, their learning ability to distinguish and apply the various linear equation lessons, as indicated in the result of the post-test. In particular, the control group-students were, anyhow, able to identify equations that are true no matter what value is particularly plugged in for the variable. They could already, somehow, recognize a statement of equality and how to determine if a value was a solution, how to substitute the value for the unknown variable, and how to simplify both sides of the equation. Their academic improvement was fair enough to be able to make a true statement as to whether both sides of the equation were equal.

The improvement of learning ability of the students as indicated in the result of the post test that enabled them to demonstrate their mathematical skills along polynomials and linear equations conforms with the ideals of the Theory of Constructivism. This theory views that learning is a process in which the learner actively constructs or builds new ideas or concepts based on current and past knowledge or experience. It may apply when individuals engage socially in talk and activity about shared problems or tasks. Along this line, the results of the current study did not jibe with the said theory , having revealed that the learners were not able to construct their analytical and critical ideas to solve the given problems.

Anyhow, the foregoing findings are founded on the Operant Conditioning Theory. According to Burrhus Skinner, the organism is in the process of "operating" on the environment, by which, in ordinary terms, means it is bouncing around its world, doing what it does. During this "operating," the organism encounters a special kind of stimulus, called a reinforcing stimulus, or simply a re-inforcer. When the teacher posted on the wall regarding the lesson in Mathematics, learners became active participants. This special stimulus had the effect of increasing the "operant" -- that is, the desired behavior of the students after posting. This is operant conditioning: "the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior in the future."

In the light of the foregoing theory, the academic performance of the students along polynomials and linear equation increased and improved because of the social networking sites used by the experimental group-students in their engagement in the electronic extension activity exercises.

Significant Difference between the Pre-Test and Post-Test Performance Levels of the Experimental and Control Groups

Table 6 shows the difference between pre-test and post-test performance levels along polynomials of the experimental group, between the pre-test and post-test performance levels along polynomials of the control group, between pre-test and post-test performance levels along linear equations of the experimental group, and between the pre-test and post-test performance levels along linear equations of the control group.

Table 6. T-test of the Significant Difference between the Pre-Test and Post-Test Performance Levels of the Experimental and Control Groups

GROUP	PAIRS	T Value	Df	Sig.	Results
Experimental	Pre-test (Polynomials) – Post-test (Polynomials)	-7.560	18	.000***	VHS
Control	Pre-test (Polynomials) – Post-test (Polynomials)	-4.461	17	.000***	VHS
Experimental	Pre-test (Linear Equation) – Post-test (Linear Equation)	-1.676	18	.111^{ns}	NS
Control	Pre-test (Linear Equation) – Post-test (Linear Equation)	-3.725	17	.002*	S

With the result, analysis was made from which accurate implications were drawn for appropriate recommendations. The post test was essential to the current study on the basis of a necessity for comparison between its result and that of the pre-test so that the difference could be determined. The information was indispensable for the attainment of the research findings.

As to the difference between the pre-test and post-test results along polynomials of the experimental group, data reveal the T-value of -7.560 with 18 degree of freedom and the probability value of .000 at .05 level of significance. Since the probability value is very much less than the cited level of significance, the null hypothesis of non-significance is rejected. Hence, the difference in polynomials between pre-test and post-test performance results of the experimental group is very highly significant.

The findings revealing a negative T-value indicate that the post-test result was higher than the pre-test result. This further indicates the improvement of academic performance of the experimental group of respondents along polynomials during the post test. It should also be noted that the learning ability of this group along the cited subject matter was greatly enhanced as it was exposed to social networking sites. It is noteworthy that the employment of Facebook as the desired intervention was very helpful, especially for the experimental group-students, in augmenting their knowledge and cultivating their skills in the computation of figures concerning the said topic.

As to the difference between the pre-test and post-test results along polynomials of the control group, data reveal the T-value of -4.461 with 17 degree of freedom and the probability value of .000 at .05 level of significance. Since, the probability value is very much less than the cited level of significance, the null hypothesis of non-significance is rejected. Hence, the difference in polynomials between pre-test and post-test performance results of the control group is very highly significant.

The findings indicate that the result of the pre-test along polynomials of the control group differed from that of the post-test in the sense that the latter revealed remarkable progress of its satisfactory competency level. It is also noteworthy that the control group was not exposed to the social networking sites and yet, was able to get their learning performance better. The result also implies that the group successfully made use of the traditional method of learning polynomials without technological learning facilitation provided by the social networking sites. However, it should be noted that even as the control group performed better in the said subject matter, the fact could not be denied that the experimental group that utilized the Facebook in learning polynomials got very satisfactory competency level higher than what the control group achieved.

As to the difference between the pre-test and post-test results in linear equations of the experimental group, data reveal the T-value of -1.676 with 18 degree of freedom and the probability value of .111 at .05 level of significance. Since the probability value is greater than the cited level of significance, the null hypothesis of non-significance is accepted. Hence, the difference in linear equation between pre-test and post-test performance results of the experimental group is not significant.

The above finding indicates that although the result of the pre-test differed from that of the post-test as evidenced in the revealed data of “needs improvement” to “moderately satisfactory” competency level along linear equations, the said difference turned out to be insignificant. The insignificant difference could be attributed to a factor that the pre-test and post-test results in linear equations did not matter with respect to the experimental group’s ability to learn. It further implies that the intervention conducted barely affected the result of the post test specifically along linear equations, so that its difference from the result of the pre-test was not significantly notable.

As to the difference between the pre-test and post-test results along linear equations of the control group, data reveal the T-value of -3.725 with 17 degree of freedom and the probability value of .002 at .05 level of significance. Since the probability value is less than the cited level of significance, the null hypothesis of non-significance is rejected. Hence, the difference in polynomials between pre-test and post-test performance results of the control group is significant.

The result reveals a negative T-value indicating that the post-test was higher than the pre-test results. It also implies that the academic performance of the students who belonged to the control group as per the post-test was quite better than its competency level during the pre-test. It further indicates fair progress from “needs improvement” to “moderately satisfactory” category in linear equations.

However, it should be noted that the control group did not make use of the social networking sites, and yet, achieved learning performance a bit better than what pre-test result revealed. The result also implies that the group merely adopted traditional learning approaches to linear equations without using the social networking sites for electronic learning. It further implies that the academic performance not only of the control group but also of the experimental group could be augmented along linear equations, regardless of the utilization of the social media networks. Moreover, the result indicates that there were elements in the linear equation lessons which did not necessarily require the use of social media networking sites to enable the students to perform better in class.

The above findings are in harmony with the study conducted by Tandingan (2008) of the University of Cordilleras, Baguio City. In his study, the researcher concluded that traditional teaching supplemented with e-learning enhances the development of students' attitudes toward computers depending on the course being pursued.

Nevertheless, the given result is indicated without prejudice to the manifestation of fair improvement of performance among the students who belonged to the control group. Despite their use of traditional learning methods, the said students were still able to articulate their knowledge acquired and skills cultivated along linear equations without the necessary exposure to social networking sites. Lastly, the findings indicate room for improvement of academic performance using the Internet along with the indispensability of a variety of pedagogical approaches responsive to the needs of the learners. Likewise, the betterment of academic performance of the control group as manifested in the post-test result could be attributed to the teaching-learning approaches adopted in class meant to ensure genuine transfer of learning.

Perceived Effects of Social Networking Sites on Learning

Tables 7A to 7E depict the perceived effects of the social networking sites in the performance of the students in Mathematics 2 along the five (5) areas of technology, namely, learning pedagogy, motivation, interaction, interaction with students, students' interaction with mentors, and technology. The tables further illustrate the findings along with the said effects in five (5) groups. Table 7F, meanwhile, shows the summary table of the perceived effects of the social networking sites in the performance of the students in Mathematics 2 along the given areas.

The indicators in every group were computed into the mean towards the over-all mean (0WM). They were also ranked according to the findings in the light of the following scales: strongly agree-extremely beneficial; agree- beneficial; disagree-not beneficial; and strongly disagree – extremely not beneficial. In which case, the perceived effects were operationally defined in the context of the positive effects exposure to social networking sites could bring about. It means that the use of the Internet as a form of technology was perceived to yield better learning performance of the students in mathematics especially along the areas of polynomials and linear equations.

As shown in Table 7A on the perceived effects of the social networking sites on the performance of the students in Mathematics 2 along learning/pedagogy, data reveal, in general, said effects were extremely beneficial as indicated by a 3.35 over-all mean (OWM). This implies that the use of Facebook as a form of technology provided the students with appropriate opportunity not only to demonstrate their learning ability but also to share their learning experience in mathematics, particularly along the lessons in both polynomials and linear equations. This gives them the formative atmosphere to utilize social networking sites in a more productive manner by which they are able to augment their knowledge in mathematics through the types of mass media which they are happy about.

Specifically, among the cited indicators, "I understand more about math because of using the e-math2 learning Facebook group page" earned 3.58 weighted mean (WM), which was interpreted as extremely beneficial and on rank 1. This indicates that the study's Facebook page provided them the widest latitude to engage in interactive learning with their classmates, thereby giving them a more pleasing learning atmosphere. It also implies that the discussion of mathematics over the social networking sites has been more easily grasped than its usual proceedings in conventional classrooms.

"Benefits of using the Facebook page are worth the extra effort & time" ranked last for having gained 3.26 WM and yet, was interpreted as extremely beneficial. This implies that, just the same, the students had been using the Facebook for a noble purpose so that it became worth the time and effort spent. It also implies that the Facebook could truly be utilized by the mathematics teacher as an instrument by which he/she could effect a technological type of learning, and update the students with the current information about the subject which are not yet taken in class. Hence, social networking sites could be employed for learning and educational purposes.

Table 7A. Perceived Effects of Social Networking Sites on Learning Pedagogy

Indicators	Mean	Interpretation	Rank
Increased understanding thru e-Math2 learning in *Facebook* group page	3.58	Extremely Beneficial	1
Interactive math learning of extension activities	3.42	Extremely Beneficial	2
Enhanced interest thru *Facebook* application	3.37	Extremely Beneficial	3.5
Understanding math skills by multimedia sharing	3.37	Extremely Beneficial	3.5
Difficulty in solving math equations overcomed	3.32	Extremely Beneficial	5
Enhanced critical thinking through the websites, videos and poll math questions.	3.27	Extremely Beneficial	6
Project objectives achieved through video tutorials and online math games.	3.26	Extremely Beneficial	7
Total	**3.35**	**Extremely Beneficial**	

Table 7B presents the perceived effects of the social networking sites on motivation. Data reveal, in general, that said effects were "beneficial" as indicated by a 3.10 over-all mean (OWM). This implies that the students typically enjoyed having access to the Internet in terms of motivation to learn mathematics. It further implies that the learners were quite motivated to interact with their classmates and their teacher on polynomials and linear equations. Such motivation must have emanated from the students' inherent propensity for the delight and pleasure the Internet provides.

Table 7B. Effects of Social Networking Sites On Motivation

Indicators	Mean	Interpretation	Rank
Provides opportunity for brainstorming	3.21	Beneficial	1
Encourages incorporation into other subjects	3.16	Beneficial	2
Can be used in my other school classes	3.11	Beneficial	3
Can be used to discuss other school topics	3.00	Beneficial	4.5
Offers opportunity for interactive participation in learning math	3.00	Beneficial	4.5
Total	**3.10**	**Beneficial**	

Among the given indicators, "It provides a better opportunity for brainstorming that leads to classroom participation" ranked first for getting 3.21 WM and was rated as beneficial. This indicates the influential role Facebook played in the life of the student-respondents. They were motivated to actively cooperate in class activities and their motivation could have stemmed from the fact that they were allowed to have access to the Internet, particularly Facebook.

On the other hand, "it offers me an opportunity for more interactive participation in learning mathematics" were at the last rank together for obtaining 3.0 WM and were categorized as beneficial. The findings signify that the students wished to have the Facebook page included in the daily classroom instruction not only in mathematics but also in the other subject areas. These also indicate the strong influence the social networking sites could bring out among the lives of the students. Thus, the findings indicate a necessity to establish close supervision of students along their electronic sojourn to ascertain that social networking sites would continue to serve as healthy motivating factor for them to achieve the goals of education.

Table 7C illustrates the perceived effects of social networking sites on teacher's interaction with students. Data reveal, in general, that said effects were "extremely beneficial" as indicated by a 3.28 over-all mean (OWM). The result indicates that the Internet has been so far the strongest medium of distant communication among the students, along with many individuals. It also indicates how powerful peer relationship and interaction could be among the learners using social networking sites.

Among the given indicators, "I like seeing other students responding to class notes, events, student's accomplishment posted by the teacher on e-math2 group page", "Using Facebook helped me interact more with other students because of its easy sharing of information and communication", and "My relationship with other students grew stronger because of its ambient awareness" ranked first together. The results indicated that the students really enjoyed chatting with and assisting their classmates and friends in dealing with the extension activity exercises posted by the teacher.

Table 7C. Effects of Social Networking Sites On Interaction With Students

Indicators	Mean	Interpretation	Rank
Likes student's response on what teacher posted in the *Facebook* page.	3.37	Extremely Beneficial	2
Helps interact more with students	3.37	Extremely Beneficial	2
Relationship w/ students grow stronger using the Facebook page	3.37	Extremely Beneficial	2
Increase learning through exchanging messages to other students thru facebook	3.32	Extremely Beneficial	4
Promotes collaborative learning with other students	3.21	Beneficial	5
Increase learning from the information posted by other students on the Facebook page.	3.05	Beneficial	6
Total	3.28	**Extremely Beneficial**	

Table 7D presents the perceived effects of the social networking sites on interaction with mentor. Data revealed, in general, that said effects were “extremely beneficial” as indicated by a 3.30 over-all mean (OWM). The result indicates that the social networking sites were already employed by the instructors and professors as among their modern tools to conduct teaching-learning process. It also indicates advantageous facilitation of prior information dissemination of vital topics to be tackled, lessons to be discussed, and activities to be undertaken to enable the students to prepare so well for the class discussion.

Among the given indicators, “I learned more about the subject because of information and activity exercises posted by my mentor on the e-math2 group page.” ranked first for having obtained 3.37 WM and was classified as extremely beneficial. The results indicate that Facebook was proven to be very helpful for the instructor to follow up the lessons discussed in class to ensure assimilation and accommodation of the same over the electronic means of communication. It further indicates proximate possibility for the instructor and students to sustain their professional relationship meant to help the latter in the shaping of their knowledge, molding of their character, and carving of their skills towards holistic human growth and development.

Meanwhile, “My relationship with my mentors grew stronger because it allows shy students to communicate with her” was at the last rank for getting 3.21 WM and was rated as beneficial. This indicates the existence of a cropping relationship between the instructor and the students. It also indicates a very appropriate opportunity for the instructor to make use of all her teaching skills repertoire to engage her students not only in collaborative learning but also in free and responsible experience of dealing with the body of knowledge posted at the Facebook wall. Nevertheless, being at the last rank, the cited indicator paves the way to the exertion of extra effort on the part of the instructor to spend significant time in interacting with the students along educational and academic subject matter.

Table 7D. Effects of Social Networking Sites On Interaction With Mentor

Indicators	Mean	Interpretation	Rank
Adds learning thru activity exercises posted by my mentor	3.37	Extremely Beneficial	1
Learns more about the mentor through the *Facebook* page	3.32	Extremely Beneficial	2
Helps interaction w/ mentor & promotes a better working relationship	3.31	Extremely Beneficial	3
Supports collaborative learning with mentor	3.26	Extremely Beneficial	4
Allows shy students to communicate with mentor	3.21	Beneficial	5
Total	3.30	**Extremely Beneficial**	

The above results are corroborative of the Facebook suggestions for mathematics teachers. Facebook is a great way for mathematics teachers to share formulas and their solutions. They can make their files, upload all the important files they want to share with students such as their class syllabus, supplemental reading materials, and assignments when they use the application. They can make a quiz easily to test their students' knowledge and see how they score.

Table 7E shows the perceived effects of the social networking sites on technology. Data reveal, in general, that said effects were “extremely beneficial” as indicated by the 3.37 over-all mean (OWM).

The result indicates that, among the social networking sites, the Facebook page was the most frequently visited social network by the respondents. It also indicates that the respondents felt at home with Facebook as it could easily be accessed over the Internet. It further implies that Facebook was perceived as a type of social networking site that facilitated access to the information posted by the instructor.

Table 7E. Effects of Social Networking Sites On Technology

Indicators	Mean	Interpretation	Rank
Facebook applications and features relevant to lessons	3.42	Extremely Beneficial	1
Facebook group account accessible & effective for math learning.	3.37	Extremely Beneficial	3
Design and structure help enhance math learning	3.37	Extremely Beneficial	3
Easy to use book posting, browsing information & comments	3.37	Extremely Beneficial	3
Easy to handle and use as a learning tool.	3.32	Extremely Beneficial	5
Total	3.37	**Extremely Beneficial**	

Among the given indicators, “The Facebook applications and features were overall easy to understand” ranked first for getting 3.42 WM and was extremely beneficial. These imply that the students had perceived Facebook as a social networking site where they could enjoy the lessons discussed on line by the teacher. These also indicate that Facebook has become a daily partner of the students in getting to know the updates and current programs being held at the school.

"Facebook application was easy to handle and use as a learning tool" was at the last rank for obtaining 3.32 WM and was rated as extremely beneficial, though. This implies that the students had been more at peace with the Facebook than the other social networking sites available. It also indicates that a lot of teen agers and contemporaries have been using the Facebook making the students enjoy experiencing the interface and features. It also implies that the respondents learned more over the Facebook than over other social networking sites.

The aforesaid results are in agreement with the study of Dzvapatsva et al. (2011) whose findings revealed that Facebook has been useful for learners to communicate with other learners about college related work knowing very well that the lecturer moderates all comments or statements passed on the group wall.

Table 7F illustrates the summary of the perceived effects of social networking sites on learning pedagogy, motivation, interaction, interaction with students, students' interaction with mentors, and technology.

Table 7F. Summary Table of the Effects of Social Networking Sites

Indicators	Mean	Interpretation	Rank
Technology	3.37	Extremely Beneficial	1
Learning/Pedagogy	3.35	Extremely Beneficial	2
Interaction with Mentors	3.30	Extremely Beneficial	3
Interaction with Students	3.28	Extremely Beneficial	4
Motivation	3.10	Extremely Beneficial	5
Total	**3.28**	**Extremely Beneficial**	

Data shows that, in general, the perceived effects of the social networking sites on the given areas got 3.28WM and were categorized as extremely beneficial. This implies that the social networking sites offered great assistance to the students in obtaining knowledge and skills particularly along polynomials and linear equations. Specifically, Facebook was of greatest help, among the said sites, for the students to engage in the analysis of mathematical problems involving the cited subject matter. This further implies that the learners enjoyed their learning experience over the Internet and gained new orientation and outlook that exposure to social networking sites could be transformed into a scholastic undertaking worthy of admiration.

Among the given areas, technology ranked first for having earned 3.37 WM and was interpreted as extremely beneficial while motivation ranked fifth with 3.10 WM and was classified as extremely beneficial. These indicate that technology has been highly influential in the academic performance of the students. It has been perceived as a modern instrument of distant communication which could be utilized by an educator in designing his/her pedagogical contents, approaches, and applications in an effort to suit the same to the needs and interests of the learners. Indeed, social networking sites could provide an educational atmosphere where the learners could be highly motivated to participate in class discussions so as to be productive.

Nevertheless, the findings of this research also indicate possibility of misuse or abuse of social networking sites at the expense of the students' academic and general welfare. Hence, the said results further indicate a room for the teacher's close supervision tied with the inner sense of freedom and responsibility so that the learners may grow in personal and intellectual maturity and development.

CONCLUSION

On the basis of the findings, the following conclusions were drawn:

1. During the pre-test, the performance level of the experimental and control groups along polynomials and linear equations were categorized as "needs improvement" (NI) competency level.
2. The shown performance level of the experimental group in the post-test was categorized as "satisfactory" competency level, while for control group in the post-test was categorized as "moderately satisfactory" (MS) competency level.
3. The difference in polynomials between pre-test and post-test performance results of the experimental group is very highly significant.
4. The difference in polynomials between pre-test and post-test performance results of the control group is very highly significant.
5. The difference in linear equations between pre-test and post-test performance results of the experimental group is not significant.
6. The difference in polynomials between pre-test and post-test performance results of the control group is significant.
7. The perceived effect of the social networking sites on the performance of the students in Mathematics 2 along learning/pedagogy was

"extremely beneficial"; along motivation, "extremely beneficial"; along interaction with students, "extremely beneficial"; along interaction with mentors, "extremely beneficial"; and, along technology, "extremely beneficial".

RECOMMENDATION

From the foregoing findings, the following are recommended:

1. Mathematics teaching methodology must be reviewed and re-aligned to the needs of the children and signs of the times;
2. Both traditional and modern pedagogical approaches should be seriously considered and that the mathematics teacher should apply what specific approach is needed for a particular subject-matter discussion.
3. Blended teaching and learning methodologies and strategies should be raised and applied in mathematics class whenever necessary;
4. Social networking sites should be regularly utilized by the teacher in engaging students in undertaking extension activity exercises.
5. Teachers should be familiar with the social networking sites so as to employ the same for the purpose of effecting genuine learning experience among the students.
6. Students should be supervised as to the proper timing and use of social networking sites towards cooperative and collaborative learning experiences among them;
7. Teachers should employ the convenience and appropriateness of social networking sites to encourage students to engage in authentic learning and transformative education in mathematics.

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FACTORS AFFECTING PUPILS INTEREST IN VIDEO-GAMING AND ITS EFFECTS TO THEIR ACADEMIC BEHAVIOR

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ABSTRACT

The increase in the use of the internet has led to many changes in our daily living, in particular, the rise of video-gaming. Days are gone when children loved to indulge in outdoor activities, but instead, children spend most of their time playing video games. This game has become a popular leisure activity in many parts of the world. Numerous studies have systematically reported harmful effects that can affect human health because of their potentially addictive features (Green, et al, 2015). This study was conducted to identify the factors affecting pupils' interest in video- gaming and its effect on the student's academic behavior. The study employed descriptive-survey method as the research design. The integral variables of the study were measured using adopted questionnaires from Hassan (2011) on online- gaming for factors affecting video-game addiction and perception of the respondents on video- gaming. Moreover, there were four hundred (400) pupils and parents from elementary schools of Mabini, Bohol, Philippines served as the research subject of this study. The gathered data were then analyzed using statistical treatments. The researchers' found out those pupils' interest in playing video- games are affected by different factors. Social factor affects most of them and it can help improve their social skills. However, it may possibly develop a negative result on pupils' behavior. The factors affecting the pupils' interest in video- gaming has a very weak negative relationship which influences their academic behavior. The researchers' came up with the recommendations that there should be an orientation to teachers, parents, and pupils regarding the use of gadgets in the classrooms in order to come up with appropriate policies to reduce video- gaming; the teachers and parents should monitor their pupils in using computer and gadgets within the school premises; and an established school policy should be created.

Keywords: Academic Behavior, Addiction, Effects, Pupils, Video-Gaming

INTRODUCTION

Advancement in technology highly affects all walks of life. This technology applies to school. The computer becomes the necessity in the lives of every individual in the offices, establishments and even in schools. Thus, people especially the pupils are well-educated in computer use.

Pupils are using the computer for educational and entertainment purposes. They find it interesting and enjoyable since it has different options such as for communication, information and gaming. This may have an advantage if it is used properly. However, they may cause negative effects on the behavior of the users.

Numerous studies have systematically reported harmful effects games can have on human health because of their potentially addictive features (Green, Kattner, Eichenbaum, Bediou, Adams, Mayer, & Bavelier, 2015).

According to the study Chang (2009), video-gaming was referred to as Internet Gaming or Electronic Gaming. It was a gathering of the player with a common game using a local area network (LAN) where they could be on the same settings. Online gaming may have a good and bad effect. Good for those who know their limits and bad for those who fix themselves in the seats for long hours and cut off the interaction with the rest of the world (Hassan, 2011).

French and Dwyer (2002) claimed that video-game players "don't have social normal social relationships anymore", and play online games in order to cover feelings of anger, depression and low self-esteem. On the other hand, the arguments of the effects on academic performance and cognitive consequences of playing video games in both the educational environment and the public have been a major discussion. Considering that it is still arguably, recent studies of many educators have deliberated digital games as an educational tool to foster students' learning interests and motivation (Choi et al. 2013; Corpus 2009; Van Eck 2006) and can distribute to the levels of knowledge more effectively. Likewise, motivation is a crucial factor for learning success and simultaneous with academic achievement (Corpus 2009).

The Social Learning theory (Bandura, 1977 as cited by Dizon Fulgencio, Gregorio, Obias, & Vendivel, 2003), an individual may learn through mediating processes occur between stimuli and responses, and from the environment through the process of observational learning. Individuals that are observed are called models. In the community, children are surrounded by many influential models, such as parents within the family, characters on children's TV, friends within their peer group and teachers at school. These models provide examples of behavior to observe and imitate, masculine and feminine, pro and anti-social, etc.

As observed, there are many pupils escaped from the class and did not attend classes just to play video games and other pupils arrived late in their homes because they instead went to the internet café. This is now the problem and concern arise from both parents and teachers regarding computer and video game addiction of the pupils.

STATEMENT OF THE PROBLEM

The main thrust of the study aimed to determine the factors affecting pupils' interest in video gaming and its effect to their academic behavior. Specifically, this study aimed to answer the following:

1. What is the profile of the respondents (parents/pupils) in terms of sex, number of hours spent for playing, types of games played, and source of income?
2. What are the factors that influence pupils to involve in video gaming?
3. What is the perceived effect of video gaming?
4. What is the academic behavior of the pupil-respondents?
5. Is there a significant relationship between the pupil-respondents profile and the:
   5.1 factors influencing pupils' interest in video gaming;
   5.2 perceived effects of video gaming;
   5.3 types of video games played; and
   5.4 Frequency of playing video games?
6. Is there a significant relationship between the pupil-respondents' academic behavior and the factors influence pupils' interest in video gaming?

RESEARCH METHODOLOGY

The researchers used the modified descriptive survey questionnaire. The said questionnaire was adopted from Hassan (2011) in his study on online gaming. The third set of questionnaire exemplifies the perception of the respondents on video game addiction. This is consists of twenty (20) items to determine the different factors such as social, family, peer and personal factor. The checklist of academic behavior was also utilized for this study.

The researchers employed a purposive sampling in choosing the respondents in order to focus on particular characteristics of a population that are of interest and will best enable you to answer the research questions. There were two hundred (200) identified pupil respondents who played video game participated in the study. These respondents were initially surveyed by the researchers from twenty-two (22) elementary schools in the district of Mabini, Bohol, Philippines.

The gathered data were then tallied, tabulated and collated and were subjected to descriptive and inferential statistics for the purposes of analysis and interpretation in accord to the specific problems of the study. Thus, adding empirical data.

FINDINGS

The profile of the pupil respondents was determined by the following variables namely: sex and the types of games played with the number of hours spent. There were one hundred thirty (130) or 65% females, while only seventy (70) or 35% were male respondents. This entails that the majority of the pupil respondents were female that makes up the population in the district of Mabini, Bohol, Philippines.

In terms of the number of hours spent on playing, there were one hundred nine(109) or 54.5% of pupils spent 1-2 hours playing and thirty -eight (38) of them played 3- 4 hours, while 7-8 hours got the lowest number of pupils who played with two (2) or 1%. It further exposes that most of the pupil respondents spent their time in video gaming within 1-2 hours.

The pupils consumed time to use and play computer games it might lessen their time for reviewing their lessons, performing assignments and helping household chores. Some pupils played video games depending on their time availability. They don't have the same time of playing. Pupils have a limit on their playing time using video games.

In terms of types of video game played, both Helix Jump and Word Scape got forty-nine (49) or 24.5 % the same number of pupils played followed by Mine Craft/ Builder with forty-two (42) or 21%. The lowest rank was piano tiles, with only two (2) or 1%. This means that most of the pupil respondents enjoyed playing in helix jump and word scape.

Furthermore, the same number of pupils played Candy Crush and Plants vs. Zombies with the frequency of fifteen (15) or 7.5%. Some pupils played Temple Run. This shows that the pupils played two or more different types of video games in an instant.

The pupils secure money in order to play video games. The result shows that their mother was the primary source with a frequency of ninety-one (91) or 45.5%, trailed by their father with a frequency of eighty- five (85) or 42.5%. The lowest was their sister with eight (8) frequency or 4% of the total population.

This further illustrates that parents gave money to their children regardless of the usage. This may lead to a poor parent-child relationship.

Table 1. Factors Influencing Pupils' Interest in Video Gaming
N=200

ITEMS	WEIGHTED MEAN	DESCRIPTION	RANK
2.1 SOCIAL FACTOR			
1.Playing video games stay in touch with distant friend.	1.98	Sometimes	5
2.Playing video games feel more extrovert or more likely to interact with others.	2.14	Sometimes	4
3.Video gaming formed any friendships or relationship.	2.15	Sometimes	2.5
4.There is a feeling of appreciation with my friends.	2.36	Sometimes	1
5.I have gain more friends in playing video games.	2.15	Sometimes	2.5
Composite Mean	**2.16**	**Sometimes**	
2.2 FAMILY FACTOR			
1.Parent-approved video games that are played in moderation.	2.16	Sometimes	2
2.Playing video games with other family members at home.	2.02	Sometimes	3
3.Playing video games promote helpfulness among members of family.	1.73	Sometimes	5
4.I feel that gaming has affected my family in a way that is more positive, negative, or neither	2.29	Sometimes	1
5.My family in general is at risk of being addicted to video games.	1.91	Sometimes	4
Composite Mean	**2.02**	**Sometimes**	
2.3 PEER FACTOR			
1.Playing video games feel a part of a larger community.	2.01	Sometimes	4
2.Enjoy playing with partner online.	2.02	Sometimes	3
3.Able to interact with my partner when playing video games.	1.96	Sometimes	5
4. I have friends that I regards to be addicted to video gaming.	2.08	Sometimes	1
5.I have a lot of friends playing a particular online gaming.	2.06	Sometimes	2
Composite Mean	**2.03**	**Sometimes**	
2.4 PERSONAL FACTOR			
1.I feel sense of control when gaming.	2.45	Sometimes	1
2.Online games can help me to distress	2.04	Sometimes	2
3.I feel frustrated if I am unable to play the online games	1.89	Sometimes	4.5
4.Playing the video games causes me to have real life (academic, health, financial, relationship) problems.	1.89	Sometimes	4.5
5.I have a sense of higher self-esteem when playing video games.	1.95	Sometimes	3
Composite Mean	**2.04**	**Sometimes**	
Average Weighted Mean	**2.06**	**Sometimes**	

Data reveals that the pupils played video games helps develop their self-socially, as they feel satisfied, appreciated and recognized as an individual in society nowadays. This optimal experience can be attained if the player has an effective personal interaction with the system or pleasant social interactions with other people connected to the Internet.

In term of Family Factor, pupils need to ask permission from their parents and at the same time, they should take supervision on the kinds of games their children play as they will become addicted to it.

Meanwhile, in terms of Peer Factor, it reveals that pupils played video games with their peers. They enjoyed playing if they are with others that seem to be more enjoyable to them. They come up with their mind that some of their peers become addicted and so with them if they keep on playing.

Furthermore, in the Personal Factor category, pupils played video games develop their self-control, and it's their way to unwind their selves. Pupils played video games some develops their self-esteem. This shows that the pupils played with their own desires and awareness of its result.

The overall weighted mean for this category is 2.06 with the descriptive value of sometimes. Pupils played video games are affected by different factors. This means that all the factors affect the pupil's interest in video gaming nowadays; social factors, family factor, peer factor and personal factor.

Table 2. Positive Effects of Video Gaming as Perceived by the Respondents N=200

Items	Composite Mean	Description	Rank
Positive Effects			
1. Able to enjoy its personal reward.	1.39	Strongly Disagree	17
2. Challenge and sharpen the mind.	3.05	Agree	1
3. Enhanced critical-thinking capabilities.	2.83	Agree	10.5
4. Enjoy life and satisfaction.	2.83	Agree	10.5
5. Enriched social and cognitive skills	2.87	Agree	7.5
6. Help a person interact with friends	2.85	Agree	9
7. Gain more friends	2.82	Agree	12.5
8. Help learn how to cooperate in a group.	2.94	Agree	5
9. Improve a sense of self-control.	2.78	Agree	15
10. Develop good social skills.	2.87	Agree	7.5
11. Upgrade mental ability.	2.94	Agree	5
12. Improve problem-solving skills.	2.95	Agree	3
13. Upgrade the technological abilities.	3.02	Agree	2
14. Lead to have higher self- esteem.	2.66	Agree	16
15. Make a person more immersive and challenging.	2.82	Agree	12.5
16. Raise self- confidence.	2.80	Agree	14
17. Sharpened hand and eye coordination.	2.94	Agree	5
Composite Mean	**2.79**	**Agree**	

Legend:

Range	Descriptive Value
3.25- 4.00	Strongly Agree
2.50- 3.24	Agree
1.75- 2.49	Disagree
1.0- 1.74	Strongly Disagree

This view on whether it has positive or negative effects. On a positive effect, it indicates that playing video games helps the pupils to sharpen their mind and thinking ability in a generation where technology is a demand. Pupils played video games, able to upgrade their technical abilities and skills in using gadgets and online technology in general.

The overall composite mean for this category is 2.79 and described as Agree. The parents were convinced that playing computer games will lead to a desirable effect on their children. These effects were directed to the cognitive part of the children as it may improve their ability to solve problems, technology advancement, sharpened the mind and body. It shows that playing video games helps a lot to the pupils. They are able to live in this present world where high technology is a major concern in own society.

Table 3. Negative Effects of Video Gaming as Perceived by the Respondents N=200

Items	Composite Mean	Description	Rank
Negative Effects			
1. Cause dullness	2.67	Agree	12
2. Damage the vision/ sight.	2.47	Disagree	13
3. Be addicted and unproductive.	3.06	Agree	3
4. Cause bad to human's health.	2.97	Agree	4
5. Make most of the time wasted and inefficient.	3.12	Agree	1
6. Neglect on their education which is very important.	3.08	Agree	2
7. Cut down on the family time and communication.	2.89	Agree	9.5
8. Lead to poor relationships with peers and with parents.	2.96	Agree	5
9. Cause many life problems.	2.70	Agree	11
10. Frown upon by parents as time-waster.	2.95	Agree	6.5
11. Increase behavioral disorder.	2.89	Agree	9.5
12. Increase mood problem and ward off anxiety.	2.95	Agree	6.5
13. Make a person lazy.	2.94	Agree	8
Composite Mean	**2.90**	**Agree**	
Average Weighted Mean	**2.85**	**Agree**	

Legend:

Range	Descriptive Value
3.25- 4.00	Strongly Agree
2.50- 3.24	Agree
1.75- 2.49	Disagree
1.0- 1.74	Strongly Disagree

On the negative effect reveals that playing video games has negative effects on pupils' behavior, attitudes and their way of living as they imitate and get affected to the games they are used to play. It changes their mood, communication skills since they are only busy playing and some become lazy in household chores.

These possibilities were misused of precious time and unproductive pupils that may cause a serious unhealthy mental and physical aspect of an individual, and a poor relationship towards his peers, teachers and parents.

