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1. All articles must be authorized for publication by the author/s.

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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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AWARENESS AND PROFICIENCY OF THE PRESCHOOL EDUCATION (PSEd) STUDENTS IN THE ILOKO ORTHOGRAPHY: BASIS FOR CURRICULUM ENHANCEMENT

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ABSTRACT

The awareness and competency in the use of the medium of instruction will definitely guide future teachers in the real life classroom situation. This study determined the level of awareness of the Preschool Education (PSEd) students in the Technical Writing, Speaking and Reading skills and level of proficiency in the Iloko Orthography rules along: Dagiti Grapema, Dagiti Kangrunaan a Pagalagadan ti Panakaisurat Dagiti Balikas, Panagsilpo ti Balikas, Panagbulod, Silabikasion, and Nayon a Pagannurotan as basis for the enhancement of the existing PSEd curriculum. This research is descriptive-correlational method in nature. The statistical tools used to interpret the data were Weighted Mean and Bivariate Analysis. The respondents were 65-PSEd students. The respondents have high level of awareness along the abovementioned skills. The respondents' level of proficiency in the different Iloko Orthography rules is Satisfactory. There existed a highly significant relationship between the level of awareness in the Reading skill and their proficiency in the Silabikasion rule. The respondents assessed themselves as highly aware in the use of Iloko Orthography rules along the abovementioned skills. The higher the level of awareness in Technical Writing, Speaking and Reading skills is contributory to their high proficiency in the Nayon a Pagannurotan.

Keywords: children with special needs, intellectual disability, oral health status, dental caries, and module.

INTRODUCTION

Rationale

Language is considered as an effective instructional tool in the teaching and learning process. It serves as an avenue for the learners to communicate their thoughts, share their ideas, demand for their needs, and express their emotions. Through language, learners and their environment are directly connected. Ludwig Wittgenstein a great linguistic philosopher said that, "the limit of one's language is also the limit of one's world" (as cited in the study conducted by Asha, 2010). This implies that once people speak only one particular language, then they only live too in one world.

Mother tongue, on the other hand, is a native language an individual has known which also referred to as Lingua Franca which considered as perfect means of communication to impart and transfer knowledge to children where they could be easily understood and expressed themselves in a manner in favor of them. DepEd Order No. 31 s. 2013 implements the nationwide use of Mother Tongue as a medium of teaching and learning and a separate subject from Grades 1 to 3. The department noted the great contribution of using the language mother tongue as medium of instruction based on the K-12 curriculum program. There are ample researcher conducted and these studies revealed the great contribution of Mother Tongue in the instruction to the learners. (Benson & Kosonen, 2013; Cummins 2000; UNESCO (as cited by Kosonen 2005); Malone 2007; Benson, 2002).

One of the main concerns in the implementation of MTB-MLE is the supposed lack of contextualization of Philippine languages for instance the lack of local equivalents for technical terms and the lack or absence of efficient orthography. According to the article written and published by Sherna M. Benoza in the Multilingual Philippines, it is a fact that less dominant Philippine languages still do not have their own orthography. The modern Iloko orthography is represented by the orthography used by Bannawag, henceforth called Bannawag orthography or Bannawag writing system. Although there are slight variations to the Bannawag spelling used in other Ilocano papers and used/or espoused by a few Ilocano writers, the Bannawag system is the most established, most widely used, and, to this writer, the most logical, despite the few inconsistencies it is still considered as the standard orthography for so many years now, she added.

It is indeed that efficient and valid Iloko orthography will be of great help not only to the learners who will absorb the knowledge but also to teachers who serve as agents of teaching in the classroom setting. Elementary and preschool teachers who are in direct use of the mother tongue must be well acquainted with the correct and proper use of words they are uttering in their classes. Barrientos et. al (2008) stressed that effective teachers make a positive contribution to the learning of their students. They are able to meet their students' needs with a competent application of methods and techniques and a thorough knowledge of the subject matter. Competency in teaching means that teachers must know what they have to teach not only in breadth but also in depth. The role of educators in improving the quality of education and developing the level of achievement of pupils is indeed very crucial in nature. The layman's saying "we cannot give what we do not have," is an often repeated thought which is very suitable in the field of education. Thus, students cannot be expected to attain a level of competence greater than what their teachers possess.

Communication is one of the skills that teachers and students should possess. The different classroom activities are carried out largely through verbal and non-verbal interactions between teachers and students wherein language is the main instrument in carrying out these interactions. Teachers, whether handling tertiary or secondary students, elementary pupils or preschoolers, must be experts in the medium of instruction. Necessarily, future teachers must be competent in the medium of instruction as early as in the undergraduate levels. A misspelled word, wrong pronunciation, and even a slight grammatical flaw affect the development of communication skills of their learners and preschool teachers are prone to these classroom communication dilemmas.

The researcher being an instructor at the Abra State Institute of Sciences and Technology which offers Bachelor of Elementary Education (BEEd) major in PSEd and teaching most of its major and allied subjects was prompted to conduct this study to determine how far their level of awareness and proficiency on the rules of the Iloko Orthography. The result of this study is a valid and reliable basis for the inclusion of Iloko as a separate subject in the PSEd curriculum.

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OBJECTIVES OF THE STUDY

This study determines the level of proficiency of the PSEd students in the Iloko Orthography rules as basis in enhancing their existing curriculum. Specifically, this study seeks to:

1. determine the level of awareness of the respondents in the Iloko Orthography along the following skills: Technical writing, Speaking, and Reading;
2. determine the level of performance of the respondents in the Iloko Orthography rules along Dagiti Grapema, Dagiti Kangrunaan a pagalagadan iti Pannakaisurat Dagiti Balikas, Panagsilpo ti balikas, Panagbulod, Silabikasyon, and Nayon a Pagannurotan; and
3. investigate whether or not there is a significant relationship in the level of awareness of the respondents and their level of proficiency in the use of the Iloko Orthography rules.

METHODOLOGY

The descriptive-correlation method of research was used in this study. It is descriptive because it described the level of awareness of the PSEd students on the use of Iloko Orthography along a) Technical writing, b) speaking, and c) Reading. It is correlation because it determined the extent of relationship between the level of proficiency of the PSEd students and their level of awareness on the use of the Iloko Orthography rules.

The respondents were all students enrolled for the Academic Year 2016-2017 taking up Bachelor in Elementary Education major in PSEd of the Abra State Institute of Science and Technology – Bangued Campus, Bangued, Abra. They manifested their voluntary participation in the study through informed consent.

The teacher- made questionnaire was used to determine the level of awareness of the respondents in the Iloko Orthography rules along a) technical writing, b) speaking, and c) reading.

Likewise, the level of proficiency in the Iloko Ortography of the respondents was measured using the researcher-made questionnaire covering the following rules along Dagiti Grapema, Dagiti Kangrunaan a pagalagadan iti Pannakaisurat Dagiti Balikas, Panagsilpo ti balikas, Panagbulod, Silabikasyon, and Nayon a Pagannurotan. There were 10 questions for each rule. These were submitted and validated by 3 well-known Ilokano writers. Items which determined the level of awareness were measured in a scale of 1 to 5 where 1 is Very low level of Awareness (VLLA) and 5 is Very high level of Awareness (VHLA) while the items used to measure the level of proficiency in the Iloko Orthography were measured using the Likert scale which described as Poor/ Needs Improvement (P/NI) with and Excellent (E).

In analyzing the data gathered, the following statistical tools were used: weighted mean and bivariate analysis. Weighted Mean was used to determine the level of awareness of the PSEd students and their level of proficiency in the use of Iloko rules. Bivariate Analysis was used to determine the significant relationship between the level of awareness and proficiency of the PSEd students and their level of proficiency in the Iloko Orthography rules. The correlation was at 0.05 (*) and 0.01 (**) levels of probability.

RESULTS

Table 1 on the next page discloses the level of awareness of the PSEd students in the Iloko Orthography along Technical Writing skill. It is gleaned from the table the High Level of Awareness (HLA) of the respondents on the Dagiti Grapema (x=2.98), Nayon a Pagannurotan (x=2.91), Panagbulod (x=2.79), Panagsilpo ti Balikas (x=2.77), Dagiti Kangrunaan a Pagalagadan iti PannakaIsurat Dagiti Balikas (x=2.73) and Silabikasion (x=2.72) which follows the (x=2.82) as a whole result.

The level of awareness of the PSEd students in the use of Iloko Orthography along Technical Writing

Table 1.a Distribution of the respondents in terms of their level of awareness along Technical Writing

Iloko Orthography	Mean	Descriptive Rating
I. DagitaGrapema	2.98	HLA
II. DagitiKangrunaan a pagalagadanitipannakai-suratdagitibalikas	2.73	HLA
III. PanagsilpoitiBalikas	2.77	HLA
IV. Panagbulod	2.79	HLA
V. Silabikasyon	2.72	HLA
VI. Nayon a Pagannurotan	2.91	HLA
As a whole	2.82	HLA

This means that the respondents have high level of awareness in writing communications or any technical written forms applying the Iloko Orthography rules. Hence, it implies that the respondents with their high level of awareness could draft and write technical communication with correct usage in Iloko dialect.

The level of awareness of the PSEd students in the use of Iloko Orthography along Speaking

Table 1.b Distribution of the respondents in terms of their level of awareness along Speaking

Iloko Orthography	Mean	Descriptive Rating
I. DagitaGrapema	2.99	HLA
II. Dagiti Kangrunaan a pagalagadan ti Pannakai-surat Dagiti Balikas	2.71	HLA
III. Panangsilpo ti Balikas	3.02	HLA
IV. Panagbulod	2.68	HLA
V. Silabikasion	2.79	HLA
VI. Nayon a Pagannurotan	2.67	HLA
As a whole	2.81	HLA

Table 1b stressed the level of awareness of the PSEd students on the use of Iloko Orthography along Speaking skill. Further, the respondents performed with High Level of Awareness on Panagsilpo ti Balikas (x=3.02) which is so much closed with the data along Dagiti Grapema (x=2.99), Silabikasion (x=2.79), Dagiti

Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas (x=2.71), Panagbulod (x=2.68) and Nayon a Pagannurotan (x=2.67). As a whole a High Level of Awareness is reflected in the performance of the respondents with (x=2.81).

This simply means that the respondents have a strong verbal communication applying the different rules in the Iloko Orthography. The data implies then that the respondents have good communication skills in the Iloko dialect.

The level of awareness of the PSEd students on the use of Iloko Orthography along Reading

Table 1.c Distribution of the respondents in terms of their level of awareness along Reading

Iloko Orthography	Mean	Descriptive Rating
I. DagitaGrapema	3.17	HLA
II. DagitiKangrunaan a PagalagadanitiPannakaisuratDagitiBalikas	2.79	HLA
III. PanagsilpoitiBalikas	3.02	HLA
IV. Panagbulod	2.57	HLA
V. Silabikasyon	3.12	HLA
VI. Nayon a Pagannurotan	2.65	HLA
As a whole	2.89	HLA

Table 1c explained the level of awareness of the PSEd students in the use of Iloko Orthography along Reading skill. The rules along Dagiti Grapema (x=3.17), Silabikasion (x=3.12) and Panagsilpo ti Balikas (x=3.02) seemed to have bigger mean percentage compared to Dagiti Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas (x=2.79), Panagbulod (x=2.57) and Nayon a Pagannurotan with (x=2.65) though belong to the same High Level of Awareness (HLA) descriptive rating of. As a whole, the respondents noted a (x=2.89) with the same descriptive rating. This implies that the respondents could read and comprehend texts written in Iloko dialect in any reading materials.

The level of proficiency of the PSEdstudents of the Iloko Orthography rules

Table 2 Distribution of the respondents in terms of their level of proficiency in the Iloko Orthography Rules.

Iloko Orthography Rules	No of. Items	Mean (x)	Descriptive Rating (DR)
A. DagitiGrapema	10	4.74	Satisfactory
B. Dagiti Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas	10	3.11	Fair
C. Panagsilpo ti Balikas	10	4.45	Satisfactory
D. Panagbulod	10	4.94	Satisfactory
E. Silabikasyon	10	5.28	Satisfactory
F. Nayon a Pagannurotan	10	3.05	Fair
As a whole	60	25.55	Satisfactory

Table 2 manifests the level of proficiency of the PSEd students along the abovementioned rules in the Iloko Orthography. It is evident that the respondents performed better on Silabikasion as noted with the mean percentage of 5.28 higher than Panagbulod (x=4.94), Dagiti Grapema (x=4.74) and Panagsilpo ti Balikas (x=4.45) though they have a descriptive rating of Satisfactory. On the other hand, along Dagiti Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas and Nayon a Pagannurotan the respondents performed fairly with mean percentages of 3.11 and 3.05 respectively.

As a whole the level of proficiency of the respondents along the abovementioned Iloko Orthography rules is Satisfactory with a mean percentage of 25.55. This is clear evidence that the respondents have the same level of proficiency on the Iloko Orthography rules.

Correlation Matrix Showing the Relationship between the Level of Awareness of the PSEd Students and their Level of Proficiency on the use of Iloko Orthography Rules

Table 3 Test of Relationship between the Level of Awareness of the Preschool Education (PSEd) Students and their Level of Proficiency on the use of Iloko Orthography Rules

Aware-ness	Iloko Orthography Rules						As a whole
	DG	DKP PDB	PB	P	S	NP	
Technical Writing	0.121	0.023	0.171	0.059	0.078	0.266*	0.138
Speaking	0.004	0.036	0.223*	0.202	0.119	0.210	0.065
Reading	0.049	0.056	0.048	0.039	0.385**	0.134	0.079
As a whole	0.146	0.025	0.062	0.054	0.028	0.240*	0.103

Table 3 discloses the significant relationship between the level of awareness of and the level of proficiency of the respondents in the use of Iloko Orthography rules. It is very much evident that there existed a highly significant relationship between the level of awareness on Reading skill and their proficiency on the Silabikasion rule of the Iloko Orthography with (r = 0.385). This was found significant at 0.01 level. However, there existed no significant relationship found between the level of awareness on Reading skill and their level of proficiency in the Iloko Orthography rules along Panagbulod, Dagiti Grapema, Panagsilpo ti Balikas, Dagiti Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas and Nayon a Pagannurotan.

On the other hand, result of the study shows that there existed a significant relationship between the level of awareness on the Speaking skill and the level of proficiency in Iloko Orthography rules along Panagsilpo ti Balikas with (r = 0.223) significant at 0.05 level. Conversely, along Dagiti Grapema, Dagiti Kangrunaan a Pagalagadan ti Pannakaisurat Dagiti Balikas, Panagbulod, Silabikasion, and Nayon a Pagannurotan were found to be not significant to any of the abovementioned skills. Furthermore, it is noteworthy that only Nayon a Pagannurotan rule of the Iloko Orthography is found to be significant at 0.05 level along Technical Writing skill with (r = 0.266) while the rest were not found to be significant.

As a whole, there is no significant relationship between the awareness of the PSEd students and their level of proficiency on the use of Iloko Orthography rules. However, specific findings show that the overall awareness of the respondents is significantly related to the Iloko Orthography proficiency of the students in terms of Nayon a Pagannurotuan (r = 0.240) which was found to be significant at 0.05 level. This means that the higher the level of awareness in Technical Writing, Speaking and Reading skills is contributory to their high proficiency in the Nayon a Pagannurotan.

This simply implies that the respondents have prior knowledge on the Nayon a Pagannurotan rule which could be due to the fact that majority of the respondents when they were in first year have exposed themselves with the same rule explain in their subject in Study and Thinking Skills and Komunikasyon sa Akademikong Filipino in the same manner that Iloko Orthography rules do. This knowledge on the Iloko Orthography could be off help to the PSEd students to prepare and make them fully acquainted with the medium of instruction they will be exposed and used when they are fielded for their practicum.

CONCLUSION

The PSEd students assessed themselves as highly aware on the use of Iloko Orthography rules along Technical Writing, Speaking and Reading Skills. The PSEd students proved to be Satisfactory proficient on Iloko Orthography rules along Dagiti Grapema, Panagsilpo ti Balikas, Panagbulod, and Silabikasyon. However, they were found to be weak on Dagiti Pannakisurat ken Pannakayebkas Dagiti Balikas and Nayon a Pagannurotan. The higher the level of awareness in Technical Writing, Speaking and Reading skills is contributory to their high proficiency in the Nayon a Pagannurotan.

RECOMMENDATIONS

Maintain the high level of awareness or make it even higher by constantly practicing their Technical Writing, Speaking and Reading skills based on the rules stipulated in the Iloko Orthography. Seminar/training should be conducted on the rules as stipulated in the Iloko Orthography to maintain the level of proficiency on the Iloko Orthography rules along Dagiti Grapema, Panagsilpo ti Balikas, Panagbulod, and Silabikasion and improve their level of proficiency on Dagiti Pannakisurat ken Pannakayebkas Dagiti Balikas and Nayon a Pagannurotan. A formulation of the course outline in Iloko is highly recommended which will be used as guide in the preparation for the inclusion of the Iloko as separate subject in t he PSEd curriculum to improve their level of awareness in Technical Writing, Speaking and Reading skills and their level of proficiency to keep them more abreast with the native dialect. There is a need to the inclusion of the Iloko dialect as a separate subject in the PSEd Curriculum.

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ORAL HEALTH STATUS OF CHILDREN WITH INTELLECTUAL DISABILITY: BASIS FOR PROPOSED MODULE

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ABSTRACT

The study conducted aimed to assess the oral health status of children with intellectual disability. The results of which served as basis for a proposed module for children with intellectual disability. Two educational institutions namely Padre Gomez Elementary School and Legarda Elementary School participated in this study where a number of 20 subjects were randomly drawn. A survey questionnaire was developed, validated and served as the main instrument in gathering the needed data, which is treated through statistical tools such as frequency, percentage, mean, standard deviation, Pearson product moment of correlation, and T-test. Using Pearson product moment of correlation, the relationship between plaque indexing and the behavior using Frankl scale for the control group between two variables ranged from negligible to very high relationship as shown by (r=1.000). On the other hand, the results for the experimental group ranged from negligible to marked relationship. These variables were toothbrushing and flossing after the third session. The p-value of plaque index of 0.012<0.05 of significance after the third session revealed a statistically significant difference between the control and experimental groups. The study conducted showed decreased plaque accumulation and improved changes in the behavior of the subjects. The subjects displayed significantly improved skill in doing the tooth brushing and flossing with little assistance to being able to do the dental procedures on their own. The subjects need to realize the importance of regular visits to the dentists to achieve good oral condition.

Keywords: children with special needs, intellectual disability, oral health status, dental caries, and module.

INTRODUCTION

Oral health is part of health and wellness of an individual. A healthy mouth is one of the most important health needs for life. Good oral hygiene practiced everyday can help prevent dental caries and other medical disorders; it is a lifetime investment for a person's overall health.

Once in an individual's life, he/she may experience common dental problems like dental caries and periodontal disease. It was reported in numerous researches that dental caries continues to be a major problem among children with special needs than their regular counterparts.

Children with special needs like intellectual disability may exhibit certain deficiency that resulted in their inability to clean their teeth independently or even visit a dentist on a regular basis resulting into more untreated dental caries and more periodontal diseases. With this scenario, plaques continue to multiply in thickness on all the surfaces of the teeth. The acid within the plaque dissolved the enamel and underlying tissues for a period of time causing the release of hydroxyl apatite crystals leading to cavitation. A cavity opens the tooth to infections ultimately causing tooth loss.

As children cannot express the oral pain, it may cause anxiety, irritability and failure of children in attending and concentrating to a given task. Children with poor oral health were more likely to exhibit oral pain and infection, to miss school and to show poor performance in school activities (Jackson, et. al., 2011). Other consequence was the child's frequent hospitalization that in the end will entail additional burden on cost of expenses to be spent by parents (Kumar, et. al., 2015).

STATEMENT OF THE PROBLEM

This study was an assessment of the oral health status of children with intellectual disability. The results of which served as a basis for the proposed module for children with intellectual disability.

Specifically, it sought answers to the following questions: (1) What was the oral health status of the subjects as regards plaque index during (first session orientation, no intervention), second session, and third session? (2) What was the behavior observed among the subjects using the Frankl Scale for Behavior during first session (orientation, no intervention), second session, and third session? (3) What were the oral healthcare practices of the subjects with regard to frequency of tooth brushing use of dental floss, and numbers of visits to the dentist per year? (4) How did the results of the plaque indexing of the selected children with intellectual disability relate with the results for Frankl Scale for Behavior? (5) How did the results of the plaque indexing and the results for Frankl Scale for Behavior of the children with intellectual disability expose to the intervention and those not exposed to the intervention compare? (6) Based on the results, what oral health module may be proposed to improve quality oral health care of children with intellectual disability?

METHODOLOGY

Prior to the conduct of the study, the researcher obtained ethical approval from Ethical Committee for Research of the Centro Escolar University. The experimental method was used in the conduct of the study. The researcher constructed a population frame and assigned randomly a number to each of the students. The following procedures were followed in the conduct of the study: first session- parent and guardian orientation, case history and dental examination; second session- non-pharmacologic approach using Tell-Show-Do and use of storybook, plaque index determination, Frankl scale behavior observation, and oral healthcare practices. The intervention involved the orientation and observation on proper tooth brushing and flossing after application of disclosing solution on all tooth surfaces.

The data are treated through statistical tools such as frequency, percentage, mean, standard deviation, Pearson product moment of correlation, T-test for control and experimental groups and paired sample for before and after intervention.

FINDINGS

The findings of the study were summarized as follows:

4.1. oral health status of children as regards to plaque index of the subjects:

Table 1

Oral Health Status of the Subjects as Regards Plaque Index Before and After Intervention During Second and Third Session

ORAL HEALTH STATUS OF SUBJECTS AS REGARDS TO PLAQUE INDEX BEFORE AND AFTER INTERVENTION				
	SECOND SESSION		THIRD SESSION	
Control group	36.61	16.33	27.79	11.39
Experimental group	26.4	10.95	16.33	4.66

It can be gleaned in Table 1 during second session before intervention; the control group obtained the highest mean value of 36.61 and the experimental group obtained mean value of 26.40. Whereas after intervention, the control group obtained a mean value of 16.33 and the experimental group obtained a mean value of 10.95. During the third session before intervention, the control group obtained 27.79 and the experimental group obtained 16.33. On the other hand, after intervention, the experimental group has the lowest mean value of 4.66 whereas the control group has a mean value 11.39. The findings indicate a favorable reduction in plaque accumulation of the experimental group after completion of the intervention program. It was the observation of the researcher that the improved oral hygiene of the experimental group was a clear indication of its importance that was supported by parents. The subjects were now familiar with the dental procedure.

This study paralleled the study of Chavez (2014) for a need of an educational program for school children with intellectual disability as well as for their parents and caregivers towards a better quality of life.

Table 2

Behavior Displayed by the Subjects During Plaque Index Determination

	2nd Session		**3rd Session**	
Group	Before Intervention	After Intervention	Before Intervention	After Intervention
Control	3	3.2	3.6	3.9
Experimental	3.1	3.5	3.9	3.9

It can be observed in Table 2, that majority of the groups elicited a “positive behavior” interpreted as Frankl 3 as observed during second session. The subjects showed willingness to accept of the dental procedure. The subjects sometimes looked at the instruments and materials the researcher was using and even hesitated to open their mouth. The subjects showed improved behavior with a “definitely positive behavior” interpreted as Frankl 4 during the third session. The subjects sometimes laughed while trying to lean more forward to listen attentively to the storyteller.

This was somehow related to the study of Cox (2013) focused on strategies on how to help special needs children adapt according to their abilities. It finds the need to enhance the strong points and to develop skills of children with special needs towards independent living.

Table 3

Behavior Displayed by the Subjects: During Storytelling During Second and Third Sessions

	2nd Session			**3rd Session**		
Group	5 min	10 min	15 min	5 min	10 min	15 min
Control	3.2	3.1	2.9	3.7	3.6	3.6
Experi-	3.1	3.2	3	3.8	3.6	3.8

It can be seen in Table 3, the control group gained a “negative behavior” interpreted as Frankl 2 at 15-minute time frame. This would indicate reluctance of the subject to listen to the story. Some of the subjects were very quiet. This would indicate the limited span of attention due to their disability. On the other hand, the experimental group gained a “positive behavior” interpreted as Frankl 3. The subjects sometimes laughed while trying to lean more forward to listen attentively to the storyteller.

Majority of the subjects obtained a “definitely positive “ behavior during the third session. The subjects showed good rapport with the storyteller, asking questions and enjoying the story.

The researcher applied fun health promotion activities, like storytelling and puppet show. A storybook entitled Ang Panaginip ni Iza is about the story a little girl’s dream that changed her attitude towards good oral healthcare practices. A tell-show-do procedure was used during orientation in tooth brushing and flossing.

Table 4

Relationship of Results of Plaque Indexing and Frankl Scale for Behavior of the Control Group

RELATIONSHIP OF RESULTS OF PLAQUE INDEXING AND FRANKL SCALE FOR BEHAVIOR OF THE CONTROL GROUP		
TOOTHBRUSHING AND FLOSSING		
0.302 – “LOW”	1.000 – “VERY HIGH”	0.397

The relationship for the control group ranged from negligible to very high correlation as shown by the value of rs. It was interesting to note that only those with very high relationships (rs = 1.000) are observed to be significant. Using the Frankl Scale at session three after intervention tooth brushing and flossing obtained p-value, which was less than 0.01 level of significance. A stronger correlation for plaques indexing between tooth brushing and flossing using Frankl scale was observed. The findings would indicate that these variables were statistically related and were substantiated by evidence. In the control group, the familiarity and cooperation of the subjects perform the oral hygiene practices may have contributed to a lower plaque accumulation on tooth surfaces made visible with a disclosing solution. Most of the variables were not statistically significant.

According to Dr. Catabijan, children were taught by adults to brush their teeth three times a day to develop healthy teeth and a nice smile, but it was a different scenario for children with intellectual disability, as it required adult supervision. In some cases, these children may take medications that contain sugar. Thus, it was imperative to brush their teeth at least three times a day with flavored toothpaste and not to rinse the mouth thereafter. Furthermore, she recommended use of electric toothbrush because of the child’s motor problems.

However, Dr. Weinhold recommended at least twice per day tooth brushing and not to rinse with water but just spit out. In addition, Dr. Bautista suggested use of toothbrush with soft bristles with toothpaste containing fluoride.