Table 4. Pupil-Respondents' Academic Behavior N=200

4.1. Homework Completion	**WM**	**DI**	**Rank**
The students…..			
1. writes down homework assignments accurately and completely	2.46	F	2
2. when completing homework, uses highlighters, margin notes, or Other strategies to note questions or areas of confusion for later review with teacher or tutor	2.56	G	1

4.1. Homework Completion	WM	DI	Rank
The students…..			
3. turns in homework on time	2.40	F	3
Average Weighted Mean (AWM)	**2.47**	**Fair**	
4.2. Study Skills			
1. takes complete , organized class notes in legible form and maintains them in one accessible notebook	2.45	F	1
2. when reviewing notes, uses highlighters, margin notes, or other strategies to note questions or areas of confusion for later review with teacher or tutor	2.35	F	3
3. follows an efficient strategy to study for tests and quizzes	2.44	F	2
4. allocates enough time to study for tests and quizzes	2.29	F	4
Average Weighted Mean (AWM)	**2.38**	**Fair**	
4.3. Organizational Skills			
1. arrives to class on time	2.28	F	4
2. maintains organization of locker to allow student to efficiently store and retrieve needed books, assignments, work materials, and personal belongings	2.37	F	3
3. brings to class the necessary work materials expected for the course (e g. pen ,paper, calculator, etc.)	2.59	G	1
4. is efficient in switching work materials when transitioning from one in- class learning activity to another	2.54	G	2
Average Weighted Mean (AWM)	**2.44**	**Fair**	
4.4. Cooperative Learning Skills			
1. participates in class discussion	2.57	G	1.5
2. gets along with others during group/ pair activities	2.56	G	3
3. does his or her " fair share" of work during group/ pair activities	2.41	F	2
4. takes a leadership position during group/ pair activities	2.36	F	1
5. takes ownership for his/ her choices	2.57	G	1.5
Average Weighted Mean (AWM)	**2.49**	**Fair**	
4.5. Independent Seat Work			
1. has necessary work materials for the assignment	2.56	G	2.5
2. is on- task during the assignment at a level typical for pupils in the class	2.39	F	7
3. refrains from distracting behaviors (e g. talking with peers without permission, pen tapping, vocalizations such as loud sighs or mumbling, etc.)	2.36	F	8
4. recognizes when he or she needs teacher assistance and is willing to that assistance	2.49	F	4
5. requests teacher assistance in an appropriate manner	2.56	G	2.5
6. requests assistance from the teacher only when really needed	2.29	F	9
7. if finished with the independent assignment before time expires, uses remaining time to check work or engage in other academic activity allowed by teacher	2.48	F	5
8. takes care in completing work---as evidenced by the quality of the finished assignment	2.68	G	1
9. is reliable in turning in in-class assignments	2.45	F	6
Average Weighted Mean (AWM)	**2.47**	**Fair**	
4.6. Motivation			
1. has a positive sense of " self –efficacy" about the academic content area (self- efficacy can be defined as the confidence that one can be successful in the academic discipline or subject matter if one puts forth reasonable effort)	2.43	F	2
2. displays some apparent *intrinsic* motivation to engage in course work(e g. is motivated by topics and subject matter discussed or covered in the course, finds the act of working on course assignments to be reinforcing in its own right)	2.39	F	3
3. displays apparent *extrinsic* motivation to engage in course work (e g. is motivated by grades, praise, public recognition of achievement, access to privileges such as sports eligibility, or other rewarding outcomes)	2.54	G	1
Average Weighted Mean (AWM)	**2.45**	**Fair**	
4.7. Compliance			
1. is compliant	2.28	F	4
2. follows/ understands directions the first time they are given	2.33	F	3
3. responds to teacher requests and does not ignore teacher	2.40	F	2
4. responds well to natural consequences	2.50	G	1
Average Weighted Mean (AWM)	**2.38**	**Fair**	
Overall AWM	**2.44**	**Fair**	

Legend:

Rating Scale	Descriptive Interpretation (DI)
1.00 – 1.74	Poor (P)
2.50 – 3.24	Good (G)
1.75 – 2.49	Fair (F)
3.25 – 4.00	Excellent €

Table 4 demonstrates the pupil respondents' academic behavior as to homework completion, study skills, organization, cooperative learning skills, independent seatwork, motivation and compliance.

It shows that cooperative learning skills got the highest weighted mean of 2.49 or Fair while the lowest weighted mean was study skills and compliance with 2.38 or described as Fair. Computer gaming can help improve the collaborative skills of children since they have the same interest.

It reveals that the overall average weighted mean for this is 2.44 with a descriptive interpretation of Fair. This means that pupils who actively play video games possibly affected their studying because of the time they consumed in playing. This may lead to computer addiction (Wood, Gupta, Derevensky and Griffiths, 2004).

In table 5.1 below shows the relationship between the profile of the respondents and factors affecting their interest in video gaming. Hence, it involves sex, source of income, number of hours playing and the type of games played.

The result reveals that there is no significant relation on the respondent's sex, source of income and type of video games played to the factors affecting the interest of video gaming since the computed value was lesser than the critical value and it leads to the acceptance of the null hypothesis.

The respondent's number of hours played is significant to the factors affecting the pupil's interest in video gaming leading to the rejection of the null hypothesis. This rejection is caused by the greater computed value of 10.128 than the critical value of 9.49. Therefore, there is a significant relationship between the two variables.

The respondents played video games differ in the number of hours and in this way it affects their interest in video gaming.

Table 5.1 Relationship Between Profile of the Pupil Respondents and the Factors that Influenced Pupils to Involve in Video Gaming

Variables		Df	Computed value	Critical value	Decision	Interpretation
Sex	Factors Affecting Pupil's Interest in Video Gaming	2	.0596	5.99	Accept Ho	Insignificant
Source of Income		6	3.58	12.59	Accept Ho	Insignificant
No. of hours playing games		4	10.128	9.49	Reject Ho	Significant
Types of video games played		12	20.19	21.03	Accept Ho	Insignificant

Based on the results in table 5.2, the profile of the respondents is insignificant to the perceived effects of video gaming since the computed value of sex, source of income, number of hours playing games and the types of video games played were lesser than the critical value. It indicates the acceptance of the null hypothesis since there is no significant relationship between the variables.

In terms of sex the computed value is 0.219 is lesser than the critical value of 5.99 and it leads to the acceptance of the null hypothesis. This means that there is no significant relationship between profile of the respondents and perceived effects of video gaming in terms of sex.

Meanwhile, in the source of income the computed value is 5.94 is lesser than 12.59 of its critical value which leads to the acceptance of the null hypothesis. It further reveals that there is no significant relationship between profile of the respondents and perceived effects of video gaming in terms of the source of income.

On the other hand, in terms of the number of hours in playing games, the computed value is 4.17 which lesser than the critical value of 9.49 that leads to the acceptance of the null hypothesis. This means that there is no significant relationship between profile of the respondents and the perceived effects of video gaming as to number of hours playing.

Table 5.2 Relationship Between Profile of the Pupil Respondents and Perceived Effects of Video Gaming

Variables		Df	Computed value	Critical value	Decision	Interpretation
Sex	Perceived Effects of Video Gaming	2	0.219	5.99	Accept Ho	Insignificant
Source of Income		6	5.94	12.59	Accept Ho	Insignificant
No. of hours playing games	Perceived Effects of Video Gaming	4	4.17	9.49	Accept Ho	Insignificant
Types of video games played		12	8.06	21.03	Accept Ho	Insignificant

Furthermore, in the types of games played by the respondents, the computed value of 8.06 is lesser than its critical value of 21.03 which leads to the acceptance of the null hypothesis. It indicates that there is no significant relationship between the profile of respondents and the perceived effects of video gaming.

Sherry, J. L., Lucas, K., Greenberg, B. S., and Lachlan, K. (2006) believed that people play video games for stress relief, challenge and competition, relaxation, enjoyment, social interaction, and even mentally escaping from the real world.

In terms of the respondents' source of income and the types of video games played, the results show that the computed value of 22.01 is lesser than the critical value of 28.87 leading to the acceptance of the null hypothesis. Therefore, there is no significant relationship between the variables computed.

It further reveals that the profile of pupil respondents, particularly in terms of sex and the source of income did not affect the respondents as to the types of video games played. In this study, more female respondents played video games. Ferguson (2007) states that video games preferred by a wide range of people ranging from children and adolescents to adults.

Table 5.3 Relationship Between Selected Profile of the Pupil Respondents and Types of Video Games Played

Variables		Df	Computed value	Critical value	Decision	Interpretation
Sex	Types of Video Games Played	6	3.58	12.59	Accept Ho	Insignificant
Source of Income		18	22.01	28.87	Accept Ho	Insignificant

Table 5.4 shows the relationship between the profile of the respondents and the frequency of playing video games. The computed value of 18.05 is greater than the tabular value of 9.49 at 0.05 level of significance with 4 df. This leads to the rejection of the null hypothesis which means that there is a significant relationship exists between the profile of the respondents and the frequency of playing games as to the source of income.

Table 5.4 Relationship Between Selected Profile of the Pupil Respondents and Frequency of Playing Video Games

Variables		Df	Computed value	Critical value	Decision	Interpretation
Sex	Frequency of Playing Video Games	2	1.70	5.99	Accept Ho	Insignificant
Source of Income		4	18.05	9.49	Reject Ho	Significant

The result revealed that there is no significant relationship exist between the profile of the respondents and frequency of playing video games as to sex as stated in the computation with the computed value of 1.70 is lesser than the critical value of 5.99. This leads to the acceptance of the null hypothesis. The respondent's source of income is significant to the frequency of playing video games leading to the rejection of the null hypothesis. This rejection is caused by the greater computed value of 18.05 than the critical value of 9.49. Therefore, there is a significant relationship between the pupil respondents and frequency of playing video games as to the source of income.

This implies that parents, in this case, have a big role in protecting their child against video-game addiction with constant monitoring and guidance especially in terms of giving cash.

Table 6 Relationship Between Pupils' Academic Behavior and the Factors Influencing Their Interest in Video Gaming

Factors Influencing Pupils' Interest in Video Gaming	r	Sig.	Interpretation	Decision
Social Factor	0.173	0.014	Significant	Reject Ho
Family Factor	0.154	0.030	Significant	Reject Ho
Peer Factor	0.260	<0.001	Significant	Reject Ho
Personal Factor	0.184	0.009	Significant	Reject Ho

Correlation is significant at the 0.05 level (2-tailed)

Table 6 presents the relationship between pupils' academic behavior and the factors influencing their interest in video gaming. It could be gleaned from the table that social, family, peer and personal factors are significantly related to the pupils' academic behavior. This is evidenced by the computed correlation values of 0.173, 0.154, 0.260, and 0.184 with the p-values of 0.014, 0.030, <0.001, and 0.009, respectively which are lower than the present level of significance thus, the null hypothesis is rejected.

The result discloses that the more time spent by the pupils playing the video game the more its possible to be addicted to computer games. Thus, this addiction may lead to negative behavior that affects a child's personality.

CONCLUSIONS

In light of the findings of the study, the following conclusions were formulated:

Video gaming is happening among the pupils in public elementary schools, and this affects their academic behavior.

Pupils' interest in playing video games is influenced by social factors where video gaming helped them developed socially, upgrade the technological abilities and improve problem-solving skills. However, it make most of the time wasted and inefficient, and may the cause of absences, tardiness and low academic performance.

RECOMMENDATIONS

Based from the conclusions drawn, the researchers recommended that there should be a consultative conference among the school heads, teachers and parents regarding the use of gadgets in the classrooms in order to come up with appropriate policies to reduce video gaming; the teacher's regular monitoring to pupils in using computer and gadgets within the school premises can help reduce its habit; and since the parents play a big role in their child's welfare for constant monitoring and guidance.

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INDUSTRY FEEDBACKS ON SENIOR HIGH SCHOOL WORK IMMERSION PROGRAM OF TECHNICAL VOCATIONAL LIVELIHOOD ANIMAL PRODUCTION: A REFERENCE FOR SUCCEEDING INDUSTRY IMMERSION COLLABORATIONS

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ABSTRACT

This study sought to determine feedbacks from supervisors, managers, owners and farm technicians of different industry partners of the University of Science in Technology of Southern Philippines on the Senior High School Industry Work Immersion. likewise, it sought to determine which among the competencies need to be further honed to improve Senior High School technical knowledge and skills necessary as a reference for succeeding industry immersion collaborations of the University. The study made use of quantitative-qualitative descriptive research utilizing validated predefined close-ended questionnaires. They were given to employers of Senior High School Technical Vocational Livelihood Animal Production Strand students who went for a 10-day industry immersion which was covered with Memorandum of Agreement forged between the university and industry. Questionnaire used was a researcher-made validated test. Data gathered from industry owners, supervisors, managers or farm technician were tallied, computed and tabulated using statistical tools. Descriptive Statistics revealed that majority of the SHS students' competencies were rated outstanding: 90 percent in Work Knowledge, 94 percent in Personality and Personal Appearance, 77 percent in Professional Competence, and 81 percent in Work Attitude and Habits. Among the competencies, professional competence got 77 percent, the lowest rated competency. Result on Work Knowledge implied that students realized the value of the program in developing their competencies relevant for them to either pursue higher education or to join the world of work. Findings on Professional Competence is supported by Mulder (2016) who said that competence is of key importance for effective performance but has been grossly lacking in many places. The feedback is considered a vital component in the education and training of students. This serves as a venue for better mentoring, monitoring, to facilitate better-quality decision making in improving the curriculum; to better equip students while they are in the university, as well as important in maintaining effective linkages with the industry. To the instructors, better mentoring of learners, strict implementation of the prescribed curriculum, close monitoring and feed-backing of students' competencies especially on the development of work attitude, habits and professional competence were found crucial. To the Industries, it is recommended that they continue to support the educational system to provide hands-on experiences of needed competencies and skills that would better prepare students to either venture in their own business, either be employed or even pursue a college education.

Keywords: Competence, Curriculum, Industry feedback, Senior High School, Work Immersion

INTRODUCTION

According to the Department of Education's Order No. 30, s. 2017, students shall appreciate the importance and application of the principles and theories learned in school; enhance their technical knowledge and skills; enrich their skills in communications and human relations; and develop good work habits, attitudes, appreciation, and respect for work. Thus, work immersion in industries provide students with exposures to develop their competencies and skills that would prepare them to either venture in their own business, be employed or even pursue a college education.

Work Immersion has been a requirement before graduation in the Technical Vocational Livelihood Animal Production strand of the Senior High School offered by the University of Science and Technology of Southern Philippines during the K-12 Transition period. The strand incorporates into its curriculum, Work Immersion as a subject that provide learners with opportunities: to become familiar with the workplace; for employment simulation; and to apply their competencies in areas of specialization/applied topics in authentic work environment.

Students are exposed individually upon the guidance of their industry supervisor, farm manager or owner to the world of work. In which, the industry is anticipated to provide the experience the students need but in return these students are expected to maximize their potential at the different stages of training, raise their awareness of strengths and areas for improvement.

Moreover, the SHS curriculum is also in consonance with one of the missions of the University to bring the world of work (industry) into the real higher education and training of students. Thus, this eventually leads to the congruency between basic education and the nation's development targets as spelled out in the mission statement of the University.

The exchange of learning insights during the exposure does not only benefit the students but as well as the agency because they can utilize these students to their advantage. However, students do learn as they traverse towards performing the tasks on hand. The experience is a two-way process; such that, at the end, the students shall be evaluated with their performance while in the industry. The evaluation measures how the performance of the trainee was during the whole immersion of ten working days or eighty hours. Work knowledge, Personality, and Personal Appearance, Professional Competence, Work Attitude, and Habits are the criteria to be measured.

The feedback is considered a vital component in the education and training of students. It can lead to identifying actions to be taken in order to improve performance as a reference for succeeding industry immersion activities. It enables the University to capture trainees' best practices and lessons learned since this serves as a venue for better mentoring, monitoring, and facilitating better-quality decision making in improving the curriculum. Moreover, the result of the feedback will convey information about how these students performed while they were in the industry. As an offshoot, the University can also plan and improve its strategies, methodologies, and approaches to better hone and equip its students while they are in the University, in addition to maintaining effective linkages with the industry.

Workplace supervisor feedback on performance on the job is a critical aspect of learning process enabling students to recognize areas of strength and those needing improvement. Clear direction and quality feedback can help reduce student uncertainty about their performance in the workplace and encourage increased effort (Shute, 2008).

With this, it is the intention of this study to determine how the industry's feedback can help augment the students' weaknesses and reinforce their strengths since the proponents believe that students are the ambassadors of the University.

STATEMENT OF THE PROBLEM

This study tried to determine the industries' feedbacks on Senior High School work performance during the Immersion Program of Technical Vocational Livelihood Animal Production.

1. What are the industries' feedbacks on Senior High School work performance in terms of?
   1.1 Work knowledge,
   1.2 Personality and Personal Appearance,
   1.3 Professional Competence, and
   1.4 Work Attitude and Habits
2. Which competency needs to be strengthened considering Work knowledge, Personality and Personal Appearance, Professional Competence, Work Attitude, and Habits?

REVIEW OF RELATED LITERATURE

According to Weibell (2011) feedback is how the learner or any other agent directing the learning process found if progress has been made toward the target goal.

Thorndike's theory of learning which focused on feedback is cast in his law of effect. In his experiment where he blindfolded his subjects and repeatedly told them to draw a four-inch line, he discovered that for so many times the subjects did not demonstrate better results from those depicted in the first or twelfth attempts. He believed that repetition in the absence of feedback does nothing to improve performance. There was no caused by learning. Thorndike even went out on exploring the effects of positive and negative feedback through a variety of experiments. He concluded that reward and punishment are not equal in their power to strengthen or weaken a connection. In one trial he had conducted, students learned Spanish vocabulary by selecting for each Spanish word one of five possible English meanings followed by the rewarding feedback of being told "Right" or the punishing feedback of being told, "Wrong." From the results of this experiment, Thorndike's research on frequency has been cited as proof that the effect of frequency is negligible on knowledge. However, learning cannot take place in the absence of explicit intention or feedback, no matter how frequently the learning task is repeated.

A useful study of Thurlings, M. et al. (2012) had reviewed the literature on feedback to teachers. The research does not only focus on feedback among teachers but also include input in the classrooms. Based on the review, the effectiveness of feedback and feedback processes are dependent on the adhered learning theory. The study's findings showed that useful feedback is a goal or task-directed, specific, and neutral. The article indicates that there are many variables involve and feedback processes are complicated.

Robertson (1991) had studied on the significant impact of feedback loops to the biological system. He gave the two fundamental types of feedback loops: positive and negative. This negative feedback can produce stability but resist changing while positive feedback produces instability and even catastrophe. In the biological systems, both loops are essential, and both can create chaos. However, an understanding of the patterns that result from the effects of feedback loops can provide critical new insights into the trends that can mark the evolutionary development of biological systems.

Work knowledge is knowledge of how to make something work. According to the Longman Dictionary of Contemporary English, work knowledge is an ability to understand something well enough to use it, but that doesn't mean to have an in-depth understanding of it. Moreover, Drucker (2005) as quoted by El-Farr (2009) stated that work knowledge is dominated by intellectual, technical know-how, interaction, innovation, and even networking. All workers need the experience to be able to perform their jobs. Collins (1997) as quoted by El-Farr realized that all kinds of work even the unskilled ones require a minimum amount of knowledge. He further said that there is no clear threshold to identify the intensity of experience in an occupation that qualifies as a knowledge work one. Spacey (2016) typically contrasted work knowledge that is primarily physical or that follows predefined processes and practices. To him, professions such as academics, architects, engineers, physicians, lawyers, project managers, business analysts, and accountants are examples.

Generally defined by Pyo¨ria (2005) knowledge work is dominated by cognitive effort to use, generate, and extract value from knowledge. He defined knowledge work as processes and not the results. In his study, he examined the work where experience is the heart of the work and the critical output ingredient as opposed to work where knowledge is only a secondary resource and is obtained instead of processed. Vehkapera (2018) recognized the definition of knowledge work as complex and vague. He said that all work demands knowledge to some extent poses a challenge in defining knowledge work.

Another study of Ongore (2014) administered a survey to determine the relationship between personality traits and job engagement of the 118 university personnel. The investigation revealed significant correlations between personality traits and job engagement. In the study, he mentioned five personality models: Extraversion, Agreeableness, Conscientiousness, Openness, and Neuroticism. However, Neuroticism was negatively related to physical, emotional and cognitive engagement but the rest was positively associated. Results of this study suggest that the five-factor models are useful for examining the source of job engagement.

According to Abdullah (2016) Personality has catered five root ideas: motivation, unconscious, self, development and maturity. He gave an example of two persons of the same age but have different interests, activities, feelings, and thinking. There is something different inside them and that something inside is said to be a personality (Kasschau, 2000 as quoted by Abdullah 2016). Thus, personality can be a trait that may eventually affect or maybe influence the behavior of an individual that mostly affect employment in the future.

Morever, Lee (2014) researched personality traits. He often encountered controversy about the stability of personality traits. He further said that it is widely accepted that personality traits tend to be stable in adulthood. Almlund et al. 2011 as quoted by Lee reviewed the stability of personality traits and that personality development stabilized around the age of thirty. Cobb-Clark and Schurer (2012) also concluded that the personality traits at working age are stable over four years.

The intellectual component is a key to the company's success thus professional competence becomes an essential managerial discipline (Voronina, Ivanova & Ratner, 2013; Boud & Molloy, 2013 as quoted by Burganovaa 2017). Burganovaa (2017) defined professional competence as the ability of an employee to perform work by the requirements of the position, and job requirements are tasks and standards of their performance, used by the organization or industry. He considered it as the primary parameter that estimates the human and structural capital of the company. Also, Ko (2012) evaluated the relationships between active learning, professional competence and learning performance for college hospitality students. He found a significant correlation among professional skill and active learning which included job and course satisfaction, and semester GPA. Professional competence was a mediator for active learning and learning performance.

Similarly, Okwoche (2011) research was conducted to compare 40 female and 110 male extension agents on the importance and needs of competency categories. The result revealed that female respondents perceived competencies such as the ability to motivate farmers, commitment to extension work, work management, planning, organizing, and priority setting. While the male agents: motivate farmers, spoken and verbal communication fluency and development of instructional materials. He further stated that competency needs should be stressed to enhance the competency of the extension agents' professional values.

An attitude refers to our opinions, beliefs, and feelings about aspects of our environment. According to Tulgan (2017) if you do not follow the right work attitude that makes you seem younger and less mature. With this, managers would have second thoughts about trusting you with valuable work. A useful study of Rahman (2017) investigated the impact of factors that lead to better productivity of employees and to identify the factors that have a bearing on work attitudes. The performance of such employees is influenced by Job-related attitudes like satisfaction, leadership, work commitment, and job involvement. An employee with a positive attitude is well aware of the dynamics of business, can fine tune to the organizational environment, leading to a holistic development in the performance and productivity of the entire organization (ibid).

RESEARCH METHODOLOGY

This study used the survey method design and employers were floated with the predefined close-ended questionnaire before the immersion ended. All Senior High School Technical Vocational Livelihood Animal Production Strand students were taken as respondents hence the use of non-random purposive sampling. A proposal letter for Work Immersion was distributed to different industries after the industry mapping and a study if the venue was safe and suitable place for the students. A Memorandum of Agreement (MOA) was entered into between the university and the industry on the condition provided in the proposal letter.

Before the immersion ended, the immersion teacher had to give the Work Immersion Appraisal Form to the industry owners, supervisors, managers or farm technicians. The individual computation, tallying, and tabulation of the questionnaires followed. The use of statistical tools was employed.

FINDINGS

What is the industry feedback on Senior High School work performance in terms of:

1.1 Work knowledge,
1.2 Personality and Personal Appearance,
1.3 Professional Competence, and
1.4 Work Attitude and Habits?

Figure 1 shows the percentage distribution of work knowledge. From the figure, it can be gleaned that 90 percent (n) of the students got the outstanding rating. This is followed by 8 percent (n) as very satisfactory while 2 percent (n) is described as satisfactory.

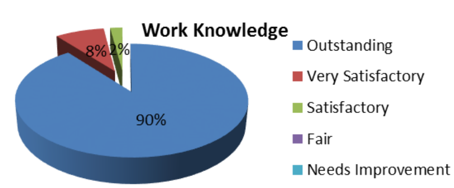


Figure 1 Frequency Distribution of SHS Work Knowledge

The result shows that the majority did meet the required standard in the performances of their duty. This finding is supported by Madell (2016) who said that every worker is a knowledge worker even those who work using their hands. He further commented that trainees should have the responsibility for their productivity, know how to manage their time and yet open to suggestions as this will put trainees in an advantageous position when searching for the real work in the future. So, these students have realized the value of the program in developing their competencies that are relevant to either pursue higher education or to join the world of work.

As shown in Figure 2, 94 percent (n of the students was outstanding, 4 percent (n) was rated as very satisfactory, and 2 percent (n1) satisfactory. These data emphasize that personality and personal appearance have been observed by the students while in the immersion program.

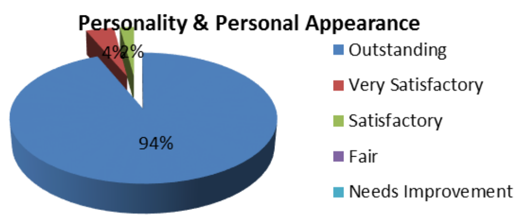


Figure 2 Frequency Distribution of SHS Personality and Personal Appearance

Moreover, Sagaran (2014) supports this finding as she says that this quality put an individual to an advantageous position because through this development one will emerge better equipped to achieve what one will want. Personal appearance in a workplace is important because it represents respect and etiquette to one's co-worker or otherwise, one would have not able to present himself with confidence, and attitude in respecting others (ibid).

As revealed in Figure 3, there was 77 percent (n of the students who were outstanding, 21 percent (n) very satisfactory, and 2 percent (n1) satisfactory. This finding is supported by Mulder (2016) who said that competence is of crucial importance for effective performance but has been grossly lacking in many places. Camilo (2013) mentioned that there should be a developed mechanism that will help improve the capacity and speed of learning in an organization particularly in crafting its training programs that will play an essential role in forming competencies.

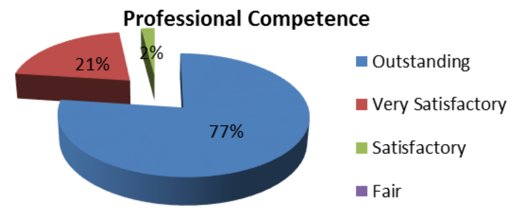
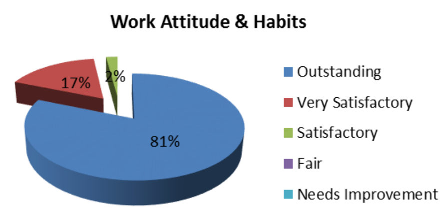


Figure 3 Frequency Distribution of SHS Professional Competence

Also, Silvia (2013) said that competence is the ability to make decisions to solve problems, perform profession in different situations, fulfill social role according to knowledge, experiences, values, and attitudes, and apply knowledge within a specific context. Meaning, this involves not only the know-how of the task on hand but also the communication skills, values and the capacity to reflect upon daily practice for the individual (ibid).

Figure 4 disclosed that there was 81 percent (n of the students who were outstanding, 17 percent (n) very satisfactory and 2 percent (n1) satisfactory. A history of good work habits is considered fundamental to earning a favorable reputation with the employers and coworkers (Webber, J.k. et al. 2015).



As Belcher (2018) mentioned that these positive attitudes at work are a subconscious transfer of feelings and passion towards a task on hand.

Which among the competencies should be reinforced considering Work knowledge, Personality and Personal Appearance, Professional Competence, Work Attitude, and Habits?

It can be noted from the table below that among the competencies professional competence got the lowest description among all the skills presented.

Table 1. Summary of Frequency Distribution of SHS Competencies

Rating Scale	Competencies							
	Work Knowledge		Personality & Personal Appearance		Professional Competence		Work Attitude & Habits	
	f	%	f	%	f	%	f	%
Outstanding	43	90.00	45	94.00	37	77.00	39	81.00
Very Satisfactory	4	8.00	2	4.00	10	21.00	8	17.00
Satisfactory	1	2.00	1	2.00	1	2.00	1	2.00
Total	48	100	48	100	48	100	48	100

Although more than half is still outstanding, yet the result reveals what is the lowest rated competency. DepEd Order No. 30, s. 2017 enclosed in their guidelines that the work immersion will at least develop among the learners the career skills. The result will prepare them to make decisions to go on postsecondary education or employment. It is further hoped that the partner institutions will provide learners with work immersion opportunities, workplace or hands-on experience, and additional learning resources.

CONCLUSIONS

1. The feedback is considered a vital component in the education and training of the students.
2. If learners are provided with opportunities to become familiar with the workplace for employment simulation, they can be potential employees in the future.
3. Through given feedbacks, learners may discover their strengths and weaknesses. With these exposures, it is hoped that their competencies and skills would prepare them to either venture in their own business, be employed or even pursue a college education.
4. Result of the study may well serve as a reference for succeeding immersion program of the University.

RECOMMENDATIONS

Based on the prior findings and conclusions of the study, the following recommendations are given:

1. There is a need to continue mentoring, monitoring, and cultivating students' professional aspect.
2. Improve the curriculum to hone better and equip students while they are in the university so that keeping and maintaining effective linkages with the industry is respected.
3. Instructors are encouraged to do better mentoring of the learners, strict implementation of the prescribed curriculum, and conduct close monitoring and supervision of students while on immersion.
4. That industries may continue to support the educational system as anticipated to provide the experience the students need.

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To God be the glory!

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EFFECTIVENESS OF THE IMPLEMENTATION OF KATARUNGANG PAMBARANGAY IN THE SELECTED BARANGAYS OF CABANATUAN CITY

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ABSTRACT

Barangay Justice System is an alternative, community-based mechanism for dispute resolution of conflicts between members of the same community. All cases covered by it must be brought first to the barangay and must undergo conciliation proceedings before it can prosper into a full blown case in court. This study assessed the Implementation of Katarungang Pambarangay in selected barangays in Cabanatuan City. The respondents of the study were from the Lupong Tagapamayapa and Barangay officials from selected Barangay in Cabanatuan City, namely: San Josef Sur, Sumacab Este, and Barlis, Cabanatuan City. The researchers utilized descriptive method of research in gathering data since it involved description, recording, analysis and interpretation of condition that really exists. From the data presented, analyzed and interpreted, the following findings, conclusions and recommendations were derived: perceived level of competency of Barangay Lupons was consistently competent in the field of maintaining peace and order in their jurisdiction. However, not all cases being filed in the Barangay are being settled, especially grave offenses.

Keywords: barangay Justice System, community-based mechanism, conciliation proceeding, descriptive method , Katarungang Pambarangay, Lupong Tagapamayapa

INTRODUCTION

Barangay Justice System (BJS) is an alternative, community-based mechanism for dispute resolution of conflicts between members of the same community. The BJS provides a venue for disputing parties to search for a mutually acceptable solution. Other members of the communities act as intermediaries, facilitating the discussion of possible solutions. Mediation is a dispute-resolution process in which an independent third party helps disputants to settle a conflict in a mutually acceptable fashion. The disputing parties, whether individuals or nations, are active participants. A goal-directed, problem-solving process, mediation occupies a position midway between self-help approaches and formal third-party decision-making processes. Mediation differs from formal litigation in that the process is voluntary; the mediator has no coercive power or authority to impose a settlement on the parties. Conciliation is a term often used interchangeably with mediation; at other times, it is used to refer to a more unstructured process of facilitating communication between estranged parties. Mediation and conciliation are perhaps best distinguished historically. In the family sphere, conciliation arose when the Los Angeles Family Conciliation Court was established in 1939, the first of a whole movement of conciliation services associated with domestic relations courts which grew up around the country; these affiliated in 1963 as The Association of Family and Conciliation Courts, an international association concerned with the provision of family counseling as a complement to judicial procedures. Family mediation developed as a broad art, movement in the 1980s, most significantly in the divorce mediation movement (L. Buzzard and R. Kraybill, 1980).

In the past, rural villagers are usually engaged in a primary activity such as farming or fishing. In the United Kingdom, a "pit village" is a settlement whose primary activity is mining. In many underdeveloped nations, these primary activities are still the focus of rural village life.

Primary activities provide basic goods and services for inhabitants and for people in surrounding areas. In this way, some villages function as trading centers. Villages surrounding the city of Damascus, Syria, for example, have been trading hubs for thousands of years. Many villages were surrounded by thick walls or gates. A tulou, for example, is a traditional building among the Hakka people of Southern China. These walled, circular buildings are constructed around a large, open, central courtyard. The tulou itself houses most villagers—up to 800. In this process, called urbanization, nucleated settlements built up around factories, not churches or community centers. This trend began on the island of Great Britain and eventually spread around the world. Hampstead was an English village that expanded rapidly after rail lines opened in the 1860s, for example. Today, Hampstead is a major neighborhood of London (https://admin.nationalgeographic.org/encyclopedia/village/).

Alternative Dispute Resolution (ADR) in the common law tradition has its origins rooted in English legal development. As early as the Norman Conquest, legal charters and documents indicate that English citizenry instituted actions concerning private wrongs, officiated by highly respected male members of a community, in informal, quasi-adjudicatory settings. In some instances, the king utilized these local fora as extension of his own legal authority; rather than adjudicating a suit via the more formal king's court, the king would simply adopt the decision of a local, but highly respected, layperson without ever "reaching the merits" of the suit, creating one of the first forms of arbitration. In some sense, then, common law ADR has been around for centuries.

In China, Confucius believed that the best way to resolve a dispute was through moral persuasion and agreement rather than coercion. There is a natural harmony in human affairs that should not be disrupted. Peace and understanding were central to his philosophy. Buddhist traditions encourage dispute resolution through compromise rather than coercion. In these cultures, litigation is a last resort and involves a loss of face. Today, in the People's Republic of China, there is still an emphasis on conciliation, self-determination, and mediation to be used in the resolution of disputes.

Barangay justice system has its roots during the time where the barangay was ruled by a Datu as he acted as the judge who renders decision when there is a dispute between and among the inhabitants of the barangay. As civilization developed, comes the establishment of formal government which is divided it into three divisions namely the Executive, the Legislative and the Judiciary. The judiciary dispenses the justice through the application and interpretation of applicable laws, which, because of some technicalities were not decided immediately. As a result, the dockets of the courts are clogged with pending cases.

The Barangay Justice System or the Katarungang Pambarangay was established through the enactment of Presidential Decree No. 1508 which aims to de-clog the judiciary from cases that may be subject to amicable settlement. It is a barangay justice system which offers accessible, fast and inexpensive way of settling disputes. By the passage of the Local Government Code of 1991, the Katarungang Pambarangay law was strengthened and institutionalized in the barangay through its provision. As the smallest political unit, the barangay is in the frontline of the government in terms of providing services, including among others, the access to dispute resolution through the Katarungang Pambarangay. Each of the barangays in every municipality in the country has its own Katarungang Pambarangay. The administration of justice is one of the basic services of the government for its constituents. It must be accessible to everyone seeking for it. As the most basic political unit, the barangay is the first in the hierarchy in the administration of justice. Pursuant to section 387 of Local Government Code of the Philippines, there shall be in each Barangay a Punong Barangay, seven (7) Sangguniang Barangay members, the Sangguniang Kabataan chairman, a Barangay Secretary, and a Barangay treasurer. There shall also be in every Barangay a Lupong Tagapamayapa. The Sangguniang Barangay may form community brigades and create such other positions or offices as may be deemed necessary to carry out the purposes of the Barangay government in accordance with the needs of public service, subject to the budgetary limitations on personal services prescribed under Title Five, Book II of Local Government Code.

THEORETICAL FRAMEWORK

"The essence of the Katarungang Pambarangay Law is the amicable settlement of disputes wherein the disputing parties are encouraged to make mutual concessions to obtain a peaceful resolution of the dispute without formal adjudication thereof. The important consideration in amicable settlement in which the parties are willing to compromise their respective claims against each other within the limits imposed by law, morals good customs, public order and public policy" (DOJ Opinion No. 185,1981).

The Local Government Code of 1991 (Republic Act No. 7160, October 10, 1991), provides that:

Section 399: *Lupong Tagapamayapa*:

(a) There is hereby created in each barangay a *lupong tagapamayapa*, hereinafter referred to as the *lupon*, composed of the *punong* barangay, as chairman and ten (10) to twenty (20) members. The lupon shall be constituted every three (3) years in the manner provided herein.