Table 5

Comparison of the Results of the Plaque indexing and Frankl Scale for Behavior of the Children with Intellectual Disability Exposed to the Intervention and those not Exposed to the Intervention

	Groupings Numeric	Mean	S.D.	t-value	p-value	
Plaque index- FRANK Scale Behavior before 3rd session	Control Experimental	3.000 3.100	.0000 .5676	-.557	P = 0.584 > 0.05	NS
Plaque index_FRANKL SCALE Behavior after 2nd session	Control Experimental	3.200 3.500	.4216 .5270	-1.406	P = 0.177 > 0.05	NS
Plaque index _Before intervention 2nd session	Control Experimental	36.6120 26.4060	13.69803 12.08839	1.767	P = 0.094 > 0.05	NS
Plaque index _After intervention 3rd session	Control Experimental	16.3250 10.9560	7.50287 7.19144	1.834	P = 0.120 > 0.05	NS
Difference_3rd Session	Control Experimental	20.2870 15.4500	8.72171 7.64172	1.319	P = 0.204 > 0.05	NS
FRANKL SCALE_Toothbrush_Behavior 2nd session	Control Experimental	3.600 3.600	.5164 .6992	.000	P = 1.000 > 0.05	NS
FRANKL SCALE_flossing Behavior_3rd session	Control Experimental	3.300 3.300	.6749 .8233	.000	P= 1.000 > 0.05	NS
Plaque index -FRANKL SCALE Behavior before intervention 3rd session	Control Experimental	3.600 3.700	.6992 .6749	-.325	P = 0.749 > 0.05	NS
Plaque index -FRANKL SCALE Behavior after intervention 3rd session	Control Experimental	3.900 3.900	.3162 .3162	.000	P = 01.000 > 0.05	NS
Plaque index - 3rd Session After	Control Experimental	27.7930 16.3330	21.07218 9.58758	1.565	P = 0.135 > 0.05	NS
Plaque index After intervention_3rd session	Control Experimental	11.3950 4.6610	6.66291 3.74545	2.786	P = 0.012 < 0.05	S
Difference_3rd Session	Control Experimental	16.3980 11.6720	16.80760 9.56251	.773	P = 0.450 > 0.05	NS
Toothbrushing Frankl scale_Behavior_3rd session	Control Experimental	3.900 3.700	.3162 .4830	1.095	P = 0.288 > 0.05	NS
Flossing Frankl scale_Behavior_3rd session	Control Experimental	3.900 3.400	.3162 .6992	2.060	P = 0.054 > 0.05	NS

It can be seen in Table 5, the plaque index after intervention during third session revealed a significant difference between children with special needs exposed to the intervention and those not exposed to the intervention from the t-test ($t=2.786, p=0.012<0.05$). The lower plaque index determined and high level of compliance at Frankl scale 4 among those exposed to the intervention after third session was observed. Knowledge about the Frankl Scale for Behavior during the three sessions of the study helped in determining the improvement of behavior. Findings of results showed the impact of motivation on behavior change through the route lead to behavior than through route of knowledge.

CONCLUSIONS

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

1. The study conducted showed improved plaque accumulation and changes in the behavior of the subjects.
2. The subjects became more cooperative during plaque index determination after three sessions of the study due to familiarity with the procedures and good rapport with the researcher.
3. The subjects displayed significantly improved skill in doing the tooth brushing and flossing from little assistance to being able to do the dental procedures on their own. The subjects need to develop the importance of regular visits to the dentists to achieve good oral condition.
4. A negative correlation achieved an improved plaque indexing and Frankl scale of Behavior among the subjects.
5. The result established a statistically significant difference between the control and experimental groups after completion of the intervention program. The behavior of the subjects during the three sessions displayed significant improvement with decrease in plaque accumulation.

RECOMMENDATIONS

Based on the conclusions, the following recommendations were given:

1. To the Public Elementary Schools

1. The curriculum must be reviewed and evaluated periodically in order to improve the quality of education programs with regard to healthcare practices of children with intellectual disability.
2. There should be inclusion of oral healthcare practices to the curriculum towards competency of the children with intellectual disability.
3. The public elementary schools must establish linkages with dental institutions in the National Capital Region to promote mutual cooperation. The scope of cooperation will facilitate exchange and participation of dental students in the field of outreach program.

2. Special Education Teachers

1. There is a felt need to upgrade the knowledge and skills in the field of teaching in promoting good oral health in children with special needs.
2. There is a felt need to contribute to the attainment of improved quality oral healthcare by collaboration with parents, dentists and other health professionals.

3. To the Parents and Guardians of Children with Intellectual Disability.

1. There is felt need for parents and guardians to continuously remind and assist their children on their oral hygiene practices at home to achieve good oral health condition.

4. To the Tertiary Institutions/ Dental Schools. Through their curriculum developers, will have a guide on reviewing and revising the clinical dentistry program to help the dental students achieved the knowledge, skill, and attitudes in the treatment and care of patients with special needs.

5. To the Dentists. Through this study will be educated on how to render the best oral health care services to children with special needs beyond the usual oral health regimen. Health care providers must collaborate with parents towards good oral health.

6. To the Future Researchers

1. Similar studies are to be conducted in other public elementary schools not included in the study using subjects other than those with intellectual disability and for a longer period of time.
2. Studies should be conducted on the effectiveness of the proposed module for children with intellectual disability in public elementary schools in the Philippines.

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UTILIZING MOTHER TONGUE – BASED MULTILINGUAL EDUCATION IN MATHEMATICS THREE LEARNING EXERCISES

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ABSTRACT

The main purpose of the study was to assess the performance of thegrade three pupils in utilizing mother tongue-based in Mathematics Process Skillls at Cornelio C. Melgar Elementary School in the School Year 2015-2016. Furthermore, this research determined the extent abilities of the pupils with regards to the different process skills; pagsusi, paglahi-lahi,pagtandi, pagsukod, pagsabot. The descriptive method was used to gather and interpret the data. The respondents were the 100 grade three pupils of Cornelio C. Melgar Elementary School. The researcher-made questionnaire was used as an instrument in collecting data. Statistical treatments were simple percentage mean, chi-square. As presented by the findings, most of the respondents were males with 55 percent, and mostly they aged eight years; sinugbuanong binisaya was the dialect used at home with 95 percent;62 percent were seldom exposed to multimedia. As revealed in the study, the grade three pupils' level of performance was described as Outstanding in Pagsusi. It is highly suggested that the output of the study which is the Instructional Improvement Plan for Grade Three be considered and if possible be used by the grade three teachers and pupils of the school.

Keywords: Mathematics Process Skills; Mother Tongue Based Multilingual Education in Mathematics Three; Descriptive Research; Balamban, Cebu, Philippines .

INTRODUCTION

Mother Tongue Based Multilingual Education is the government banner program for education as a salient part of the K to 12 Basic Education Program. Its significance is underscored by the passing of Republic Act 10523, otherwise known as the " Enhanced Basic Education Act of 2013". MTB MLE is education,formal or non-formal, in which the learner's mother tongue is used in the classroom. Learners begin their education with the language they understand best. The program of the Department of Education on Quality Education towards Philippines" idealizes the role of Mother Tongue as a medium of instruction in Mathematics for grade three to improve the performance of the pupils in Mathematics. The conceptualization of this research study is focused on the Mathematics Process Skills. The researcher believes that out of this study, the aim for quality Mathematics education could be attained. The Mathematics Process Skills Test will be used by the researcher in conducting a test for Grade Three respondents. It is a questionnaire used to assess the performance of the pupils in Mathematics with the use of mother tongue.

STATEMENT OF THE PROBLEM

This study assessed the performance of the pupils in Mathematics Three Process Skills using Mother Tongue-Based at Cornelio C. Melgar Elementary School, Pondol, Balamban, Cebu during School Year 2015-2016 as a basis for learning exercises.

Specifically,

1. What is the profile of
   - 1.1 Pupils
     - 1.1.1 age and gender,
     - 1.1.2 dialect spoken,
     - 1.1.3 exposure to multimedia,
     - 1.1.4 parent's highest educational attainment,
     - 1.1.5 parents' combined family income;
2. What is the performance level of the pupils in Mathematics Process Skills using Mother Tongue-Based as to
   - 2.1 Pagsusi
   - 2.2 Paglahi-lahi
   - 2.3 Pagtandi
   - 2.4 Pagsukod; and
   - 2.5 Pagsabot

3. Is there a significant relationship between the identified profile and the performance in Mathematics three process skills?
4. What are the problems met by the teachers in teaching Mathematics three process skills?
5. Based on the findings what learning exercises can be designed?

NULL HYPOTHESIS

There is no significant relationship between the performance level of the students in Mother Tongue Process Skills and the result of the learning process.

SIGNIFICANCE OF THE STUDY

With the growing cognizance and interest among mother tongue educators, the degree of consistent effort to develop the skills for mother tongue as a medium of instruction in teaching Mathematics in the classroom will improve the performance of the pupils. In the community, we often use our mother tongue to communicate and understand our fellows.

The assessment of Mathematics Process Skills performance will guarantee to answer today's man power development demand.

Hence, the researcher finds that the study is substantively very important to the following:

1. Curriculum Planners. They are Responsible for framing the Elementary Education Program, in particular Mathematics subject. The result of this research study may serve as the basis for the selection of the prioritized subject content in consonance with the present society's concerned needs and demands.

2. Administrators and Coordinators. The result of this study may serve as reference that will support programs enhancing the development of Mathematics process Skills on the part of the pupils concerned.

3. Principals and Teachers In Charge. They are responsible to know the needs of the teachers handling Mathematics subjects. The result of the research study may assist their managerial endeavor in empowering the quality of mother tongue directly and indirectly.

4. Mathematics Subject Teachers. The front liner of the Mathematics Education Program.The rresult of the research may seek of the guide and enlightenment of how to rate their student's performance in the subject, and how to teach the subject in response to the present need of a well skilled individual in a society.

5. Grade One Learners. Who are the recipients of the Mathematics education Program. The result of this research may serve as their guide in understanding the relevance of developing the Mother Tongue Skills to the optimum level as regarded.

6. Grade One Mathematics. A subject taught in grade one level using mother tongue as medium of instruction

7. Mother Tongue Based – Multilingual Education. The native language of the speaker used as a medium of instruction in K to 12 education.

RESEARCH METHODOLOGY

The research method being used in the study is quantitative method with the aim of assessing the performance of the pupils in Mathematics relative to the use of mother tongue as a medium of instruction.

The general mechanics to be used in this study revolves around the principles of an action research. In as much as this research dealt with the upgrading of a very important idea, it is best of the researcher's ability to make the mother tongue method functional in this endeavor. This research study used Mathematics Skills which were performed through a standardized questionnaire by the Grade Three Pupils of Cornelio C. Melgar Elementary School. The respondents of this study were the Grade Three Pupils of Cornelio C. Melgar Elementary School. The total number of students will be randomly selected from each section. This study utilized an adopted questionnaire from the learners' material of grade one used to gather relevant data needed for the study. The questions were made simple, specific, and easy to answer. This was used to collect the profile of the respondents and their level of performance of the Mother Tongue Skills.

The questionnaire was the main tool of gathering data in the study. The permission to conduct the study was sought by the researcher from the students of Cornelio C. Melgar Elementary School, Pondol, Balamban, Cebu. The fielding of the questionnaire was administered right after the permission is granted. Retrieval of the questionnaires was made after the respondents had answered the questions. The research was conducted to assess the performance of the pupils in Mathematics subject. The questionnaire was used to effectively achieve the desired outcomes. The researcher used the statistical tools:

- Simple Percentage- this is used to determine the profile of the respondents as to age and gender.
- Chi-Square- This was utilized to determine the normality of the distribution of Mathematics Three Process Skills.
- Coefficient of Contingency- This was used to determine the relationship of the variable.
- Computation of the t-test

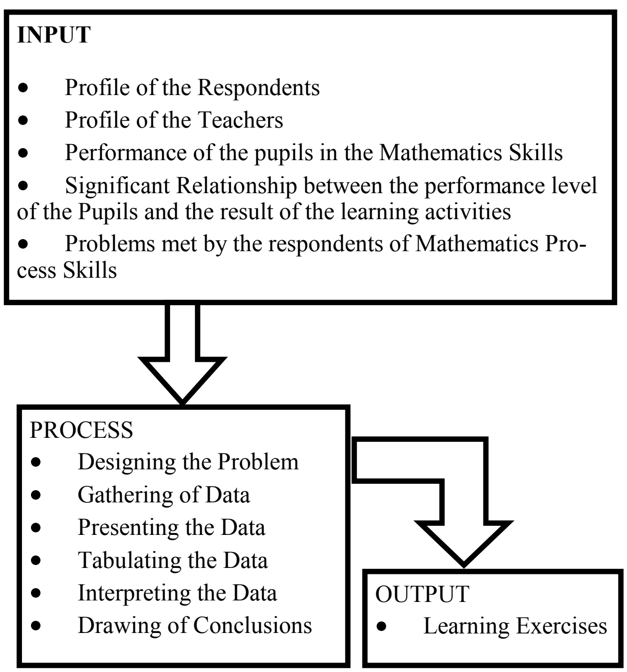

Figure 1. Flow of the Study

The table of specification is used in the formulation of the Process Test Skills

Table 1
Table of Specification

Process Skills	Level	`Item No.	Total
"Pagsusi" Identify the Place Value Sequencing Four-Digit Number Determine the half of a whole Identify the decreasing order Identify the parts of the Multiplication sentence	 Knowledge Knowledge Knowledge Comprehension Knowledge	1-5	5
"Paglahi-lahi" Differentiate the group of numbers Distinguish line and symmetry Identify the object does not belong to the group	 Comprehension Comprehension Comprehension	6-10	5
"Pagtandi" Compare four digit number Compare the money value Compare fractions	 Comprehension Comprehension	11-15	5
"Pagsukod" Find the area of the rectangle Convert the measurements	 Comprehension Comprehension	16-20	5
"Pagsabot" Comparing numbers Determine the days of the week Tell the time	 Comprehension Analysis Analysis	21-25	5
Total			25

PRESENTATION, DATA ANALYSIS AND INTERPRETATION OF DATA

Table 2
Relationship of Identified Profile of Respondents

Variables	C	rs	t	C.V. at 0.05	Level of Significance
Dialect Spoken	0.9.03	1.110	-23.01	-5.991	Significant
Exposure to Multimedia	0.13	0.159	1.60	-5.991	Not Significant
Parents Highest Educational Attainment	0,640	0.780	12.52	-5.991	Significant
Parents' Combined Family Income	0.57	0.700	9.81	-5.991	Significant
Over All Profile	0.561	0.687	11.74	-5.991	Significant
c- correlation,rs- correction values,t-computed t-test,cv-critical value					

As shown in Table 2, the relationships of the identified profile of the respondents for problem no. 1 are significant of the study. The overall profile shows the significant level of significance. Only the exposure to Multimedia is not significant in the study.

Therefore, the rest of the identified profile of the respondents affect the performance of the respondents in Mathematics Three.

RELATIONSHIP BETWEEN THE IDENTIFIED PROFILE AND THE PERFORMANCE IN MATHEMATICS THREE

This table reveals the relationship between the identified profile and the performance in Mathematics Three.