Section 402:"The *lupon* shall:

(a) Exercise administrative supervision over the conciliation panels provided herein;

(b) Meet regularly once a month to provide a forum for exchange of ideas among its members and the public on matters relevant to the amicable settlement of disputes, and to enable various conciliation panel members to share with one another their observations and experiences in effecting speedy resolution of disputes; and

(c) Exercise such other powers and perform such other duties and functions as may be prescribed by law or ordinance."

Section 412, Conciliation:

"(a) Pre-condition to Filing of Complaint in Court. - No complaint, petition, action, or proceeding involving any matter within the authority of the *lupon* shall be filed or instituted directly in court or any other government office for adjudication, unless there has been a confrontation between the parties before the *lupon* chairman or the *pangkat*, and that no conciliation or settlement has been reached as certified by the *lupon* secretary or *pangkat* secretary as attested to by the *lupon* or *pangkat* chairman or unless the settlement has been repudiated by the parties thereto."

The Law of Composition

As cited by Escoses (2012), there must be a call for the amicable settlement between parties and pacific settlement of disputes which the *Katarungang* Pambarangay System is patterned from. The *Katarungang* Pambarangay encourages the peaceful settlement of disputes in the barangay level.

The researchers held the view that the *Katarungang* Pambarangay is widely adhered and attended to by the people as this effectively facilitates settlement of disputes among barangay residents because to them it is easier to achieve justice and resolve conflict through the *Katarungang* Pambarangay.

OBJECTIVES OF THE STUDY

This work studies on the implementation of *Katarungang Pambarangay* Law in selected barangays in Cabanatuan City. Specifically it sought to answer the following question:

1. What is the socio demographic profile of *lupon* members in terms of the following:
   1.1. Age;
   1.2. Sex;
   1.3. Educational Attainment;
   1.4. Length of service as member of Lupon; and
   1.5. Civil Status?
2. What are the common cases being filed by the *Lupon*?
3. What particular cases commonly resulted to non-resolution by the *Lupon*?
4. What are the factors that affect the non-resolution of cases?

METHOD

The descriptive method of research was used in this study because it involves description, recording, analysis and interpretation of condition that really exists. It is appropriate to use descriptive method in gathering information about the present existing condition (Creswell, 2004). The emphasis is on describing rather than on judging or interpreting. The aim of descriptive research is to verify formulated hypotheses that refer to the present situation in order to explain it.

This study was conducted on the selected barangays of Cabanatuan City, Nueva Ecija. Specifically, the researchers held this study at Barangay San Josef Sur, Barangay Sumacab Este and Barangay Barlis. The respondents of this study were the Lupong Tagapamayapa and Barangay officials from selected Barangay in Cabanatuan City.

The questionnaire was consisted of four parts: Part I was the Profile of the Respondent; Part II dealt on the common cases being filed in the barangays; Part III covered the common cases not being settled in the barangay; and Part IV portioned the common factors that affect the settlement of disputes in the barangay.

The researchers presented an approved letter of permission to the Barangay Captain to each selected barangays in Cabanatuan City. Upon approval by the concerned officers, only then the researchers were allowed to locate their samples and did the necessary introduction. After which, the questionnaires were administered to and collected from the respondents. The data from each questionnaire were collected, tabulated, presented, interpreted and analyzed.

The gathered data were statistically treated using the percentage and weighted mean.

Percentage is the point in a distribution which is a specified percent of the cases or observations lie (Aquino, 2004).

RESULTS AND DISCUSSION

This chapter presents the statistical analysis of data gathered from the respondents from the surveyed barangays in Cabanatuan City with the corresponding interpretation of results based on the order in the statement of the problem.

Demographic Profile of the Members of the Lupong Tagapamayapa in Terms of Age

Figure 1 presents the demographic profile of the members of the Lupong Tagapamayapa in terms of age. It revealed that 50% of members of the Lupong Tagapamayapa are above 35 years old; 30% are 31-35 years old; 25-30 years old is 13%; while those 19-24 years old are only 7%. This finding only shows that the Lupong Tagapamayapa is dominated by elder members. Half of the respondents were above 35 years old. As stated in Australia adds (2011), experienced people make them more mature and well adopted person. In other words, most of the members of the community trust those officials who have more experiences in implementing laws in their barangay.

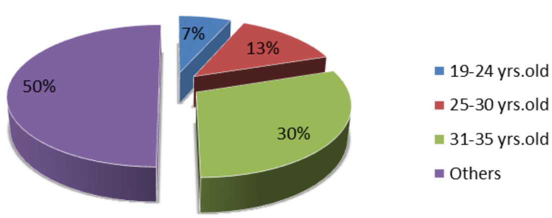

Figure 1. The pie graph of the demographic profile of the members of the Lupong Tagapamayapa in terms of age

Demographic Profile of the Members of the Lupong Tagapamayapa in Terms of Sex

Figure 2 presents the demographic profile of the members of the Lupong Tagapamayapa in terms of sex. It can be gleaned from the Figure 2 that 60% of the members of the Lupong Tagapamayapa were males, while 40% were females. This result shows that the administration of the Katarungang Pambarangay is dominated by male. Women found to have lower expectancies of future performance than males in many areas of achievement (e.g. Beyer, 1990; Elliot & Harackie; 1994). Women are not only often less certain about their abilities (see also Dweck, 2000; and Byrnes, Miller and Shafer, 1999). It was expected that the number of male officers is greater than female officers since the duty of the respondents is to maintain peace and order within their jurisdiction.

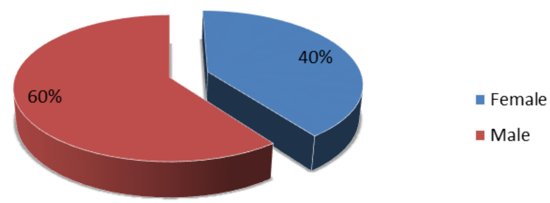

Figure 2.The pie graph of the demographic profile of the members of the Lupong Tagapamayapa in terms of sex

Demographic Profile of the Members of the Lupong Tagapamayapa in Terms of Educational Attainment

Figure 3 presents the demographic profile of the members of the Lupong Tagapamayapa in terms of Educational Attainment. Based on Figure 3, 60% of the members of the Lupong Tagapamayapa have reached college but undergraduate; 23% have finished high school; 10% have finished college; 3% are post-graduates; 4% have finished elementary level. The data revealed that most members of the Lupong Tagapamayapa are college undergraduates.

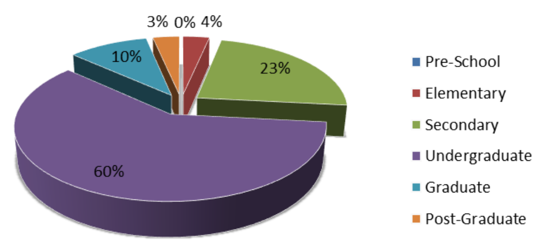

Figure 3. The pie graph of the demographic profile of the members of the Lupong Tagapamayapa in terms of educational attainment

Demographic Profile of the Members of the Lupong Tagapamayapa in Terms of Length of Years in Service

Figure 4 presents the demographic profile of the member of the Lupong Tagapamayapa in terms length of years in service. Based on Figure

4, 63% of the members of the Lupong Tagapamayapa have less than 5 years of experience in serving as member of the Lupon while 37% have five (5) to ten (10) years of experience. In length of service of the respondents, majority of the barangay officials at Cabanatuan City were at their less than 5 years in their service.

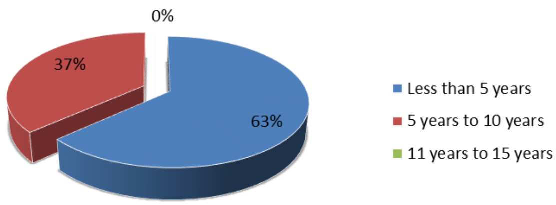

Figure 4.The pie graph of the demographic profile of the members of the Lupong Tagapamayapa in terms of length of years in service

Demographic Profile of the Members of the LupongTagapamayapa in Terms of Civil Status

Based on the figure below, 87% of the members of the Lupong Tagapamayapa were married and only 13% were still single.

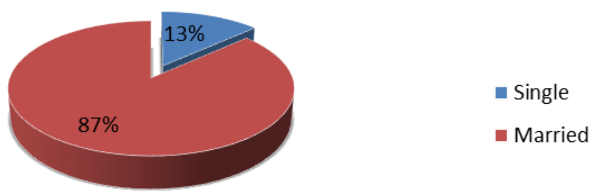

Figure 5.The pie graph of the demographic profile of the members of the Lupong Tagapamayapa in terms of civil status

Common cases being filed in the Barangay

Figure 6 shows the total percent of each item on common cases being filed in the barangay. The largest percentage of the cases being filed in the barangay were oral defamation with 24% followed by slight physical injury with 15% and damaging to property with 13% while the case with lowest percentage is theft with 1%.

It is expected that oral defamation got the highest percentage because in a small community like barangay, there are always problems specially to those neighborhood by speaking of defamatory words which tend to prejudice another in his or her reputation as well as the case of damage to property although the conviction of a crime of damage to property requires prior trial or hearing, the offender may speak with the owner to settle the issue. The settlement will not only end further conflict with the owner but it will also avoid the litigation in court. In cases like theft that got the lowest percentage, the complainant usually reported directly the incident in police station not in the barangay.

Figure 7 shows all the total percent of each item on cases not being settled in the barangay. The largest percentage of the cases not being settled in the barangay are act of lasciviousness with 27% followed by swindling with 19% and damaging to property with 14%. On the other hand, the case with lowest percentage is alarm and scandal with 1%. It is expected that act of lasciviousness got the highest percentage because this crime is serious and it deprives the reputation of the offended party as well as swindling because the offender uses trick in order to gain profit from his or her victim; and the lowest percentage is a case like alarm an scandal because this problem can be easily settled by the lupon members.

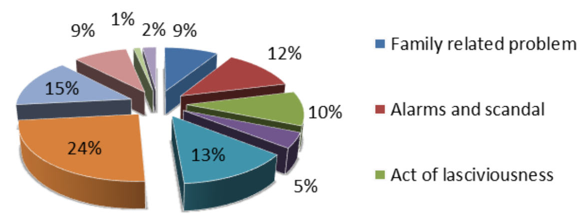

Figure 6. Total percent of each item on common cases being filed in the barangay

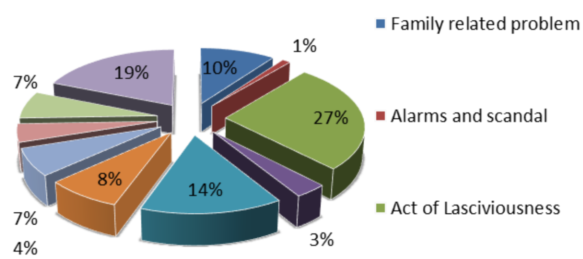

Figure 7. The pie graph of the cases not being settled in the barangay

Common factors that affect the settlement of disputes

Figure 8 shows all the total percent of each item on factors that affect the settlement of disputes in the barangay. The most frequent observed factors that affect the settlement of disputes are: late in attending hearing or trial of cases in the barangay with 33%; not attending in meeting of parties with 32%; and cannot control the arguing parties with 19%. Meanwhile, lack of experience in settling disputes and lack of experience in the service of member of lupon had never been observed. The best way to settle problems is to hear the explanation of both parties, and it cannot be fixed if the parties are late or not attending at hearing at all. The barangay official must have experience in settling disputes and must have experience in serving the community. That is the reason why it got the lowest percentage because it is necessary to become unbiased and well experienced to become a competent public servant of the community.

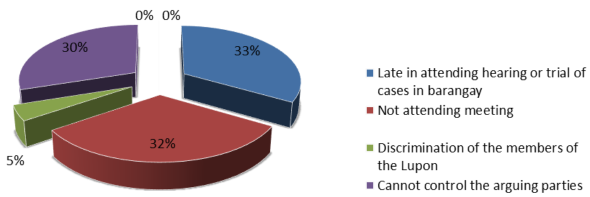

Figure 8. The pie graph of the common factors that affect the settlement of disputes

CONCLUSIONS

Based on the data presented, analyzed and interpreted in the previous chapter, the following findings were derived:

Majority of the respondents were above 35 years old and most of them were males. Out of 30 respondents, 87% were married. Another, 60% percent of barangay officials being surveyed were undergraduate as their highest educational attainment and 63% percent were in the service for less than 5 years;

From the cases being filed under the barangay, it is revealed that the top most common problems being filed were oral defamation with 24%, slight physical injury with 15% and damaging to property with 13%; and

Also, the identified top common cases that were not usually settled in the barangay were act of lasciviousness with 27%, swindling with 19% and damaging to property with 14%. And in connection with this, it is found out that the factors that affect the settlement of disputes were late in attending hearing or trial in the barangay with 33%, not attending in meeting of parties with 32% and cannot control the arguing parties with 19%.

Researchers found out that there were more respondents aging above 35 years old. In minor cases like family problems, people more likely to ask advice to those persons who have more experiences in handling family problem situations who are the elders. Majority of them were males and most of them were in the service of less than 5 years;

Furthermore, barangay officials were competent in performing their duties but they did not meet the highest level of educational attainment; And lastly, the sex, highest educational attainment and length of service cannot affect the barangay officials in implementing Katarungang Pambarangay in their respective jurisdiction.

RECOMMENDATIONS

Based on the established conclusions, the items below are hereby suggested:

Barangay officials may conduct seminars or programs related to the implementation of Katarungang Pambarangay; provide more intensified trainings for lupon members to enhance their skills; and provide materials and equipment to be used in performing their duty and functions; and additional means of evaluation to check the proper implementation of Katarungang Pambarangay and other kinds of incentives for the Lupon members may be given.

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Section 402The Local Government Code of 1991
Section 412 The Local Government Code of 1991

GLOBAL SUPPLY CHAIN OF THE PHILIPPINE TUNA INDUSTRY

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ABSTRACT

The Philippine tuna industry manages its supply chain, generally covering the national, regional, and international level. Along these levels are various laws and regulations to be complied with to ensure responsible fishing and sustainable management of fish resources by all key actors along the process. This study aimed to investigate the global supply chain management of the Philippine tuna industry in the worldwide market to propose a framework or guidelines for traceability. The study made use of primary data through field interview and secondary data accessed online. Interview guide used for key informants for handline tuna catchers on their experiences along the supply chain, as well as with the non-government representatives who are involved in the tuna catching regulations. The global supply chain of the Philippine tuna industry, specific to hand line method, finds the US and Japan to be the desirable market to trade its LYF tuna. The EU traceability requirement was found less facilitative in marketing the said product of handlers for several reasons. The strength of the Philippine tuna industry is also dependent on the government's ability to effectively implement the laws, and regulations and monitor the activities in the industry as well as the global market.

Keywords: global, industry, key actors, supply, traceability, tuna

INTRODUCTION

Globalization ushers the free flow the tuna commodities in a broader and more sophisticated market with varying consumers' preferences Miyake et al. (2010). The growth of tuna consumption in the global market increases and the supply chain network more complex. The world's significant tuna consumers products are Japan, USA, and Europe. While Japan has its unique demand for tuna, it is in Europe where sustainability requirements of the commodity set in the market.

The Philippines' canned tuna processing industry developed during the late 1970s and 1980s. Philippines have become the second largest processor in the WCPO, following Thailand. The majority of Philippines cannery production is exported, mostly to the EU and US market with 10.4 million cases or 83,604 mt in 2009, and with around 10% of canned tuna consumed locally. The production in domestic Philippine canneries seems unlikely to expand due to raw material supply problems (i.e., declining local catches and reduced access to Indonesian waters). Any strategy for a significant expansion in production capacity will more likely involve the construction of new processing plants elsewhere in the Western and Central Pacific Ocean (WCPO) (Havice, & Campling, 2013).

The Philippine tuna industry is an essential supplier of tuna in the international market. It's significant fishing and processing companies located in General Santos in Mindanao, also known as the 'tuna capital of the Philippines'. The Philippines was once the largest catching nation of yellowfin tuna in 2007. However, there was a decline in a catch in the following years for several reasons to include poor implementation of laws and policy implementation on fish catch, weak governance in the industry, poor supply chain management, varying climate conditions.

Barclay et al. (2010), cited the scholarly work of Campling et al. (2007) that in a supply chain, the agricultural product is a 'buyer-driven' commodity, to mean that retailers in more advanced countries dictate prices and quality standards for producers, making the tuna supply chains fall in said pattern, with supermarkets dictate the kind of products and influence prices. The complexity and challenges in the system highlight the critical role of a supply chain in improving the performance of the actors involved along the line at the same time improve business performance and sustainability. It is a well-managed supply chain that advocates, among others, traceability of fish catch, compliance with international standard on quality and food safety as well as the various regulations. These and other related restrictions, however, pose as a hindrance in the trade of tuna products, placing some suppliers like the Philippines in a disadvantaged position.

In the report of the WWF for 2013-2015, it revealed that the Philippines is still in the process of strengthening its implementation of national laws and regulations in the different stages of the supply chain in collaboration with various actors and stakeholders from the government and private sectors. It had noted that several violations committed by fishing companies with vessels disobeying regulatory measures like required fishing information and not controlled by their flag states. It is known as IUU or "illegal, unreported and unregulated" with great potential to negatively affect the tuna resource and stock of the country. In the past, the tuna production estimation in the country had been problematic due to incomplete and uncoordinated data collection and monitoring, which today has improved with better data quality and reliable estimates.

In the UNEP report for 2009, it highlighted the importance of having traceability of tuna products in all stages of the supply chain. According to Akkerman, Farahani, & Grunow, 2010). Quality, safety and sustainability in food distribution: a review of quantitative operations management approaches and challenges. It is necessary to consider three critical food-industry-specific challenges in food supply chains: 1) food safety, 2) food quality and 3) sustainability (Kudoh, Sagisaka, et. Al., 2015). Traceability becomes a necessary component in the supply chain management to respond to these legal, social, and environmental issues and challenges. Traceabilitydefined as the ability to track down a product from its origin to the shelves through a recorded chain of events and places a product has gone through (UNEP report 2009).

Within and along the supply chain, emerging challenges are now on the demand side. In the consuming front of the string (i.e., companies selling to consumers and consumers themselves), those creating the demand for tuna products has come to realize the importance of sustainability, but then requires needed information along the supply chain (UNEP Report 2009). Traceability, which first answers food quality and safety, becomes a convenient tool to address problems on lack of shared information and transparency as well as promotes competitiveness through work efficiency and sustainability of the Philippine tuna industry in the global tuna market.

One of the key actors in the supply chain are the fishermen or fishing vessels. This group of a key actor is the first in line in the upstream supply chain and the primary source of the tuna products. The fishermen's capture methods for yellowfin include purse seine, long-line, pole-and-line, and hand-line. Among these, it is the hand line found to be environmentally friendly or has less impact on the environment. This primary method commonly used by small scale fishermen called the handlers. Moreover, these handlers can capture most of the giant yellowfin tuna found in the market without, if not less, bycatch products, especially juvenile fish.

This study finds it essential to understand the supply chain of tuna products in the Philippines as a point of origin. At the same time, identify its legal requirements and regulations along and at different stages of the tuna supply chain. Finally, determine the traceability standard to be complied with by the actors in the supply chain, specifically the handline fishermen.

Thus, the researchers conducted the study to investigate the global supply chain management of the Philippine tuna industry in the worldwide market to propose a framework or guidelines for traceability.

STATEMENT OF THE PROBLEM

This study aimed to investigate the global supply chain management of the Philippine tuna industry in the worldwide market to propose a framework or guidelines for traceability.

Specifically, this study seeks to answer the following research questions:

1. What is the profile of the Philippine tuna industry in the global supply chain in term of:
   1.1 geographical scopes;

1.2 laws and regulations of authorized agencies;
1.3 drivers of supply and demand; and
1.4 key actors in the supply chain?

2. What are the practices of the key actors along the supply chain in the Philippine tuna industry?
3. How do the Philippine tuna industries respond to the challenge of traceability for sustainable fishing standards?

REVIEW OF RELATED LITERATURE

The Philippines ranks second in the world for tuna caught and fifth in canned tuna production. Approximately 90 percent of national tuna industry production is located in Mindanao. General Santos City in Mindanao is the center of the tuna industry. Further, six of the country's seven major tuna canning factories are located in the said City, as well as the 15 fish processors and exporters which comprise 80 percent of all fish processors in the country. Consequently, General Santos City will be chosen as the site for the research, given its position as the top tuna producing region in the country, and which is known as the Tuna Capital of the Philippines.

The Philippine tuna industry manages its supply chain generally covering the national, regional and international level. Along these levels are various laws and regulations to be complied with to ensure responsible fishing and sustainable management of fish resources by all key actors along the process. In the end, a well-managed supply chain places the best interest of its consumers at the center of its operation.

In the management of the supply chain of the Philippine tuna, the sequence generally covers three major geographical areas, the national, regional and the international market. Within the Philippines, the scope includes those at the Local Government Unit (LGU) where management of small scale fisheries takes place and commercial fishing at the national government level.

The Philippines being in the Asia Pacific region adapts its fishing and trading laws of tuna products with that of the international market. Although each member countries apply the rule of sovereignty within its area of jurisdiction, common principles and standards are being adopted. The global market includes those beyond the regional boundaries, where international fishing and trading laws become the decisive regulation for all actors in the supply chain from the origin of catch until it reaches the end consumers. This international standard is stringent in its requirements and implementation that influences the operation of the other two geographical levels.

World Wide Fund, the Philippines in its annual report (2016) asserted that the tuna supply chain key players are the fishers, local traders and exporters, partners, and other stakeholders. Many fishers are economically dependent on the local traders, due to accumulating debts during the lean catching season, which prevented them from availing a fair price for their products.

The progression of the Philippine tuna supply chain involves key actors in the domestic market and stretches outside national boundaries where international trading demand dictates and influences suppliers behavior and the products produced along with the various levels in the chain. These actors have specific responsibilities to perform and standards to comply with to access the bigger market.

METHODOLOGY

A qualitative research approach was chosen as the methodology. According to Denzin and Lincoln (2006), qualitative research is a multifaceted research method involving an interpretative, naturalistic approach to the subject matter.

Research activities include desk research, social mapping, expert consultations, interview of key actors in both the supply side (domestic) and the demand side (international), as well as authorities from the government and non-government agencies who are considered stakeholders that upholds the laws and regulations related to tuna catches. An interview guide was used for validation and additional information. The study made use of primary data through field interview and secondary data accessed online.

The research participants are generally selected because they are able to provide rich information regarding the global supply chain of the tuna industry. They were the critical informants for handline tuna catchers on their experiences along the supply chain, as well as with the non-government representatives who are involved in the tuna catching regulations using an interview guide. The researchers conducted an interview with the two (2) respondents. Responses during the interview were noted to keep track of the conversation and remind the researcher on the points to probe deeper. Following the interview, the data transcribed for analysis.

The information gathered on the practices of the hand line tuna catchers together with a CSO representative that promotes sustainable tuna fishing was obtained using content analysis. Clustering of responses did according to the categorization of central issues and challenges of these actors in the supply chain.

FINDINGS

1. The Profile of Philippine Tuna Industry

Geographical Scope

Respondent RL : *My fishing is within Philippine Territory, but used catch fish in Indonesia when fishing in their territory was still peaceful. At present, there are risks and demands from the Indonesian government to hire their people which is not helpful in our deep operation because some skills are not present in Indonesian seafarers, although Indonesian laborers can be hired. The incidence of piracy or burning of boats in Indonesian waters is just too risky. Individually, we are operating in* ***Bayawan, Negros Oriental, Celebes Sea, Palawan,*** *and other areas; there are increasing tuna stock as compared to the previous years. We have a better quality of tuna here, precisely our target, Large Yellow Fin Tuna*.

The handline tuna fishermen fish within the Philippine fishing territory this is due to the risks involved when operating in seas outside Philippine jurisdiction like in the case of Indonesia where piracy and burning of boats were experienced. Until this has been settled or allowed by the WCPC, as requested by the association of handline fishermen in General Santos, fish catching will be confined within in the waters of the country.

Laws and Regulations of Authorized Agencies

The fishing laws are already present. However, the implementation of the same is still weak, and the governance and political will are not able to harmonize the real situation in the tuna industry. While there is already the appropriate law and IRR, RA 9379, the old law, RA 8550, is still actively used. This old law is disadvantageous to the handliners since its applicability to commercial fishers is being enforced on small-scale handliners.

Respondent RL : *Right now, we are requesting the Western Central Pacific Fisheries Commission (WCPFC) to allow fishing in international waters, especially for handline tuna catchers. This is to enable us to move when the tuna transfers to another area outside the country. Further, the BFAR implements and regulates our fishing, together with the Coastguard and the National TeleCcomunication. The laws that we abide are RA 8550 (old law), this is too generic and applicable to all different types of tuna catchers. What is helpful to handliners is to have a specific code appropriate for our type of selective catching method. Right now, there is the RA 9379 (new law) which is more preferred by handliners using the passive gear. There is now the IRR crafted, which is long overdue. It is probably because those high officials in government are less knowledgeable about the actual tuna fish catching. Overall, the implementation of the law is weak. Moreover, it is still the old law, RA 8550, that is actively implemented, causing confusion and a disadvantage to our group since it is less fitting.*

Respondent JB : *The IRR was a product of lengthy consultations. While it was very challenging, at least we were able to include essential points that will promote the interest of the fishermen.*

Drivers of Supply and Demand

The tuna is demand driven, to mean that buyers dictate the type of product as well as the price of the same. The biggest market for the Large Yellow Fin tuna is the USA and Japan. These two important markets have encouraging trading policies with the Philippines; however, the Japanese market is more subjected to price fluctuation since tuna from the Philippines are less favored than Japanese caught tuna when auctioned in their market. The EU is not an attractive market for the Large Yellow Fin Tuna, because their trading with the Philippines is more on the products that are for further processing or canning. The EU is seriously promoting the traceability system; however, the USA and Japan do not require this to be mandatory.

RL: *The buyers are the ones who specify the type of tuna products, and suppliers comply. The preferential tariff in the USA and low tariff in Japan are encouraging, although price fluctuation is high in the Japanese market since tuna products are still subjected to auction. The USA is still a big market to penetrate, and the price is fixed upon shipment. The EU does not buy fresh giant yellowfin tuna from the Philippines, like the handliners but sources it from other regions. They usually purchase for processing and canning* *and prefer to buy from purse-seine catchers, which is a less sustainable fish catching method.*

We have not experienced chargeback for products not meeting specification but the reduction in price if ever, usually happens in Japan transactions since Philippine tuna will lessen in quality after auctioned in their market. Hence, price becomes lower for Philippine tuna. The USA is more stable, and the price is fixed upon closing of the deal in the Gensan port before shipment. One can right away compute sales and profit.

JB : *The EU is strict in its traceability system and is practiced in international trading, like tuna products. Although their market still has to improve on their buying decision making*.

Key Actors in the Supply Chain

RL: *The key actors in the supply chain are the Fishermen/Fishing Vessel, Fish Landing, Transporter, Processing Unit, Local traders, Exporter, International transporter, Importers. There are regulators present in along the chain – DA-BFAR, Coastguard, National TeleCommunications (NTC), Marina, Marine Stewardship Council (MSC), Western Central Pacific Fisheries Commission (WCPC)*

JB: *There are different structures in the tuna supply chain. Other than the usual actors, there are also the financiers that extend credit to the fishermen obliging the fishermen to land their catch to their "casa" or site at a price that is lower than the market.*

The key actors in the supply chain involve the Fishermen/Fishing Vessel, Fish Landing, Transporter, Processing Unit, Local traders, Exporter, International transporter, Importers, Retailers. These interactions and the activities in the market are regulated and monitored by government agencies like the DA-BFAR as the lead implementing agency in the country, along with the Coastguard, National TeleCommunications (NTC). Licensing, standardization, and certification handled by Marina and the Marina, Marine Stewardship Council (MSC). The regional fishing activities regulated by the Western Central Pacific Fisheries Commission (WCPC). However, there are also those that influence the actions of key actors in the supply chain especially the handline fishermen, the financiers extending credit to these handlers fishers result in the low pricing of the tuna catch, thus, leaving the fishermen without a choice.

2. The Practices of Key Actors Along The Supply Chain

The handline fishermen register their vessel at the Marina to comply with legal requirements. However, they find the MSC certification too costly for the small scale fishermen since it requires from the improvement in their vessel like tiled CR; fiberglass ice box, etc.

RL: *We register to the MARINA as a requirement but not for traceability purposes. Registration is affordable, but the requirement or standards to comply with the traceability or the MSC certification is too expensive not accessible to the small-scale tuna catchers or the handlers since it necessitates improvement in our vessel like tiled CR; fiberglass ice box, etc.*

The tuna fishing, after about a month in the deep sea, will bring their tuna catch to the GenSan fish landing. The quality and safety also determined in the fish landing. The open auction is done when export quality/high-grade quality had been sorted for shipment, and buyers in the landing site will then entertained in an open auction. These buyers will be selling to processing units or for domestic market consumption.

Recording of data is only for necessary information but not for traceability purposes. My market, USA and Japan, do not require that traceability information, unlike Europe. USA and Japan require only the necessary information needed in trading. Most of us handliners do not trade with EU; we do not have a preferential tariff. The EU source their LYF tuna somewhere else. Also, the EU is more on further processing like those for canning. Handliners giant yellowfin tuna are not for canning unless the quality is poor. But hardliners tuna catch is usually of good quality, export grade.

We handliners find the traceability practice a deterrent or hampers the growth of our tuna industry and puts a risk to the handline fishers. The documentation requires at least the following origin of catch or capture location, wind direction in the area of catch, depth of the sea. Also, the temp of tuna at the time of catch and every after how many hours, time of catch and others are just too much information and might expose your business to risk, especially of this information is known to the industrial vessels. Also, most of these handline fishermen are of low educational attainment; one cannot expect them to be able to accomplish the form correctly in the deep sea during fishing operation.

I find it unsuitable for the news to place pictures of handliners carrying their tuna catch with headlines about unsustainable and illegal fishing. This is in contradiction to the fact that it is con-

sidered to be the most environmentally sound fishing method and sustainable at the same time since it is targeting only individual, mature tuna without having the by-catch of juvenile fish. But this has never been corrected. It is quite ironic. Overall, I can say, that is the sad reality of the tuna industry.

The testing of tuna temperature now and then also affects the quality of tuna when reaching the shore. There is supposed to be a specific temperature to maintain, but with the constant opening and closing of the ice container, then the heat cannot be maintained, other than affecting the quality of the meat due to continual poking.

I find the traceability practice impractical, a deterrent to the development of our domestic tuna industry, the risk to the hand line catchers and competition in finding tuna stock, may reduce the quality of fish through the standardized test, and others. You can imagine, if fleeting commercial vessels can access this information, the small scale handline fishers will lose its fishing ground to these commercial fishers that have more modern ways of catching fish. The handlers exposed to stronger competition; in the end, these small-scale fishermen will be losing their main livelihood instead of being protected.

We ship our Large Yellow Fin tuna to the USA and Japan in two ways :

A. Fresh chilled – full round (no internals) - sashimi
   a. W/o head – USA (0 tariffs) – price fixed at source
   b. With head and tail – Japan (3% tariff) – vacuum packed; shipped but still to be auctioned in Japan so the price is unstable and quality possibly reduced since Japanese sells and buys from Japan sources first, then from other sources after.

B. Fresh frozen tuna (processing plant) to the USA :
   - Tuna steak, tuna sake bar, loins, cubes, ground tuna
   It will be subjected to necessary processing or standardized packing like quick blast freezing, frozen, packing method and materials, like packed in foil, boxed and using dry ice to maintain cooling temperature. It has been effective ways of preserving the tuna quality, to keep the giant fin tuna in high-grade quality

The traceability system found impractical since most of the handling is less educated and cannot accomplish the form correctly. Moreover, traceability, which promotes sustainable fishing practices, is already compiled by the hand line fishing method, it considered as the most environmentally sound fishing method and sustainable fishing practice. As proposed by the respondent, traceability might be more appropriate to non-hand-liners. Moreover, the primary buyers of Large Yellow Fin tuna, the USA, and Japan, do not require traceability information. Exported tuna are those of high-grade quality, while those that do not satisfy export requirement left for local consumption. Moreover, traceability can be considered a threat to the small-scale handline fishermen since the traceability information can access by commercial-scale tuna catchers and might compete in the harvest of tuna with their modern technology in catching fish leaving the handlers to lose their fishing ground. The constant checking of the tuna temp as required in the traceability documentation can also affect the quality of the tuna.

The giant Yellowfin tuna are marketed to Japan and the USA as (1) Fresh chilled – whole round (no internals) for sashimi, (a) w/o head for the US market (b) with head and tail for Japan; or Fresh frozen tuna (processing plant) for the US market, specifically, tuna steak, tuna sake bar, loins, cubes, ground tuna.

These two essential markets provide favorable trading incentives to Philippine exporters, the USA market provides a zero tariff on the said products with the price determined at the source. On the other hand, Japan offers a 3% tariff for the Philippine LYF tuna. Although shipped to Japan through vacuum packaging to retain quality, it is still to be auctioned in Japan, so the price is unstable and quality possibly reduced since Japanese prioritizes Japanese caught tuna. The processing unit is capable of packing the tuna in a standardized way that maintains its quality until the point of final destination.

3. The Philippine Tuna Industries Respond to the Challenge of Traceability for Sustainable Fishing Standards

The Philippine tuna industry responds positively to the traceability documentation primarily required by the EU market. A massive campaign is presently done to ensure that fish catches properly documented to reduce, if not eliminate, IUU incidences at the same time ensure that fish catch is of the best quality and comply with safe for human consumption. The traceability practices involve a large number of stakeholders like the government agencies, the CSOs, and most of the key actors in the supply chain.

While this is strongly supported by the stakeholders mentioned above, there are also differing views as regards its implementation. For the handline fishermen in GenSan, the traceability documentation is difficult to accomplish and quite risky if compiled. The difficulty lies in the profile of the fishermen who are less educated. Also, it becomes dangerous as the information, like the location of capture, can be accessed by competitors making their fishing ground vulnerable to big competitors or the commercial fishing vessels, hence, inviting conflict. The constant temperature monitoring of the fish, necessitating poking and exposing the fish to lower temperature, can damage the appearance and affect the quality of the meat. While traceability is supposed to improve the marketability of the tuna products, the government does not have marketing support to the handlers in trading the tuna products in the international market. As it is, the exporters of the Large Yellow Fin Tuna that sourced the fish from handliners navigate through the international tuna market on their own. The government lacks the marketing arm to guarantee marketability of the Philippine LYF tuna in the global market.

RL : *The traceability information is complicated and risky to comply for handline tuna fishers. Most of these fishermen have low educational attainment, hence, have little reading and comprehension ability. The information is so detailed and has to be answered when in the middle of the deep sea, to indicate the site, wind direction, the depth, time of catch, the temperature of tuna, etc.*

If all the information is to be supplied, then these hand line fishermen will be revealing their area to competitors, leaving them at a disadvantaged position. It is too risky for the fishermen that in the end their catch has been harvested by sizeable industrial fishing vessels.

The constant testing/pricking of the tuna to regularly test the temperature, as required in the standardized form, can significantly affect the quality of the tuna as the quality of the meat will be damaged.

The marketing aspect of the tuna product is solely through the efforts of the tuna businessmen. No specific government agency is assisting in marketing activities. Government support is absent in this area.

On the contrary, the CSOs find the traceability requirement to be of great benefit to the handline fishermen. The practice of traceability was viewed to improve the marketability of the product, specifically in the EU market. This response to the need for information sharing and transparency, avoidance of IUU activities, guarantee food quality and safety, among others. Further, of most importance is the protection it can provide to the fishermen in terms of predatory pricing in the market especially by the financier-buyer or those extending credit to the handliners or the rampant unfair trade practices. While much effort has given in the promotion of the traceability practice, the progress is there but quite slow and still in its vulnerable state. Generally, the implementation of the law is weak.

JB: *WWF encourages these handliners to be compliant with certification, although it is quite costly for them. That is why we train these handliners on proper handling of tuna catch to ensure quality is maintained, other than the sustainable way of fishing. To improve the fish stock, we promote less catch but higher price through excellent tuna quality. Traceability, other than its original intention, is also important to protect these small-scale handliners from unfavorable rates due to illegal fishing practices that finds its way in the market at a lesser price. As a representative of WWF, I have traveled to the EU market to lobby and have a dialogue with buyers in the market to comply with the traceability practices. So far, we have made progress with the fishermen in our project sites, but the process is quite slow and challenging, with leadership, political will, and implementation of the law is still weak. The practice is still in its vulnerable state. The traceability is not only in the EU but also recognized in other markets; the marketability of the product will be improved with better economic benefits to those fishermen who practice it.*

CONCLUSIONS

Based on the findings of the study, the researchers make the following conclusions:

1. The global supply chain of the Philippine tuna industry, specific to hand line method, finds the US and japan to be the desirable market to trade its LYF tuna.
2. The EU traceability requirement was found less facilitative in marketing the said product of handliners for a number of reasons.

3. The strength of the Philippine tuna industry is also dependent on the government's ability to effectively implement the laws, polices and regulations and monitor the activities in the industry as well as the global market.
4. The handliners need support to effectively market its LYF tuna in the international market.

RECOMMENDATIONS

Based on the findings and conclusions drawn from the study, the researchers make the following recommendations:

1. The tuna industry strengthens its market ties with US and Japan.
2. The traceability requirement will be promoted in two modes, partial for handliners and full compliance for purse-seine and long line; and phase by phase implementation to gain the needed support.
3. The government creates a marketing arm to assists handline–owner/exporters in expanding its current market; promote price stability; lobby and introduce amendments when necessary.
4. A more in depth research be done on handline tuna fishing and come up with a more appropriate regulation and formulate economic incentives to those practicing selective method and sustainable fishing practices.

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A CASE STUDY OF A TRADITIONAL HEALER: IMPLICATIONS TO HEALTH MANAGEMENT

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ABSTRACT

The traditional Filipino healing practices have been the alternative for the majority of the poor and people living in urban areas in having their illnesses treated for not being able to afford the services of hospitals and health-care professionals. This study aimed to investigate how the traditional healer described his traditional healing practices to the community in Sulangon, Dapitan City, Zamboanga del Norte. It made use of a qualitative approach to the traditional healer who performed healing. The healer served as the key informant because of the popularity in healing. The use of open-ended interview in our own dialect and observation provided a free listing of their verbatim accounts were noted and as primary narratives. The traditional healer was a male between 80 to 90 years of age, started healing at the age of 2 years old, but the knowledge was a gift from Amang Diyos (Divine Mercy). He had never attended training. People knew him through word of mouth or came from the family members. The plants used for traditional medicine came from mountainous areas. It is his one challenges; it is not available in his adjacent area. The healer could not transfer his knowledge to somebody or his family members because it is a gift from God (Divine Mercy). Thus, it concluded that his knowledge came from God or let say "gitugahan" therefore training is not needed. His role was to heal the sick. The herbal plants used by the healer were beneficial to the community.

Keywords: health, health management, practice, traditional healer, traditional healing

INTRODUCTION

The existence of traditional healing has existed since 14,000 centuries B.C. until Chinese, Graeco-Arabic, and western countries start using conventional medicines. It is the oldest form of structured healing, which practiced with a basic set of tenets (Medicine Network, 2003). Traditional healing practice is an essential part of healthcare systems in almost all countries of the world (Haque, Chowdhury, Shahjahan, & Harun, 2018). Traditional healing is part of the Filipino culture that has been passed down through many generations and is continuously being practiced, especially in far-flung barrios and barangays in the country (Labastida, Alapay, Billones, Gonzales, et. al., 2016).

The traditional Filipino healing has been the alternative for the majority of the urban poor and people living geographically isolated and disadvantaged areas (GIDAs) in having their illnesses treated for not being able to afford the services of hospitals and health-care professionals. Instead of buying expensive synthetic medicines, they resort to herbal concoctions and prayer-based therapies as prescribed by these traditional healers (Labastida, Alapay, Billones, Gonzales, et. al, 2016)

The World Health Organization (WHO) defines 'traditional' medicine 'as including diverse health practices, approaches, knowledge, and beliefs incorporating plant, animal, and /or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness.' (World Health Organization, 2002 cited by Hills, Aram, et al., 2013).

The term 'traditional healer' is an umbrella concept that encompasses different types of healers with different types of training and expertise (Mokgobi, 2012). The traditional healers are already reliable persons who have indigenous health information and ways of indigenous treatments. Provided with appropriate competencies, traditional healers play a more significant role in preventing diseases to anyone, in society (Inocian,& Inocian, 2016). For Demapan (2011), the traditional healer role was to heal the sick and to be a helper in the community. People of all ages, including foreigners, children, and family members, were often treated by the healer.

People in Dapitan City lived a simple and uncomplicated life. It is a quiet and peaceful place. The City itself is very small, and only a few hours needed, people could walk around the proper City. Sulangon is a barangay of Dapitan City where people living in this area are very accommodating, and religious. Some people believed traditional healing and have faith in it, especially those who could not send their members of the family to the hospital. This kind of beliefs is a way to help reduce poverty because the traditional healer or mananambal doesn't ask for the services rendered.

With this, the researcher's objective was to conduct a qualitative interview with the traditional healer and with a small number of Dapitanon to investigate their personal perspective on traditional healing practices, particularly on training and preparation; perceived roles; knowledge of health, illness, and healing; and traditional healing practices. Also, on how the traditional healer transferred his knowledge.

STATEMENT OF THE PROBLEM

This study aimed to investigate how the traditional healer described his traditional healing practices to the community in Sulangon, Dapitan City, Zamboanga del Norte. Specifically, the study sought to answer the following questions stated below:

1. How is the traditional healer described based on the personal profile as to age, gender, length of time being a traditional healer and other personal backgrounds?
2. How is the traditional healing of the traditional healer described based on his:
   2.1. training and preparation;
   2.2. perceived roles;
   2.3. knowledge of health, illness, and healing; and
   2.4. traditional healing practices?
3. How the factors of traditional healing knowledge transferred from the traditional healer?
4. Based on the findings, what recommendations can be proposed for a traditional healer?

REVIEW OF LITERATURE

In the Third World, traditional healers are a significant resource that should be fully employed in the struggle to provide adequate health care. They are available and willing to work in primary care when trained and established a good working relationship with other health staff (Hoff, 1992). Traditional healers tend to be male-dominated, although there are female healers in some communities. They have exceptional knowledge and powers that can be used to aid people (Devanesen, 1985; Maher, 1999). Further, traditional healers have a variety of roles ;(1) providing strong spiritual and social support; (2) determining the ultimate cause of a serious illness or injury; (3) determining cause of deaths at an 'inquest; and (4) employing counter sorcery to remove the evil influences causing illness (Tynan, 1979; Nathan. Japanangka,1983; Reid, 1983; Soong, 1983; Peile, 1997; Maher, 1999).

Indigenous healers or traditional doctors play a significant and recognized role in health care provision in Africa (Levers, 2006; Freeman & Motsei, 1992; LeBeau, 1999; Leonard, 2001; Mpofu, 2003; Oppong, 1989). The mananambal, as traditional healers are already reliable persons who have indigenous health information and ways of indigenous treatments. Provided with appropriate competencies, they play a bigger role in preventing diseases to anyone, in society. However, most medical practitioners do not believe in traditional healing for the reason that most of the medicines the traditional healers use have not been validated scientifically (Berdon, Ragosta, Inocian, Manalag, & Lozano, 2016). According to the World Health Organizations (2002) cited in Tabi, Powell, & Hodnicki,(2006), that most traditional medicine practitioners live and work in the community level, which makes such treatment available and affordable to most of the population. The World Health Organization acknowledged the need for an inexpensive and effective treatment for common diseases in low-income countries.

METHODOLOGY

Qualitative data were analyzed by using respondents' responses based on the interview guide checklist to form the narratives. In the narrative analysis, the stories, main issues or words that research participants use to provide insights about their lived experiences (Miles, 1994; Thorne, 2000; Mokgobi, 2012).

The traditional healer served as the primary key informant mananambal was selected because of their popularity in healing. To avoid the bias of the study, two informants paseyente, as traditional healing patients were also consulted. The research instrument was modified adopted from Demapan, I. (2011). A total of 13 questions were designed to help answer the four research questions defined for this study — an exploratory 1- to 2-hour semi-structured interview conducted with each participant (the healer and patients). An interview was conducted in the healer home and at the same time, a place of his treatment. During the interviews, the researcher followed the interview script. The researcher used handwritten notes to help her follow the conversation and remind herself of points to probe more deeply. Following the interview, the data was transcribed for analysis. When analyzing data, the researcher made sure that only data relevant to the study formed part of the core analysis.

FINDINGS

Profile of Traditional Healer

The traditional healer is a male, with an age in between 80-90 years. He started healing and curing people at the age of 2 with the spiritual guidance of Amang Diyos (Divine Mercy). Further, his knowledge and ability to cure the sick people did not come from his parents. His family has no background as a healer.

According to the healer, he has no personal experience. He considered this as a gift given from Amang Diyos. He did not ask this knowledge. It instantly came when he was two years old. He noticed his healing experience when he cured his mother ill. What he did, he placed his hands on his mother's body, and he called the Amang Diyos, Holy Spirit (Divine Mercy).

Description of Traditional Healing

Training and Preparation

The researcher asked to describe the training and preparation for becoming a healer in the community. He answered that he had never met training because the knowledge he had, came from the Divine Mercy. The practice was given to him by the Divine Mercy. He got interested when he cured his mother's illness. He wants to help people who need help. Further, according to him, there was no training for this medicine. It is a gift from Amang Diyos (Divine Mercy).

Perceived Roles

The researcher asked to identify the roles of a traditional healer, the procedure that a client needs to see him, and the charges. According to the healer, his role is to heal the sick. He will treat anybody who needs his help. He will not choose the age or standard living of a person. What he asked the people who approached him is to believe and have faith in God because only God can cure their illnesses. He is an instrument in the hands of God. People come and go to his place for treatment and spiritual pieces of advice. He never asked any single amount for payment of the services rendered.

According to the World Health Organization (1948) as cited by Jacab (2011), health is a state of complete physical, mental and social well-being and not merely in the absence of disease or infirmity. Other scholars defined health and wholeness are intrinsically related to a patient's physical, emotional and spiritual growth.

I also interviewed with healer's patients. I felt this would better allow each patient to share something of their own healing experience of "Tatay" (traditional healer) in whatever way they wanted. Thus, I formulated my question in an open-ended way and based on my understandings. To make it fully understand to them, I translated my question from English to our own vernacular.

Patient 1

"Niari ko sa lugar ni Tatay sa akong kabubut -on. Si Tatay dili mangayo og bayad nako. Naa koy problema sa akong left eye. Nagpatambal ko niya dayon naayo akong wala na bahin sa akon mata. Ang akong problema sa mata kay nawala na".

I come here (place of Tatay) on my will. Tatay did not ask any charges from me. I had a problem with my left eye. When I approached Tatay to heal my left eye, a few minutes, my eye problem was gone.

Patient 2

"Nituo ko sa healing power ni Tatay bisan first time pa nako ang pagduol niya. Nganong nituo ko niya? Ang hinungdan kay ang among silingan, na admit sa hospital pila ka-adlaw. Nagpahibaw na ang doctor na stage 3 sa cancer. Tungod kay walay kwarta para chemo therapy, nitry og duol ang pamilya sa masakiton ni Tatay. Og karon ang among silingan na masakiton kay physically healthy na. Si tatay wala jud nangayo og bayad sa pagpaayo sa mga masakiton. Kun iyang pasyente mohatag og kwarta or mga

lagutmon o butang, kini kay kabubut-on sa mga pasyente."

I believe the power of Tatay in healing even this is my first time to approach him. Why did I believe him? My neighbor admitted to a hospital for how many days. The doctor informed my neighbor that he had a CANCER stage 3. Because of my neighbor, had no money for the chemo treatment, his family tried to ask the healer for the procedure. And now, my neighbor is physically healthy. The healer did not request payment for that treatment. If the patients want to give cash or in kind, it is his/her own will.

Knowledge of Health, Illness, and Healing

The expert was asked to share his views on health, illness, and healing. According to the expert, he is a Roman Catholic. In the healing process, the healer always asks God (Divine Mercy) in guiding him to heal the person in need. God provided this healing gift to him as a service from God. In addition to that, touch healing comes from God's love and care of his people. A person's physical appearance indicates health. For Demapan (2011), the healers defined health as being without disease as well as looking and feeling healthy. The healers identified several causes of illness, including physical and social factors (e.g., accidents, injuries); psychological factors (e.g., thoughts, feelings, mental health); and spiritual factors (e.g., ancestral spirits).

According to him, the spirit may also cause health conditions. There are cases that those who come to his place and ask his help for treatment are because they offended the 'SPIRIT or what we called non-like ours". He can feel and can sense the health condition of that sick person. After his treatment, he can see the changes in that person.

Traditional Healing Practices

Another focus of the interview was examining the traditional healing practices of "Tatay." Topics include namely: the administrative aspects of healing (e.g., marketing, logistics, payment policies); work of healing (e.g., symptoms and illnesses treated, services, preparation of medicine, treatment protocols, treatment duration); and their reflections on the practice.

1. Administrative Aspects of Healing

Below are the responses of my key informant (traditional healer)

1.1 In terms of Marketing

Word-of-mouth is defined as any positive or negative statement made by customers experiences about a product or company, which is made available to a mass of people and institutions using the Internet (Hennig- et al. 2004). Further, most persons found that social set-ups have a higher influence on others than themselves, and that third person influence undesirably on individual's behavioral aim related to word of mouth communication (Cengiz& Yayla,2007).

"Ang ako rang mga pasyente nga naayo sa ilang mga sakit, ang mo istorya og magpahibaw ngadto sa ilang mga kahigalaan, silingan, o pamilya. Wala ko nag advertise sa akong kaugalingon. Ako isip mananambal nahibaw an gumikan sa mga baba sa akong mga pasyente".

When a person healed, they tell and share their experience with their neighbors, friends, or family. Others get a referral from family members, and I did not advertise, they knew me through word of mouth".

1.2 In terms of Logistic

"Tawagon ko akong mga pasyente pinaagi sa cellphone o moanhi sila mismo sa akong puluy-anan. Ang uban gusto na moadto ko sa ilang balay kay labi na ang masakiton dili makalakaw. Gusto sila maayo. Sa walay pagbalibad, ako silang adtoon sa ilang panimalay para ayuhon ang sakit. Gitugahan sa Ginoo aning knowledge busa ako motabang sa walay paghakubili".

There were times my clients called me through cellular phone, or they just came to my house. They wanted me to go to their house because the sick person could not walk. They wanted me to treat that sick person. Without any hesitation, I went to their place. God gives me this knowledge to help the needy person.

1.2 In terms of Payment

In the study of Leonard, K. (1998), patients with higher incomes receive more effort from traditional healers because the healer can bargain for a higher payment in the case of success and therefore have more incentive to provide a medical attempt.

"*Naay uban pasyente naayo pagkahuman nako og tambal, mohatag og kwarta o mga lagutmon. Ang uban mangutana* *kun unsa ako gusto. Ang ako ra jud isulti nila na kanang inyong ihatag nako, ihatag na sa mas labaw pang nagkinahanglan nako. Usahay dili malikayan, makadawat ko gikan sa mga naayo nakong pasyente. Pero ang akong buhaton, ang akong mga nadawat, akong ihatag sa akong mga silingan nga nagkinahanglan o akong ishare sa akong ubang pasyente*".

The traditional healer did not ask anything. His only purpose is to help people. There are clients, especially those healed after treatment, gave him something in kind or cash. Some patients asked him what he wants. According to him, it is not necessary for him to get paid. He will appreciate those things, but he won't ask anything in return. He is very happy if they healed his patients. He told his patients instead of giving the gifts, he will give those who are needy. Sometimes it can't be avoided, but those gifts received, he gave it to his neighbors that need it most, and to his other patients.

2. Work of Healing
   2.1 Symptoms and illnesses treated

The laying on of hands is a biblical method for receiving impartation. Besides communicating affirmation, the imposition of hands is an outward sign of the spiritual, inward reality and mainly acts as a transfer agent in the process of impartation when hands are used (Benevento, 2015).

The healer could treat a wide variety of ailments such as cancer, gynecology, eye cataract, skin ailments and diseases, ear, nose, and more. He could also help those who want to pass the board examinations like CPA and for Teachers (LET), and he could even away from the BAD spirit inside the body of a person.

The healer describes some examples: A 34-year-old married woman asked to have a 2nd baby. Her 1st baby at that time was 12 years old. She wanted to have another one.

"Unsay akong gibuhat, gihikap nako ang iyang tiyan og akong giampo-an siya pinaagi sa akong abay na Amang Diyos (Divine Mercy). Pila kabuwan ang nilabay, nibalik og nagpasalamat sa akoa ang babaye tungod kay siya nagmabdos na sa ikaduha niyang bata. Og karon ang bata, lima na katuig".

What I did to her, I touched the stomach of a married woman and prayed to Divine Mercy. After a month, that married woman came back to me and extended her gratitude because she's pregnant. And now successfully, she had a 2nd baby who is currently running five years old.

"Ang doctor from West Berlin Germany naay brain cancer. Nibisita siya kauban sa iyang pamilya diri sa Pilipinas. Gi schedule siya og operasyon didto sa private hospital sa Cebu City, Usa sa iyang pamilya, gitawagan ko usa sa iyang pamilya pinaagi sa cellphone na ayuhon ang iyang paryente pinaagi sa "tayhop" og ampo kay layo man sila. Pinaagi sa akong pag-ampo og pagtayhop, ang sakit na cancer sa iyang paryente nawala. Dako kung pasalamat. Ang mga doctors nga nag assist sa cancer person, natingala".

A Doctor by Profession from West Berlin Germany had brain cancer. He visited in the Philippines. He scheduled for operation in a private hospital in Cebu City. One of his family members called me through mobile phone to do healing even that CANCER doctor is far from me. Thank God, with that healing, the cancer was gone. It's a miracle. He did not undergo anymore the operation. The doctors who assisted him in the hospital were surprised".

"Usa na pod sa akong pasyente na doctor from Monreal Canada, naay problema sa paginhawa. Siya og iyang pamilya nag stay sa Dakak, Dapitan City atong higayona. Iyang igsoon niari sa akong balay alas otso sa gabii, og nangayo panabang. Iya kong gidala diin didto nagpuyo siya kauban sa pasyente na doctor. Pag-abot nako, ang akong gibuhat, akong gihikap sa left side and lung sa doctor. Akong giampoan og nangayo ko og guidance sa amahang Diyos (Divine Mercy). Akong gipumped ang tungod sa lungs, katulo. Pagkahuman nako og pumped, nibalik sa normal ang breathing sa doctor. Ang Ginoo nitabang nako sa pagpaayo sa masakiton".

Another Doctor from Monreal Canada had a problem in breathing. The doctor and his family were staying in Dakak, Dapitan City. His sister came to my house at precisely 8:00 pm and asked for help. She brought me to Dakak to heal his brother. When I was there in Dakak, I touched the left lung of the doctor. I asked guidance from Divine Mercy on how many times, I pumped the lungs. I pumped it three times, and after pumping, the doctor has normal breathing. God helps with the healing process.

2.1 Treatment protocols, duration, and challenges

The healer also asked the treatment protocol, duration of healing, and the challenges faced while practicing herbal medicine. Treatment for spiritual illness must see specific guidelines practical and to avoid disease to the healer. If the spirits offended of the person actions, that person will go back to the place where the incurred and ask forgiveness. It is not an easy task because often times, the Spirits will counter fight the healer. The healing or treatment will depend on the ill case of the patient. There are times after one healing touch, it healed, and some will cure after 2-4 treatments.

"Nag atubang pod ko og mga pagsulay labi na sa pagkuha og mga tanom para akong itambal sa akong mga pasyente. Kinahanglan moadto pa ko sa mga lagyong dapit o kalasangan. Kining mga tanoma kuhaaon nako labi na Holy Friday kay epektibo". Ang tanom nga akong makuha, akong iprocess, og ako mismo ang muuna og inom sa di pa nako ipainom sa akong pasyente".

I faced many challenges in getting herbal plants. I went in wild place to get those plants. The plants are useful and effective if it will be harvested during Holy Friday. When the process of herbal plants done, I need to drink it first before giving it to my patients.

Transfer on traditional healing knowledge

With the interview made to the healer, I found out that his knowledge could not be transferred.

"Dili nako mabalhin o mahatag ang akong kinaadman ngadto sa uban o mismo sa akong pamilya kay kini gituga sa Ginoo diri sa akoa. Dili ni gikan sa akong pamilya. Naa ko aning kinaadmana, duha pa ko katuig. Naabot ra ni sa akoa. Dili ko kahibalo unsaon pagbalhin og pagpamana ani. Pinaagi sa akong pag ampo og pagsalig sa atong Ginoo, naayo ang akong mga pasyente".

"Dili ni siya kinahanglan og training o seminar sa pag ayo sa mga masakiton. Dili ko kabalhin ani bisan usa sa akong pamilya. Depende ra jud ang tanan NIYA (God). Siya ra mismo ang makabuot kun kinsa ang akong sumusunod".

I can't transfer my knowledge because this is given by God (Divine Mercy) to me. I did not acquire this from my family. I did not ask this to HIM. I had this gift when I was two years old. It instantly came to me. I don't know how to transfer this because what I did every time I healed a sick person, I pray and ask help to God. To those who believe my healing and have faith in God be treated.

Further, there's no need for training or seminars in healing to the sick person. I could not transfer this to my family members. It's up to HIM (God). It's a will of God who will be the next generation to acquire this kind of knowledge.

CONCLUSION

Based on the findings of the study, the researcher hereby concluded that:

1. The traditional healer did not divulge his exact age but according to one of his clients, he is around 80 years of age.
2. His knowledge came from God or let say "gitugahan" therefore training is not needed.
3. His role is to heal the sick and help in the community.
4. In business, word-of-mouth is one of marketing strategy to convince your target markets. The traditional medicine used was not tested by the Department of Health, but it was beneficial for those who have faith in it.
5. He can identify several causes of diseases, including physical, social, psychological, and spiritual factors. The healing was coming from Amang Diyos (Divine Mercy).
6. Traditional healing as an alternative to medical practice because of financial matters.

RECOMMENDATIONS

Based on the findings and conclusions, the researchers make the following recommendations:

1. The healer should always take care of himself because of his old age.
2. The healer should train his family members in preparing traditional medicine for the sick person.
3. Traditional medicine best implemented as a compliment and not as an alternative to conventional medicine.
4. The healer should have linkages to the Local Government Unit's officials and the Department of Health for the safety in drinking the traditional medicine.
5. The Local Government Units should offer help to the healer to sustain his standard of living so that the healer could continue healing the sick person who needs help for treatment.
6. It is necessary to keep and protect the land areas where medicinal plants grow to continue/sustain the practice of traditional healing.

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LEVEL OF DISASTER AWARENESS AND PREPAREDNESS AMONG PUBLIC ELEMENTARY SCHOOLS IN UBAY, BOHOL PHILIPPINES

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ABSTRACT

The main objective of the study was to determine the level of disaster awareness and preparedness among public elementary schools in Ubay, Bohol for the school year 2018-2019. The study used a modified questionnaire from the compiled and adapted checklist of Maria Petal and Rebekah Green (2008). Some items of the said questionnaire were derived from the Disaster Preparedness Handbook, Revised 2016. The tool was distributed to 45 school heads, 470 teachers and 315 pupils. Based on the findings, earthquake drill was mostly conducted since when Bohol was hit by the 7.2 magnitude earthquake in the year 2013. However, tsunami, storm surge and lightning/thunderstorm drill was never conducted. All of the respondent schools were equipped with the emergency facilities and equipment except for the transportation vehicle/school bus and rubber boat. It was observed that most school personnel and pupils are aware of the Disaster Risk Reduction and Management (DRRM) plan and its content, aware of the basic activities as part of disaster preparedness, the safe and unsafe places of their school and school personnel/ staff are expected to stay after a disaster. In addition, the level of preparedness in terms of assessment and planning activities, physical and environmental risk reduction and response capacity development activities, most of the respondents were on the level of prepared so they have met the minimum requirements of disaster preparedness. It is highly recommended that school personnel and pupils are encouraged to intensify the conduct of different drills not only earthquake drill but also fire drill, lightning/thunderstorm drill, tsunami and storm surge drill for disaster preparedness. School Heads are encouraged to coordinate or seek financial assistance from Department of Education (DepEd), Local Government Unit (LGU), Parents Teachers Association (PTA), and Non-Governmental Organizations (NGO's) for the purchase of Emergency Go-Bag, transistor radio, and school bus/rubber boat for these equipment are needed in times of disaster.

Keywords: awareness, disaster, preparedness, public elementary school, risk reduction

INTRODUCTION

Philippines placed third in the World Risk Index of 2013. It is subjected to an average of 20 tropical cyclones per year and is highly vulnerable to disasters resulting from extreme natural events like tropical cyclones, monsoon rains, earthquakes, tsunamis, and volcanic eruptions. This is aggravated by a rapidly increasing population density, environmental degradation due to urbanization and industrialization, and climate change. From 1970-2013, the National Disaster Risk Reduction and Management Operations Centers (NDRRMOC) listed 856 tropical cyclones that entered the Philippine Area of Responsibility (PAR), 322 of which, or 38 percent, were destructive. In the past 20 years, tropical cyclones claimed 17,119 lives and injured 51,068, with 5,198 still missing. It affected at least 24.8 million families or 122.1 million people and caused damages to agriculture, infrastructure, and private properties worth P354.7 billion. The value of human life in the demand of safety is a matter of concern to all and diverse in every part of the world. In fact all organizations and institutions of learning have safety measures put in place. All institutions of learning are viewed as heavens of peace worldwide. Aside from this view, institutions of learning are reported to be experiencing serious cases of insecurity. All over the world, there has been an upward trend in the number of school children dying or getting injured in school violence, disasters and emergencies that would be avoided if safety policies were strictly adhered to (Simatwa, 2014).

Hazards only become disasters when it affects a population. If it occurs in a community which is well prepared for such events may not experience a disaster. Decreasing vulnerabilities and increasing capacities of a community exposed to a hazard could prevent disasters. (Dep Ed Disaster Risk Reduction Manual, 2008). A disaster is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability to the affected community or society to cope using its own resources. Although the categories of disasters may differ, their impacts are common. Disaster preparedness are actions that ensure resources necessary to carry out are available before a disaster, or they can be obtained promptly when needed. These are preparations and adjustments such as storing of food and water, preparing emergency plan and emergency kit, and other activities that reduce risk, injury or damage. It is also a health protective behavior, so the behavioral approaches have taken center stage as a means of it. Even though hundreds and thousands of lives were affected without warning by disasters yearly, most people do not concern themselves by preparing until disaster strikes. (Najafi M., Ardalan A., Akbarisari A. Noorbala AA., & Elmi H., 2017).

UNISDR (2010) as cited by Helen (2011) stated that Disaster Risk Reduction education requires schools to implement safety, emergency and disaster preparedness plans to prepare learners and educators to know what to do during and after a disaster has occurred. To make people aware of hazards brought by disasters in the environment, the Philippine Government through the Department of Education conducts seminars and trainings for teachers and school administrators regarding disaster preparedness (Luna E., Bautista ML., & Guzman M., 2008). This prompted the researchers to assess the level of disaster awareness and preparedness among public elementary schools in Ubay, Bohol by checking the availability of schools' disaster facilities and equipment, disaster drills and other activities conducted to ensure safety in the learning environment since the occurrence of disasters in Bohol is considered a common incidence.

OBJECTIVES

The main purpose of the study was to determine the disaster awareness and preparedness among public elementary schools in Ubay, Bohol for the school year 2018-2019. Specifically, it sought to answer the following questions:

1. What is the profile of the school personnel in terms of: age; sex; civil status; educational qualification; length of service; number of trainings attended/conducted; and number of orientation conducted/attended?
2. What is the profile of the pupil respondents in terms of: age; sex; and grade level?
3. What is the profile of the school in terms of: total number of teachers and staff; total number of pupils; total number of buildings; and total number of classrooms?
4. How often do schools conduct disaster preparedness drills as to: communication drill; earthquake drill; emergency evacuation drill; fire drill; first aid drill; tsunami drill; storm surge drill; lightning/ thunderstorm drill; meeting place drill; and shelter-in-place drill?
5. What are the emergency facilities/equipment available in schools?
6. What is the level of preparedness does each school possess in terms of: assessment and planning activities; physical and environmental risk reduction; and response capacity development activities?
7. Is there a significant relationship between the respondents' profile and the level of disaster preparedness in terms of: assessment and planning activities; physical and environmental risk reduction; and response capacity development activities?
8. Is there a significant difference between the perception of respondents on the level of preparedness in terms of: assessment and planning activities; physical and environmental risk reduction; and response capacity development activities?
9. What program maybe proposed based on the results of the study?

RESEARCH METHODOLOGY

This study was focused on the disaster awareness and preparedness among public elementary schools in Ubay, Bohol. The researcher used the modified survey questionnaire to assess the level of awareness and disaster preparedness developed by Petal M. and Green R. in 2008. The instrument was used in the data gathering needed in the study in order to generate the information relevant to what is asked in the statement of the problem.

Environment and Respondents. The study was conducted in all public elementary schools of Ubay, Bohol, Philippines with 45 School Heads/ Principals, 470 teachers/staff and 315 pupil respondents who were Supreme Pupil Government (SPG) officers. All in all, there were 830 respondents.

Instruments. The researcher used an adapted questionnaire from the compiled and adapted checklist of Maria Petal and Rebekah Green (2008) for the Great California Shakeout entitled, Risk RED School Disaster Response Drill Model and Template". Some items of the said questionnaire were derived from the Disaster Preparedness Handbook by HYDN Publishing, Philippine Copyright (2014) and its Licensors, Revised 2016, All Rights Reserved. The questionnaire was categorized to: Profile of the school personnel/pupil respondents, Profile of the Respondent Schools, level of awareness, Disaster Preparedness Drills, Emergency Facilities and Equipment, and Level of Preparedness (Assessment on planning Activities, Physical and Environmental Risk Reduction, Response capacity and Development Activities).

Data Gathering Procedures. Permission to carry out the study was secured first from the Dean of the College of Advanced Studies. Upon the endorsement of the research design, the researcher asked permission from the Schools district supervisor to conduct the study in the public elementary schools in Ubay, Bohol. After the approval to conduct the study, the researcher asked permission from the school heads/principals then, the researcher personally distributed the survey-questionnaires to the respondents. Furthermore, the researcher assured the respondents regarding the confidentiality of their responses and sincerely sought their utmost cooperation in honestly and objectively answering the survey. After a week, the questionnaires were personally retrieved by the researcher for tabulation, treatment, analysis, and interpretation purposes.

Statistical Treatment. The data were subjected to statistical treatment using simple percentage frequency and weighted mean to analyze the gathered data. Simple Percentage was used in the study using the formula:

$$p = \frac{f}{n} \times 100$$

Where: P = percentage
f = responses
n = number of percentage

Weighted Mean Score (WMS) was also used to determine the level of preparedness among the public elementary schools of Ubay, Bohol. The formula is:

$$\text{WMS} = \frac{\sum fw}{\sum n}$$

Where: $\text{WMS} =$ Weighted Mean Score; $\sum fw =$ Sum of the products of f and w where f is the frequency of each weight; w is the weight and n = Number of respondents

The Pearson Product Moment Correlation and t-test for correlation coefficient was also used to determine the relationship between the responses of the respondents in regards to the statements of null hypotheses. This formula below will be used:

Formula for the correlation coefficient:

$$r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt{[n(\Sigma x^2) - (\Sigma x^2)][n(\Sigma y^2) - (\Sigma y^2)]}}$$

Formula for the t test for the correlation coefficient:

$$t = r\sqrt{\frac{n-2}{1-r^2}}$$

Chi-Square. To determine the significant degree of relationship between the different variables, the data were subjected to Chi-Square test using the formula:

$$X^2 = \sum \frac{(O-E)^2}{E}$$

X^2=correlation coefficient; f_o=observed frequency; f_e =expected frequency

The obtained Chi-square ratio was checked against the table of Significant values at 0.05 level of significance.

FINDINGS

Table 1 exhibits the profile of the school personnel in terms of:

Age. It shows that the age interval 26-30 got the highest frequency with One hundred fourteen (114 or 24.26%) of the 470 teacher-respondents while the ages 56 years old and above got the lowest frequency with ten (10 or 2.13%) Meaning, most of the teachers were in the middle-age. Most of the School heads/Principals are in the age bracket of 41-45 years old with a frequency of sixteen (16 or 35.56%) out of 45 while none of them (0%) age range of 21-25 years old.This implies that majority of the school head-respondents' ages lie within the age interval which is most ideal for the position as school head with the presumption that with age come wider knowledge and experience in dealing people and other school related matters.

As to Sex, Four hundred ten (410 or 87.23%) of the teacher respondents and thirty-five (35 or 77.78%) of the school heads/principals were females, while sixty (60 or 12.77%) of the teacher respondents and ten (10 or 22.22%) of the school heads/principals were males.

As to the Civil Status, Three hundred eighty (80.85%) of the teachers and thirty seven (37 or 82.22%) of the school heads/principals were married, while two (2%) of the teacher respondents and none (0%) of the school heads/principals were separated.

As to Educational Attainment, Two hundred forty-eight (52.77%) of the teacher respondents had taken their Bachelor's degree with Masteral units and five (1.06%) were Doctorate. As to the school heads/principal, twenty (44.44%) of them had Complete Academic Requirements in their Master of arts degree while none (0%) of them were doctorate.

As to Years in Service. Most of the teachers had 6-10 years of experienced in teaching in public elementary schools with a frequency of 158 or 33.62% and none of them reached 31 years or more experienced in teaching. For the school heads, a frequency of 17 or 37.78% were in the service for 16-20 years and none (0%) of them had experienced in teaching for 5 years and below. Therefore, most of the school heads/principals had more years of teaching experience than that of their subordinates, the teachers.

As to the Number of Trainings and Orientation Attended/Conducted. All School Heads and Teachers had undergone one training and orientation attended/conducted in relation to disaster awareness and preparedness specifically, the community-based child focused disaster risk reduction.

Table 1 Profile of School Head- and Teacher-Respondents N = 515

1.1 Age	Teachers			School Heads		
	F	%	Rank	F	%	Rank
21-25 years old	35	7.45	6	0	0	8
26-30 years old	114	24.26	1	1	2.22	7
31-35 years old	100	21.28	2	4	8.89	5
36-40 years old	72	15.32	3	6	13.33	4
41-45 years old	36	7.66	5	16	35.56	1
46-50 years old	70	14.89	4	7	15.56	3
51-55 years old	33	7.02	7	8	17.78	2
56 years old and above	10	2.13	8	3	6.67	6
Total	**470**	**100%**		**45**	**100%**	

	Teachers			School Heads		
	F	%	Rank	F	%	Rank
1.2 Sex						
Male	60	12.77	2	10	22.22	2
Female	410	87.23	1	35	77.78	1
Total	**470**	**100%**		45	100%	
1.3 Civil Status						
Single	84	17.87	2	6	13.33	2
Married	380	80.85	1	37	82.22	1
Separated	2	.43	4	0	0	4
Widow/Widower	4	.85	3	2	4.44	3
Total	**470**	**100%**		45	100%	
1.4 Highest Educational Attainment						
Bachelor's Degree	134	28.51	2	4	8.89	4
Bachelor's Degree with MA Units	248	52.77	1	10	22.22	2
CAR in MA	50	10.64	3	20	44.44	1
Master's Degree Holder	20	4.26	4	6	13.33	3
MA Degree Holder with Units in PhD/EdD	7	1.49	5	3	6.67	5
CAR in PhD/Ed.D	6	1.28	6	2	4.44	6
Doctorate	5	1.06	7	0	0	7
Total	**470**	**100%**		45	100%	
1.5 Number of Years in Service						
1 – 5 Years	150	31.91	2	0	0	7
6 – 10 Years	158	33.62	1	2	4.44	6
11 – 15 Years	61	12.98	3	13	28.89	2
16 – 20 Years	57	12.13	4	17	37.78	1
21 – 25Years	29	6.17	5	6	13.33	3
26 – 30 Years	15	3.19	6	4	8.89	4
31 years and above	0	0	7	3	6.67	5
Total	**470**	**100%**		**45**	**100%**	
1.6 Trainings attended/conducted						
Community-Based Child-Focused Disaster Risk Reduction	**470**	**100%**		**45**	**100%**	
Total	**470**	**100%**		**45**	**100%**	
1.7. Orientation attended/conducted						
Orientation on Earthquake Drill	**470**	**100%**		**45**	**100%**	
Total	**470**	**100%**		**45**	**100%**	

Then again, table 2 shows the profile of the pupil-respondents who were the Supreme Pupil Government Officials of the respondent schools. In terms of age, 290 or 92.06% out of 315 are in the age bracket of 11-12 years old and 25 or 7.94% aged 9-10 years old. Most of them were females with a frequency of 295 or 93.65% while only 20 or 6.35% were males. Two hundred ninety (290 or 92.06%) of the SPG officers were in the peak of their elementary level (Grade VI) and 25 or 7.94% were Grade 5.