Table 2
Relationship Between the Identified Profile of the Respondents and the Performance in Mathematics Three

	C	t	C.V. at 0.05	Decision
Identified Profile to Performance in Mathematics Three	0.716	8.52	5.991	Significant
c- correlation,t-computed t-test,cv-critical value				

.The table views the relationship between the identified Profile of the respondents and the performance in Mathematics three. The decision is significant. The profile of the respondents are significant in the performance in Mathematics three.

Therefore, the mother togue of the grade three pupils which is the "Sinugbuanong Binisaya" has a great effect on their academic performance in Mathematics. It is also relevant to the highest educational attainment and combined family income of their parents.

Problems Met by the Teachers in Mathematics Three

Table 3 presents the problems met by the teachers in the teaching of Mathematics three using MTB. The first problem is the difficulty in delivery of the lesson, followed by the utilization of mother tongue, next is the scarcity of the learning resources, and last is the difficulty of computation. These problems were addressed to improve the quality of instruction in Mathematics three and achieved the desired skills of the pupils.

These problems met by the grade three teachers should be given action to improve the teaching-learning process in Mathematics three.

Table 3
Problems Met by the Teachers in Mathematics Three

Problems Met	Rank
Difficulty in delivery of the lesson	1
Utilization of mother tongue	2
Scarcity of the learning resources	3
Difficulty of computation	4

FINDINGS

Based on the gathered data, the following findings were drawn:

- Most of the respondents were male with a total of 55 respondents.
- Most of the respondents were 8 years old.
- A total of 95 respondents spoke sinugbuanong binisaya in their home.
- Majority of the respondents were seldomly exposed to multimedia.
- There were four female teachers, two of them had an undergone graduate studies. They were all equipped with trainings related to Mathematics and Mother Tongue Based Education.
- The relationship of the identified of the respondents is significant in the study.
- The relationship between the profile of the respondents and the performance in Mathematics three is significant in the study.

CONCLUSION

The mother tongue of the grade three pupils should be relevant to the learning instructions and competencies in Mathematics three.

Pupils Academic Performance in Mathematics is influenced by their family's status and achievement.

The grade three pupils and teachers should be more knowledgeable and more equipped about the utilization of the terminology and ideology in handling mother tongue based education in Mathematics process skills.

RECOMMENDATION

It is greatly recommended that the output of the study which is the Instructional Improvement Plan for Grade Three pupils be noticed and utilized for the improvement of the performance of the grade three pupils in Cornelio C. Melgar Elementary School.

The teacher must have more training relati ve to Mathematics and Mother Tongue.

The curriculum guide and the books used must be revised.

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PROFESSIONAL QUALIFICATIONS, TEACHING EFFECTIVENESS AND RESEARCH CAPABILITY OF THE FACULTY OF PHILIPPINE MERCHANT MARINE ACADEMY

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ABSTRACT

The main objective of the study was to identify the professional qualifications, teaching effectiveness, and research capability of the faculty of Philippine Merchant Marine Academy for school year 2014-2015. Designed questionnaires were used to gather data on the perception of faculty in terms of their professional qualifications and research capability. Further, document analysis of the NBC 461- QCE Faculty Evaluation form was utilized to gauge faculty teaching effectiveness. Statistical tools such as frequency, percentage, mean, analysis of variance, paired samples t-test, and Pearson-r correlation were used to test hypotheses. The study revealed that all the PMMA faculty have eligibility/license, majority have pursued or are currently pursuing graduate studies, has 1-4 years of teaching experience, has 0-8 years of on-board experience, the technical faculty have attended Training Course for Instructors based on the IMO Model Course (6.09) and Assessment or the Examination and Certification of Seafarers based on IMO Model Course (3.12), On research capability: Majority of the faculty has no extension services provided, has no publication nor research production. Further, the study revealed that the faculty perceived their research capability as satisfactory in the following areas: opportunity and chance, technical/ writing skills, basic statistics and data analysis, and other-related factors. Lastly, their teaching effectiveness was perceived as very satisfactory by both their respective superior and students. Based on these findings, the researcher recommends that the Academy should support the faculty by providing encouragement, rewards, facilities, and opportunities to boost their professional qualifications and research capability which would maintain and ensure that teaching effectiveness be exceptional

Keywords: Maritime education, teaching effectiveness, professional qualifications, research capability, faculty, perception, descriptive design, PMMA

INTRODUCTION

The teacher is the key factor in education as they are the central figure of the educational system and recognized as molders of educational thoughts and builder of future leaders. As such, the success of the educational enterprise lies within the teacher's quality of teaching. They guide, direct and encourage students at every opportunity and promote conditions favorable to individual achievement to the limits of their abilities.

As such, it is imperative that teachers need to improve knowledge and skills to enhance, improve and explore their teaching practices. Selvi (2010) also stated that teachers' competencies have been broadening with respect to reform studies in education, development of teacher education, and scientific results of educational science and other fields. Further, he argued that professional development should be redefined for sustainability as the aims of education change very quickly depending on the demands of the era requiring stronger and more efficient professional competencies.

Pasicolan (2005) studied the relationship between the teachers' competence in the classroom discipline with their profile, personality traits and teaching methodology and found out that the following do not affect classroom discipline: sex, age and civil status of the teachers, accepting other assignments aside from the academic load, and subject being taught. The findings also showed that teachers' characteristics and behavioral pattern relate to how they manage classroom discipline. The findings imply that the teachers have problems on classroom discipline, as their personality traits were apparently unfavorable.

On the other hand, Goems and Clover (2004) emphasized that a good teacher is skillful in producing a style all his own and teaching in a way the occasion calls for. This needs not only of in-service trainings to supplement the lack of training that teachers received provided in some institutions, but probably some changes or close monitoring is necessary as to the implementation of what are provided in the trainings and seminars. Moreover, they pointed out that teachers must polish, improve and expand research, and diagnostic and teaching techniques. Teachers need a mastery of the subject matter content and an understanding of the interdisciplinary nature of knowledge.

Moreover, Barry (2010) mentioned that teaching effectiveness involves a deeper understanding of subject matter, learning theory, and student differences, planning, classroom instructional strategies, knowing individual students, and assessment of student understanding and proficiency with learning outcomes. It also includes the teacher's ability to reflect, collaborate with colleagues and continue on going professional development.

Instead of changing the structure, Elmore (2009 as cited in Barry, 2010) stated that the instructional practices of teachers should be changed. Guarding of teaching effectiveness is imperative because it influence student learning. Researches identified these factors which primary includes differences in abilities and attitudes, family and community background, and other attribute which students bring in the school, and teacher quality of teaching, and other attributes which the students bring to the school.

According to Danielson (2015), effective teaching has five domains, each with several observable teacher behaviors, which covers the planning, and preparation, classroom environment, instruction and professional responsibilities.

On the other hand, Hanford (1998), stated that an effective and productive teacher utilizes his potential to the fullest and focuses on the tasks assigned to him by means of comparing what the teacher does know with what he should know; comparing the teacher's ability to perform with the desired standard quality; assessing teacher's ability to plan and carry through the job and the amount of planning needed; and judging whether the teacher can and will learn vital knowledge.

Further, Bain et al (1989) found out that a variety of institutional planning activities, teaching strategies and materials was common in the repertoire of effective teachers. These includes having high expectations for student learning; providing clearer and focused instruction; closely monitoring of student learning progress; re-teaching using alternatives strategies when children didn't learn in the first time; using incentives and rewards to promote learning; being highly efficient in their classroom routines; setting and enforcing high standards for classroom behavior; and maintaining excellent personal interaction with their students.

Finally, Marzano's (2007) model of teaching effectiveness articulates logical planning sequence for successful instructional design includes establishing learning goals, students' interaction with new knowledge, student practice to deepen understanding, engaging students, effective classroom management, effective student teacher relationship, communicating high expectation for students, and effective standards-based formative and summative assessment practices which use multiple measures of students' proficiency.

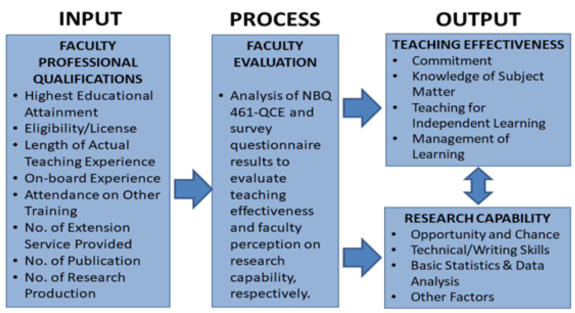
Previous researches also have similar and different views towards the relationship of teaching effectiveness to the faculty profile to the present studies. For instance, Pama et al (2013) revealed that found out that the level of teaching effectiveness among faculty as a whole and when classified according to gender, age, highest educational degree, length of service, academic rank and academic discipline was outstanding. Significant differences on the level of teaching effectiveness based on length of service and academic rank were also found but the variance between groups is not really big enough to make a difference. Lastly, no statistical differences were found on the level of effectiveness between age and highest educational degree of faculty.

In terms of academic rank, several studies found that full, associate and assistant professors were rate highly rated by students compare to teaching assistants (Marsh & Dunkin, 1992). However, Feldman (1983) concluded that majority of the studies showed no significant correlation between academic ranks and student ratings. Feldman (1983) also found out that students yielded no significant correlation between age and experience of the teacher and students rating on teacher evaluations.

The present study is similar to the recent studies such of Pama et al. (2013) which showed the relationship of teaching effectiveness with the faculty age, gender, and highest education degree, length of service, academic rank and academic discipline. Basow (2000) and Achawarin (n.d.)

also shows similarity with this study which shows the association of gender, teaching style sand teaching evaluations, and the relationship between teacher qualification, teaching experience, teacher competence curriculum development, and educational research respectively. However, the difference of the present study is that it combined the variables such professional qualifications, teaching effectiveness and research capability of the faculty in relation to each other. (See Figure 1. Conceptual Framework).

Figure 1. Conceptual Framework



The present study is anchored on the concept that a teacher is the key variable in our unending quest for quality education in our educational system. The desirable professional qualifications and teaching competencies of the faculty shown and applied in the actual teaching and learning activities in the classroom greatly help them to become competent in the different aspects of their school work, thus, resulting in the achievement of quality education and much of great achievement on the part of the students.

OBJECTIVES OF THE STUDY

The study aimed to identify the professional qualifications, teaching effectiveness, and research capability of PMMA faculty for SY 2014 -2015. The specific objectives were: (1) characterize the faculty members in terms of their professional qualifications; (2) assess their perception on their research capability and teaching effectiveness; and (3) analyze the differences and relationships in the faculty's teaching effectiveness, professional qualifications, and research capability.

METHODOLOGY

The researcher used descriptive design of research to identify the professional qualifications, teaching effectiveness and research capabilities of the faculty of PMMA. In addition, document analysis of the NBC 461-QCE Faculty Evaluation Form and related literature were done to include survey and interview to gather data from the respondents. The forty one (41) PMMA faculty members from the College of Marine Transportation and College of Marine Engineering were asked to answer the survey-questionnaire, which is the main data gathering instrument of this study. Universal sampling was utilized for the survey to give all faculty member chance to become part of the study which includes the contractual and temporary status. On the other hand, snowball technique has been utilized in order to get the most reliable person to be included in the interview method. The respondents' perceptions were obtained through the following scales: 5 = Outstanding; 4 = Very Satisfactory/Very Good; 3 = Satisfactory/Good; 2 = Fair/Average; and 1 = Poor. Both descriptive and inferential statistics such as frequency, percentage, ranking, mean, analysis of variance, Pearson r, paired samples t-test, and Tukey Post-Hoc test, were used to analyze the data.

RESULTS AND DISCUSSION

1. **Faculty Professional Qualifications**

Highest Educational Attainment. Majority of the faculty respondents (26 or 63.41%) pursued or are currently pursuing advanced studies. However, fifteen (15) or 36.59 % are only baccalaureate degree holders. Faculty member who have taken or undertaking graduate studies are mostly general education and allied courses faculty members while those who are only baccalaureate degree holders are technical/professional courses instructors.

Eligibility/License. All of the respondents have eligibility/license. Fifteen (15) or 36.59% have passed the Licensure Examination for Teachers while twenty-five (26) or 63.41% have either merchant marine officer's license (i.e., captain/chief engineer, chief mate/second engineer, second mate/third engineer, or third mate/fourth engineer) or allied courses' license.

Length of Actual Teaching Experience. Twenty four (24) or 60.00% has 1-4 years length of teaching experience, fourteen (14) or 35 % has 5-9 years, one (1) or 2.5% has 10-14 years, and one (1) or 2.50% has 15-19 years.

On-board Experience. The twenty Six (26) or 63.41% of the respondents are general education and allied courses faculty, has 0 on-board experience, eight (8) or 19.51% have 1-8 years of onboard experience. Conversely three (3) or 7.32% has 9-19 years of on board experience, two (2) or 4.88% has 20-29 years, and two (2) or 4.88% has 30-39 years of on-board experience.

Attendance on IMO Training/s: Twenty (20) or 48.78% are general education faculty and were not required to attend the I Training Course for Instructors based on the IMO Model Course (6.09) and Assessment, Examination and Certification of Seafarers based on IMO Model Course (3.12). On the other hand among the professional/technical faculty, two (2) or 4.88% attended the IMO Model Course 6.09 only, one (1) or 2.44% attended the IMO Model Course 3.12 only, and eighteen (18) or 43.90% attended both of the trainings.

Number of Extension Service Provided. Most (32 or 78.05%) of the faculty respondents has not provided extension services yet. On the other hand, seven (7) or 17.07% have rendered 1-5 extension services while only 2 or 4.88% have provided 7 or more extension services.

Number of Publication. When it comes to publication, majority (32 or 78.05%) of the faculty respondents have not yet published while nine (9) or 21.95% have 1-4 publications.