Table 2. Profile of Pupil-Respondents
N = 315

2.1. Age	Frequency	Percentage (%)	Rank
9-10	25	7.94	2
11-12	290	92.06	1
13-15	0	0	3.5
others	0	0	3.5
Total	315	100%	
2.2. Sex			
Male	20	6.35	2
Female	295	93.65	1
Total	**315**	**100%**	
2.3. Grade Level			
Grade IV	0	0	3
Grade V	25	7.94	2
Grade VI	290	92.06	1
Total	315	100%	

Table 3 shows profile of the respondent schools in terms of the number of teachers and staff, number of pupils, number of buildings, and number of classrooms.

Number of Teachers and Staff. Most of the respondent schools 30 (66.67%) had 1-10 number of teachers and staff, 13 (28.89%) schools had 11-20 teachers and staff, 1 (2.22) school had 21-30 number of teachers and staff, and 1 (2.22%) also had 31 teachers or more.

Number of Pupils. Central schools and other large schools has the highest population and 1 school (2.22%) in one of the remote areas of Ubay, Bohol had the lowest population which has below 100 pupils.

Number of Buildings. Most of the schools 31 (68.89%) had 1-5 number of buildings while 4 (8.88%) had more than 10 buildings in a school.

Number of Classrooms. Thirty one (68.89%) schools had 1-10 classrooms, 11 (24.44%) had 11 -20 classrooms and 3 (6.67%) of the 45 schools had 21 or more classrooms.

Table 3. Profile of the School-Respondents
N = 45

z3.1. Number of Teachers and Staff	**Frequency**	**Percentage (%)**	**Rank**
1-10	30	66.67	1
11-20	13	28.89	2
21-30	1	2.22	3.5
31 and above	1	2.22	3.5
Total	**45**	**100%**	
3.2. Number of Pupils			
100 and below	1	2.22	6
101-200	17	37.78	1
201-300	11	24.44	2
301-400	10	22.22	3
401-500	3	6.67	4.5
501 and above	3	6.67	4.5
Total	45	100%	
3.3. Number of Buildings			
1-5	31	68.89	1
6-10	10	22.22	2
11-15	2	4.44	3.5
16 and above	2	4.44	3.5
Total	45	100%	
3.4. Number of Class-rooms			
1-10	31	68.89	1
11-20	11	24.44	2
21 and above	3	6.67	3
Total	45	100%	

Table 4 below reveals the different drills conducted by the respondent schools during the school year 2017-2018 in preparation for this school year 2018-2019. The school personnel and the SPG officers admitted that they "often" conducted Earthquake drill, Communication drill, Emergency evacuation drill, and meeting place drill. Meaning, they actually conducted these drills in a quarterly basis. On the other hand, they "rarely" conducted shelter in-place drill, first aid drill, and fire drill, so this was done once or twice a year. However, the respondents admitted that they "never" conducted storm surge drill, tsunami drill, and lightning/ thunderstorm drill.

Table 4. Disaster Preparedness Drills
Conducted in Schools
N = 830

Disaster Preparedness Drills	**WM**	**DI**	**Rank**
Communication Drill	2.66	O	2
Earthquake Drill	2.96	O	1
Emergency Evacuation Drill	2.65	O	3
Fire Drill	1.97	R	7
First Aid Drill	2.10	R	6
Tsunami Drill	1.61	N	9
Storm Surge Drill	1.62	N	8
Lightning/Thunderstorm Drill	1.54	N	10
Meeting Place Drill	2.62	O	4
Shelter In-Place Drill	2.14	R	5
Average Weighted Mean	**2.19**	**Rarely**	

Legend: Rating Scale Descriptive Interpretation **(DI)** Weighted Mean **(WM)**
3.25 – 4.00 Very Often (VO)
2.50 – 3.24 Often (O)
1.75 – 2.49 Rarely (R)
1.00 – 1.74 Never (N)

It was a sad fact that even schools along the shore never conducted tsunami and storm surge drill even they know that their area is prone to storm surge and tsunami. The respondents were not aware that lightning/thunderstorm may cause disaster because any event which can harm people and may cause loss of life and damage to properties maybe considered a disaster, so they did not conduct lightning/thunderstorm drill. To make people aware of hazards brought by disasters in the environment, the Philippine Government through the Department of Education conducts seminars and trainings for teachers and school administrators regarding disaster preparedness (Luna E., Bautista ML., and Guzman M., 2008). In fact all the school head and teacher-respondents had undergone one orientation and one training relative to disaster awareness and preparedness. As said by Petra Nemcora, “we cannot stop natural disasters but we can arm ourselves with knowledge; so many lives wouldn’t have to be lost”.

Table 5 displays the availability of the emergency facilities and equipment in each of the respondent schools. It was found out in the survey that almost all schools 821 (98.92%) had first aid kit. Most of the emergency facilities and equipment commonly used in the respondent schools were the following: cellphones with the frequency of 761 (91.69%), television with 611 (73.61%), matches/lighters 591 (71.20%), flashlight/ emergency lights 577 (69.52%), transistor radio 489 (58.92%), fire extinguishers 437 (52.66%), whistle 409 (49.28%), megaphones/lapel 370 (44.58%), and carpentry tools 302 (36.39%). All schools had no transportation vehicle/school bus and rubber boat in case of high floods and even the two schools in the island of Ubay had no rubber boat to be used in case of emergency evacuation. Public Elementary Schools in Ubay, Bohol were so blessed because after the Municipal DRRM Office conducted a Community- Based Child-Focused Disaster Risk Reduction Seminar last February 15-17,2017, the DILG in cooperation with the World Vision, a non-governmental organization distributed one megaphone and 2 fire extinguishers per school. And just this June 2018, each school was provided with a handheld radio initiated and sponsored by the LGU, Ubay and World Vision. Disaster preparedness are actions that ensure resources necessary to carry out are available before a disaster, or they can be obtained promptly when needed. These are preparations and adjustments such as storing of food and water, preparing emergency plan and emergency kit, and other activities that reduce risk, injury or damage. This was supported with Republic Act No. 10121. This is an Act strengthening the Philippine Disaster Risk Reduction and Management System, providing for the National Disaster Risk Reduction and Management Framework and institutionalizing the National Disaster Risk Reduction and Management Plan, appropriating funds therefore and for other purposes. It shall be known as the “Philippine Disaster Risk Reduction and Management Act of 2010”. In support of the responsibility of the government to ensure people’s safety, the UN Humanitarian Resolution 46/182 of 1991 has declared that, “Each State shall have the responsibility first and foremost to take care of the victims of natural disasters and other emergencies occurring on its territory. Hence, the affected State has the primary role in the initiation, organization, coordination, and implementation of humanitarian assistance within its territory.

Table 5. Emergency Tools and Equipment Available in Schools N=830

Emergency Facilities/ Equipment	Frequency	Percentage (%)	Rank
Flashlight/Emergency Lights	577	69.52	5
Fire Alarms	115	13.86	11
Half mask Respirator	36	4.34	13
Television	611	73.61	3
Megaphones/ lapel	370	44.58	9
Safety Net	12	1.45	15
First Aid kit	821	98.92	1
Transportation Vehicle/ School Bus	0	0	18.5
Cellphones	761	91.69	2
Carpentry Tools	302	36.39	10
Whistle	409	49.28	8
Emergency Blanket	33	3.98	14
Fire Hoses	22	.03	17
Fire Extinguishers	437	52.66	7
Matches/ Lighters	591	71.20	4
Safety Helmet	42	5.06	12
Transistor Radio	489	58.92	6
Rubber Boat	0	0	18.5
Folding Stretchers	3	.36	16

As shown in table 6, the level of awareness among schools on Disaster Risk Reduction Management Plan as part of Disaster Preparedness, almost all of the respondents are aware of the safe and unsafe places in their school with a frequency of 828 or 99.76% while only 2 or 24% were not aware of. They were also aware that the School staffs are expected to stay as disaster service workers.

According to United Nations International Strategy for Disaster Reduction or UNISDR (2008:16), the purpose of school disaster management is to protect the lives of students and staff, and to ensure educational continuity of students. It further states that administrators, teachers and staff always take the place of parents and bearing both moral and legal imperatives to stay with and to protect children. All are expected to serve as “disaster service workers” during times of emergency and are responsible for reunifying children with their families. This responsibility makes it a necessity for every school system and school site to have risk reduction plans and disaster preparedness drills to protect students and the staff from physical harm, minimize disruption and ensure the continuity of education for all children and develop and maintain a culture of safety.

Eight hundred twenty-six (99.52%) were aware of the School DRRM plan and the different disaster preparedness drills while only 4 (.48%) did not know that each school should have a DRRM plan. This is in connection with DRRM policies and programs in support of the national, regional, and divisions directions (R.A. 9155: Basic Education Governance Act of 2001). Specific interventions to address the effects of hazards and risks are determined at the school level and this could be done through the DRRM plan.

Eight hundred twenty-four (99.28%) had the knowledge and skills on the facilities and equipment to be used in times of disaster, while only 6 (.72%) did not know it. Eight hundred 22 (99.04%) were aware of the evacuation routes in school and the assembly point of the school where they would go after a tremor subsides while 8 (.96%) were not aware. Out of 826 (99.52%) who were aware of the DRRM plan, only 819 (98.67%) had visited and had the knowledge of the content of the DRRM plan but they have known the special alarm that is to be raised in case of emergency. In totality, almost 100% of the respondents were equipped with the knowledge with regards on the early warning system, what to do, and where to go in times of disaster.

With the issuance of a policy (DepEd Order No. 37 Series 2015), the Comprehensive DRRM in Basic Education Framework seeks to: Protect learners and education workers from death, injury, and harm in schools; Plan for educational continuity in the face of expected hazards and threats; Safeguard education sector investments; and Strengthen risk reduction and resilience through education.

Table 6. Level of Awareness Among Schools on Disaster Risk Reduction Management Plan
N = 830

Statement	Yes			No		
Are you aware of...	F	%	Rank	F	%	Rank
the School's Disaster Risk Reduction and Management (DRRM) Plan?	826	99.52	3.5	4	.48	7.5
the content of the DRRM Plan?	819	98.67	8.5	11	1.33	2.5
the special alarm that is raised in case of an emergency?	819	98.67	8.5	11	1.33	2.5
the safe and unsafe places in your school for an earthquake?	828	99.76	1.5	2	.24	9.5
the assembly point of your school where you would go after the tremor subsides?	822	99.04	6.5	8	.96	4.5
the markings for safety precautions in your school?	813	97.95	10	17	2.05	1
the evacuation routes in your school?	822	99.04	6.5	8	.96	4.5
the different disaster preparedness drills?	826	99.52	3.5	4	.48	7.5
the facilities and equipment to be used in times of disaster?	824	99.28	5	6	.72	6
the School staffs are expected to stay as disaster service workers.	828	99.76	1.5	2	.24	9.5

Table 6.1 shows the level of preparedness in terms of assessment and planning activities. It was found out that school personnel were well prepared the following: Has a disaster preparedness plan with a Weighted Mean (WM) of 3.29, Drills actually conducted with a WM of 3.48, Stores accessible and functional emergency tools with a WM of 3.26. Only one item was interpreted as "partially prepared": Has insurance coverage for school disaster and the rest of the items were interpreted as "prepared".

On the side of the pupil-respondents, all of the items were interpreted as "prepared". Item 12 which stated, "Pupils' emergency release and emergency contact information is updated at the beginning of the school year", ranked first this is because of DepEd Order No. 43, Series 2012, the Guidelines on the Implementation of Executive Order No. 66 dated January 9,2012, entitled "Prescribing Rules on the Cancellation or Suspension of Classes and Work in Government Offices due to typhoons, flooding, other weather disturbances and calamities", is issued to streamline the procedure on the suspension of classes and work in government offices in times of typhoons, floods, and other disasters or calamities to spare the pupils, students, teachers, and government workers and the general public from unnecessary dangers to their lives and limbs.

In general, Assessment and Planning activities for the school personnel obtained a total mean score of 2.96 with a descriptive interpretation of "prepared", and also the pupils were prepared with an average weighted mean of 2.74.

Preparedness are the key strategic actions that give importance to activities revolving around community awareness and understanding, contingency planning, and conduct of local drills, and the development of disaster response plan.

Table 6.1 Schools' Level of Disaster Preparedness in terms of Assessment and Planning Activities
$N_1 = 515$; $N_2 = 315$

Statement	School Personnel			Pupils		
	WM	DI	Rank	WM	DI	Rank
Has a disaster preparedness plan.	3.29	WP	2	3.09	P	2
Has an organizational structure of disaster controlled group.	3.19	P	4	2.51	P	10
School staff have reviewed and revised the plan in the past years.	2.85	P	10.5	-	-	-
Conducts disaster preparedness trainings and seminars for both teachers and students.	2.85	P	10.5	2.54	P	9
Drills actually conducted.	3.48	WP	1	2.69	P	5
Stores accessible and functional emergency tools.	3.26	WP	3	-	-	-
Proper use of facilities and equipment were taught to teachers and students.	2.70	P	13	2.57	P	8
Staff has completed their own classroom disaster plans.	2.69	P	14	-	-	-
Evacuation route map is posted in each room, with the room marked on map.	2.65	P	15	2.63	P	7
Teachers are prepared to check in on neighboring classrooms.	2.89	P	9	-	-	-
Has plans on the assistance in evacuation of the individuals with disabilities or physically challenged.	2.74	P	12	2.75	P	4
Pupils' emergency release and emergency contact information is updated at the beginning of the school year.	3.06	P	7.5	3.12	P	1
Has a plan for an alternate school site for school continuity following a disaster.	3.14	P	5	2.66	P	6
Has a plan for alternative schedules and methods as needed, means for continuing instruction during a period of school closure due to disaster.	3.06	P	7.5	2.86	P	3
Has an off-site secure back-up of educational records and emergency contact and release information in an alternate location.	3.07	P	6	-	-	-
Has insurance coverage for school disaster risks.	2.46	PP	16	-	-	-
Average Weighted Mean (AWM)	**2.96**	**Prepared**		**2.74**	**Prepared**	

Legend: Rating Scale Descriptive Interpretation (**DI**) Weighted Mean (**WM**)
3.25 – 4.00 Well Prepared (WP)
2.50 – 3.24 Prepared (P)
1.75 – 2.49 Partially Prepared (PP)
1.00 – 1.74 Not Prepared (NP)

It is reflected in table 6.2, the schools' level of disaster preparedness in terms of physical and environmental risk reduction activities, all the items were interpreted as "prepared" with an average weighted mean of 2.81 as perceived by the school personnel. But for the pupils, school buildings meet all current standards for disaster safety, entrance and exit doors in each room and buildings are swinging outside, has limited, isolated, and secured hazardous materials, facilities and equipment are in place and maintained regularly, has emergency lightings to be used during disasters, and exit routes are marked and are kept clean were interpreted as "prepared", while they rated "partially prepared" for school gate is passable with standard fire trucks, and has fastened tall and heavy furnishings that could fall or slide during disasters and could injure or kill people.

Table 6.2 Schools' Level of Disaster Preparedness in terms of Physical and Environmental Risk Reduction Activities N_1=515, N_2=315

Statement	School Personnel			Pupils		
	WM	DI	Rank	WM	DI	Rank
School buildings meet all current standards for disaster safety.	2.71	P	6.5	2.86	P	1.5
School gate is passable with standard fire trucks.	2.82	P	5	2.10	PP	8
Has fastened tall and heavy furnishings that could fall or slide during disasters and could injure or kill people.	2.83	P	4	2.18	PP	7
Has limited, isolated, and secured hazardous materials.	2.94	P	2	2.85	P	3
Exit routes are marked and are kept clean.	2.54	P	8	2.54	P	6
Has emergency lightings to be used during disasters.	2.71	P	6.5	2.6	P	5
Entrance and exit doors in each room and buildings are swinging outside.	3	P	1	2.86	P	1.5
Facilities and equipment are in place and maintained regularly.	2.90	P	3	2.66	P	4
Average Weighted Mean (AWM)	**2.81**	**Prepared**		**2.58**	**Prepared**	

Legend: Range Descriptive Interpretation (**DI**) Weighted Mean (**WM**)
3.25 – 4.00 Well Prepared (WP)
2.50 – 3.24 Prepared (P)
1.75 – 2.49 Partially Prepared (PP)
1.00 – 1.74 Not Prepared (NP)

Table 6.3 presents the Schools' level of disaster preparedness in terms of response capacity development activities, wherein 3 out of 5 items were rated by the school personnel as "well prepared", while item 4 had a descriptive interpretation of "partially prepared" same as the interpretation of the pupil respondents. Other than that, the rest of the items as revealed by the SPG officers had a descriptive interpretation of "prepared". Findings revealed that school personnel were more prepared than that of the pupils. This was supported with Ellena (2010), that the schools are our universal institution for sharing knowledge and skills, the expectations for school leaders to be role models in disaster preparedness and prevention is high. Successful mitigation is one of the ultimate tests of success of the education we provide over generations.

Table 6.3 Schools' Level of Disaster Preparedness in terms of Response Capacity Development Activities
N_1=515, N_2=315

Statement	School Personnel			Pupils		
	WM	DI	Rank	WM	DI	Rank
Pupils, teachers, and staff are trained to use fire extinguisher.	2.35	P	4	2.53	P	4
Pupils have practiced "Drop, Cover and Hold" in their classrooms and building evacuations.	3.55	WP	2	2.8	P	2
Pupils are taught about 4 ways for building evacuation: "Don't Talk! Don't Push! Don't Run! Don't Turn Back!"	3.41	WP	3	2.71	P	3
Emergency Go-Bag are available in the classrooms.	2.16	PP	5	2.2	PP	5
Pupils are taught that if they are outside the classroom, they should exit to the assembly area, NOT to go back inside.	3.61	WP	1	2.84	P	1
Average Weighted Mean (AWM)	**3.02**	**Prepared**		**2.62**	**Prepared**	

Legend: Range Descriptive Interpretation (**DI**) Weighted Mean (**WM**)
3.25 – 4.00 Well Prepared (WP)
2.50 – 3.24 Prepared (P)
1.75 – 2.49 Partially Prepared (PP)
1.00 – 1.74 Not Prepared (NP)

Table 7 denotes the relationship between the school personnel's' profile and the level of disaster preparedness. The result revealed that the school personnel's' profile as to civil status, highest educational attainment and length of teaching experience and the level of disaster preparedness have significant relationship since the computed chi-square values of 126.43, 72.23 and 29.50 with the p-values of <0.001, <0.001 and 0.043, respectively which is lesser than the preset level of significance 0.05 thus, the null hypothesis is rejected.

Relationship Between the School Personnel's' Profile and Level of Disaster Preparedness
N = 515

Profile	X^2 value	df	p – value at α=0.05	Interpretation	Decision
Age	24.41	21	0.274	Not Significant	Accept Ho
Civil Status	126.43	9	<0.001	Significant	Reject Ho
Highest Educational Attainment	72.23	18	<0.001	Significant	Reject Ho
Length of Service	29.50	18	0.043	Significant	Reject Ho

This denotes that school personnel have a greater power over the outcome of their situation, which consequently makes them less vulnerable both during and after a disaster. The study is supported by Simatwa (2014). The value of human life in the demand of safety is a matter of concern to all and diverse in every part of the world. All institutions of learning are viewed as heavens of peace worldwide. Aside from this view, institutions of learning are reported to be experiencing serious cases of insecurity. All over the world, there has been an upward trend in the number of school children dying or getting injured in school violence, disasters and emergencies that would be avoided if safety policies were strictly adhered to (Simatwa, 2014). However, there is no significant relationship between age and level of disaster preparedness since the computed chi-square value of 24.41 with p-value of 0.274 of <0.001 which is lesser than the 0.05 level of significance. Hence, the null hypothesis is accepted.

Table 8 below indicates the difference between the perceptions of the respondents on the level of preparedness. The results revealed that there is significant difference between the perception of the respondents as to the Assessment and Planning Activities, Physical and Environment risk Reduction, Response Capacity Development Activities, and Overall Level of Preparedness since the computed t-value of 10.144, 16.437, 9.769, and 11.653 with the p-value of <0.001 in all categories which is lesser than 0.05 level of significance. Thus the null hypotheses are rejected.

Table 8 Difference Between the Perception of the Respondents on the Level of Preparedness Among Public Elementary Schools
N_1 = 515; N_2 = 315

Level of Preparedness	Mean		Mean Difference	t – value	p – value at α=0.05	Interpretation	Decision
	School Personnel	Pupils					
Assessment and Planning Activities	2.74	2.95	0.209	10.144	<0.001	Significant	Reject Ho
Physical and Environment Risk Reduction	2.63	3.02	0.388	16.437	<0.001	Significant	Reject Ho
Response Capacity Development Activities	2.59	2.81	0.221	9.769	<0.001	Significant	Reject Ho
Overall Level of Preparedness	2.67	2.92	0.254	11.653	<0.001	Significant	Reject Ho

It implies that disasters could be prevented if it occurs in a community of prepared people much more if well prepared. Decreasing vulnerabilities and increasing capacities could prevent disasters. Icek Azjen (1991) believed that an effective intervention will not only have to encourage people of the desirability of disaster preparedness but also to provide them with the skills and means to do it. The more strongly they can be made to feel that they have control over disaster preparedness behavior the more likely they are to carry out the intentions. In contradict to the study of Najafi M., et al (2014) that a disaster is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability to the affected community or society to cope using its own resources. Even though hundreds and thousands of lives were affected without warning by disasters yearly, most people do not concern themselves by preparing until disaster strikes. (Najafi M., Ardalan A., Akbarisari A., 2017).

Table 9
PROPOSED ACTION PLAN

Time Frame : School Year 2019-2020
Proposed budget : P 2,000,000.00

Areas of Concern	Objectives	Activities/ Strategies	Source of Fund	Persons Involved	Success Indicators
Disaster Awareness Emergency facilities and Equipment	- Equip the teachers with the knowledge and skills related to disaster. -To equip the school personnel and pupils with emergency facilities which are usable in times of disaster	-Revisit this year's contingency/ SDRRM plan. -Revise the CP/ SDRRM plan to be functional. - Conduct risk assessment. - Plan and undertake actions based on the result of risk assessment. -Understanding of advisory including warning signals. - Rehabilitate/ replace the old emergency facilities and equipment. - Acquire more emergency facilities and equipment which can be used in times of disaster.	DepEd MOOE LGU, PTA, DepEd, NGO	-Elementary School Heads/ Principals and SDRRM Coordinator -School Heads/ Principals, Teachers, Staff and pupils - School Heads/ Principals, Teachers, Staff and pupils -School Personnel and Pupils -School Personnel and Pupils	Functional Contingency Plan Hazard-free environment Aware of the PAGASA/ DOST Advisory School personnel and pupils can respond to early warning signals Each School personnel and pupils have Emergency-Go- Bag
Disaster Preparedness	-To intensify the conduct of disaster preparedness drills and other activities.	- Conduct all disaster preparedness drills religiously, if possible monthly and it would be better if un announced especially during the last quarter of the school year.		School Personnel and pupils	School Personnel and pupils are well prepared. Zero casualty

CONCLUSIONS

Anchored on the foregoing findings, the researchers arrived at the following conclusions:

1. Most of the school personnel were in the height of their career. Stereotyping still exists in the field of teaching because there were more females than males. They were qualified in their position. They were still on their early period of teaching and most of them have shown productivity in their career in the sense that they keep on growing professionally by enrolling themselves in Master of Arts classes.
2. Most of the pupil-respondents were females who belonged to the age group of 11-12 years old. They were in the peak of their elementary level which is Grade VI.
3. Most of the respondent schools had 10 and below number of teachers and staff. Central Schools had the highest number of enrolment. Most schools had 5 and below number of buildings with 1-10 classrooms.
4. Based on the findings, earthquake drill was mostly conducted since when Bohol was hit by serious calamities such as the 7.2 magnitude earthquake and consecutive storms in the year 2013, that's why the schools were motivated to have preparedness measures that gave improvement in the conduct of the drills. However, tsunami, storm surge and lightning/ thunderstorm drill was never conducted by all of the respondent schools maybe because the DepEd was not able to have strict and frequent monitoring in the conduct of the other drills on the respondent schools.
5. Furthermore, all of the respondent schools were equipped with the emergency facilities and equipment except for the transportation vehicle/school bus and rubber boat. It was observed that most school personnel and pupils are aware of the DRRM plan and its content, aware of the basic activities as part of disaster preparedness, the safe and unsafe places of their school and school personnel/ staff are expected to stay after a disaster.
6. In addition, the level of preparedness in terms of assessment and planning activities, physical and environmental risk reduction and response capacity development activities, most of the respondents were on the level of prepared so they have met the minimum requirements of disaster preparedness.
7. School personnel have a greater power over the outcome of their situation, which conse-

quently makes them less vulnerable both during and after a disaster.

8. Disasters could be prevented if it occurs in a community of prepared people much more if well prepared. Decreasing vulnerabilities and increasing capacities could prevent disasters.
9. By informing children and teachers about how to prepare for and respond to disasters, they become involved in the process. Through involvement, children and teachers have a greater power over the outcome of their situation, which consequently makes them less vulnerable both during and after an event. By mentally and physically preparing children and teachers for an event, families and communities can diminish some of the concern they have in a disaster's aftermath. These children are also less likely to have post disaster psychological responses and are more likely to be resilient. Preparing them for a potentially traumatizing event is the key to a zero casualty.

RECOMMENDATIONS

Anchored on the findings and conclusions of the study, the following recommendations were drawn:

1. School personnel and pupils are encouraged to intensify the conduct of different drills not only earthquake drill but also fire drill, lightning/ thunderstorm drill, tsunami/storm surge drill for disaster preparedness.
2. School Heads are encouraged to coordinate or seek financial assistance from DepEd, LGU, PTA and NGO's for the purchase of Emergency Go-Bag, transistor radio, and school bus/ rubber boat for these equipment are needed in times of disaster.
3. Teachers are encouraged to continue attending trainings and seminars relevant to disaster preparedness to help pupils recover.
4. School administrators are encouraged to seek assistance on the conduct of seminars and trainings from MDRRMO (Search and Rescue Unit) for both teachers and pupils.
5. School Heads are encouraged to enhance their school gate to be passable with standard fire trucks.
6. Teachers should fastened tall and heavy furnishings that could fall or slide during disasters and could injure or kill people.

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BREAST SELF-EXAMINATION: ATTITUDE AND PRACTICES OF WOMEN IN A COLLEGE

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ABSTRACT

According to the International Agency for Research on Cancer (2018), breast cancer is the leading cause of cancer death for women and the most commonly detected cancer for women. In the Philippines, breast cancer is the common and leading cause of death among women. This study was designed to determine the level of attitude and extent of practice on breast self-examination among women of North Luzon Philippines State College. The respondents of this study were 50 female personnel and 300 female students of NLPSC. The study made use of the descriptive, comparative and correlational design. The level of attitude of personnel along susceptibility is "average". The level of attitude among personnel along seriousness is "average" while students has a "High" level. On benefits, the level of attitude of personnel is "average" while students had a "high" level. Female personnel "sometimes" performed the breast self-examination while students "rarely" performs it. The extent of practice on breast self-examination observed on personnel and students is generally low. There is significant relationship between age and level of attitude along barriers and health and motivation. There is significant relationship on level of attitude along health and motivation. It is recommended that there should be series of health advocacy campaign on breast self-examination as an early detection of breast cancer, health workers should intensify health education on breast self-examination and further studies need to explore what interventions could be best used to improve the uptake and practice of breast self-examination.

Keywords: attitude, breast self-examination, practice

INTRODUCTION

According to the International Agency for Research on Cancer (2019), breast cancer is the leading cause of cancer death for women and the most commonly detected cancer for women. In the Philippines, breast cancer is the common and leading cause of death among women. One in every 13 Filipinas is projected to develop it in her lifetime. Moreover, the Philippines has been identified as having the highest incidence rate of breast cancer in Asia (Laudico et al., 2015).

The three screening methods recommended for breast cancer include breast self-examination (BSE), clinical breast examination (CBE) and mammography. BSE is a cost-effective method of early detection of cancer of the breast especially in resource poor countries. More than 90% of cases of breast cancer can be detected by women themselves, stressing the importance of breast self-examination (BSE) as the key breast cancer detection mechanism (Samina, Warda, Saqib, Afaf, & Sumbal, 2011).

Examining the breasts is an important way to find a breast cancer early, when it is likely to be cured (Zabari, Latiff, Juni, Said & Ismail, 2015). Not every cancer can be found this way, but it is a critical step one can and and take for herself. Breast self-examination is an essential part of taking care of oneself.

Breast self-examination (BSE) is an easy but unreliable method for finding possible breast cancer. It is when woman uses her hands and the surrounding areas for unusual lumps and shape changes. BSE is done on a regular basis with the same technique each time. This technique ensures that all areas of the breast are felt and examined thoroughly. American Cancer Society (2013) recommends breast self-examination has to be performed monthly as an early detection tool for breast cancer.

With this background, the study was designed to determine the level of attitude and extent of practice on breast self-examination among women of North Luzon Philippines State College.

STATEMENT OF THE PROBLEM

This study aimed to determine the level of attitude and extent of practice on breast self-examination.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of age, civil status, religion and place of residence among female personnel and female students?
2. What is the level of attitude on breast self-examination among women of NLPSC along:
   a. susceptibility;
   b. seriousness;
   c. benefits;
   d. barriers; and
   e. health and motivation?
3. What is the extent of practice on breast self-examination by the respondents?
4. Is there a significant relationship between the profile and the level of attitude on breast self-examination on female personnel and female students?
5. Is there a significant difference on the level of awareness and extent of practice on breast self -examination between two groups of respondents?

METHODOLOGY

Research Design. The study made use of the descriptive, comparative and correlational design. The descriptive analysis in this study provided information about the level of attitude of the respondents on BSE along health motivation, benefits, barriers, seriousness and susceptibility and the extent of practice of female respondents on BSE.

Population and Sample. The respondents of this study were 50 female personnel and 300 female students of NLPSC. The slovin's formula was used to determine the number of respondents included in the study.

Research Instrument. Data needed for the study were gathered by utilizing the questionnaire of Asistin (2010). The instrument has three parts. Part I was designed to gather the information on socio demographic. Part II contains information on the level of attitude towards BSE and Part III is the extent of practice of BSE of the respondents.

The level of attitude of the respondents on BSE was described by using a five-point rating scale which are as follows: 5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, and 1-Strongly Disagree; while the extent of practice on BSE used the following rating scale: 5-Always, 4-Often, 3-Sometimes, 2-Rarely, and 1-Never.

The norm for interpretation to determine the level of attitude and extent of practice on breast self-examination were as follows:

Item Descriptive Rating	Statistical Range	Level of Attitude on BSE	Extent of Practice on BSE
5- Strongly Agree	4.20-5.00	Very High	Always
4- Agree	3.41-4.20	High	Frequent
3- Undecided	2.61-3.40	Average	Sometimes
2- Disagree	1.81-2.60	Low	Rarely
1-Strongly Disagree	1.00-1.80	Very Low	Never

FINDINGS

Question No. 1. What is the profile of the respondents in terms of age, civil status, religion and place of residence among female personnel and female students?

Table 1.a

Age	Personnel		Students	
	f	%	*f*	%
55 and above	4	8.0	0	0
45-54	9	18.0	2	0.7
35-44	10	20.0	13	4.3
25-34	20	40.0	21	7.0
15-24	7	14.0	264	88.0
Total	**50**	**100**	**300**	**100**

The women who participated in the study ranges from 15 and above years of age. A great percentage of the personnel are 25-34 years old (40%) while most of the students are aged 15-24 (88%).

Table 1.b

Civil Status	Personnel		Students	
	f	%	*F*	%
Single	13	26.0	276	92.0
Widowed	6	12.0	6	2.0
Married	30	60.0	15	5.0
Separated	1	2.0	2	0.7
Single Parent	0	0	1	0.3
Total	**50**	**100**	**300**	**100**

Majority of the personnel are married (30 or 60%) and almost all of the students are single (276 or 92%).

Table 1.c

Religion	Personnel		Students	
	f	%	*f*	%
Roman Catholic	31	62.0	215	71.7
Iglesia ni Cristo	12	24.0	20	6.7
Jehova	6	12.0	9	3.0
AOG	1	2.0	4	1.3
SDA	0	0	1	0.3
Methodist	0	0	17	5.7
Born Again	0	0	24	8.0
Others	0	0	10	3.3
Total	**50**	**100**	**300**	**100**

On religion, majority of the personnel are Roman Catholics (31 or 62%) and so with the students (215 or 71.7%).

Table 1.d

Place of Residence	Faculty		Students	
	f	%	*f*	%
Poblacion Area	7	14.0	85	28.3
Agricultural/Farmland Area	20	40.0	105	35.0
Coastal Area	16	32.0	51	17.0
Mountainous Area	7	14.0	59	19.7
Total	**50**	**100**	**300**	**100**

A great percentage of the personnel (40%) and students (35%) live at the Agricultural or Farmland area.

Question No. 2. What is the level of attitude on breast self-examination among women of NLPSC along susceptibility, seriousness, benefits, barriers, and health and motivation?

Table 2

Level of Attitude	Personnel	Level of Attitude	Students	Level of Attitude
Susceptibility	3.10	Average	3.07	Average
Seriousness	3.25	Average	3.60	High
Benefits	3.36	Average	3.70	High
Barriers	3.39	Average	3.38	Average
Health and Motivation	3.24	Average	3.63	High

The indicators used to evaluate the level of attitude on breast self-examination were susceptibility, seriousness, benefits, barriers and health and motivation.

The level of attitude on breast self-examination of personnel respondents of NLPSC along susceptibility is "average" as indicated by the overall mean rating of 3.10 and students had an overall mean rating of 3.07 along susceptibility interpreted as "average".

The level of attitude among the personnel-respondents in NLPSC along seriousness is "average" as backed up by mean rating of 3.25 while students of NLPSC has a "High" level of attitude along seriousness as manifested by a mean rating of 3.60.

On benefits, the level of attitude of personnel is "average" with a mean rating of 3.36 while students has a "high" level of attitude along benefits as evidenced by a mean rating of 3.70.

It is noted that the level of attitude along barriers is "average" supported by a mean rating of 3.39 and same with students who had "average" level of attitude along barriers with a mean rating of 3.38.

The table further reveals that the level of attitude of respondents along health and motivation is "average" as indicated by the overall mean rating of 3.24 and students had a "high" level of attitude supported by a mean rating of 3.63.

The general attitude of the respondents in this study towards breast self-examination was average, which implies that motivation is needed to improve their attitude towards performing breast self examination. Intensifying campaigns on early detection of breast cancer through breast self exam could motivate the respondents to practice BSE.