Number of Research Production. In relation to research production, most of the respondents (33 or 80.49%) have not produced research output yet while six (6) or 14.63% have 1-5 research productions and only 2 or 4.88% have more than 7 research outputs.

2. Faculty Respondents' Perception of their Research Capability

Table 1. Perception of Faculty Respondents on their Research Capability

CRITERIA	MEAN	DESCRIPTIVE RATING
Opportunity and Chance	3.25	Satisfactory
Technical/Writing Skills	3.31	Satisfactory
Basic Statistics and Analysis	3.21	Satisfactory
Other Research-Related Factors	3.11	Satisfactory
OVER-ALL MEAN	**3.22**	**SATISFACTORY**

As shown above, overall, the faculty respondents are satisfied with their research capability on all of the aspects: opportunity and chance, technical/writing skills, basic statistics and analysis, and other research-related factors (e.g., availability of research facilities, laboratories, and equipment, provision of incentives and rewards, research culture, venue for presentation, publication and dissemination, among others) with a mean of 3.22.

3. Significant Difference on faculty research capabilities when grouped according to Professional Qualifications

Table 2. Analysis of Variance of Respondents' Research Capability in terms of their Professional Qualifications

		Sum of Squares	df	Mean Square	F	Sig.
Higher Educational Attainment	Between Groups	7.348	4	1.837	1.924	.128
	Within Groups	34.381	36	.955		
	Total	41.729	40			
Eligibility/ License	Between Groups	10.507	6	1.751	1.907	.108
	Within Groups	31.222	34	.918		
	Total	41.729	40			
Length of Service	Between Groups	9.267	8	1.158	1.123	.376
	Within Groups	31.976	31	1.031		
	Total	41.244	39			
On-Board Experience	Between Groups	12.333	11	1.121	1.085	.410
	Within Groups	26.876	26	1.034		
	Total	39.209	37			
Attendance on Other Training	Between Groups	2.805	2	1.403	1.350	.272
	Within Groups	38.439	37	1.039		
	Total	41.244	39			
Number of Extension Service Provided	Between Groups	4.211	5	.842	.786	.567
	Within Groups	37.518	35	1.072		
	Total	41.729	40			
Number of Publication	Between Groups	3.829	4	.957	.909	.469
	Within Groups	37.900	36	1.053		
	Total	41.729	40			
Number of Research Production	Between Groups	3.807	5	.761	.703	.625
	Within Groups	37.922	35	1.083		
	Total	41.729	40			

Based on the table above, the study revealed that there is no statistically significant difference between the research capability of the faculty when grouped according to their professional qualifications (i.e., higher educational attainment, eligibility/license, length of service, on-board experience, attendance on other training, number of extension service provided, number of publication, and number of research production). This implies that the faculty's perception of their research capability does not depend on their professional qualifications.

4. Significant Relationship between the faculty research capability and professional qualifications

Table 3. Pearson-r Correlation of Relationship between Respondents' Research Capability and Professional Qualifications

		Highest Educational Attainment	Eligibility / License	Length of Service	On-board Experience	Attendance on other training	Number of Extension Service Provided	Number of Publication	Number of Research Production	Research Capability
Highest Educational Attainment	Pearson-r	1	-.469**	.450**	-.429**	-.277	.396*	.325*	.373*	.362*
	Sig. (2-tailed)		.002	.004	.007	.084	.010	.038	.016	.020
	N	41	41	40	38	40	41	41	41	41
Eligibility/ License	Pearson-r	-.469**	1	-.564**	.288	.523**	-.172	-.364*	-.374*	-.230
	Sig. (2-tailed)	.002		.000	.079	.001	.283	.019	.016	.149
	N	41	41	40	38	40	41	41	41	41
Length of Service	Pearson-r	.450**	-.564**	1	-.235	-.331*	.481**	.411**	.388*	.281
	Sig. (2-tailed)	.004	.000		.155	.037	.002	.008	.013	.079
	N	40	40	40	38	40	40	40	40	40
On-board Experience	Pearson-r	-.429**	.288	-.235	1	-.065	-.200	-.161	-.198	-.295
	Sig. (2-tailed)	.007	.079	.155		.698	.228	.334	.232	.072
	N	38	38	38	38	38	38	38	38	38
Attendance on other training	Pearson-r	-.277	.523**	-.331*	-.065	1	.053	-.239	-.239	-.259
	Sig. (2-tailed)	.084	.001	.037	.698		.746	.137	.138	.106
	N	40	40	40	38	40	40	40	40	40
Number of Extension Service Provided	Pearson-r	.396*	-.172	.481**	-.200	.053	1	.623**	.579**	.235
	Sig. (2-tailed)	.010	.283	.002	.228	.746		.000	.000	.139
	N	41	41	40	38	40	41	41	41	41
Number of Publication	Pearson-r	.325*	-.364*	.411**	-.161	-.239	.623**	1	.828**	.261
	Sig. (2-tailed)	.038	.019	.008	.334	.137	.000		.000	.100
	N	41	41	40	38	40	41	41	41	41
Number of Research Production	Pearson-r	.373*	-.374*	.388*	-.198	-.239	.579**	.828**	1	.229
	Sig. (2-tailed)	.016	.016	.013	.232	.138	.000	.000		.150
	N	41	41	40	38	40	41	41	41	41
Research Capability	Pearson-r	.362*	-.230	.281	-.295	-.259	.235	.261	.229	1
	Sig. (2-tailed)	.020	.149	.079	.072	.106	.139	.100	.150	
	N	41	41	40	38	40	41	41	41	41

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 3 shows that there is a statistically significant moderate positive relationship between the perception of the faculty on their research capability and highest educational attainment with r = 0.362, p = 0.20, and df = 39. This implies that the faculty's perception of his/her research capability is affected by his/her highest educational attainment wherein the higher the educational attainment, the higher the faculty's satisfaction on his/her research capability. On the other hand, eligibility/license, length of service, on-board experience, attendance on other training, number of extension service provided, number of publication, and number of research production have no statistically significant relationship with the respondents' research capability.

Table 3 shows that there is a statistically significant moderate positive relationship between the perception of the faculty on their research capability and highest educational attainment with r = 0.362, p = 0.20, and df = 39. This implies that the faculty's perception of his/her research capability is affected by his/her highest educational attainment wherein the higher the educational attainment, the higher the faculty's satisfaction on his/her research capability. On the other hand, eligibility/license, length of service, on-board experience, attendance on other training, number of extension service provided, number of publication, and number of research production have no statistically significant relationship with the respondents' research capability.

5. Supervisors and Students Perception on the Teaching Effectiveness of the Faculty

Table 4. Descriptive Statistics of the Faculty Respondents' Teaching Effectiveness as Perceived by the Supervisor and Students

INDICATORS	SUPERVISOR	STUDENT	INTERPRETATION
Commitment	4.63	4.26	Very Satisfactory
Knowledge of Subject matter	4.70	4.27	Very Satisfactory
Teaching for independent learning	4.70	4.24	Very Satisfactory
Management of learning	4.70	4.23	Very Satisfactory
OVER-ALL	**4.68**	**4.25**	**VERY SATISFACTORY**

Table 4 shows the faculty respondents' teaching effectiveness as perceived by their respective supervisors and students. Teaching effectiveness, as measured by the NBC 461 – QCE Faculty Evaluation Form, has the following indicators: commitment, knowledge of the subject matter, teaching for independent learning, and management of learning. From the above table, it can be noted that the supervisors perceive the faculty's effectiveness as Very Satisfactory (overall mean: 4.68) with knowledge of subject matter, teaching for independent learning, and management of learning having the highest mean of 4.70 each while commitment is rated 4.63.

Likewise, the students perceive the faculty's teaching effectiveness as Very Satisfactory (overall mean: 4.25), with knowledge of subject matter having the highest rating of 4.27 while commitment, teaching for independent learning, and management of learning were rated 4.26, 4.24, and 4.23, respectively.

Overall, the supervisors' perception of the faculty's teaching effectiveness is higher than that of the students' with mean of 4.68 compared to 4.25 as revealed using independent samples t-test with p < 0.05 (see table below):

Table 5. Significant Difference on the Teaching Effectiveness as Perceived by the Faculty and the Students

			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		2.622	
	Sig.		.123	
t-test for Equality of Means	t		-.847	-.847
	Df		18	16.664
	Sig. (2-tailed)		.408	.409
	Mean Difference		-.19600	-.19600
	Std. Error Difference		.23151	.23151
	95% Confidence Interval of the Difference	Lower	-.68238	-.68159
		Upper	.29038	.29319

6. Significant Relationship between Faculty Teaching Effectiveness and Professional Qualification

Table 6. Significant Relationship between Teaching Effectiveness and Professional Qualifications

		Teaching Effectiveness			Teaching Effectiveness
Highest Educational Attainment	Pearson Correlation	-.136	Attendance on other training	Pearson Correlation	.419**
	Sig. (2-tailed)	.398		Sig. (2-tailed)	.007
	N	41		N	40
Eligibility/ License	Pearson Correlation	.139	Number of Extension Service Provided	Pearson Correlation	.239
	Sig. (2-tailed)	.385		Sig. (2-tailed)	.133
	N	41		N	41
Length of Service	Pearson Correlation	.047	Number of Publication	Pearson Correlation	-.045
	Sig. (2-tailed)	.775		Sig. (2-tailed)	.778
	N	40		N	41
On-board Experience	Pearson Correlation	.229	Number of Research Production	Pearson Correlation	.016
	Sig. (2-tailed)	.167		Sig. (2-tailed)	.920
	N	38		N	41

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

Table 6 shows that there is a statistically significant relationship between the faculty teaching effectiveness and their attendance on other training at α=0.01, while all other professional qualifications (highest educational attainment, eligibility/license, on-board experience, number of extension service provided, number of publication, and number of research production). This implies that the teaching effectiveness of the faculty is affected by their attendance to the Training Course for Instructors (IMO Model Course 6.09) and Assessment, Examination and Certification of Seafarers (IMO Model Course 3.12).

7. Significant Difference on faculty teaching effectiveness when grouped according to professional qualifications

Table 7. Significant Difference between the Faculty Respondents' Teaching Effectiveness when Grouped according to Professional Qualifications

		Sum of Squares	df	Mean Square	F	Sig.
Highest Educational Attainment	Between Groups	.144	4	.036	1.030	.405
	Within Groups	1.261	36	.035		
	Total	1.405	40			
Eligibility/ License	Between Groups	.236	6	.039	1.143	.359
	Within Groups	1.170	34	.034		
	Total	1.405	40			
Length of Service	Between Groups	.418	8	.052	2.046	.073
	Within Groups	.791	31	.026		
	Total	1.209	39			
On-board Experience	Between Groups	.272	11	.025	.719	.710
	Within Groups	.893	26	.034		
	Total	1.165	37			
Attendance on Other Training	Between Groups	.228	2	.114	4.306	.021
	Within Groups	.981	37	.027		
	Total	1.209	39			
Number of Extension Provided	Between Groups	.156	5	.031	.876	.507
	Within Groups	1.249	35	.036		
	Total	1.405	40			
Number of Publication	Between Groups	.038	4	.010	.251	.907
	Within Groups	1.367	36	.038		
	Total	1.405	40			
Number of Research Product	Between Groups	.055	5	.011	.284	.919
	Within Groups	1.351	35	.039		
	Total	1.405	40			

Based on the results, there is a significant difference between the faculty respondents' teaching effectiveness ($F(0.114, 0.027$; $p=0.021$) when grouped according to attendance on other training.

On the other hand, there is no statistically significant difference between the faculty respondents' teaching effectiveness when grouped according to the other professional qualification. To determine which of the groups under the attendance on other training differed from one another, a Tukey post-hoc test was conducted:

Table 8. Tukey Post-Hoc Test on Significant Difference between Faculty Respondents' Teaching Effectiveness in terms of Attendance on Other Training

(I) Attendance on other training	(J) Attendance on other training	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
None	6.09	.04156	.12076	.937	-.2533	.3364
	6.09 and 3.12	-.14705*	.05290	.023	-.2762	-.0179
6.09	None	-.04156	.12076	.937	-.3364	.2533
	6.09 and 3.12	-.18861	.12137	.278	-.4849	.1077
6.09 and 3.12	None	.14705*	.05290	.023	.0179	.2762
	6.09	.18861	.12137	.278	-.1077	.4849

*. The mean difference is significant at the 0.05 level.

Table 8 shows that there is statistically significant difference in the teaching effectiveness rating between those who have not attended either the Training Course for Instructors based on the IMO Model Course 6.09 and Assessment, Examination and Certification of Seafarers based on IMO Model Course 3.12 (4.41 ± 0.18) and those who have attended both of the training courses (4.56 ± 0.13). This implies that the two (2) mandatory training courses (IMO 6.09 and IMO 3.12) truly contribute to teaching effectiveness.

8. Significant relationship between the teaching effectiveness and research capabilities of the faculty

Table 9. Pearson-r Correlation of Relationship between Faculty Teaching Effectiveness and Research Capability

		Teaching Effectiveness	Research Capability
Teaching Effectiveness	Pearson Correlation	1	.028
	Sig. (2-tailed)		.863
	N	41	41
Research Capability	Pearson Correlation	.028	1
	Sig. (2-tailed)	.863	
	N	41	41

Table 9 shows that there is no statistically significant relationship between the teaching effectiveness and research capability of the faculty respondents ($p > 0.05$). This implies that the teaching effectiveness of the faculty does not affect their perception on their research capability.