Question No. 3. What is the extent of practice on breast self-examination?

Table 3

Extent of Practice	Personnel	Descriptive Level	Students	Descriptive Level
	2.85	Sometimes	2.27	Rarely

The table shows that the female personnel "sometimes" performed the breast self-examination as evidenced by a mean rating of 2.85 while students "rarely" performs Breast self-examination as a way of detecting the early signs of breast cancer.

This means that the extent of practice on breast self-examination observed in this study on personnel and students is generally low.

Early detection by breast self-examination is the best method of improving the survival rate in breast cancer (Yaren A, Ozkılınc G, Guler A, and Oztop IA., 2008). According to the study of Isara and Ojedakun (2011), no family history of breast cancer is the main reason of not performing breast self-examination. Agboola et al., 2009, Bassey et al., 2008, and Aniebue and Aniebue, 2008 conveyed that the low performance of breast self-examination is due to lack of knowledge.

Question No. 4. Is there a significant relationship between the profile and the level of attitude on breast self-examination on female personnel and female students?

Table 4.a (Personnel)

Profile	Level of Attitude				
	Suscepti-bility	Serious-ness	Benefits	Barriers	Health and Motivation
Age	0.189	0.179	0.198	0.301*	0.079
Civil Status	-0.030	-0.064	-0.005	0.001	-0.067
Religion	-0.383**	-0.436**	-.400**	-.476**	-0.375**
Place of Residence	0.073	0.088	0.185	0.224	-0.085

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

The table shows that there is a significant relationship between age and level of attitude along barriers. This implies that the higher the age, the higher the level of attitude on BSE along barriers.

On religion, it appears that it is negatively correlated with the level of attitude along susceptibility, seriousness, benefits, barriers, and health and motivation. This implies that the higher their faith is, the lower they perceive BSE as a way of detecting breast cancer.

However, in the study of Dundar et al., (2004), the practice on breast self-examination is not influenced by spiritual principles or religious affiliations.

Table 4.b (Students)

Profile	Level of Attitude				
	Sus-ceptibil ity	Seri-ousne ss	Bene-fits	Barri-ers	Health and Moti-vation
Age	0.094	0.015	0.077	0.245**	0.153**
Civil Status	0.049	0.010	0.010	0.021	-0.022
Religion	-0.094	0.049	0.055	0.042	0.117*
Place of Residence	-0.121*	0.014	-0.068	-0.134*	-0.024

***. Correlation is significant at the 0.01 level (2-tailed)*
**. Correlation is significant at the 0.05 level (2-tailed)*

As gleaned from the table, there is a significant relationship between age and level of attitude on BSE along barriers and health and motivation. This implies that the higher the age, the more conscious people become about their health and become highly motivated for breast self-examination.

With regard to religion, it appeared that there is significant relationship on level of attitude along health and motivation. It shows that the spirituality or religious belief of a person influences their outlook in health, particularly BSE.

The place of residence of the respondents is seen to be negatively correlated with susceptibility and barriers. This means that those in the Poblacion areas have higher level of attitude on BSE along susceptibility and barriers. This implies the location of residence of an individual influences the level of attitude on BSE.

Question No. 5. Is there a significant difference on the level of awareness and extent of practice on breast self-examination between two groups of respondents?

Table 5

	Mean (Personn el)	Mean (Student s)	Mean Differ-ence	Comput-ed t-test value	Tabu-lar Value	Decision
Level of Attitude	3.27	3.48	-0.21	1.983	2.000	Accept Ho
Extent of Practice	2.85	2.27	0.58	5.962	2.000	Reject Ho

Level of significance = 0.05

The table shows that on the level of attitude, the computed value is 1.983 which is less than the tabular value of 2.000 at 0.05 level of significance. Thus, the null hypothesis is accepted. There is no significant difference in the level of attitude on BSE between students and personnel.

On the other hand, the computed t- test value on the extent of practice of personnel and students is 5.962 which is higher than the 2.000 at 0.05 level of significance. Therefore, the null hypothesis is rejected and there is significant difference on extent of practice between students and personnel.

This implies that personnel who has a higher level of education compared with students has a better understanding on the importance and benefits of BSE which lands for personnel's higher frequency of practicing breast self-examination than the students.

CONCLUSIONS

Based on the findings, the following conclusions were made:

1. A great percentage of the personnel are 25-34 years old (40%) while most of the students are aged 15-24 (88%). Majority of the person-

nel are married (60%) and almost all of the students are single (92%). On religion, majority of the personnel are Roman Catholics (62%) and so with the students (71.7%). A great percentage of the personnel (40%) and students (35%) live at the Agricultural or Farmland area.
2. The level of attitude on breast self-examination of personnel respondents of NLPSC along susceptibility is "average" as indicated by the overall mean rating of 3.10 and students had an overall mean rating of 3.07 along susceptibility interpreted as "average". The level of attitude among the personnel- respondents in NLPSC along seriousness "average" as backed up by mean rating of 3.25 while students of NLPSC has a "High" level of attitude along seriousness as manifested by a mean rating of 3.60. On benefits, the level of attitude of personnel is "average" with a mean rating of 3.36 while students had a "high" level of attitude along benefits as evidenced by a mean rating of 3.70. It is noted that the level of attitude along barriers is "average" supported by a mean rating of 3.39 and same with students who had "average" level of attitude along barriers with a mean rating of 3.38. The level of attitude of respondents along health and motivation is "average" as indicated by the overall mean rating of 3.24 and students had a "high" level of attitude supported by a mean rating of 3.63.
3. The female personnel of NLPSC "sometimes" performed the breast self-examination as evidenced by a mean rating of 2.85 while students of NLPSC "rarely" performs breast self-examination as a way of detecting the early signs of breast cancer. The extent of practice on breast self-examination observed in this study on personnel and students is generally low.
4. There is significant relationship between age and level of attitude along barriers. On religion, it appeared that it is negatively correlated with the level of attitude along susceptibility, seriousness, benefits, barriers, and health and motivation.
5. There is a significant relationship between age and level of attitude on BSE along barriers and health and motivation. With regard to religion, it appeared that there is significant relationship on level of attitude along health and motivation. The place of residence of the respondents is seen to be negatively correlated with susceptibility and barriers.
6. There is no significant difference in the level of attitude on BSE between students and personnel. There is significant difference on extent of practice between students and personnel.

RECOMMENDATIONS

Based on the salient findings and conclusions of the study, the following recommendations are suggested:

1. There should be a training on breast self-examination among personnel and students as an early detection measure of breast cancer in every institution.
2. Health workers should intensify health education on breast self-examination.
3. Further studies need to explore what interventions could be best used to improve the uptake and practice of BSE.

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PROFESSIONAL PREPARATION AND PRACTICES IN RELATION TO TEACHING EFFICIENCY AMONG PUBLIC ELEMENTARY SCHOOL TEACHERS

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ABSTRACT

The main thrust of the study was to determine the relationship between professional preparation and practices to teaching efficiency among public elementary school teachers during the school year 2018-2019. Specifically, this study primarily to delve into determining the teachers' professional preparation, qualification, practices and teaching efficiency among public elementary school teachers in Ubay III District, Ubay, Bohol, SY 2018-2019 with the end view of proposing a career pathing program. The researcher utilized the descriptive survey design using quantitative data with the aid of the questionnaire developed by Glenn Andrin (2011), as the main gathering tool which was distributed to the seventeen (17) public elementary schools in Ubay III district. The respondents were composed of thirteen (13) school heads and one hundred thirty-three (133) teachers of the respective schools. After subjecting data to the documentary and statistical analysis, Pearson Correlation Analysis revealed that there is a significant relationship between teachers who attained the highest level of education and attended relevant training and seminars and assumed to be more efficient and that education and training promote teaching efficiency. Professional preparation and practices also enhanced teaching efficiency. Anchored to these findings, the researchers had concluded that professional preparation and practices promote teaching efficiency. Thus, it is recommended that teachers should be equipped and pursue masters and doctoral degree in education and continually adopt training and seminars to ensure a high level of teaching efficiency. It is also recommended that school administrators initiate programs and practices which could promote teaching efficiency. Accordingly, a pathing program is proposed.

Keywords: Efficiency, Practices, Preparation, Professional, Teachers, Teaching

INTRODUCTION

In the case of teaching, the professional expectations of teachers have changed over time. In many countries, the role and functioning of schools are changing and so is what is expected of teachers. Teachers are asked to teach in increasingly multicultural classrooms; to place greater emphasis on integrating students with special learning needs in their classrooms; to make more effective use of information and communication technologies for teaching; to engage more in planning within evaluative and accountability frameworks; and to do more by updating their intellectual capabilities (http://www.oecd.org/berlin/4354 1636).

In the light of accelerated changes and situations that impact the young, elementary school learners' needs, interests, and capabilities are being prioritized in child development programs, while teachers are being prepared to adapt to these changes. Current trends show changes on acquiring new knowledge and information through technology, heightened awareness and active participation in addressing political, economic, social, ecological, and spiritual issues and problems; the need for teachers with a strong academic preparation, values formation, and commitment; and the great concern for education to expand the basics to include problem-solving, creativity, and capability of the individual for lifelong learning (Salandanan, 2012).

In the context of Philippine education system, every teacher shall uphold highest possible standards of quality education, shall make the best preparations for the career of teaching, and shall be at his best at all times and in the practice of his profession. In connection to this, the Department of Education encourage teachers to attend the Mass Training of Teachers (MTOT) on the K to 12 Basic Education Program (BEP) to emphasize different teaching approaches and to develop 21st Century learners. Since teacher preparedness incorporates what the teacher brings to the classroom from pre-service training and on-the-job learning. Teachers unanimously revealed that they were not well-prepared to integrating educational technology in the grade or subject taught (Andrin, 2011).

The teachers in Ubay III District being equipped and benefited about different professional preparation, practices, teaching strategies, techniques and approaches to enhance teaching effectiveness. The teachers outwardly found themselves ready for change. With this, the researcher felt it urgent to confirm if today's teachers could ably handle educational changes emerging in the teaching-learning paradigms highlighted in the development process for quality education and this points to the issue on teaching efficiency. The next issue would be on "How professionally qualified are these teachers"? With these prevailing situation, the researchers were motivated to undertake this study primarily to delve into determining the teachers professional preparation, qualification, practices, and teaching efficiency among the public elementary school teachers of Ubay III District, SY 2018-2019 with the end view of proposing a career pathing program.

STATEMENT OF THE PROBLEM

This study primarily to delve to determine the teachers' professional preparation, qualification, practices and teaching efficiency among the public elementary school teachers of Ubay III District, Ubay, Bohol of SY 2018-2019 with the end view of proposing a career pathing program in school, particularly:

1. the teachers' level of professional preparations and practices, and
2. teaching efficiency.

RESEARCH METHODOLOGY

Design

This study utilized the quantitative descriptive research using questionnaire developed by Glenn Andrin, (2011). This descriptive research seeks to find answers to questions through the analysis of variable relationships. It was specifically a correlational research since correlational analyses was used.

Environment and Respondents

The research was conducted in public schools of Ubay III District with a total of 133 public school teachers and 13 school heads as of SY 2018-2019. This district is located at the eastern part of Bohol and is part of Second Congressional District of Bohol. There were 133 teacher- respondents of the study comprising Kindergarten to Grade Six teachers.

The distributions of respondents were from Lomangog ES, Bongbong ES, San Pascual ES, California ES, Bulilis ES, Los Angeles ES, San Francisco ES, Ilihan ES, Villa Teresita ES, Governor Boyles ES, Buenavista ES, Gabi ES, Hambaburan ES, Luz ES, Casate ES, Bay-ang ES and Pag-asa ES

Instruments

The researcher used a modified checklist-questionnaire of 60 items , developed by Glenn Andrin, (2011). The questionnaire begins with the personal background of the respondent. Part I covered teachers' professional preparation in terms of highest educational attainment, relevant in-service trainings and relevant teaching experience. Part II focused on teachers' professional practices constituting eight factors. The practices included instructional planning and delivery, classroom management, teacher-learner interaction, subject content, evaluation and professional responsibilities and relationships. Part III concentrated on teaching efficiency which covered important teaching dimensions of planning and preparation, classroom environment, instruction, professional responsibilities and use of learners' assessment. All three parts with a total of 60 items are broken down to 5 for professional preparation, 30 for professional practices and 25 for teaching efficiency.Part I was more informative on the personal qualification of teachers. Parts II and III were composed of evaluate items using rubrics and descriptors anchored on a rating scale of 1 to 5.

Data Gathering Procedure

Upon the receipt of the approval, questionnaires were distributed to the respondents. The respondents were assisted and were given sufficient time to answer the questionnaires. The researcher collated the answered questionnaires.

The collated data were tabulated, analyzed and interpreted using descriptive statistics.

LITERATURE BACKGROUND

Professional identity has been described as “the attitudes, values, knowledge, and beliefs shared with others within a professional group and relates to the professional role being undertaken by the individual and thus is a matter of self -conceptualization associated with the work role adopted” (Adams, Hean, Sturgis & Macleod Clark, 2006, p. 56). Shaped by history and culture, professional identity is dynamic, subject to formulation and reformulation at both an individual and collective level as the professional discourse both reflects and constructs the social world. In the current study, teachers’ conceptualisations of their professional role seemed to have an alignment with much of the current discourse of teaching. The value in undertaking academic study was seen by all teachers as being able to connect ‘researchers and professional practitioners, research and practice, academic coursework and professional training’ and in doing so ‘address the learning needs and interests of those working in a professional capacity.’ (Forsyth,H.,Laxton, R., Moran, C., van der werf, J., Banks, R., & Taylor, R. 2009, p. 652).

Boud, Cohen, and Walker (1993) believe that experience is the central consideration of all learning. They argue that learning builds on and flows from experience and that “learning can only occur if the experience of the learner is engaged, at least at some level” (p. 8). One way to enhance student learning is by the integration of teaching and practice of the instructor. Dewey, in his essay “The Relation of Theory to Practice in Education” (Dewey, 1904/1974), expressed the belief that content knowledge (i.e., scholarship) should not be remote from the practical issues that teachers face. He believed that teachers’ practical knowledge could serve as a valuable resource for enhancing educational theory. A study by Kramer, Polifroni, and Organek (1986) showed that students taught by a practicing faculty member scored higher on professional characteristics (including autonomy, self-concept, and self-esteem) than did students taught by non-practicing faculty.

The Philippine public school system has gone through a dramatic revamp when Republic Act No. 10533, also known as ‘The Enhanced Basic Education Act of 2013’, was conclusively implemented in the year 2016. This abandons the previous 10-year basic educational curriculum and will be extended for two more years to make it twelve in total. Thus, more colloquially referred to as the K-12 Basic Education Program.

DepEd compensates its teachers using a tool called Teachers’ Preparation Pay Schedule (TPPS). It is a classification and compensation scheme for teaching positions in elementary and secondary schools based on a combination of competencies which include academic or educational preparation, work experience and extracurricular professional training and certificates. For leadership assignments and roles, TPPS does not provide a clear provision to more compensation or reduced teaching load. Generally, teachers who perform additional assigned tasks or leadership roles are not provided with benefits (Alegado, P. J. E. (2018)

FINDINGS

Table 1. Profile of the School Head-Respondents
N = 13

1.1 Highest Educational Attainment	**Frequency**	**%**	**Rank**
Bachelor’s Degree Holder	1	7.69	4
With Units in Master’s Degree	8	61.54	1
Master’s Degree Holder	2	15.38	2.5
With Units in Doctorate Degree	2	15.38	2.5
Doctorate Degree Holder	0	0.00	5
Total	**13**	**100%**	
1.2.Length of Teaching Experience			
Below 1 year	0	0.00	6
1 – 5 years	1	7.69	4
6 – 10 years	3	23.28	2.5
11 – 15 years	4	30.77	1
16 – 20 years	3	23.08	2.5
21 – 25 years	0	0.00	6
26 – 30 years	2	15.38	3
31 years and above	0	0.00	6
Total	**13**	**100%**	
1.3 Relevant Trainings Attended			
1.School Heads’ Development Program	6	46.15	7
2.Retooling on Continuous Improvement	11	84.62	6
3.Division Symposium on School to School Partnership Implementation	13	100	2.5
4.District-Based Mid- Year Assessment and In-Service Training on Enhancing Teaching Strategies in English, Mathematics, Music and Construction of Test Questions in Filipino, and Management Skills of Teachers	13	100	2.5
5.Seminar Workshop on Child Protection Policy and Code of Conduct Write-ups	11	84.62	5
6.Mass Training of Teachers on K to 12 Curriculum	13	100	2.5
7.Orientation Seminar on Philippine Performance Standards for Teachers/Results-Based Performance Management System Full Package	13	100	2.5
8.Seminar Workshop on Multi-Factored Assessment Tool	2	15.38	8

As to training/seminar-workshops attended related to teaching efficiency, the table revealed that the Seminar-Workshop on Multi-factored Assessment Tool is only attended by 2 school head respondents which cover 15.38%. In terms of Division Symposium on School to School Partnership Implementation, District-Based Mid-Year Assessment and In-Service Training on Enhancing Teaching Strategies in English, Mathematics, Music and Construction of Test Questions in Filipino, and Management Skills of Teachers , Mass Training of Teachers on K to 12 Curriculum and Orientation Seminar on Philippine Performance Standards for Teachers/Results-Based Performance Management System Full Package school head-respondents are attained by them covering 100%. With this training, the Department of Education gives an avenue to develop the teaching efficiency of the teachers together with the supervision of the school heads.

Table 2. Profile of the Teacher-Respondents
N = 133

1.1 Highest Educational Attainment	**Frequency**	**%**	**Rank**
Bachelor’s Degree Holder	30	22.56	2
With Units in Master’s Degree	86	64.66	1
Master’s Degree Holder	12	9.02	3
With Units in Doctorate Degree	4	3.01	4
Doctorate Degree Holder	1	0.75	5
Total	**133**	**100%**	
1.2. Length of Teaching Experience			
Below 1 year	3	2.26	7.5
1 – 5 years	51	38.35	1
6 – 10 years	34	25.56	2
11 – 15 years	18	13.53	3
16 – 20 years	8	6.02	5
21 – 25 years	12	9.02	4
26 – 30 years	4	3.01	6
31 years and above	3	2.26	7.5
Total	**133**	**100%**	
1.3 Relevant Trainings Attended			
1.Retooling on Continuous Improvement	51	38.35	4
2.District-Based Mid- Year Assessment and In-Service Training on Enhancing Teaching Strategies in English, Mathematics, Music and Construction of Test Questions in Filipino, and Management Skills of Teachers	102	76.69	2
3.Seminar Workshop on Child Protection Policy and Code of Conduct Write-ups	1	0.75	12.5
4.Mass Training of Teachers on K to 12 Curriculum	101	75.94	3
5.Orientation Seminar on Philippine Performance Standards for Teachers/ Results-Based Performance Management System Full Package	123	92.48	1
6. BASA Pilipinas On-Line Course on Effective Literacy Instruction	2	1.50	10.5
7. Enhancement Training on Pedagogical Skills in Mother Tongue	15	11.28	7
8. Division Level Training on K-Pedagogies, Child Centered Approaches	17	12.78	6
9. Outdoor Leadership Course	10	7.52	9
10.Seminar Workshop on Multi-Factored Assessment Tool	13	9.77	8
11. Seminar Workshop on CPD-An Ethical and Professional Obligation	2	1.50	10.5
12. Seminar Workshop on Interactive Teaching Strategies	1	.75	12.5
13. Seminar Workshop on Remedial Reading Support Program	18	13.53	5

As illustrated in the profile of teacher-respondents as to their educational attainment, teaching experience and training/seminars attended in relation to teaching efficiency.

As to highest educational attainment is concerned, the result reveals that teachers with masters' units got the highest rank with a total of eighty-six (86) respondents having a percentage 64.66% while on the contrary only 1 teacher respondent which is 0.75% is a Doctoral Degree Holder. This indicates a great aspiration of the teachers to pursue more in the aspect of professional growth to be more efficient in the field of teaching.

As to the length of service in teaching, the range of 1 to 5 years got the highest rank with a frequency of 51 or 38.3% while the range below 1 year and 30 years above got the lowest rank with a frequency of 3 covering the percentage of 2.26%. This implies that most of the respondents are neophytes in the teaching profession.

As to trainings/seminar-workshops attended related to teaching efficiency the table revealed that teacher - respondents are given great concern on the implementation of different programs of the department through orientation, trainings, seminar and workshop on K to 12 Basic Education which has a frequency of 101 or 75.94% , District-Based Mid- Year Assessment and In-Service Training on Enhancing Teaching Strategies in English, Mathematics, Music and Construction of Test Questions in Filipino, and Management Skills of Teachers which has a frequency of 102 or 76.69% and Philippine Performance Standards for Teachers/Results-Based Performance Management System Full Package which has a frequency of 123 or 92.48%. It is also evident that the Seminar-Workshop on Interactive Teaching Strategies Seminar Workshop on Child Protection Policy and Code of Conduct Write-ups has only a frequency of 1 or 0.75% which got the lowest.

Figure 3 indicates the Respondents’ Level of Professional Practices. It implies that there is a significant relationship between the school heads’ perception and teachers’ perception of Professional Practices which it is weighted mean is 3.77 and 3.79 which described as Very Satisfactory

The level of satisfaction ranging between 3.40 - 4.19 achieves results to a very acceptable level / very capable.

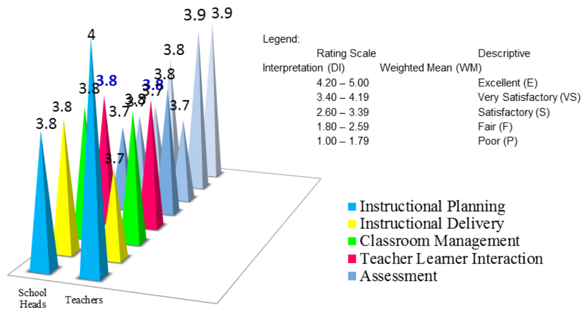

Figure 1: Respondents' Level of Professional Practice

Figure 4 shows the result in terms of Teaching efficiency both school heads' and teachers' perception. The average weighted mean of school heads' perception is 3.63 while the 3.82 of the teachers'.

These further reveal that the school heads' and teachers' perception in terms of Planning and Preparation, Classroom Environment, Professional Responsibilities and the Use of Learners' Assessment is efficient.

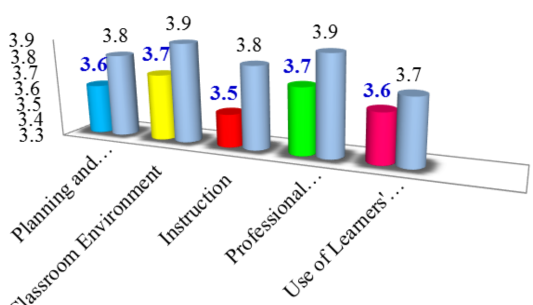

Figure 2: Respondents Level of Teaching Efficiency

Figure 4 shows the result in terms of Teaching efficiency both school heads' and teachers' perception. The average weighted mean of school heads' perception is 3.63 while the 3.82 of the teachers'.

These further reveal that the school heads' and teachers' perception in terms of Planning and Preparation, Classroom Environment, Professional Responsibilities and the Use of Learners' Assessment is efficient.

Table 3. Relationship Between the Teacher-Respondents' Professional Preparation and Level of Teaching Efficiency
N = 133

Professional Preparation	X^2	df	p-value at α=0.05	Interpretation	Decision
Highest Educational Attainment	29.94	8	0.00022	Significant	Reject Ho
Length of Teaching Experience	10.62	12	0.561	Not Significant	Accept Ho
Relevant Trainings/ Seminars Attended	35.93	6	<0.001	Significant	Reject Ho

Table 3 presents the data on the relationship between the teacher-respondents' level of teaching efficiency and their profile that includes the highest educational attainment, length of teaching experience and the relevant training/seminars attended.

It could be gleaned from the table that the highest educational attainment obtained by the teachers and the relevant training/seminars attended by them are significantly related to their level of teaching efficiency. This is evidenced by the computed correlation value of 29.94 and 35.93 with the p-value of 0.00022 and <0.001, respectively which is lower than 0.05 level of significance thus the null hypothesis is rejected. The result implies that teachers who have the highest level of education and attended relevant training and seminars are assumed to be more efficient and that education and training promote teaching efficiency.

However, the data presented on the table revealed that there is no significant relationship between the teachers' length of teaching experience and their teaching efficiency since the computed correlation value of 10.62 at 12 degrees of freedom with a p-value of 0.561 which is greater than the present level of significance 0.05 thus, the null hypothesis is rejected. This denotes that the teaching experience of the teachers has not directly related to teaching efficiency.

The table 4 illustrates the data on the relationship between the teacher-respondents' level of teaching efficiency and their professional practices.

Table 4. Relationship Between the Level of Professional Practices and Level of Teaching Efficiency

Professional Practices and…….	r	p-value at α=0.05	Interpretation	Decision
Teaching Efficiency	0.495	<0.001	Significant	Reject Ho

It could be gleaned from the table that professional practices are significantly related to their level of teaching efficiency. This is evidenced by the computed correlation value of 0.495 with the p-value of <0.001, respectively which is lower than 0.05 level of significance thus the null hypothesis is rejected. The result implies that teachers who are engaged in professional practices promote teaching efficiency.

CONCLUSIONS

In the light of the findings presented, it can be concluded that in Ubay III District, Bohol, Philippines, the professional preparation and practices among teachers were significantly related to teaching efficiency. Highest educational attainment and relevant training and seminars attended promote a higher level of teaching efficiency.

Moreover, teachers' profile specifically the length of teaching experience has no influence towards teaching efficiency.

Therefore, it is concluded that a high level of teaching efficiency could be achieved through attaining masters' degree or doctoral degree and attending more training and seminars. In addition, teaching practices such as instructional planning, instructional delivery, classroom management, teacher-learner interaction, assessment, professional responsibilities and professional relationships could also improve teaching efficiency.

RECOMMENDATIONS

Based on the conclusions mentioned, the following recommendations are offered:

1. Teachers should pursue a masters' degree or doctoral degree to ensure a high level of teaching efficiency.
2. Teachers should attend training and seminars for their professional growth thus promote teaching efficiency.
3. Teachers should observe a high level of professional practice in terms of instructional delivery and use of assessment in consonance to a high level of teaching efficiency.
4. Teachers should adopt changes by implementing new programs in regards to teaching efficiency.
5. The school administrators are encouraged to initiate programs and practices which could promote teaching efficiency.

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CORPORATE SOCIAL RESPONSIBILITY PRACTICES: THE CASE OF LENDING INSTITUTIONS

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ABSTRACT

This study aimed to determine the corporate social responsibility practices of lending institutions in the Province of Zamboanga del Norte, Philippines. The descriptive method of research was used. There were 330 respondents of the study. Frequency count, percentage, and Weighted Mean were used as a statistical tool. Results of the survey revealed that economic, legal, ethical, and philanthropic responsibilities were often practiced by the lending institutions involved in the study. It was concluded that the researchers affirm Carroll's concept as cited by Roa (2011) that corporate social responsibility requires a manager to consider his acts in terms of an entire social system, and holds him responsible for the effects of his actions anywhere that system. Hence, it recommended that lending institutions are advised to sustain or improve their social responsibility with regard to philanthropic responsibility as this would create a long- lasting impression on their stakeholders, and it would create to them a better image. Also, the future researcher may study the relationship between each indicator of strategic management and social entrepreneurship.

Keywords: corporate social responsibility, lending, lending institutions, practices

INTRODUCTION

Doing business is not a way of doing it like in the past. While in the past, managers had only to concern themselves with the economic results of their decisions. However, today, it is more than economics to be worried. Business firms have social responsibilities, which they are expected to perform to benefit society. Social responsibility is involved because it must make in a wide variety of areas. It encompasses three major areas for social issues, such as total compliance with legislative laws and acts; moral and ethical standards and procedures under which the firm operates, and philanthropic giving.

According to Barnat (2014) who cited Dayton and Davis study, social responsibilities underscores the purpose of business which is to serve society. If a company does not serve the community, society will not tolerate the profits or even its existence. A strong advocate of corporate social responsibility offered a classic definition of corporate responsibility as the firm's consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm to accomplish social benefits along with the traditional financial gains which the firm seeks.

Moreover, the Academy of Management Journal (2011) expounded the idea of corporate social responsibility (CSR) as is, businesses bearing a burden to society and a broader set of stakeholders beyond its shareholders. As an organizational phenomenon, CSR has become increasingly prevalent and visible within corporations as a mechanism to energize and motivate stakeholders, as well as manage societal perceptions and expectations on the role and utility of businesses in societies and communities beyond the core.

On the standpoint of business, socially responsible behavior may improve the present value of a firm's future cash flows and, thus, may be consistent with the wealth-maximizing interests of the firm's equity holders. Accordingly, socially responsible behavior can enable a firm to differentiate its products in its product market allows a firm to avoid costly government-imposed fines and can act to reduce a firm's exposure to risk. All of these socially responsible actions can increase the present value of a firm's future cash flows and are therefore consistent with maximizing the wealth of the firm's equity holders (D'Amato et al., 2009).

In conclusion, social responsibility implies that organizations must behave ethically and be sensitive to social, cultural, economic, and environmental issues. It includes compliance with legal and ethical standards, corporate governance, and protection of public health, safety, and ecological protection. An ethical business environment creates trust from customers and employees, resulting in higher customer satisfaction, stronger employee commitment, and improved quality, all of which lead to higher profits (Evans, and Lindsay, 2015).

In light of the above discussion, the main objective of this study is to determine which of the lending institutions in the province of Zamboanga del Norte consistently employ best practices on social responsibility.

STATEMENT OF THE PROBLEM

The study aimed to evaluate the corporate social responsibility practices of lending institutions operating within the selected municipalities and cities of the province of Zamboanga del Norte as the basis for policy recommendations during the year 2018.

Specifically, it sought answers to the following questions:

1. What is the profile of the lending institutions in terms of years in operation?
2. How often do lending institutions practice corporate social responsibility in terms of:
   2.1. Economic responsibilities,
   2.2. Legal responsibilities, and
   2.3. Ethical responsibilities
   2.4. Philanthropic responsibilities?
3. Based on the findings, what policy can be proposed for lending institutions?

REVIEW OF LITERATURE

As defined in the business dictionary, a lending institution refers to organizations such as a bank, credit union, or finance company that makes loans. A lending institution may or may not also be a depository institution. Moreover, there are two primary categories of lending institutions; these are banks and non-banks. Banks accept deposits, whereas non-banks do not.

Banks also play an essential role during a credit crisis. For example, when Basel I was implemented in 1989, many banks were compelled to increase capital, to decrease lending or both. The decrease in lending, or the credit crunch mentioned in the literature review, became one of the factors that caused the US recession in 1991(Wu, & Shen, 2013).

Banks are aware of their use of public resources, and this awareness explains why many banks append a CSR section in their annual reports to tell how they give back to society. For example, the HSBC yearly report states that the corporation’s CSR is related to charitable donations, environment, and culture as well as to decision-making that maintains the right balance between the environment, community, and the business of the bank (Simpson, Kohers, 2002; Wu & Shen, 2013).

The concept social responsibility (CSR) is not a new concept in the, but in the current economic situation, it has become the best solution for integrating moral principles in banking activity (Mocan, Rus, Draghici, Ivascu, & Turi, 2015). According to McWilliams and Siegel (2000) cited in Rodriguez-Fernandez, M. (2016), Corporate Social Responsibility consists of actions that favor social wellbeing beyond the interests of the company or the stipulations required by law. Hence, companies direct their efforts toward management models with higher social content, notwithstanding assuring profitability, and standing on superior moral grounds.

The literature and studies herein discussed were part of the conceptualization of this investigation. The cited research and studies all dealt with the subject of strategic management and social responsibilities. However, this locale, time and respondents differed, since this study conducted in the two cities and municipalities of the entire province of Zamboanga del Norte.

METHODOLOGY

The study employed a descriptive method of research. The study on Corporate Social Responsibility Practices intended to the two cities and municipalities of Zamboanga del Norte where the locality of the lending institutions, hence purposive sampling techniques employed. This study utilized a modified questionnaire adopted from the Singapore Management University Institutional Knowledge at Singapore Management University with eight situation-specific items covering the four constructs of Social Responsibilities: economic, legal, ethical, and philanthropic. The clients/ community people answered the questionnaire-checklist, the local/barangay officials, as well as the LI's management and employees.

The questionnaire focused on the extent of the practice of corporate social responsibility by the lending institutions under study. There were eight situation-specific items comprised every part of the survey, covering Economic to Philanthropic practices. It was distributed to 330 Local Government Units / Clients, and top management

The Microfinance or lending operations are expanding not only in the country but also in the region studied. This study was conducted among the Lending institutions in the entire province of Zamboanga del Norte. Being the commercial hubs of Zamboanga del Norte, Liloy, Tampilisan, Sindangan, Maukan, Katipunan, Dipolog City, and Dapitan City are the sites of branch offices of SEC-registered lending institutions in these places. Thus, all the Lending Institutions operating in these municipalities and cities were utilized as participants in this study, except those few who declined. What impact do these lending institutions have to the community where they are operating given reasons to the conduct of the research.

The data gathered from the instrument were analyzed and interpreted with the use of frequency count, percentage, and Weighted Mean.

RESULTS AND DISCUSSION

Table 1 presents the data on the profile of lending institutions as to many years in operation. It shows that there was 49.66 percent of the lending institutions were operating for 1 – 3 years; 53 or 36.55 percent were serving for 4 – 6 years; 14 or 9.66 percent have been in operation for 7 – 9 years and only 6 or 4.14 percent have been in operation for more than ten years. Majority of the lending institutions were new in the lending industry in the entire province of Zamboanga del Norte. They are the neophytes and those that are yet not very familiar with how the lending institutions play in the field of competition. However, despite the lack of experience in business, they are still expected to perform social responsibility to all their stakeholders.

Table 1. Profile of the Businesses in Terms of Years of Operation

Years of Operation	Frequency	Percent
1 – 3 years	72	49.66
4 – 6 years	53	36.55
7 - 9 years	14	9.66
10 and above	6	4.14
Total	**145**	**100.00**

Table 2 shows the economic responsibilities practiced by the lending institutions as part of their social responsibility. Looking at the items, item 1 is on "taking operations as profitable as possible," obtained average weighted values of 4.27 and 4.34, described as always. These means show that profit is of prime importance to the lending institution and that their operations generally geared towards accumulating profits. Often done were on lowering the operational cost, striving to have the highest returns, paying salaries to employees on time, granting incentives and fringe benefits, providing expansion for business operation, varying interest rates of the products being offered and allowing borrowers to enjoy economic benefits from proceeds. These items obtained weighted values that fall within the range of 3.41 – 4.20.

In totality, the means of 4.02 and 4.15 were both described as often done. It means that financial responsibilities are usually done by the lending institutions their social responsibilities to the business, to their employees and the other stakeholders of the lending institution, especially the clients. An adjustment in the interest rate is a good point for loyalty purposes. Doing changes and different interest for the various products and services offered is an avenue for customers to avail more of products of the lending institution. The customers feel benefited from these offerings of the institution, which also is a part of their economic, social responsibility.

The most basic responsibility of a business organization is to maximize its profitability not only to attend to the interest of its shareholders but also to contribute to the progress of the economy. A business is thereby an integral actor in economic development and nation building. American economist Milton Friedman once mentioned that prime responsibility of a company is to maximize profits and ensure that it can pay all taxes levied by the government. If a company is unable to produce profitable products and maintain sustainability, it is impossible to attend to all other succeeding social responsibilities.