CONCLUSION

This study attempted to identify the professional qualifications, teaching effectiveness, and research capability of the PMMA faculty. Based on the results, this study found out that:

- In terms of professional qualifications, Most of the faculty have pursued or currently pursuing graduate studies. Majority of the faculty eligibilities or licenses are aligned with maritime certification. The mean year of faculty-respondents' length of service is 3.875. The faculty member has an average year 4.39 onboard experience. Among the faculty members, the general education faculty were not required to attend the IMO Model Course 6.09 and IMO Model Course 3.12.However, all maritime technical faculty have taken both courses. The faculty shows minimal number of extension service provided, publication works and research output.
- The PMMA faculty research capability is perceived as satisfactory in terms of opportunity and chance, technical/writing skills, basic statistics and analysis, and other research-related factors.
- There was no significant difference between the faculty's research capabilities when grouped according to their professional qualifications while there is a statistically significant moderate positive relationship between research capability and highest educational attainment.
- The teaching effectiveness of the faculty was perceived as very satisfactory by both the supervisors and students.
- There is a significant difference between teaching effectiveness of those who have attended both IMO Model Courses 6.09 and 3.12 and those who did not attend any while there is no significant relationship between the faculty teaching effectiveness and research capability.

RECOMMENDATIONS

In view of the foregoing, this study recommends the following:

- The faculty members, both technical and general education, should be required to pursue advanced or graduate studies and/or undergo faculty development program through trainings, seminars, and workshops related to their specialization

- Encourage commitment among the faculty and propose reward system for the faculty. Strengthen the retention program by providing faculty member with competitive salary and appropriate incentives and rewards.
- Strengthen the technical/writing skills and basic statistics and data analysis of the faculty members to effectively and efficiently conduct research through trainings, crash courses and refreshers' courses and provide research facility, laboratories and equipment, and other research-related resources such as internet connection, subscription to online journals, and updated and well equipped library to enhance the research culture of the academy.
- Maintain, and ensure that the teaching effectiveness of faculty member in terms of commitment, knowledge of subject matter, management of learning, and teaching for independent learning.
- Conduct further study on the research capability and professional qualifications of the faculty which affects their teaching effectiveness.

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ORAL LANGUAGE ERRORS OF SOPHOMORE STUDENTS IN ISABELA STATE UNIVERSITY

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ABSTRACT

This study was conducted to determine the predominant oral language errors committed by the sophomore students of the Isabela State University which were elicited through oral interview and picture-cued narration. This was investigated to make learners aware of their errors to foster self-correction, aid language teachers on what language features must be given much attention, and contribute significant notions in the field of SLA due to a dearth of research on this matter. Cluster and random sampling were used to select respondents.The study made use of Corder's Taxonomy of Error and Keshavarz's Linguistic Taxonomy in the error analysis procedure. It had been found out that the predominant errors of the students which encompassed all the types of errors and the syntactico-morphological level of language in particular were errors on verb, preposition, articles, pronoun, conjunction, word structure, number and noun/ noun phrases. Moreover, the predominant phonological errors were the incorrect production of the sounds /Ɵ/ and /ð/ and not production of the consonant cluster ending with syllable pattern CCC of words. Substitution errors and syntactico-morphological errors were also the most committed errors in terms of error types and level of language these errors belong. The research further showed that females committed less error of addition than males. Lastly, the profile variables of the respondents such as sex, English 12a grade, type of school graduated from and language spoken at home could not be bases to predict one's performance in committing errors when engaged in oral language.

Keywords: oral language errors, oral interview, picture-cued narration, error analysis, Corder's Taxonomy of Error and Keshavarz's Linguistic Taxonomy

INTRODUCTION

Committing an error is a very natural and expected phenomenon to everyone in any endeavor he will take. Errors are no longer seen as devil signs of failure to be prevented and eradicated… errors are considered signs of developmental processes involved in the learning of language (Shekhzadeh and Gheichi, 2011).

However, learners and even educators at times do not realize the vital roles played by errors in the teaching and learning process. Because of the negative connotation of the word error, learners view it as a threat and an intimidating factor especially in their attempt to use the target language orally, while some educators perceive it as a manifestation of incompetence among their learners.

There has been a lot of researches about errors on the written outputs of the students; however, there is just a dearth of research on the spoken outputs of the students. It is because errors committed in oral communication are often neglected because the message could still be comprehended due to contextual clues (Valero et al., 2008). Also, in many language courses, instructors and learners take a lot of time analyzing examples of adapted written language rather than observing and studying samples of real spoken language (Brenes, 2005). Hence, this research was conducted to contribute knowledge on the understanding of learners' errors in spoken language. This would give more light on the limited concerns and reports of minimal research focused on errors in speaking.

Error analysis is utilized in the analysis and evaluation of learners' language outputs such as written and spoken outputs. This was considered to systematically study and evaluate errors as well as to deliberately diagnose language areas which were problematic in the oral language of learners. Hence, this research aimed to provide also appropriate recommendations and effective measures or remediation on how to deal with these errors of the students.

Through the findings of this study, syllabi could be enhanced by including the errors usually committed by the learners in their oral language in the list of the course contents, or to consider the remediation activities as product of this research in the enhancement activities stipulated in a syllabus to instructionally correct these errors. Likewise, it could gradually help learners to get rid of whatever effect that error correction may bring to them for they would be cognizant of the errors they often commit while they are engaged in oral communication and would foster self-correction in the process of language learning. Teachers would also become more effective in addressing the weaknesses of learners because they would become fully aware of the errors committed by the students and be guided on how to deal and treat these errors since remediation activities were the outcome of this study.

STATEMENT OF THE PROBLEM

The study sought to determine the errors committed by the sophomore students in oral language. Specifically, it sought to answer the following questions:

1. What is the profile of the sophomore students in terms of the following variables:
   - 1.1 Sex
   - 1.2 Grade in English 12a
   - 1.3 Type of school graduated from
   - 1.4 Language spoken at home
2. What are the predominant errors committed by the respondents in oral language in terms of:
   - 2.1 Types
     - 2.1.1 Omission
     - 2.1.2 Addition
     - 2.1.3 Substitution
     - 2.1.4 Permutation
   - 2.2 Level of Language
     - 2.2.1 Phonological
     - 2.2.2 Lexicosemantic
     - 2.2.3 Syntactico-morphological
3. What is the level of performance of the respondents in terms of the types and level of language?
4. Is there a difference between the errors committed by the respondents in oral language when grouped according to their profile variables?
5. Is there a significant relationship between the level of performance of the sophomore students when grouped according to their profile variables?

RESEARCH METHODOLOGY

The researcher made use of a descriptive method to obtain information about the errors committed by second language learners in their oral language as a manifestation of their learning or change of behavior to determine, describe and analyze the current status of the learners' progress in second language learning. Quantitative method was also used to see if there is a difference between the errors committed by the learners in their oral language when grouped according to their profile variables and if there is a relationship between the performance of the sophomore students when grouped according to their profile variables. The study was conducted at the College of Teacher Education, Isabela State University- Echague Campus, Echague, Isabela. The researcher made use of cluster sampling. Then from the cluster, the researcher employed systematic sampling to come up with 30 respondents from which language outputs were derived and used for this study due to the intricacy of data gathering procedure and analysis.

The researcher employed language tasks in a form of oral interview composing of 10 conversational-type, and open questions and a picture -cued narration with six pictures. These tools were used for the students to speak up and use the target language beyond sentential level to manifest a true oral language engagement and for the researcher to elicit longer responses from the respondents. The language tasks employed were actually based on the data gathering procedure of Zayda Asuncion (2004) in her thesis entitled "Oral Language Proficiency and Compensatory Strategies". On the other hand, the pictures used in picture-cued narration were adapted from the thesis of Binay-an (2012). The two language tasks of the respondents were carefully and deliberately recorded by means of a digital camera with a feature of video camcorder for the intricate analysis of the data. During the execution of the language tasks, a faculty member was present to observe and attest the recording of data and for the sake of validity and reliability as well.

Transcription of the videotaped utterances was initially done before the error analysis procedure using Corder's taxonomy of errors (i.e. omission, addition, substitution and permutation) and

Keshavarz's Linguistic taxonomy of errors (i.e. phonological, lexicosemantic and syntactico-morphological errors).

Frequency counts and percentage were used to describe the profile variables of the respondents, their errors and the classifications of errors.

Lastly, Analysis of Variance and T-test for independent groups, where appropriate, were used to see if there is a difference between the errors committed by the respondents in oral language in terms of type and level of language when grouped according to their profile variables and if there is a relationship between the performance of the sophomore students when grouped according to their profile variables. The hypotheses were tested at 0.05 level of significance.

REVIEW OF RELATED LITERATURE

There were lots of studies discussing the beginning of error analysis (EA). Some studies even looked into the theories related to EA. In a study of Heydari (2012) entitled "Error Analysis: Sources of L2 Learners' Errors", he comprehensively condensed how error analysis came into the light of education. In recent years, there has been a growing research interest in the analysis of errors adults make while learning a second language. The study and analysis of the errors made by second language learners (i.e. Error Analysis or EA), either in their speech or writing or both has been brought under consideration by many educators, EFL teachers, linguists, and researchers throughout the world. In fact, learners' errors have been the subject of controversy for a long time.

Errors, being the focus of this process, is defined as the flawed side of learner's speech or writing which deviates from some selected norms of mature language performance (Dulay, Burt, and Krashen, 1982), thus called the competence errors. Mistakes, on the other hand, are performance errors caused by fatigue or inattention. In addition, a study conducted by Ratnah (2013) entitled "Error Analysis on Tenses Usage Made by Indonesian Students", more definitions of errors were derived from several views. Among the several perspectives he quoted was by Crystal (1987) who defined 'error' as a term used in psycholinguistics referring to mistakes in spontaneous speaking or writing attributable to a malfunctioning new muscular command from brain whereas Richard (1985), in relation to the speech or writing of a second a foreign language learner, stated that error is the use of linguistics item (e.g. a word, a grammatical item, a speech act, etc.) in a way which a fluent or native speaker of the language regards as showing faulty or incomplete learning. Moreover, error is something done wrong, (Current, 1980) and is a systematic deviation which consistently produced by the learner, (Norrish, 1983).

Error analysis has pervasively acknowledged also as to its use. In a study of Lestari (2010) entitled "Student's Grammatical Errors in Using Conditional Sentence Type III (A Case Study Of Third Year Students Of Sma N 1 Guntur Demak in the Academic Year of 2010/2011), she emphasized that the use of error analysis is to show some problems of the students. It also gives information to teachers about the process of acquiring a foreign language made by students. She really thought that it is necessary to discuss error analysis for teaching English as a foreign language because English teachers should know error analysis since it becomes a useful key to understanding the process of foreign language acquisition. They should know how the target language is learned or acquired, what the best strategy the learners employ in order to master the target language. Since learning a language is a process that involves the making of mistakes and errors, errors are considered as the product of learning. It is important for English teachers to realize that errors made by a learner need to be analysed correctly in order to be able to arrange learning strategy effectively.

As regards to the role of EA as a diagnostic tool, Ratnah (2013) claimed in his research that error analysis is an invaluable source of information to teachers. It provides information on students' errors which in turn helps teachers to correct students' errors and also improves the effectiveness of their teaching. The study of errors by themselves would have been misleading; the study of errors in contrast to the number of correct responses gives a good picture of which items are being mastered and which are not.

One consideration in error analysis is the evaluation of errors as to its sources and/or causes. In the study of Phuong (2011) entitled "Written Errors in EFL: When and How to Correct", he cited the classification of written errors in ELT. There have been a lot of different criteria in classifying errors in general or written errors in particular, but the most popular classification that earns scholars' consensus prevailingly is the division of errors into interlingual errors, intra- language errors and developmental errors. Additionally, in a study conducted by Shekhzadeh and Gheichi (2011) entitled "An Account of Sources of Errors in Language Learners' Interlanguage", they also stressed the sources of errors by citing Keshavarz's taxonomy of errors. Another but more comprehensive and complex classification of errors as to their sources was presented by James (1998). In his study, he showed the different types of learners' errors relating to omission, overinclusion, misselection, misordering, and blends.

In the light of international researches, there have been numerous studies conducted in the analysis of errors in written output of second language learners. Some researches look into the intralingual and interlingual errors in the written outputs of the students as in the researches of Pelin, Alsulmi (2010), Nayernia (2011), Oluwatosin (2011) and Chebchoub. Kafipour and Khojasteh (2012) refer to these errors as sources of errors. Moreover, other researchers such as Alonso (1997), Karma and Hajjaj, (1989:151-152, cited by Nzama, 2010), Farhat, (1994:47, cited by Nzama, 2010), Rogers (2012) and Bilal et al. (2013) focused more on the L1 interference or the interlingual errors. Al Jarf (2010) looked into the spelling errors whereas Chiann Ying (2011) concentrated on pronunciation errors and Munira (2013) delved on the lexical errors. Additionally, more of the researches in the written outputs of the students dealt with grammatical errors such as in the researches of Chan (1988), Geraldine (1990), Ahmad (2001, cited by Abdullah, 2013), Talif and Edwin (2002, cited by Abdullah, 2013), Ramdani (2009), Najiah (2009), Wee (2009, cited by Muhamad et al., 2013) , Mungungu 2010, Sofendi (2010), Wee et.al. (2010, cited by Muhamad et al., 2013), Rahmawati (2012); Yahya, Ishak, Zainal, Faghat, Yahaya (2012), Ahour and Mukundan 2012, Abdullah (2013), Ratnah (2013) and Odinye. Nzama (2010) even cited in his study the researches on errors in syntax such as the research of El- Sayed (1982:73), Belhhaj (1997:120) and Radwan (1988). Some researches made use also of some taxonomies of errors (i.e. surface strategy taxonomy, linguistic category taxonomy and Corder's taxonomy of errors) taking into account all the errors in general in the written output of the students as in the research of Permadi and Prayogo and Farrokh (2011) whereas other studies had taken into account broader scope as in the study of Kafipour and Khojasteh (2011) which is focused on morphological, syntactic, and semantic errors. Sahragard, Gorjian and Shushtari (2013) had also taken into account the morphological and syntactic interferences but the context of their research was concentrated on media headlines. In addition, Hariri (2012), Barzegar (2013) and Tafazoli, Golshan and Piri (2013) looked into the morpho-syntactic description of errors. Eftekhar and Nouraey (2013) also studied commercial translations using Keshavarz' model of error analysis, thus their research dealt on grammar, semantics and pragmatics.

However, it is disheartening to note that only few are researches dealing with the errors in oral aspect of communication. Some of these researches was conducted by Muhamad et al. (2013). They investigated the errors made by the students in their oral presentations in English for Academic Purposes (EAP). Findings indicate that misformation (411 errors or 50.24%) accounted for the majority of the total grammatical errors identified followed by omission (198 errors or 24.21%) and addition (196 errors or 23.96%). In addition, verb form, word form and article were found to be the three most frequent types of errors made by the students. In addition, in a study conducted by Jayasundara and Premarathna (2011) entitled "A Linguistic Analysis on Errors Committed in English by Undergraduates", they identified errors committed in speaking through an oral test which has been conducted as a formal interview and was recorded. They found out that equivalent to the errors committed in writing, the most prominent errors committed in spoken language are also reported under the category of grammar. It reflects the greatest value 59.4 % under grammar while the second place is recorded in syntactic category representing 29.9 %. However, error categories, morphology, phonology and other stand for fewer percentages than 5%.

Several factors affecting errors were also reported in various studies such as sex (Boroom and, Abusaeedi and Asghar, 2013), type of school, intelligence, college, age, language spoken at home, other profile variables and certain factors like reading English newspaper (Jayasundara and Premarathna, 2011), lack of knowledge and competence of the English grammar, influence of the mother tongue, loan words and lack of exposure of the English language (Abdullah, 2013), shortage of libraries and library books and lack of training in the structure of English (Nzama, 2010).

Findings

Profile of the Sophomore Students

Table 1 shows the profile variables of the respondents. As to their sex, 13 or 43.3 percent of the respondents are males while 17 or 56.7 percent are females.

In terms of school type, 18 or 60 percent of the respondents studied at certain public schools, whereas the remaining 12 or 40 percent of the respondents had their secondary education at private schools.

With regard to the respondents' first language, four languages had been identified as their native tongue. There are 13 or 43.3 percent of the respondents whose first language is Ilocano, 11 or 36.7 percent of them speak Tagalog, 4 or 13.3 percent are Yogad and 2 or 6.7 percent are Itawes.

In terms of English12a grade, 3 or 10 percent of the respondents have a grade of 1.5; 2 or 6.7 percent of them have 1.75; 5 or 16.7 percent of them have 2.0; 6 or 20 percent of them have 2.25; 7 or 23.3 percent of them have 2.5; and 7 or 23.3 percent of them have 2.75-3.0. The grades 2.25, 2.5 and 2.75 are most of the grades garnered by majority of the respondents.

Table 1. Profile of the Sophomore Students

Category	Frequency (N=30)	Percent
School Type		
Public	18	60.0
Private	12	40.0
Sex		
Male	13	43.3
Female	17	56.7
First Language		
Ilocano	13	43.3
Tagalog	11	36.7
Yogad	4	13.3
Itawes	2	6.7
English Average Grade		
1 (1.50-1.74)	3	10
2 (1.75-1.99)	2	6.7
3 (2.00-2.24)	5	16.7
4 (2.25-2.49)	6	20
5 (2.50-2.74)	7	23.3
6 (2.75-3.00)	7	23.3

Predominant Error Types Based on Corder's Taxonomy

Omission

Table 2 reveals the predominant errors of omission committed by the students. The predominant errors as shown in the table are omissions of preposition, conjunction, pronoun, verb, articles, and noun or noun phrase with percentages of 16.79, 14.43, 13.25, 12.22, 12.22, and 9.13, respectively. These are the linguistic features which receive the greatest numbers of errors of omission in the oral language of the students.

Table 2. Predominant Errors of Omission by the Students.

Errors	Frequency	Percentage
Omission of Verb	83	12.22
Omission of Article	83	12.22
Omission of Preposition	114	16.79
Omission of Conjunction	98	14.43
Omission of Pronoun	90	13.25
Omission of Noun/ Noun Phrase	62	9.13

Aside from the aforementioned errors of omission committed by the students, other errors such as omissions of adverb, verbal component (i.e. gerund, infinitive), determiners, adjectives, verb particle, auxiliary verb, possessive, and correlative conjunction component are also evident in their responses. However, only a few of the students manifest these errors.

Based on the analyzed oral responses of the students with regard to error of omission, it could be inferred that students have incomplete acquisition of the rules governing utterances in the target language as well as the structures or forms appropriate in certain contexts. Hence, the learners created a deviant structure on the basis of other structures in the target language.

Addition

Table 3 shows the predominant errors of addition committed by the students. The predominant errors as shown in the table are additions of unnecessary verbs, preposition, articles, pronoun and conjunction. Among those who committed these errors, these are the percentages: 16.40, 12.70, 12.01, 10.39, and 10.16, respectively. These are the linguistic features which receive the greatest numbers of errors of addition in the oral language of the students.

Table 3. Predominant Errors of Addition by the Students.

Errors	Frequency	Percentage
Addition of Articles	52	12.01
Addition of Unnecessary Verbs	71	16.40
Addition of Pronoun	45	10.39
Addition of Conjunction	44	10.16
Addition of Preposition	55	12.70

This finding of the study supports the claim that language learners generally omit grammatical morphemes much more than the content words (Dulay, Burt, Krashen, 1981) which includes noun and verb inflections (-s,-ed, -ing); the article (the, a, an); verb auxiliaries (is, will, can, etc.); and preposition (in, on, at, etc.). This is because the content words carry more of the meaning that the sentence wants to convey. Aside from the aforementioned errors of addition committed by the respondents, other errors such as additions of adverb, unnecessary dependent clause, unnecessary noun and noun phrase, adjective and modal, and repetition of noun are also evident in their responses, however, only a few of the respondents manifest these errors. . Compared to the whole samples, they are less than one-fourth of the students.

Based on the analyzed oral responses of the students with regard to error of addition, it could be inferred that respondents had actually failure to learn conditions for rules application. Hence, ignorance of rule restrictions happened because the learners apply rules to context where they are not applicable.

Substitution

Table 4 reveals the predominant errors of substitution committed by the respondents. The predominant errors as shown in the table are wrong choice of tense and aspect combination and verb form, incorrect use of preposition, wrong choice of word structure, incorrect use of number and wrong choice of pronoun with percentages of 27.13, 14.22, 13.01, 9.86, 9.44 and 9.01, respectively. These are the linguistic features which receive the greatest numbers of errors of substitution in the oral language of the students.

Table 4. Predominant Errors of Substitution by the Students

Errors	Frequency	Percentage
Wrong Choice of Verb Form	166	14.12
Wrong Choice of Word Structure	116	9.86
Incorrect Use of Preposition	153	13.01
Wrong Choice of Pronoun	106	9.01
Wrong Choice of Verb Tense-Aspect Combination	319	27.13

Aside from the aforementioned errors of substitution committed by the respondents, other errors that constitute less than one-fourth of the students are inappropriate use of article and comparative adjective, wrong choice of determiners, auxiliary verb and adverb, incorrect use of conjunction, incorrect structure of verb-formed adjective, and wrong component of correlative conjunction component.

After determining all the errors of substitution, it could be inferred that students have shown overgeneralization or system-simplification which is caused by the misuse of words or grammatical rules since the focus of error of substitution is selection of incorrect element over the correct element.

As in the case of errors of omission and addition, the errors of substitution greatly deal with intralingual errors also. These errors result also from faulty or partial learning of the target language since incomplete application of rules is also very evident and the students have actually failure to learn conditions for rules application due to incorrect selection of items of the students in their utterances.

Permutation

Table 5 shows the specific error of permutation committed by the respondents. The error is only focused on incorrect word order, thus this constitutes the whole percentage of the respondents' errors.

Table 5. Predominant Errors of Permutation by the Students.

Errors	Frequency	Percentage
Incorrect Word Order	96	100

It could be noted that since the word order in the first language of the learners greatly differs with that of the target language, the errors then of the students in this type of error are more of interlingual. In the target language, when a clause introduced by subordinating conjunction like what, where, when and the like and is connected to a certain sentence, the order of the subject and auxiliary verb swaps.

Since there is no swapping of subject and auxiliary verb in the students' first language, they carry this habit onto their way of learning and using the target language. Thus, they ignore the rule restrictions on linguistic features due to the influence of their first language. These are caused by the first language interference which is generated from the different nature of the two languages (Richard, 1971). Moreover, false hypothesis, that is when the learners do not fully understand a distinction in the target language, is also evident in students' errors in their oral responses.

Error Types using Corder's Taxonomy of Errors

Table 6 shows the frequency count, percentage and rank of the error types using Corder's Taxonomy of Errors. It further reveals that error of substitution is the primary error of the students followed by error of omission, then addition and permutation. The errors of substitution, omission, and addition are actually intralingual errors since the errors reflect the students' understanding and attempt to use the language items in the target in their utterances. On the other hand, error of permutation is attributed to learners' first language interference due to the language features variation specifically on word order. Thus, this error is more of interlingual errors.

Table 6. Students' Error Types Using Corder's Taxonomy

Types of Errors	Frequency	Percentage	Rank
Omission	679	28.48	2
Addition	433	18.16	3
Substitution	1176	49.33	1
Permutation	96	4.03	4
Total	**2384**	**100**	

This supports the study conducted by Muhamad et.al. (2013). They found out that the errors in oral presentations of 32 students which were investigated using surface structure taxonomy revealed that misformation (411 errors or 50.24%) accounted for the majority of the total grammatical errors identified followed by omission (198 errors or 24.21%) and addition (196 errors or 23.96%). In this research, misformation was taken as substitution.

It further jibes with the findings of Santos (1994) in her study entitled "An Analysis of Student Errors through a Dictation Task" that the most predominant errors committed by the students through the dictation task were substitution, omission, addition and transposition.

This further implies that respondents find more difficulty in selecting appropriate grammatical item for a specific context. Hence, ignorance of rule restrictions, that is the learners apply rules to context where they are not applicable, is also evident as a result of incorrect selection of linguistic features.

Errors of the Level of Language Based on Keshavarz's Linguistic Taxonomy

Phonological Errors

Table 7 reveals the predominant phonological errors committed by the students. The errors are just focused on wrong production of sounds, not production of sound as part of the word, silent letters being pronounced and wrong accent; however, silent letters being pronounced is not evident in the utterances of the respondents. The predominant errors as shown in the table are wrong production of sounds and not production of sound as part of the word with percentages of 70.43 and 27.83, respectively. These are the phonological features which receive the greatest numbers of phonological errors in the oral language of the students. There are also students who committed errors on word accent. However, only a few of them manifest this kind of error.

Table 7. Predominant Phonological Errors of the Students as to Level of Language (Keshavarz's Taxonomy of Errors)

Errors	Frequency	Percentage
Wrong Production of Sounds	405	70.43
Not Production of Sound as Part of the Word	160	27.83

Furthermore, in the analysis of the sounds incorrectly produced, it has been found out that the predominant errors are the incorrect productions of the sounds /ð/ and /Ɵ/ as in the extracts This result supports again the claim that interlingual errors or errors caused by the first language interference are generated from the different nature of the two languages (Richard, 1971) since the sounds /Ɵ/ and /ð/ are not in the sound system of the learners' language.

Additionally, learner has "carried the habits of his mother tongue into the second language" they are striving to acquire (Corder; 58). This is evident in this phonological error since the manner of producing the sound /ð/ is reduced to the manner of which the sound /d/ is produced and the sound /Ɵ/ is also reduced to the manner of which the sound /t/ is produced since the sounds /d/ and /t/ are the closest equivalent sounds of the sounds /ð/ and /Ɵ/ in the learners' first language.

On this observation, Tayao (2004) stated that interdental fricatives /Ɵ/ and /ð/ are likewise absent in the basilect (and in most Philippine languages). They are substituted with the alveolar stops /t/ for /Ɵ/ and /d/ for /ð/ in the basilect.

On the other hand, for the error of not production of sound as part of the word, the respondents do not produce all the phonemes on words ending with consonant clusters with a syllable pattern of CCC. Thus, the predominant errors are focused on words with consonant cluster ending specifically CCC syllable pattern such as in the words aspects, fifth, interest and the like. This syllable pattern or consonant clusters are not possible in the learners' first language. Hence, the native tongue of the students again interfere with their target language learning. This error results from the transfer of phonological aspect of the learners' mother tongue to the learning of the target language.

Lexicosemantic Errors

Table 7 shows the specific lexicosemantic errors committed by the respondents. The error is only focused on wrong diction/ choice of word, thus this constitutes the whole percentage of the respondents' errors.

Table 8. Predominant Lexicosemantic Errors of the Students as to Level of Language (Keshavarz's Taxonomy of Errors)

Errors	Frequency	Percentage
Wrong Diction/Choice of Word	170	100

As to the analysis of the oral responses of the students with regard to lexicosemantic errors, it could be inferred that respondents have shown ignorance of rule restrictions because they applied rules to context where they are not applicable. In this error, students show limited knowledge on when or what particular context that the words or vocabulary will be used. Thus, this reflects also inadequate learning on their part because they could not observe proper diction considering the message to be conveyed and the situation they are in.

Moreover, overgeneralization also takes place on the part of the learners because they create a deviant structure on the basis of other structures in the target language. They assumed that since the word that they used in their utterances and which are actually incorrect as to word choice has almost the same meaning or related to some extent on the meaning of the word they would want to use in the sentence, they are left with no choice but to use it because they generalize that what word they thought (correct word choice) and the word they used in their utterances (their error in their oral response) convey the same meaning. In addition, as stated earlier, this may also be attributed to lack of stock of vocabulary so they just readily use whatever vocabulary they acquired in target language learning.

Syntactico-morphological Errors

Table 9 reveals the specific syntactico-morphological errors committed by the respondents. The predominant errors as shown in the table are wrong use of tenses, incorrect use of preposition, and incorrect word order. Among those who committed these errors, these are the percentages: 49.44, 23.25, and 13.45 respectively. These are the linguistic features which receive the greatest numbers of syntactico-morphological errors in the oral language of the students.