Table 2 Corporate Social Responsibility in Terms of Economic Responsibilities

Items	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
Takes its operation as profitable as possible.	4.27	AP	4.34	AP
Strives to lower its operational costs.	3.95	OP	4.21	OP
Fulfills its duty to be able to give the strive for the highest returns to their shareholders	4.15	OP	4.16	OP
Pays its employees' salaries and allowances on time.	4.09	OP	4.17	OP
Grants incentives and other fringe benefits are granted to the employees.	3.95	OP	4.12	OP
Provides employment expansion of the business operation.	3.94	OP	4.12	OP
Varies interest rates vary depending on the product availed of.	3.85	OP	4.00	OP
Allows borrowers to enjoy economic benefits from proceeds.	3.92	OP	4.08	OP
Mean	4.02	OP	4.15	OP

Legend: 4.21-5.00 Always Practiced, 3.41-4.20 Often Practiced, 2.61-3.40 Sometimes Practiced, 1.81-2.60 Seldom Practiced, 1.00 - 1.80 Not Practiced D (Description); AP - Always Practiced, OP - Often Practiced, SoP - Sometimes Practiced, SeP - Seldom Practiced, NP - Not Practiced

Legal Responsibilities

Table 3 presents the social responsibility of the lending institutions in terms of legal obligation. A closer look at the results on the table would tell that the top management has a high rating over the clients. The ranks of the senior management fall on the highest level while those that of the clients were a little bit lower than the top managements' rating on legal responsibilities.

The low ratings of the clients against the high ranks of the top management mean that the top management knows better what is going on in the business. Senior management knows better in terms of legal requirements and their period of compliance better than clients. Thus, the rating was low.

On the other hand, based on the data in Table 2, the lending institutions comply with legal requirements and adhere to all state rules and regulations though it may entail a cost for them. Compliance of the legal documents intended for business operation is a must for lending institutions because it allows them to move and do business around the area of coverage freely.

Some of the laws affecting a company business include necessary business permits and requirements, tax laws, labor rights, intellectual property rights, consumer protection, contracts and obligations, and anti-trust and competition rules, among others.

Among the often practiced legal responsibilities of the lending institutions that they take immediate and appropriate action in response to complaints, either within the organization or arising from conflicts with average weighted values of 4.09 and 4.19. Also, it ensures that state contributions for its employees like SSS, Philhealth, Pag-IBIG monthly premiums remitted regularly. Most of all they are providing opportunities for the continuous improvement and development of skills, improvement of compensation and benefits packages for their employees with an average weighted value of 3.99 and 4.01 from the LGU and Clients and Top Management respectively.

Table 3 Corporate Social Responsibility in Terms of Legal Responsibilities

Items	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
Operates with complete legal requirements, business permits and other documents as required by law.	4.30	AP	4.43	AP
Pays just taxes on or before due dates as a manifestation of good citizenship.	4.13	OP	4.35	AP
Accomplishes and submits periodic reports as required by agencies which have direct supervision and control over the lending institution.	4.16	OP	4.37	AP
Adheres to all state rules and regulations even though it may be costly.	4.07	OP	4.22	AP
Takes immediate and appropriate action in response to complaints, either within the organization or arising from conflicts.	4.02	OP	4.19	OP
Ensures that state contributions for its employees like SSS, Philhealth, Pag-IBIG monthly premiums are remitted regularly.	4.09	OP	4.19	OP
Respects consumers' rights and takes full accountability for problems/complaints that may arise from misrepresentation of the organization and/or other business related circumstances.	4.04	OP	4.14	OP
Provides opportunities for the continuous improvement and development of skills, improvement of compensation and benefits packages for employees.	3.99	OP	4.01	OP
Mean	4.10	OP	4.24	AP

Legend: 4.21-5.00 Always Practiced, 3.41-4.20 Often Practiced, 2.61-3.40 Sometimes Practiced, 1.81-2.60 Seldom Practiced, 1.00 - 1.80 Not Practiced D (Description); AP - Always Practiced, OP - Often Practiced, SoP - Sometimes Practiced, SeP - Seldom Practiced, NP - Not Practiced

Ethical Responsibilities

Table 4 presents the social responsibility of the lending institutions in terms of ethical responsibility. Results on the table show the lending institutions often manifest moral responsibility. These include striving to do with what is right, fair and just; dealing with competitors honestly; ensuring prompt service; looking at customer satisfaction most of the times; dealing with clients courteously and explaining properly on the details of the products and services offered by them to the customers. These items obtained the average weighted values that fall within the range 3.41 – 4.20, all are described as often. It implies that most of the times, ethical responsibilities practiced by the employees of the lending institutions included in this study.

On the other hand, an item is given due care by the employees of the lending institution, and this is on dealing and observing confidentiality and courtesy in dealing with customers. This item obtained an average weighted value of 4.22 and 4.28 from the two groups of respondents. The figures mean that the employees of the lending institution always observe the confidentiality of the details.

The means obtained were 4.06 and 4.18, respectively, from the two groups of respondents. The ethical responsibilities are performed most of the times. Employees observe proper values and ethics when dealing with customers and the affairs of the business. More important than making money from the business is customer relationship, and this can be attained through proper ethics. Ethically responsible business can recognize, interpret, and act upon many principles and values according to standards prescribed by a particular context or within a given field. It can distinguish from wrong and make decisions and actions that serve the interests of concerned parties.

Table 4 Corporate Social Responsibility in Terms of Ethical Responsibilities

Items	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
Deals and observe confidentiality and courtesy in dealing with customers/clients, even for those who are considered as delinquent loaners.	4.22	AP	4.28	AP
Strives to do what is right, fair and just, especially when dealing with the clients/customers.	4.08	OP	4.55	AP
Deals with competitors honestly and fairly.	4.07	OP	4.17	OP
Ensures prompt, and honest service.	4.01	OP	4.12	OP
Regards to customer satisfaction highly.	3.98	OP	4.08	OP
Deals with clients courteously even when under pressure by difficult clients.	3.98	OP	4.06	OP
Embodies the vision and mission of the organization.	3.9	OP	4.10	OP
Acquaints customers/clients about the interest rate, collection of payment, incentives/rebates and the like before the release of loans.	4.15	OP	4.10	OP
Mean	4.06	OP	4.18	OP

Legend: 4.21-5.00 Always Practiced, 3.41-4.20 Often Practiced, 2.61-3.40 Sometimes Practiced, 1.81-2.60 Seldom Practiced, 1.00 - 1.80 Not Practiced
D (Description); AP - Always Practiced, OP - Often Practiced, SoP - Sometimes Practiced, SeP - Seldom Practiced, NP - Not Practiced

Philanthropic Responsibilities

Presented in Table 5 is the data on the social responsibility of the lending institutions as expressed in terms of philanthropic responsibility. The information on the table shows the average weighted values that ranged from 3.45 to 4.01, described as often. The philanthropic trusts are done usually like contributing resources to the community, sponsoring civic activities, supporting activities for culture and the arts, donating funds to natural and human-made calamities, supporting cause-oriented businesses, and encouraging employees to join cause-oriented groups.

The overall results show that the lending institutions are expressing their concerned about the community, especially those activities that need funds like human-made and natural disasters, public events, and cause-oriented activities. It implies that philanthropic responsibilities are among the priorities of the lending institutions covered in this study. Humanitarian obligations is an essential factor when creating an image of the business. One business should give back to the community what they earned from them. Besides, when employees and owners of business reached the highest peak of motivation, which is self-actualization, they go beyond the fifth level to the sixth level, which is self-transcendence.

Table 5 Corporate Social Responsibility in Terms of Philanthropic Responsibilities

Items	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
1. Contributes its resources to the community.	3.83	OP	4.01	OP
2.Sponsors civic activities in the promotion of the well-being of the people.	3.70	OP	3.83	OP

Items	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
3. Participates voluntarily in community activities, such as tree planting, fiestas, etc.	3.61	OP	3.79	OP
4. Commits resources to support culture and arts.	3.49	OP	3.73	OP
5. Allocates funds in support of the local government's efforts in mitigating disaster.	3.48	OP	3.70	OP
6. Allocates funds for donation to victims of natural or man-made disasters.	3.60	OP	3.72	OP
7. Donates funds to cause –oriented groups.	3.53	OP	3.60	OP
8. Encourages its employees to participate in cause-oriented organizations, like Jaycees, Rotary Club, etc.	3.54	OP	3.59	OP
Mean	3.54	OP	3.75	OP

Legend: 4.21-5.00 Always Practiced, 3.41-4.20 Often Practiced, 2.61-3.40 Sometimes Practiced, 1.81-2.60 Seldom Practiced, 1.00 - 1.80 Not Practiced D (Description); AP - Always Practiced, OP - Often Practiced, SoP - Sometimes Practiced, SeP - Seldom Practiced, NP - Not Practiced

Corporate Social Responsibility Practices

Table 6 presents the summary on corporate social responsibility practices of the lending institutions. Results on the table show that the lending institutions often practice corporate social responsibility practices.

These lending institutions become more socially responsible because their business operations are well planned to result in a successful business, which enables them to perform their social responsibilities. For Barclift (2012), there is an increasing number of people who think that business decision making must not only consider profit maximization, but businesses should also voluntarily contribute to solving social issues as their moral responsibility.

Table 6 Corporate Social Responsibility Practices of Lending Institutions

Corporate Social Responsibility Practices	LGU and Clients		Top Management	
	Ave. Weighted Value	D	Ave. Weighted Value	D
Economic Responsibilities	4.02	OP	4.15	OP
Legal Responsibilities	4.10	OP	4.24	AP
Ethical Responsibilities	4.06	OP	4.18	OP
Philanthropic Responsibilities	3.54	OP	3.75	OP
Mean	3.93	OP	4.08	OP

Legend: 4.21-5.00 Always Practiced, 3.41-4.20 Often Practiced, 2.61-3.40 Sometimes Practiced, 1.81-2.60 Seldom Practiced, 1.00 - 1.80 Not Practiced D (Description); AP - Always Practiced, OP - Often Practiced, SoP - Sometimes Practiced, SeP - Seldom Practiced, NP - Not Practiced

CONCLUSIONS

The researchers at this moment concluded that most of the lending institutions operating for 1-3 years. They are new in the lending industry in the entire province of Zamboanga del Norte. They are the neophytes and those that are yet not very familiar with how the lending institutions play in the field of competition. However, despite the lack of experience in business, they are still expected to perform social responsibility to all their stakeholders.

Further, management of lending institutions needs to balance the multiplicity of interest, not only for more substantial profit but also take into account the employees, the communities where they are operating, the government and the nation as a whole.

RECOMMENDATIONS

Based on the findings and conclusions, below are the following recommendations:

1. Since most of the lending industries are a neophyte in the service, they are enjoined to go into research and development in order to assess the competition and potential threats that can affect its operation in the market as well as sustainability.
2. Lending institutions are enjoined to sustain or improve their social responsibility with regard to philanthropic responsibility as this would create a long - lasting impression on their stakeholders, and it would create to them a better image.

ACKNOWLEDGMENTS

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E-TRANSACTION : A DEVELOPMENT OF ACCOUNT RECEIVABLE SYSTEM

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ABSTRACT

When we talk about information system, it is not merely ensuring the correct flow of data or overseeing the data processing operation of an organization and be well versed on current trends in technology. Every semester, cashier does data encoding and translate into information needed by the Finance Officer, aid by spreadsheet, it creates a tedious part for the cashier to locate students with back accounts with unknown semester. The development of Intranet-based Account Receivable System (ARS) with Short Messaging Services (SMS) features. The researcher user Rapid Application Development Methodology to accomplish the objective. There were 183 students and 3 personnel from the finance office as the respondents. The new system undergo series of testing and debugging through a test data based to the data of the cashier. A simulation was made at the cashier's office by encoding the student detailed payments and the output were consolidated and compared to the records that which addressed effectively the issues and lower delinquent payees. The researcher found out from the study that the system features needed by the college, all resulted to most important, deployment of text messages decreases delinquent students and the system were able to generate reports needed by the finance office. The results shows that the level of performance of the present system was one point seven (1.7) compared to the new system resulted to four point sixty four (4.64) excellent. In addition, the result from expert on the field of system development agreed for the implementation.

Keywords: Intranet, Text Messages, Performance, innovative system

INTRODUCTION

When we talk about information system, it is not merely ensuring the correct flow of data or overseeing the data processing operation of an organization. In this highly innovative era, most of the organizations are heavily dependent on information technology. Data is being stored in servers, high end computers are being used to process day to day transaction and the Internet or electronic mail has been a major means of communication. It is because of these reasons that Information Technology (IT) continues to play an important role in managing information systems. In order to effectively manage the information system of an organization, one should be well versed on current trends in technology and should know how to use them properly. There are a lot of components in IT- it is not only servers, personal computers and the Internet. One should have in-depth knowledge of all components and should know how these components would interact with one another (Garcia, 2008).

The current trend for computer users is to rely on the Internet or the World Wide Web for all information needs. This is not limited to searches for information on almost every topic or subject matter that man manages to think up but it has reached into our personal lives as well. We can now shop online, bank online, we use the Internet (shorten) and the web for almost all personal tasks that may be processed or concluded online and at all times. This too, is where the proposed Intranet -based Account Receivable System is deemed to be most useful to the itinerant user, whose sole purpose in accessing the system is to ascertain the correct amount that must be paid and receive assurance that payments have been validated and credited to their account.

Intranets offer workforce productivity which can help user to find and observe information very fast. User may also use applications according to their roles and tasks. Through web browser a user can get access to entire contents of any website from anywhere or any time and increase the ability of employee by performing their job confidently very fast and accurately. Intranet permits business companies to share information to employees according to their need or requirements. Employees may also link to appropriate data at their expediency.

Project Context

Most of the families of these students derived their source of income from fishing and agriculture and few from the local government units. Consequently, delays have occurred in service delivery to all students. At present, the college has no functional computerized system for the billing of the students. That makes the collection more tedious. Few students have personal computers and Internet at home that limit them to surf the web. Currently, the college enrollment has been steadily increasing and its population has exceeded the administration's expected target and with the tedious process of the enrolment and the steadily growing of population with only one (1) cashier who uses the present account receivable system prompted the college to adopt an improve account receivable system with a SMS capability feature to cater to the needs of the students and college in terms of mobile billing.

A mobile device with text messaging also called SMS (Short Messaging Service) allows users to send and receive short text messages on a phone. Such as: Mobile to Mobile: send a message from your mobile device to another mobile device and Web to Mobile: send a message from a text messaging website to mobile device or with message of breaking news and other updates, such as sports scores, stock prices and weather forecasts (Shelly, et al., 2009).

GENERAL OBJECTIVE

The study aimed to develop an Intranet-based Account Receivable System with Short Messaging Services (SMS) features to support the business operations.

Specifically it aimed:

1. To assess the level of performance of the present account receivable system.
2. To identify the features needed in the proposed system.
3. To deploy text messaging solutions that sends and receives a plain text supported by mobile phones and major network carriers.
4. To generate the following reports:
   - Official Receipt per student
   - Statement of Account per student
   - Examination Permit per student
   - Collection Profile
   - Collection Profile Summary
   - Student Profile per Program

METHODOLOGY

The Account Receivable System (ARS) rely on the students load per semester that were evaluated by the Registrar and stored to the Enrolment System of North Negros College (RENNC). The two (2) system of North Negros College was placed in one room. The Registrar and Finance Office will connect through the school network.

Hardware Specifications

The hardware requirement of this study consist devices that were interfaced through a data cable. A server hosting the operating system, SMS gateway and all the needed programs and the Mobile phone used to accept all incoming and outgoing messages. The hardware specifications are composed of the following: Hardware specification for development and Hardware specification for implementation.

For Development

The hardware specification for development refers to the different hardware being used during the development of the system. The server computer specification is the same with the system unit used by the college cashier. A Nokia GSM Mobile phone (6150) was used for the development and testing of the system.

For Implementation

It was observed by the researcher that during the reports generation it takes few seconds before the details to be displayed. Thus, Intel Core I3-2330M 2.2 GHz is recommended as the server specification. For the Mobile phone, GSM Mobile phones can be used for Mobile FBUS Direct DLL interface.

Software Specifications

It is recommended that the choice for the application development software are the Microsoft Visual Basic 6.0 and PHP: Hypertext Processor (PHP). The Microsoft Visual Basic 6.0 is available on a wide variety of computer and will work over the initially envisioned local area network as well as over long distance links will be needed in the future and for the Mobile services needed for the ARS. In setting up the following database the Microsoft Access and MySQL Front application software are the choice since the existing information system in the RENNC is developed using the application software and the Microsoft Access for importing tables from the RENNC and ARS in order for the Mobile services can response to the student's and college administrator's inquiry.

Data Communication Requirements

The server is connected to workstations through a switch. One of the servers was connected to an ADSL modem so that the remote offices can access the servers. The servers are connected through a switch for the Local Area Network (LAN) through Internet and Wireless Network that will allow an electronic device to exchange data wirelessly.

System Development

Technology has developed at a rapid pace but the most aspect of any system is human know-how and the use of ideas to harness the computer so that it performs the required task. This process essentially what system development is all about. To be of any use, and suit the organization for which it has been designed. If a system help people to work more efficiently they will they will use it (http://220.227.161.86/18954sm_finalnew_isca_cp2.pdf).

Requirements Analysis

Methodology

The researcher user Rapid Application Development Methodology to accomplish the objective.

Study Population

North Negros College was the study site due to the demand of the college to cope with the volume of transactions on student's billing system.

Respondents/ Subjects of the Study

The total respondents were three fifty eight (358). Three hundred fifty five (355) were officially enrolled first year to fourth year Bachelor in Science in Computer Science and three (3) staff from the Finance/ Accounting Department. The stratified-random sampling technique was used to select the respondents of this study for students and purposive sampling for the three (3) staff from the Finance/ Accounting Department (See Table 1). The researcher used Pagoso's formula (as cited by De Juan, E. Unpub) in determining sample size, such as:

$$n = \frac{N}{1 + N(e)^2}$$

Where
n = sample size
N = population size
e = margin of error

Table 1
Respondents of the Study

Respondents	Number of Students	Percentage of Sample Size	Distribution of Sample Size	Sample Size
Finance and Accounting Dept.	3			3
BSCS /1st year	153	46%	84	
BSCS / 2nd year	101	30%	55	
BSCS /3rd year	46	14%	26	
BSCS / 4th year	35	10%	18	
Total BSCS Students	355		183	
Total Respondents	358			183
Total Sample Size				186

Research Instrument

The study utilized a researcher made questionnaire. The part I diagnosed the present student's billing system of North Negros College in terms of the features of the Automated Billing system.

Part II of the instrument analyzed the present and the new system in terms of speed in searching and producing information needed by the End-users.

Part III determined the deployment of text messaging solutions that sends and receives a plain text supported by mobile phones and major network carriers.

Part IV the generation of reports.

Validity and Reliability of the Instrument

In the reliability test, the researcher used Test-retest reliability. Whether repeating the test/ questionnaire under the same conditions and same respondents produce the same results. The reliability coefficient resulted to 0.90. Interpreted as reliable.

Content validation was performed by the instructors on related field. Suggestions were being incorporated in the final draft of the questionnaire.

Data Analysis

The researcher gathered all the completed questionnaires. The data collected was analyzed using the statistical tools such as measures of central tendency.

In order to use the Likert-scale for interpretation for part I, II, III and IV weighted mean to represent each question was computed.

Table 2. Hypothetical Range and Interpretation

Verbal Interpretation	Range of Mean Score
Excellent/Most Important	4.21 – 5.00
Very Good/More Important	3.41 – 4.20
Good/Importance	2.61 – 3.40
Fair/Less Importance	1.81 – 2.60
Poor/Least Importance	1.00 – 1.80

The Table 3 shows the hypothetical range and interpretation of data used to interpret of the derived weighted mean, the hypothetical range with interpretation was applied.

Requirements Documentation

Through this SPSS the compilation and tabulation of data that were gathered had a standard and reliable result that gives the researcher the overview of what will be the outcome and need to include for the new system.

System Design

The ARS was designed based on the recommendations of the respondents and the interview conducted by the researcher with the Cashier and Finance Officer. The design is very simple and user friendly. Menus are placed at the upper right side. As the mouse pointer is placed over the main menu, a drop down menu is then seen on the screen. The Cashier will click the sub menu and the system will open the page. Any page that has other menu is placed at the right side of the screen. The middle, center of the screen is reserve for any query and input needed by the Cashier and the Finance Officer.

System Architecture

The ARS composed of three (3) databases and two (2) applications. All database were incorporated in the Microsoft Access and the other from MySQL Front. The ARS system was connected on the enrolment system of the registrar (RENNC). Whatever reservation made by students on his program, are the data to be fetched by the ARS system and be manipulated to get the student accounts payable. The ARS computes the student account payable based to the number of units loaded to a student, total miscellaneous, laboratory fees and other fees (See Figure 1).

The ARS will fetch the student discount either from promo or privilege and the entrance fee. The system will deduct the discounts to the total fee to get the total assessment and will be divided according to the number of terms to have the term payable. These same processes will the bases of student inquiry in the SMS.

The SMS is driven by the Visual Basic 6.0. The incoming SMS are filtered and compare to the data from the RENNC to produce valid information needed by the parents and students. The student can access their accounts either at the computer laboratory or at the WIFI.

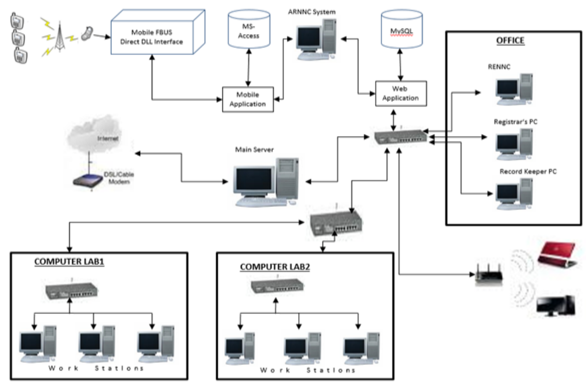

Figure 1. Architectural Design of ARS

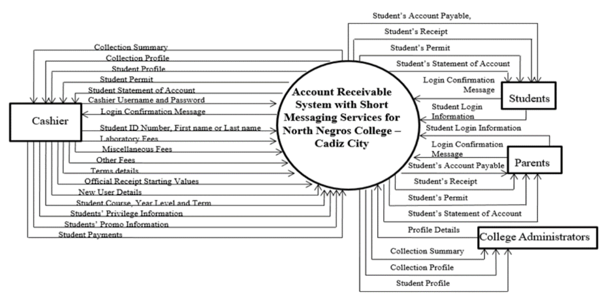

Figure 2. Context Data Flow Diagram

The figure above shows the Context Data Flow Diagram. The diagram describe the data that flows towards and outward the entity.

System Testing

The system was tested at the Cashier and Finance Officer of the college. Composed of Web and Mobile-based application system.

The Web-based application system was installed in a laptop (Asus Intel(R) Core(TM) i3-2330M CPU @ 2.2GHz 2.2GHz) and connect with the college network system with Microsoft

XP operating system. The researcher made a test data based to the computations Cashier's computer and students found in the RENNC. At the start, all parts of the Setting and students' discount in Student menu were setup. The Cashier encode the each student enrolment fee (these students are the students in Bachelor of Science in Computer Science from first year to fourth year) and check each student account to validate the remaining payable for the semester. The system will divide the remaining amount depending on the number of terms set by the Cashier. Student accounts were paid on different amounts. Such as: full payment for the semester, with balance for the term, amount more than the term payable and student with full or partial privilege and with discount.

Users Training

The user training was divided into three phases. First, the Cashier phase. At the start, the Cashier were guided through the user guide provided by the researcher. The Cashier had encoded the necessary setup for the Setting and Student menu. A dry run was made for the system Transaction menu. The Cashier does the transaction based to the test data and see if there are bugs.

The second phase was the student phase. The student took their username and password from the Registrar office. The students had encoded their username and password on a computer and view their statement of accounts with payment history. The same time they could check their accounts through the SMS by sending their username and password through a designated cellphone number. The ARS had replied the correct the student account.

The last phase was for the college administrators. The Cashier will log and print the corresponding reports needed by the college administrators.

The researcher develop a user manual that will guide the end user for user queries.

RESULTS AND DISCUSSIONS

The researcher conducted surveys to different end-users and expert on the field of system development. The survey had assessed the present system of the college and the new system to be implemented

The analysis and interpretation of data are presented below.

System Assessment

The present system were assessed on the level of performance, features to be included and

On the Level of Performance Present System

On the level of performance of the present system were evaluated in order to determine if the system can accommodate vast information needed by the Students and the College Administrators in a limited time.

The level of performance of the present system resulted to one point seven (1.7). Interpreted as Poor. The result simply implied that the performance of the present system is poor. Therefore, there is a need to develop a new system to enhance the performance of the present system.

Features to be Included in the New System

The features to be included in the new system compose of Students and College Administrators / Finance Department. The student's features include the Web Based Application and the Mobile Application. While on the Finance Department composed of searching continuing student(s) and generate and reissuance of the statement of account, receipt and permit.

The Intranet application for students resulted to four point four (4.4). Interpreted as Most Important. The result implied that the feature to be included in the intranet application for students was most important. Therefore, there was a need to implement the features for the present system.

On the Mobile Application for student resulted to three point five (3.5). Interpreted as Most Important. The result shows that the features to be included in the Mobile Application for students was most important and be applied for the new system.

The result from the Department of Finance regarding the features to be included in searching continuing student as part of the new resulted to four point nine (4.9). Interpreted as Most Important. The result shows that the features to be included in searching continuing student was most important and it is useful for the new system.

The result from the Department of Finance regarding the features to be included to generate and reissue students' statement of account, permit and receipt as part of the new system resulted to five (5). Interpreted as

Most Important. The result shows that the features to be included in generating and reissuing students' statement of account, permit and receipt was most important and it is valuable for the new system.

Table 3. Comparison of Present System and Innovation System

Present System	Proposed Innovation or New system
Print student's account through word processor.	Web and Mobile support for student's account receivable
Tedious computation and paper works	Real time result standing account per student, per class, per program and all students.
Spends more time to search student account from present semester or previous semesters.	Determine delinquent students
One venue for accessing for students statement of account	Intranet for students
Tiresome for cashier to locate continuing students account.	Search continuing student
The finance allow the	Generate and reissue students' statement of account, permit and receipt

The table above show the situation of the present account receivable of the college and the features of the innovative new system. It appears in the study that the innovative features of the new system contributed more on the efficiency of collection. In addition, delinquent students were easily determined and counseling were done that resulted to very low uncollected fees.

Assessment of the New System

On the Level of Performance of the New System

The researcher distributed the same sets of questionnaire to the same respondents for the second time. In order to determine if the new system increase its level of performance. The questionnaire were gathered and tabulated.

Table 4. Evaluation of the Present System and Innovative New System

Criteria	Evaluation of the Present System		Evaluation of the Proposed Innovation or New system	
	Result	Interpretation	Result	Interpretation
System Level of Performance	1.70	Poor	4.64	Excellent
Deployment of Text Messaging Solutions	1.60	Poor	4.51	Excellent
Generation of Reports	1.82	Fair	4.48	Excellent

The table above presents the evaluation of the present system and the innovative new system. The level of performance of the new system resulted to four point sixty four (4.64). Interpreted as Excellent. The result shows that the level of performance of the new system was excellent. Therefore, the new system should be implemented. On the deployment of text messaging solutions that sends and receives a plain text supported by mobile phones and major network carriers resulted to four point fifty-one (4.51). Interpreted as Excellent. The result shows that the level of performance of the new system was excellent. Therefore, the new system provides text messaging solutions.

The system generation of reports resulted to four point forty-eight (4.48). Interpreted as Excellent. The results shows that the generation of reports was excellent. Therefore, the system generates report fitted to the college.

Survey Result from the Expert on the Field of System Development

The researcher had distributed sets of questionnaire to the experts on the field of system development for the system be tested before it will be hand in to the end-users. The questionnaire were gathered and tabulated.

The average mean was four point sixty four (4.64). Interpreted as Excellent. The result shows that the experts in the field of system development agreed that the college will use the proposed Account Receivable System with Short Messaging Services System.

The results between the level of performance of the present system and the new system shows that there was a great significance difference between the levels of performance. The new system will be implemented for it improved the performance of the Cashier's Accounts Receivable System. In addition, survey from the people in the field of system development agreed that the system can now be launched for it is well tested and evaluated.

SUMMARY OF FINDINGS

With particular reference to the results of the research under study as well as the literature review, the research are summarized and discussed as follows:

Assessment of the level of performance of the account receivable system.

It was found out that on the new system performance had increase the speed in searching for student's information regarding the statement of account had increase based to the result of the survey. Thus the longer time needed by the student for filling a request for student statement of account had decrease.

Identifying features needed in the proposed system.

It was further established that the features for the new system was effective in searching and producing hardcopy of information needed by the students. Improvement in in terms of searching and producing hardcopy had ensure optimal performance and also increase daily transaction in the cashier office.

Deployment of text messaging solutions

It was found out that the collection of students payable decreased. Since the college has ease in determining the delinquent payee, a one on one intervention was made with students and parents.

Generate reports

It was established that there is an ease and accuracy of producing student's statement of account from the new system. Since the new system is connected to the server of the Registrar enrolment system, whatever subjects taken by the students will automatically reflect in the new system.

CONCLUSIONS

1. It can be concluded from the assessment of the level of performance of the present system and the innovative account receivable system that the new system can deliver the system performance needed by the college.
2. The identified features needed in the proposed system were accepted by the end user that provides efficiency that resulted to optimal performance.
3. The Deployment of text messaging solutions resolves the delinquent students on its account payable, since then, the parent are aware of the status of their student account.
4. It was further concluded that the system were able produce an ease and accuracy of producing student's statement of account from the new system. Since the new system is connected to the server of the Registrar enrolment system, whatever subjects taken by the students will automatically reflect in the new system. The researcher emphasizes that account receivable system constitute a significant portion of the school current assets and thus should be managed properly.

RECOMMENDATIONS

It is recommended that the proposed new system in North Negros College will be adopted by the college because the new system performs more than as expected.

It is also recommended that the features will be included in the new system since it was useful for the college

Further recommendation for the deployment of text messaging solutions must be part of the system due to decrease the number of delinquent payee.

Lastly, it is also recommended that the system generation of reports will be implemented because it constitute a momentous aid to the college.

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THE POLITICAL ECONOMY OF LOW INCOME COUNTRIES

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ABSTRACT

Countries around the world create and implement policies that promote the welfare of its citizen. Some extends from one government to another to mitigate poverty and enhance standard of living – through grants and aids. These states are commonly developed countries which have higher percentage of people living above the poverty line and have more structured political composition. On the other hand, Low Income Countries (LICs) which most often are the recipients of grants and aids have high poverty incidence and rough political roads. Thus, this study looks specifically into the political economy of low income states. In general, the study tries to understand the political economic characteristic of Low Income Countries (LICs) by using political factors that influences the per capita output. The researcher used secondary data from the United Nations (UN) and the World Bank (WB). The researcher focused on government efficiency, rule of law and political stability to represent political variables which influence the Gross Domestic Product Per Capita (per capita output) which embodies the economic side of a country through panel regression models. In LICs the delivery of goods and services to the different sector of the economy becomes inefficient as the per capita increases. People tend to widen their activity as their capacity increases but the government cannot easily adapt to the new structure – of market and developing economy. On the contrary, political atmosphere is highly significantly related to per capita output. Political stability influences expectations and preferences of investors that engage in the market. There is a positive significance between the rule of law and the per capita output. The rule of law as well as political stability influences the expectations in the market. This variable tells how the government holds it law on its jurisdiction – for its civil, administrative, social and economic aspects. The researcher recommends that in low income countries, strong political structure is a pre-requisite to enhanced economic activity. Mercantilist with reservation towards global perspective is a necessary economic policy platform to protect domestic economic activity and at the same time gearing towards internationalization. Promotion of inclusive basic social services is also recommended to improve social capital specially, socio-political aspect of the low income countries.

Keywords: economy, low income, per capita, political economy, politics

INTRODUCTION

The state is the main character concerning the development of a country. It is responsible for its economy and other stakeholders. Moreover, it should determine the economic demands of its economy, regulate economic variables and to allocate its resources efficiently. Striking the balance of political and economic stability is very difficult. Ideally, if the government is running smoothly and its programs are addressing the needs of its society properly, there is a high potential that the people are to have higher standard of living and address the needs of the society (Blanchard, 2016).

Governments around the world create and implement policies that promote the welfare of its citizen. Some extends from one government to another to mitigate poverty and enhance standard of living. These states are commonly developed countries which have higher percentage of people living above the poverty line and have more structured political composition (Tadeo, 2016).

Low Income Countries (LICs) which most often are the recipients of grants and aids have high poverty incidence and rough political roads.

In the new millennia, the Low Income Countries' policy platforms were focused on inclusivity of strategies in poverty alleviation, generation of productive employment, promotion of equitable income and social justice, attainment of sustainable growth – that is in accordance with the Sustainable Development Goals (Richardson. 2017). However, there are minimal studies that looks in the political economic conditions of LICs that focuses on behavioral analysis. Thus, to address the pressing issue of understanding how political and economic aspects of LICs behave, this study looked specifically into the political economy of low income states in order to understand how political variables such as government efficiency, rule of law and political stability influence aggregate economy which can serve as platform and springboard for political economic policies of low income countries.

RESEARCH PROBLEMS

In general, the study tried to understand the political economic characteristic of Low Income Countries by using political factors that influences the per capita income. More specifically this study tried to answer:

1. What is the behavior of political and economic variables of low income countries namely: gross domestic product per capita, political stability, government efficiency and rule of law from 2010 to 2017?
2. How does political stability, government efficiency and rule of law influences gross domestic product per capita of low income countries from 2010 to 2017?
3. Is there a significant relationship between gross domestic product per capita and political stability, government efficiency and rule of law?

METHODOLOGY

Research Design

The researcher used inferential and causal research designs to provide analysis on how political dimensions of states from low-income countries influence the economic growth of respective states. The researcher used secondary data from 2010 to 2017 only because of scarcity and incomplete information from the United Nations (UN) and the World Bank (WB). The researcher focused on government efficiency, rule of law and political stability to represent political variables which influence the Gross Domestic Product Per Capita which embodies the economic side of a country. Furthermore, this study focused on the thirty two (32) Low – Income Countries (LICs) as determined by the WB these are as follows:

Afghanistan	Eritrea	Malawi	Uganda
Bangladesh	Ethiopia	Mali	Zimbabwe
Benin	Gambia, The	Mozambique	
Burkina Faso	Guinea	Nepal	
Burundi	Guinea-Bissau	Niger	
Cambodia	Haiti	Rwanda	
Central Africa	Kenya	Sierra Leone	
Chad	Kyrgyz	Tajikistan	
Comoros	Liberia	Tanzania	
Congo, Dem. Rep.	Madagascar	Togo	

**World Bank 2016*

Review of Literatures

State is defined as a community of people more or less numerous, occupying a definite portion of territory, possessing an organized government and enjoying independence from external control. It can be also defined as a set of communities having an organized body of government, occupying or residing in a fixed territory to which they exercise their law, sovereignty and common habits and customs and traditions (Dannug et al, 2004:130). More specifically, government as an element of the state can be described as the totality of authorities which rule a society by prescribing and carrying fundamental rules which regulates behavior and activities of its members or constituents. These definitions that describe of what a state and government is give us the idea that the government is the driver of an economy of a state (Mishkin, 2008).

The state is the main character concerning the development of a country. The state is responsible for the totality and performance of its economy (McConnel and Brue, 2009). The state should determine the economic demands of its economy, regulate economic variables and to allocate its resources efficiently to arrive to an effective planning scheme in the economy. According to the United Nations - World Economics No. 191 dated August 16-31 1998 the state should bring together social, political and economic assets in such a way as to provide the vision and coordination needed to ensure the growth and integration work in a mutually supportive way.

According to the theory of the state natural trade –off, "Political Will" alone is not sufficient, but it is clearly necessary. Appropriate economic measures are always difficult politically, the more so to the degree that not only demand-shifting but also demand-compressing. "Commitment" is usually born of duress -- the painful recognition that the economic and political costs of failure to act are probably greater than the costs of action. The strength of leaders' commitment is determined by the perceived margin of advantage – the degree to which the expected results of the programs are preferred to available alternatives. "Commitment" that grows out of desperation will fade if any aspect of the situation becomes less binding, for example, improved prices for a major export good (Nelson, J. 2000).

In low-income countries, increased expenditure efficiency will have to complement increased social expenditure. Emerging markets, in turn, may seem under less pressure of this kind, given their rapid growth, but it is well-known that the demand for public services tends to rapidly increase as countries become richer (the so-called Wagner effect), and higher efficiency will be the only way to avoid a large increase in the tax burden. Moreover, good government is also of more general concern, as it has been shown, for example by Easterly and Levine (1997), that it is a crucial determinant of economic growth (Myers, 2016).

Data Collection and Data Analysis

This study used secondary data from the United Nations and World Bank. World Bank used economic parameters; per capita income, real aggregate growth, macroeconomic stability and resiliency in identifying and classifying low income countries. Furthermore, a panel data regression (random effects model) was used to present the econometric model. The econometric model will be tested for multicollinearity, autocorrelation, heteroscedasticity, specification error.

Statistical Test of Significance

The researcher utilized the following tests to assure that the econometric model is working under the best linear unbiased estimates concept:

Breusch – Godfrey Serial Correlation (LM test)

The Breusch–Godfrey serial correlation LM test is a test for autocorrelation in the errors in a regression model. It makes use of the residuals from the model being considered in a regression analysis, and a test statistic is derived from these. The null hypothesis is that there is no serial correlation of any order up to p (Gujarati, 2013).

Variance Inflation Factor (VIF)

The Variance Inflation Factor (VIF) quantifies the severity of multicollinearity in an ordinary least squares regression analysis. It provides an index that measures how much the variance (the square of the estimate's standard deviation) of an estimated regression coefficient is increased because of collinearity.

Jarque – Bera Test

The Jarque–Bera test is a goodness-of-fit test of whether sample data have the skewness and kurtosis matching a normal distribution.

RAMSEY (RESET)

The Ramsey Regression Equation Specification Error Test (RESET) test is a general specification test for the linear regression model. More specifically, it tests whether non-linear combinations of the fitted values help explain the response variable. The intuition behind the test is that if non-linear combinations of the explanatory variables have any power in explaining the response variable, the model is wrongly specified.

White's Heteroscedasticity

The White test is a statistical test that establishes whether the residual variance of a variable in a regression model is constant or homoscedastic.

Augmented Dickey – Fuller Test

Augmented Dickey–Fuller test (ADF) is a test for a unit root in a time series sample. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models.

Econometric Model: Random Effects

$$\sum \mathbf{GDC} = \boldsymbol{\beta}\mathbf{0} + \sum \boldsymbol{\beta}\mathbf{1POL} + \sum \boldsymbol{\beta}\mathbf{2GEF} + \sum \boldsymbol{\beta}\mathbf{3ROL} + \boldsymbol{\mu}$$

Whereas:

GDC = Logarithm of GDP Per Capita
POL = Political Stability
GEF = Government Efficiency
ROL = Rule of Law
β = estimators
μ = error term

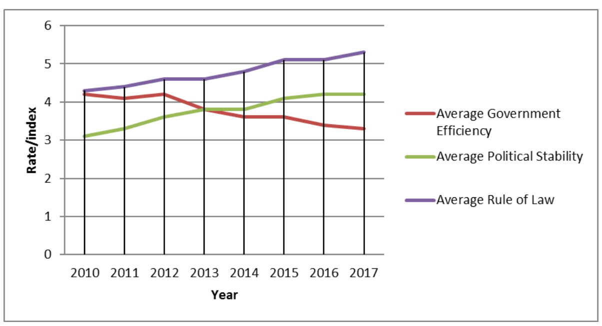
FINDINGS

This chapter presents an exploration of the data used in the study. It is divided into two major sections: the first is a presentation and analysis of data used to represent the respective variables; while the second is an analysis of the results of the panel data regression and statistical diagnostics using the three models defined in the methodology.

Behavioral Analysis

Figure 1 shows the behavior and the trend of the political variables under consideration of this study. Government efficiency which pertains to the efficient delivery of basic and social services to its fellowmen have been decreasing from 2010 to 2017. It implies that policies and activities that the governments of low income countries are not inclusive and inefficient, thereby missing their targets. According to a state study, conducted by Myers (2016) that low income countries were struggling to identify key clients due to budget restrictions and manpower constraints as well as infrastructure and economic conditions that hinders full efficiency of government efficiency in the delivery of its services.

Figure 1 Behavior of Government Efficiency, Political Stability and Rule of Law in Low Income Countries from 2010 to 2017 (Averaged)



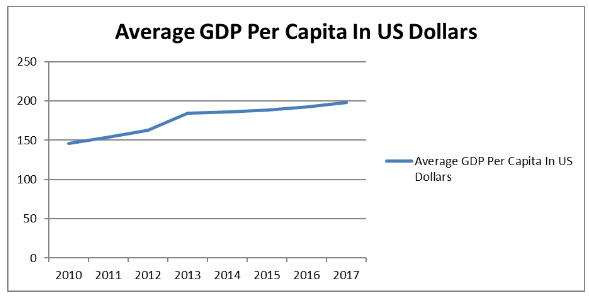
Source: World Bank, Data Bank

Moreover, this figure signifies an increasing trend value in political stability and rule of law among low income countries. Studies have shown and prove that political factors such as stability in government in low income countries are improving. Shebaku (2016), pointed out that African low income countries' political state and rule of law are improving since the United Nations have put their monitoring and safety nets among this identified African countries.

In Asia, political stability, which pertains to internal factors are becoming strong though at times challenged but still remaining strong in political strength and rule of law which is a worldwide trend(Times Magazine, 2017). It was also visible that as far government policy is considered and of a global movement, an increasing trend was also revealed by a study conducted by Tadeo (2016), wherein government expenditures where increasing in the ASEAN region.

Figure 2 shows the trend and behavior of the Gross Domestic Product Per Capita of Low Income Countries. The GDP per capita is the measure of economic growth divided by the number of population in a certain state. Generally, it can be observed that there is an increasing trend from 2010 to 2017.

Figure 2 Behavior of Gross Domestic Product per Capita in Low Income Countries from 2010 to 2017 (Averaged)



Source: World Bank, Data Bank

Considerably, there is a stiff growth in GDP per capita from 2010 to 2012 as a possible aftermath lag effect of the global financial crisis of 2008 to 2009. However a spiked growth was experienced from 2012 to 2013 in these nations and a flat growth from 2013 to 2017 due to global economic slowdown and restraining global markets due to international trade policies that hinders low income nation to fully participate in trade and their vulnerability to natural calamities and disasters.

Regression Results

$$\mathbf{GDC = 5.09 + 0.22POL - 0.26GEF + 0.06ROL + \mu}$$

Standard error	(0.13)	(0.04)	(0.08)	(0.01)
t-value	(38.63)	(5.96)	(-3.28)	(7.67)
F-Stat	(27.63)	p- value	(0.0000)	r^2 (0.33)
Durbin – Watson Statistics (1.77)			Dllimit (256) (1.715)	

The t-values of the model are significant following the thumb rule of 2. Moreover, they are significant at 1% value. The overall significance which is the F-Stat is significant at 1% value. The r squared reveals that 33% of the independent variables are explaining the dependent variable which is GDC. The Durbin Watson Statistics is significant at a value of 1.77 which is found to be greater than the lower limit value with degrees of freedom of 4 and sample size of 256 and less than the value of 4 therefore the presence of multicollinearity is rejected. The model gives us the proportional or relative change in GDP per capita which is represented by GDC for a given absolute values of GEF, POL and ROL. Furthermore, the model also presents the partial estimators which show the relationships between dependent and independent variables: change in POL will bring about 22% increase in GDC, change in GEF will have an effect of -26% to the per capita income as it grows and the ROL has 6% increase if additional unit has been incurred.

SUMMARY OF FINDINGS

The study summarized the following findings based upon the data and model presented in the previous chapter:

1. The null hypothesis is rejected that there is no significant relationship between GDP per capita and Government Efficiency and the alternative hypothesis is accepted. There is an inverse relationship between these two variables. In LIC's the delivery of goods and services to the different sector of the economy becomes inefficient as the per capita increases. People tend to widen their activity as their capacity increases but the government can't easily adapt to the new structure – of market and developing economy. Establishing new policies or regulation might have lag effect to pursue or control such activity on the economies of LICs.
2. The alternative hypothesis is accepted that there is a significant relationship between political stability and the GDP per capita. Considerably, the null hypothesis is rejected. The presence of a peaceful and calm political environment promotes the well-being of the people living in LICs. On the contrary, if political atmosphere so to speak is in conflict, per capita do follows also. Political stability influences expectations and preferences of investors to engage in the market.
3. The null hypothesis is rejected while the alternative hypothesis is accepted. There is a positive significance between the rule of law and the per capita income. The rule of law as well as political stability influences the expectations in the market. This variable tells how the government holds it law on its jurisdiction – for its civil, administrative, social and economic aspects.

CONCLUSIONS

Generally, the researcher concluded that political factors such as: rule of law, political stability influences the economic condition of the low income countries. However, government efficiency which is also significant, holding other variables are held to be constant.

Specifically, the researcher concluded that:

1. There is an increasing and improving indices in the political stability and rule of law in the low income countries. However, government efficiency is decreasing from 2010 to 2017. Moreover, GDP per capita is increasing from 2010 to 2017 which implies that more people were given a chance to improve their standard of living.
2. Rule of Law, Political Stability positively influences the GDP per capita. It means that improvement in systems of law and stable political atmosphere contribute to the improvement of standard of living. However, government efficiency is negatively influencing in the GDP per capita of low income countries, this may be due to restrictions for inclusivity and implementation mechanisms which is a clear gray spot and needs to be addressed for maximum effect of and delivery of government services.
3. There is significant relationship between political factors: rule of law, political stability and government efficiency and economic conduit – through GDP per capita. Proving that there is an existing interplay of political economies of low income countries. Thus REJECTING all NULL HYPOTHESIS, under consideration in this study, ceteris paribus.

RECOMMENDATION

Based on the findings and conclusions from this study, the researcher recommends that governments of LICS should focus in strengthening political factors because in low income countries, strong political structure and strong implementation of local and international laws are prerequisites to enhanced economic activity as purported by Dannug (2004) strengthening political aspects will enhance state performance. By assumptions and as validated by this study, good political environment induces good economic environment, as LICs are very vulnerable and highly sensitive to international economic shocks, the researcher recommends further to the economic managers of LICs to craft a mercantilist's based mixed economic policies to be implemented with respective countries.

Considerably, to address the negative relationship of government efficiency towards aggregate economy, there should be policies with reservation towards global perspective because it is necessary for economic policy platform to protect domestic economic activity and at the same time gearing towards internationalization. It is also recommend to strengthen government efficiency to provide good networks of international relationship that will boosts economic policies both political and commerce-based serving as springboard for aids and international supports, benchmarked market environment, and short term and long term economic strategies. Internally to address government efficiency, it is further recommended the promotion of inclusive basic social services of LIC government to improve social capital specially, socio-political aspect of the low income countries. This can be attained by bottoms-up scanning management scheme: wherein planning starts from basic and smallest economic and political unit transgressing upwards to the national government, provided key function of good governance is observed by leaders, politicians and economic managers not fully relying on modelling on western and developed economies. Lastly, the researcher recommends to the future researchers to undertake root level political and economic variables such as local policy effectives and market share to provide micro analysis that can provide more inclusive approach in policy making.

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ECONOMIC REASONS FOR MEMBERSHIP ON SELECTED COOPERATIVES IN QUEZON PROVINCE

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ABSTRACT

This study assessed the economic reasons for membership on selected cooperatives in Quezon Province. Descriptive research was applied in this study using a questionnaire to gather data. Frequency and Percentage Distribution, Weighted Mean, t-Test and ANOVA were utilized as statistical tools. Majority of the respondents were female, married, and 46-50 years old. The respondents' majority highly appreciates "Is a source of financial help" and have the lowest appreciation on the indicator "Is an entrepreneurial activity of all members" when grouped by sex, civil status and age. There were no significant differences in the respondents' economic reasons for membership when grouped by sex and civil status however there were significant differences when grouped by age. Cooperatives should device a mechanism that will entice other individuals to be members of the cooperative, since the life blood of the organization is through the membership fee or the share of the members. Cooperatives should come up with an information campaign or drive for other individuals to be knowledgeable of the benefits of being a member of a cooperative and to attract other groups. A common bond of interest of the cooperatives as an organization should be based on both what the members' need, their access to capital and support services, and chance to avail and enhance their knowledge and skills through sustainable training and development. The cooperatives should keep operation practices the priority in the areas of savings mobilization, sufficient budget, innovativeness and entrepreneurial skill development, member's participation, and continuous education and training.

Keywords: Cooperatives, Economic, Membership, Quezon, Reasons

INTRODUCTION

Cooperatives are considered to be the best form of economic enterprise, especially for the development of the economy, because they are capable of seeking a balanced adjustment between the collective spirit and individual rights. The basic reason for putting cooperatives, as a form of business and economic enterprise, is to help people work together and move forward collectively. Here, they have the opportunity to equally share the income and benefits derived from cooperatives.

In the Philippines, there is approximately ninety-four percent (94%) of the established cooperatives are multi-purpose cooperatives (Mendoza and Castillo, 2006). They perform two (2) main and integrated tasks, namely: financing and marketing. They also serve as the savings structure and source of household and agricultural products of its members. These cooperatives are mostly agriculture-based and agriculture-oriented. As in the nature of mutual finance organizations, the resources of cooperatives in the savings, loans, and marketing sector come from the capital contributions of members as well as from profit from their credit, marketing, and other economic activities.

The setting of the study is the Province of QUEZON in Region IV-A, its four (4) districts; and with a total of 365 cooperatives (CDA, 2015). Quezon is southeast of Metro Manila and is bordered by the provinces of Aurora to the north, Bulacan, Rizal, Laguna and Batangas to the west and the provinces of Camarines Norte and Camarines Sur to the east. Quezon comprises 39 municipalities and one component city named Tayabas City, which are organized into four legislative districts and further subdivided into 1,209 barangays. The province also includes the Polillo Islands in the Philippine Sea.

Since most cooperatives in the province are created because of the willingness of some institutions and organizations and their people to expand their sources of financing, credit, and to help them have the opportunity to share equally the incomes and benefits; thus create the necessity to conduct this research. Results of this study may serve as the basis for the production of recruitment strategies thus adds up to the existing theories regarding motivations in joining cooperatives.

RESEARCH OBJECTIVES

This study attempted to assess the economic reasons for membership of selected cooperatives in Quezon Province in Region IV-A. Specifically, it aims the following:

1. To determine the profile of the respondents in terms of the following variables:
   A. Sex
   B. Civil Status
   C. Age
2. To know how do the respondents consider their economic reasons for membership in when grouped by profile.
3. To identify if there is a significant difference in the respondents' assessment on their reasons for membership when grouped according to profile

METHOD OF RESEARCH

The purpose of the study was to assess the Economic Reasons for Membership of selected cooperatives in the four (4) districts of Quezon Province in Region IV-A. Corollary to this, the assessment of the selected groups of respondents with regard to the Economic Reasons for Membership of these selected cooperatives were solicited through the use of sets of survey questionnaire and informal interview, respectively. The study involved an analysis of data particularly focusing on the area of study which was sourced through the primary and secondary source. Hence, the descriptive and qualitative method of research is most appropriate for this study.

Descriptive studies also include the analysis of the facts and present conditions which may involve the procedures of induction, analysis, verifications, enumeration or measurement. According to Sevilla, et al., (2002), in pure descriptive research, it is conducted to describe systematically a situation of area of interest factually and accurately. These include population census studies, public opinion, surveys, fact finding surveys, status studies, questionnaire and interview studies, documentary analysis and normative data.

DATA GATHERING PROCEDURE

The validated instrument was administered to the groups of respondents in each of the target districts, after approval and upon letter of permission was received. The researcher met with the head or designated authority to discuss significant matters about the study.

The researcher then secured an appointment with the head of selected cooperatives in the District particularly the Cooperative Development Authority (CDA) Specialist, the Provincial Cooperative Development Officer and the Municipal Cooperative Development Officers in order to get an endorsement letter for those who participated in the survey. Schedules were set for the administration and retrieval of the questionnaire for all the specific groups.

Additional information was also taken from the documents (reports, memos) available to the researcher to validate or confirm the responses of the respondents.

This is done for the validity of the findings would depend on the truthfulness and thoroughness of the respondents' response. The responses maybe bound for the subjectivity yet, the researcher had to accept the responses as true, correct and complete.

The data gathering procedure duration of the research is from 2016 to 2018. There were 403 respondents from the first district, 479 from the second district, 171 from third district and 247 from the fourth district, comprising of 1,300 respondents in the study.

STATISTICAL TREATMENT OF DATA

The data collected in the study were tallied, organized and classified based on the research design and problems formulated. The data were then coded, tabulated, and tabled to facilitate the presentation and interpretation of results using the following arithmetical and statistical tools:

1. Frequency. It is the actual response to a specific item/ question in the questionnaire where the respondent ticks his choice.
2. Percentage. It is used as descriptive statistics which describes a part as a whole
3. Weighted Mean. It is used to measure the respondents' perceptions which are computed using weighted mean. It is done by multiplying each value in the group by the appropriate weight factors and the products are summed up and divided by the total number of respondents.

4. F-test or ANOVA. This test was also utilized to determine the difference of three (3) or more means if there is only one (1) factor variable involved in the study.

5. t-test. This statistical test is used to determine whether or not significant difference exists between the assessments of the respondents. The formula for the t-test is:

FINDINGS

This part presents the analysis and interpretation of the data gathered through the survey questionnaire. The results are arranged according to the objectives of the study mentioned in the previous parts. Table 1 shows the frequency and percentage distribution of the respondents in terms of sex.

Table 1 Frequency and Percentage Distribution of the Respondents in Terms of Sex

SEX	Frequency	Percentage
Male	548	42.2
Female	637	49.0
No Response	115	8.8
Total	1300	100.0

As seen from the table, 637 or 49% of the respondents were female and 548 or 42.2% were male. It can be deduced from the table that majority of the respondents were female. It can be assumed from the findings that in a family it is the mother who budgets and tries to look for other sources of income aside from the salary given by the father. Joining a cooperative can be considered as a good source of additional income.

Nippierd (n.d.) mentioned that women actually do make up a large proportion of the membership, such as in credit and consumer cooperatives despite the most important gender issues in cooperatives today are women's low level of active participation and their under-representation in decision-making and leadership.

The next table illuminates the frequency and percentage distribution of the respondents in terms of civil status.

Table 2 Frequency and Percentage Distribution of the Respondents in Terms of Civil Status

Civil Status	Frequency	Percentage
Single	226	17.4
Married	779	59.9
Widowed	111	8.5
Separated	21	1.6
No Response	163	12.5
Total	1300	100.0

As shown by the table, 779 or 59.9% of the respondents were married; 226 or 17.4% were single; 111 or 8.5% were widowed and 21 or 1.6% were separated. However, 163 or 12.5% of the respondents did not disclose their civil status.

It can be realized that collective struggles for economic survival serves as the motivations for individuals to join cooperatives, since married couples, particularly parents, have to rely on their own in finding additional source of funds to support the growing needs of their family.

According to Hart, K. (2009), employment in the women's cooperative became a source of empowerment for married women, but unmarried daughters remained unpaid weavers in their natal households. By considering the different actors, unmarried and married, the author considered the construction and limits of personhood and local interpretations of development.

It can be noted that majority of the respondents being married is connected with Table 3 wherein majority of them aged 46-50 years old and above.

Table 3 Frequency and Percentage Distribution of the Respondents in Terms of Age

AGE	Frequency	Percentage
Below 20 years old	11	0.8
20-25 years old	58	4.5
26-30 years old	101	7.8
31-35 years old	134	10.3
36-40 years old	133	10.2
41-45 years old	182	14.0
46-50 years old	288	22.2
51-55 years old	194	14.9
56 years old and above	180	13.8
No Response	19	1.5
Total	1300	100.0

Table 3 exhibits the frequency and percentage distribution of the respondents by age. The table shows that 288 or 22.2% of the respondents aged 446-50 years old; 194 or 14.9% aged 51-55 years old; 182 or 14% were 41-45 years old; 180 or 13.8% were 56 years old and above; 134 or 103% aged 31-35 years old; 133 or 10.2% aged 36-40 years old; 101 or 7.8% aged 26-30 years old; 58 or 4.5% were 20-25 years old and 11 or 0.8% were below 18 years old; moreover, 19 or 1.5% did not reveal their age.

It can be noted that majority of the respondents aged 36 years old and above. As shown in Table 3 that majority of the respondents are married giving this a clear indication that membership in cooperatives is seen as an alternative way to earn and this could also be a way of investment looking into the return on investment in the future. It can also be observed from the table that 23% of the respondents were millennials (aged 20 -35 years old). This could mean that millennials are not that interested in joining cooperatives either they do not know about it or not interested at all.

The results conforms with an article which states that most of the cooperatives in Indonesia have been managed by elderly people thus far and it was time cooperatives started to increase the role of millennial generation in management. (Asia News Monitor; Bangkok 25 June 2019)

Table 4 displays the respondents' economic reasons for membership when grouped by sex.

Table 4 Respondents' Economic Reasons for Membership When Grouped by Sex

Economic	Sex					
	Male		Female		Total	
	WM	VI	WM	VI	WM	VI
Serves as the excellent source of savings	3.90	HC	3.99	HC	3.96	HC
Is a source of financial help	4.06	HC	4.07	HC	4.07	HC
Is the best form of economic enterprise	3.86	HC	3.87	HC	3.87	HC
Is excellent source of financing and credit	3.99	HC	3.99	HC	4.00	HC
Has the opportunity to share equally the incomes and benefits of cooperative	3.96	HC	4.09	HC	4.04	HC
Is an entrepreneurial activity of all members	3.74	HC	3.80	HC	3.77	HC
Is a non-profit organization	3.88	HC	4.00	HC	3.94	HC
Enjoys profit sharing	3.93	HC	4.04	HC	4.00	HC
Offers variety of financial assistance	3.93	HC	3.99	HC	3.96	HC
Charges low interest rate	3.98	HC	4.06	HC	4.03	HC
Creates opportunities for members to venture into entrepreneurship	3.79	HC	3.83	HC	3.81	HC
General Weighted Mean	3.91	HC	3.98	HC	3.95	HC

Legend: "4.51-5.00 (Very Highly Consider (VHC)), 3.51-4.50 (Highly Consider (HC)), 2.51-3.50 (Moderately Consider (MC)), 1.51-2.50 (Least

The male respondents gave high consideration on "Source of financial help." with 4.06 however "An entrepreneurial activity of all members." has the lowest appreciation with 3.74.

The results proves that male respondents, as head of the family, are motivated to join the cooperative to save and borrow small amounts as a financial help. Since cooperatives have low rates in terms of loans, it becomes the last resort for in times of need.

The female respondents attributed high consideration on "Has the opportunity to share equally the incomes and benefits of cooperative." with 4.09; while "An entrepreneurial activity of all members" have the lowest appreciation with 3.80.

The results attests that female respondents are motivated to join cooperative for additional investments. Unlike the male respondents, who sees cooperatives as more on a lending organization, female respondents' gazes at cooperatives as one of the basket where they can put eggs and later on gain profit from it.

The respondents highly considered economic as reason for membership when grouped by sex as revealed by its general weighted mean of 3.95.

Cooperative involves the cooperation of people toward a common goal. They pool resources of their varied memberships and they provide a ready venue for exchange of ideas and skills. More importantly, in coming together for a common cause, cooperatives increase the intellectual capital of the members, thus, providing opportunities created when cooperatives perform and live up to their real mission. (CDA, 2009).

Table 5 Respondents' Economic Reasons for Membership When Grouped by Civil Status

Economic	Civil Status									
	Single		Married		Widowed		Separated		Total	
	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI
Serves as the excellent source of savings	4.03	HC	3.96	HC	3.94	HC	4.48	HC	3.98	HC
Is a source of financial help	4.07	HC	4.09	HC	4.04	HC	4.33	HC	4.08	HC
Is the best form of economic enterprise	3.86	HC	3.90	HC	3.80	HC	4.10	HC	3.88	HC
Is excellent source of financing and credit	4.00	HC	4.01	HC	3.99	HC	4.30	HC	4.02	HC
Has the opportunity to share equally the incomes and benefits of cooperative	4.14	HC	4.02	HC	4.05	HC	4.45	HC	4.05	HC
Is an entrepreneurial activity of all members	3.80	HC	3.76	HC	3.89	HC	4.15	HC	3.79	HC
Is a non-profit organization	3.97	HC	3.94	HC	3.87	HC	4.28	HC	3.94	HC
Enjoys profit sharing	4.03	HC	3.99	HC	4.01	HC	4.30	HC	4.00	HC
Offers variety of financial assistance	3.92	HC	3.97	HC	3.96	HC	4.38	HC	3.97	HC
Charges low interest rate	4.00	HC	4.04	HC	4.03	HC	4.29	HC	4.03	HC
Creates opportunities for members to venture into entrepreneurship	3.81	HC	3.81	HC	3.87	HC	4.21	HC	3.83	HC
General Weighted Mean	3.96	HC	3.95	HC	3.96	HC	4.31	HC	3.96	HC

Findings revealed that the indicator "Has opportunity to share equally the incomes and benefits of cooperative" got the highest appreciation by Single respondents with 4.14 and widowed respondents with 4.05. Also, "Is a source of financial help" is highly considered by Married respondents with 4.9.

Results verified that being single, who thinks about the future, and widowed, who thinks about the retirement, got the motivation in joining cooperatives from its long term investment aspect. The economic reason is focused on how the profit gained from the shared capital that will somehow help in their future retirement plan. However married respondents are motivated to join cooperative for financial help through loans to sustain the possible shortage of daily budget and not to create small business. This is proven by the result of the lowest mean.

The indicator "Is an entrepreneurial activity of all members." has the lowest appreciation by the Single respondents with 3.80 and Married respondents with 3.76 and Also, the indicator "Is the best form of economic enterprise." has the lowest mean of 3.80 by the Widowed respondents and 4.10 by the Separated respondents.

The results confirmed that entrepreneurial activity and creating business is the least motivational factor in joining cooperatives. The respondents only perceive cooperatives as a financial tool for borrowing and not for business purposes.

The respondents highly considered economic as reason for membership when grouped by civil status as shown by its general weighted mean of 3.96. Cooperatives are truly offering their various types of services in their most efficient and effective manner. The cooperatives had been able to make themselves the people's tough partner in attaining development goals, especially, those that are very economic in nature. The cooperative's effectiveness in delivering services is a result of its manpower's' untiring effort to innovate planning, policy-formulation and management. Finally, individual members support to all activities of the cooperative accounts for this very desirable outcome.

Indiana Cooperative Development Center (nd), mentioned that one should join a cooperative because he can find the cooperative's services or products valuable to him as an individual. Other reasons individuals or businesses join cooperatives include: (i) increase income; (ii) increase bargaining power; (iii) obtain products or services otherwise unavailable; (iv) expand new and existing market opportunities; (v) improve product or service quality and (vi) lower operating costs.

Table 6 depicts the respondents' economic reasons from membership when grouped by age.

Table 6 Respondents' Economic Reasons for Membership When Grouped by Age

Economic	Age																			
	Below 20 years old		20-25 years old		26-30 years old		31-35 years old		36-40 years old		41-45 years old		46-50 years old		51-55 years old		56 years old and above		Total	
	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI	WM	VI
Serves as the excellent source of savings	3.82	HC	4.12	HC	4.02	HC	4.10	HC	3.86	HC	4.03	HC	3.80	HC	3.97	HC	3.99	HC	3.96	HC
Is a source of financial help	4.18	HC	4.14	HC	3.98	HC	4.34	HC	3.97	HC	4.09	HC	3.99	HC	4.11	HC	4.04	HC	4.07	HC
Is the best form of economic enterprise	4.09	HC	3.91	HC	3.73	HC	4.08	HC	3.73	HC	3.95	HC	3.81	HC	3.90	HC	3.83	HC	3.87	HC
Is excellent source of financing and credit	4.00	HC	4.00	HC	3.91	HC	4.21	HC	3.85	HC	4.08	HC	3.95	HC	3.97	HC	4.02	HC	4.00	HC
Has the opportunity to share equally the incomes and benefits of cooperative	3.73	HC	4.28	HC	4.05	HC	4.18	HC	4.00	HC	4.08	HC	3.99	HC	3.96	HC	4.04	HC	4.04	HC
Is an entrepreneurial activity of all members	3.91	HC	3.90	HC	3.69	HC	3.97	HC	3.72	HC	3.73	HC	3.75	HC	3.69	HC	3.82	HC	3.77	HC
Is a non-profit organization	3.82	HC	4.08	HC	3.88	HC	4.02	HC	3.84	HC	4.09	HC	3.91	HC	3.88	HC	3.92	HC	3.94	HC
Enjoys profit sharing	4.18	HC	4.09	HC	3.97	HC	4.14	HC	3.89	HC	4.12	HC	3.89	HC	3.98	HC	4.04	HC	4.00	HC
Offers variety of financial assistance	3.91	HC	4.05	HC	3.87	HC	4.05	HC	3.90	HC	4.02	HC	3.91	HC	4.01	HC	3.96	HC	3.97	HC
Charges low interest rate	3.91	HC	3.98	HC	3.96	HC	4.18	HC	3.95	HC	4.06	HC	3.99	HC	4.02	HC	4.09	HC	4.03	HC
Creates opportunities for members to venture into entrepreneurship	3.73	HC	3.89	HC	3.77	HC	3.93	HC	3.80	HC	3.79	HC	3.74	HC	3.81	HC	3.89	HC	3.82	HC
General Weighted Mean	3.93	HC	4.03	HC	3.89	HC	4.11	HC	3.86	HC	4.00	HC	3.89	HC	3.93	HC	3.96	HC	3.95	HC

Legend: "4.51-5.00 (Very High Consider (VHC)), 3.51-4.50 (High Consider (HC)), 2.51-3.50 (Moderate Consider (MC)), 1.51-2.50 (Least Consider (LC)), 1.00-1.50 (Very Least Consider (VLC))"

As observed from the table across the different age groups the following statements received the highest to lowest weighted mean and were verbally interpreted as highly considered. The indicator "Is a source of financial help" has been highly appreciated by the majority of the age group; particularly: ages below 20, 31 to 35, 46 to 50, 51 to 55; while all of the age group has the lowest appreciation on the indicator "Is an entrepreneurial activity of all members" The results of this table only conforms with the results of the previous tables with the same outputs. The respondents highly considered economic as reason for membership as observed from the general weighted mean of 3.95.

These kowtows with the results of Arado (2017) who wrote that more than three thousand individual members of various cooperatives in Davao City benefited from the Cooperative Financial Assistance Program (CFAP) of the City Cooperative Development Office (CCDO) since its expansion of maximum loan capacity in 2015 from P50,000 to P300,000. Most of these cooperatives used the loan for micro-lending businesses, livelihood programs for their members, and agricultural developments among others.

Table 7 Significant Difference in the Respondents' Economic Reasons for Membership When Grouped by Sex

Sex	Mean	t test	p value	Decision	Remarks
Male	3.91	-1.734	0.083	Accept Ho	Not Significant
Female	3.98				

Table 7 shows the significant difference in the respondents' economic reasons for membership when grouped by sex.

Male got a mean of 3.91 and females with 3.98. The t-test is -1.734 and the p-value is 0.083.

Since the computed p-value is greater than the 0.05 assigned level of significance, the null hypothesis was accepted; therefore, there is no significant difference in the respondents' reasons for membership in terms of economic when grouped by sex.

The findings only proves that both male and female are identical in terms of economic reasons for joining cooperatives

In contrast with the research of Gandhi, K. (2010), which confirmed that women who had been empowered through cooperative membership maintained this power, while women who had not advanced their status lost some of their already limited freedoms

Table 8 Significant Difference in the Respondents' Economic Reasons for Membership When Grouped by Civil Status

Civil Status	Mean	F value	p value	Decision	Remarks
Single	3.96	2.069	0.103	Accept Ho	Not Significant
Married	3.95				
Widowed	3.96				
Separated	4.31				

Table 8 presents the significant difference in the respondents' economic reasons for membership when grouped by civil status.

Single got a mean of 3.96; married with 3.95; widowed with 3.96 and separated with 4.31. The f -value is 2.069 and p-value is 0.103. Since the computed p-value is greater than the assigned 0.05 level of significance, the null hypothesis was accepted; therefore, there is no significant difference (agreed) in the respondents' reasons for membership in terms of economic when grouped by civil status.

It can be noted from the findings that economic indicator is not significant as a reason for membership when respondents are grouped according to civil status. This could be explained since majority of the respondents were married and it is a common knowledge that they join cooperatives due to its economic contribution.

Ibitoye (2012) study deals with the analysis of the performance of agricultural cooperative societies in Koji State of Nigeria. The findings of the study showed that agricultural cooperative societies in Koji State performed moderately well towards agricultural development, economic improvement and capital formation of the rural dwellers. Cooperative societies in the State participate fundamentally in the production, distribution and marketing of farm products and other activities. The findings from this study give credence to the use of cooperative as machinery for rural transformation and agricultural development in Nigeria. They have been able to make impart in the area of membership enrolment, crops and livestock production, farm input procurement, and training of members.

Table 10 exhibits the significant difference in the respondents' economic reasons for membership when grouped by age.

Table 10 Significant Difference in the Respondents' Economic Reasons for Membership When Grouped by Age

Age	Mean	F value	p value	Decision	Remarks
Below 20 years old	3.93	1.969	0.047	Reject Ho	Significant
20-25 years old	4.03				
26-30 years old	3.89				
31-35 years old	4.11				
36-40 years old	3.86				
41-45 years old	4.00				
46-50 years old	3.89				
51-55 years old	3.93				
56 years old and above	3.96				

When group by age, the f-value is 1.969 and the p-value is 0.047. Since the computed p-value is lesser than the assigned 0.05 level of significance, the null hypothesis was rejected; therefore, there is a significant difference (disagreed) in the respondents' economic reasons for membership when grouped by age.

Obviously different age group have different motivations in joining cooperatives. In relation with table 6, younger age groups focus on viewing cooperatives as a form of business and investment, middle ages are more on financial help, while the older age group focus on profit sharing and benefits.

However these differences in appreciation can be something of use. According to Asia News Monitor (2019), if cooperatives in Indonesia improve their quality by increasing the roles of millennials in management and make good use of digital technology, it would have a major impact on the national economy

CONCLUSIONS

Based on the findings, the following conclusions were derived:

1. Majority of the respondents were female, married, and 46-50 years old.
2. Majority of the respondents highly appreciates "Is a source of financial help" when they are grouped by sex, civil status and age. However, majority of the respondents have the

lowest appreciation the indicator "Is an entrepreneurial activity of all members" when they are grouped by sex, civil status and age.
3. There were no significant differences in the respondents' economic reasons for membership when grouped by sex and civil status however there were significant differences when grouped by age.

RECOMMENDATIONS

Based on the data gathered and the conclusions derived, the researcher submits the following recommendations:

1. Since majority of the respondents were female, married, and 46-50 years old, cooperatives should device a mechanism that will entice other individuals to be members of the cooperative, since the life blood of the organization is through the membership fee or the share of the members. Cooperatives should come up with an information campaign or drive for other individuals to be knowledgeable of the benefits of being a member of a cooperative and to attract other groups.
2. Since majority of the respondents highly appreciates "Is a source of financial help" when they are grouped by sex, civil status and age; A common bond of interest of the cooperatives as an organization should be based on both what the members' need, their access to capital and support services, and chance to avail and enhance their knowledge and skills through sustainable training and development.
3. Since the respondents have the lowest appreciation the indicator "Is an entrepreneurial activity of all members", the cooperatives should keep operation practices the priority in the areas of savings mobilization, sufficient budget, innovativeness and entrepreneurial skill development, member's participation, and continuous education and training.
4. For future researchers, there are identified limitations of the study that the researcher offers replication of the study using different setting and approach including subject content.

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