Table 9. Predominant Syntactico-Morphological Errors of the Students as to the Level of Language (Keshavarz's Taxonomy of Errors)

Errors	Frequency	Percentage
Wrong Use of Tenses	353	49.44
Incorrect Word Order	96	13.45
Incorrect Use of Preposition	166	23.25

Aside from the aforementioned syntactico-morphological errors committed by the students, as these are compared to the whole samples, there are less than one-fourth of the students who committed other errors in this error of level of language such as wrong use of plural morpheme, inappropriate use of articles, and incorrect structure of comparative degree of adjective.

The syntactico-morphological errors determined in the students' oral responses imply that students have shown overgeneralization, that is the learners create a deviant structure on the basis of other structures in the target language.

Furthermore, ignorance of rule restrictions, that is the learners apply rules to context where they are not applicable, is also evident in this kind of error of students since they use the usual way of pluralizing words (specifically noun) without considering restrictions or conditions on the usage of the linguistic feature. Since not full awareness on rules inclusive of restrictions and conditions is noticed as the errors are analyzed, then the errors may also be due to faulty or inadequate learning of the students which is actually a cause of intralingual errors. Thus, this explains the error of the respondents on this level of language that the error belongs.

Predominant Errors in Level of Language Based on Keshavarz's Linguistic Taxonomy

Table 10 shows the frequency count, percentage and rank of the errors as to level of language using Keshavarz's Linguistic Taxonomy. It further reveals that syntactico-morphological errors are the most numbered error of the students followed by phonological, and lexicosemantic. There are 714 syntactico-morphological errors, thus it constitutes 48.94 of all the errors using Keshavarz's Linguistic Taxonomy. It is followed by phonological errors having 575 or 39.41 percent of the errors, and lexicosemantic errors which constitute 96 or 4.03 percent of all the errors considering their level of language.

Table 10. Students' Error in Level of Language Using Keshavarz's Linguistic Taxonomy.

Errors	Frequency	Percentage	Rank
Phonological	575	39.41	2
Lexicosemantic	170	11.65	3
Syntactico-morphological	714	48.94	1
	1459	**100**	

As in the case of error of substitution, syntactico-morphological errors, being the most numbered errors committed by the respondents, show also incompleteness awareness and knowledge of the learners on what appropriate linguistic features are to be used in specific contexts since syntactico-morphological errors (i.e., wrong use of plural morpheme, wrong use of tenses, incorrect use of preposition, inappropriate use of article, and incorrect structure of comparative degree of adjective) deal with almost all the aspects of substitution errors. Hence, it could be derived that learners find difficulty on what, how and when certain linguistic features are to be used. Moreover, as stated earlier, errors of substitution are intralingual errors, so do the syntactico-morphological errors since they almost have the same focal points.

Overall Level of Performance of the Students

Table 13 shows the overall level of performance of the respondents based on Corder and Keshavarz Taxonomy of errors. It reveals that in terms of these taxonomies of error, 4 or 13.3 percent of the respondents are poor, 17 or 56.7 percent of them are satisfactory and 9 or 30 percent of them are very satisfactory.

Table 13. Overall Level of Performance of the Students Based on Corder's and Keshavarz's Taxonomy of Errors

Category	Frequency	Percent
Poor	4	13.3
Satisfactory	17	56.7
Very Satisfactory	9	30.0

Comparison between the Overall Performance of the Students

Table 14 reveals that there is a significant difference between the overall performance of the respondents when grouped according to their sex, but do not significantly differ in other profile variables such as type of school graduated from, language spoken at home and grade in English 12a. This supports the claim that females are really more inclined in language learning and that they are more linguistically competent compared to males since it is assumed that men are more inclined in Mathematics. Moreover, according to Davies (2007) in his book entitled "An Introduction to Applied Linguistics: From Practice to Theory", he claimed that females are ahead, and girls do better than boys in all verbal areas of the school. The explanation typically offered is that girls are more verbal than boys, that is this is hired-wired into the brain. Moreover, verbal is one aspect of being linguistically inclined.

Table 14. Difference between the Overall Performance of the Students when Grouped According to Sex

Category	Mean	SD	Std. Error of Difference	t-value/ F-value	Probability
Addition					
Male	18.00	8.083	2.671	2.356*	0.026
Female	11.71	6.555			
Omission					
Male	24.15	8.494	3.437	0.781^{ns}	0.441
Female	21.47	9.907			
Substitution					
Male	44.46	18.455	5.994	1.640^{ns}	0.112
Female	35.18	12.556			
Permutation					
Male	4.00	2.309	0.782	1.805^{ns}	0.082
Female	2.59	1.970			
Phonological					
Male	19.69	5.202	2.173	0.427^{ns}	0.673
Female	18.76	6.369			
Lexicosemantic					
Male	6.62	3.477	1.047	1.599^{ns}	0.121
Female	4.94	2.249			
Syntactico-morphological					
Male	27.31	10.160	3.419	1.811^{ns}	0.081
Female	21.12	8.558			
Overall Performance					
Male	23.31	4.309	1.592	1.839	0.071
Female	26.24	4.338			
ns = not significant					
* = significant at 0.05					

Moreover, the respondents almost have the same errors since they are exposed to the same circumstances (i.e. nature of the university, mode of teaching of the teachers, instructional activities employed in the classroom), hence significant difference in other profile variables are not evident.

Relationship between the Overall Performance of the Students and Selected profile Variables

Table 15 reveals that there is no significant relationship between the overall performance of the respondents when grouped according to their profile variables such as sex, type of school graduated from, language spoken at home and grade in English 12a. This implies that there are other factors aside from these variables which affect their errors whenever they are engaged in oral language. The profile variables as concerns of this study could not be bases to indicate one's performance in language learning. Thus, in making precise predictions about how a particular individual is influenced by certain factors or variables in his/her success as a language learner, factors or variables other than the ones previously mentioned as the concerns of this study are recommended.

Table 15. Relationship between the Overall Performance of the Students when Grouped According to Profile Variables

Variable	Correlation Coefficient	Prob-value	Statistical Treatment
School type	-.194	.305	Not significant
First language	.125	.512	Not significant
Sex	.328	.077	Not significant
English Grade	-.210	.266	Not significant

As the errors of the respondents are analyzed, it has been observed that the more they use the target language, the more they commit errors regardless of their sex, English 12a grade, type of school graduated from and language spoken at home, hence, comprehensiveness as manifested by the length and complexity of the responses of the respondents should also be taken into account.

Moreover, the findings of this research implies that errors committed by the respondents in their oral language may also be due to other factors affecting second language learning which have been recognized in the field of second language acquisition such as aptitude, personality, motivation and attitude, learner preferences and beliefs, learning styles, ethnic identity and affiliation, and age of acquisition. These factors might also be considered in making predictions as to how the performance of learners in language learning in relation to these variables or factors because they have also been found to be important determining factors in both rate of learning and eventual success in language learning.

CONCLUSION

The predominant errors of omission, addition, substitution and permutation as well as syntactico-morphological errors have explicit errors which are the common denominators of all these grammatical errors. Hence, they encompass all the types of errors and the syntactico-morphological level of language in particular. These errors are exemplars of intralingual errors.

The error of permutation and phonological errors manifest exemplars of interlingual errors. These kinds of errors tend to occur among male students.

RECOMMENDATIONS

- Language teachers should continuously devise and employ a lot of instructional activities in teaching the target language which could develop and enhance the communicative competence of learners since most of their errors were intralingual which show incomplete acquisition of the rules and acceptable structure or form of the target language.
- In the Philippine context, more pronunciation drills focused on the correct production of the sounds /Ɵ/ and /ð/, and on the consonant cluster ending with syllable pattern CCC of words should be provided. Other sounds which are not present, as well as combination of sounds not possible in the learners' first language should also be considered in the provision and employment of pronunciation drills in the language classroom. This is to avoid first language interference as manifested by the reduction of the way that the sounds are produced considering related sounds (in learners' L1) that could actually take the place of these sounds.
- Form, meaning and function should be equally emphasized in teaching the target language for the learners to really know, how and when to use certain linguistic features since substitution errors and syntactico-morphological errors were the most numbered errors committed by the learners. Teachers then are advised not to concentrate on one aspect of language features since these language features are interwoven and should not be isolated from one another to encourage meaningful learning among language learners.
- Teachers should also equally address the needs of the students in terms of language learning regardless of their sex, previous grades in English subjects, type of school graduated from and language spoken at home.

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SENSORY CHARACTERIZATION OF TURMERIC (Curcumalonga) MAJA

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ABSTRACT

Turmeric plant is beneficial in preventing several health issues like arthritis and diabetes. Experimental research method was used in this study to find out which of the treatment formulations can produce an enhanced Maja using turmeric powder with a better quality with regard to color, aroma, taste and aroma. As perceived by 60 panelists on the level of acceptability, Treatment 3 was the most acceptable treatment in all attributes. In terms of color, TLE-Foods Teachers scored the highest mean of 4.40 or Golden Yellow and TLE-Foods students scored the highest mean of 4.15 or Yellow Brown. In terms of aroma, TLE-Foods Teachers scored the highest mean of 4.50 or Most Pleasant and TLE-Foods students scored the highest mean of 4.53 or Most Pleasant. In terms of taste, TLE-Foods Teachers scored the highest mean of 4.45 or Highly Palatable and TLE-Foods students scored the highest mean of 4.35 or Highly Palatable. In terms of texture, TLE-Foods Teachers scored the highest mean of 4.30 or Most Soft and TLE-Foods students scored the highest mean of 4.58 or Most Soft. In the evaluation, it was found out that there was a significant mean difference between 20 TLE teachers and 40 TLE students in CTU- Tuburan Campus. The output of this study is to produce a techno- pack on Turmeric Maja for technology dissemination and adoption.

Keywords: Turmeric powder, Maja, Product formulation, Experimental research, Techno Pack .

INTRODUCTION

Good nutrition is essential for survival. Everyone needs to eat healthy food in order for them to perform their daily activities. The choice of food to be eaten is substantial. The proper nourishment they get from the food is valuable which helps the human body cells to provide nutrients and carry these to the different parts of the body to work product. No food, no life. Food is the main source of nutrients, vitamins and minerals. Human cannot enjoy his life without acquiring proper nutrition.

In the Philippines, over eighty children less than five years old die each day and more than half of these cases are due to the lack of good nutrition. Philippines, as one of the most number of wasted and undernourished children, with millions of school children in our country due to the lack of proper nourishment and low economic status. It is believed that all youth and school children should have fair and equal access to nutritious food every day.

The population in the country is increasing every year. Malnutrition is one of the problems especially to the school children. It is a condition where the quality of the food is inaccurate.

Malnutrition nowadays has been a major health problem in our community. Many of them people are becoming health conscious however some still don't know as to what kind of food are they going to eat and as to how much nutrient do they need to acquire. They have to fill their tummies with nutritious food by means of cooking.

Cooking food has grown over the last century in the Philippines, from a quite small industry to large popular industry and due to the increased demand for food products from the population in the Philippines; this can be a great opportunity for them to utilize and process farm products for human consumption. They belong to an agriculture-based country and with its proper utilization it can contribute towards the realization of the country's economic goals and malnourishment.

One thing to do to eradicate malnutrition of the children is to engage the people in cooking by creating an experimental food product using agricultural crop that gives solution to malnutrition or poverty.

There are many plants which we see and suited to the Philippine climate which are considered to be nutritious and one of it is the Turmeric. (Curcuma longa), its scientific name is rich in manganese and iron as well. We can acquire lots of vitamins from it such as potassium, fiber, copper and cur cumin. Curcuma longa is found in our locality and its medicinal properties tend to be forgotten and not being utilized.

To the respondents it is a challenge for them to utilize turmeric in cooking and in eating nutritious food. With this study, the researcher will develop a new food product to enhance the existing pudding in the market and promote new turmeric food product to help expand the utilization of turmeric powder in cooking and food processing. Using turmeric as the main ingredient in cooking maja is beneficial for all ages. Maja pudding in the market is so simple and so quick to prepare and its original composition or ingredient is stated as follows;

Heat remaining 2 cups coconut milk, cream-style corn, cornstarch, 1/2 cup sugar, and corn kernels in a saucepan over medium heat, stirring constantly, until thickened, about 5 minutes. Pour corn mixture into prepared mold. Cool until maja blanca is set. Cover mold with a plate and invert maja blanca onto the plate.

STATEMENT OF THE PROBLEMS/ OBJECTIVES

This research developed a Techno Guide of Maja enriched with Turmeric powder at Cebu Technological University, Tuburan Campus during the Academic Year 2017-2018.

Specifically, this study answered to the following questions;

1. How can maja enriched with turmeric powder be formulated using the following treatments;
   - 1.1 Treatment 1 – 50 g turmeric powder + 100 g cornstarch+ standard recipe,
   - 1.2 Treatment 2 – 100 g turmeric powder + 100 g cornstarch + standard recipe,
   - 1.3 Treatment 3 –– 200 g turmeric powder + 100 g cornstarch + standard recipe?
2. As perceived by the respondents, which of the treatments is the most acceptable formulation by the trained panelists and most preferable by the consumers formulation to the following attributes;
   - 2.1.1 color,
   - 2.1.2 aroma,
   - 2.1.3 taste, and
   - 2.1.4 texture?
3. Are there significant mean differences among the perceptions of the respondents based on the aforementioned attributes on the most acceptable formulated maja?
4. Based on the findings what Techno pack on Turmeric Maja can be developed?

METHODOLOGY

Experimental research method was used in this study in order to find out which of the treatment formulations can produce an enhanced maja using turmeric powder fortified to other ingredients with a better quality with regard to color, aroma, taste and aroma.

The formulations were Treatment 1- 50 g turmeric powder + 100 g cornstarch +standard recipe, Treatment 2- 100 g turmeric powder + 100 g cornstarch + standard recipe and Treatment 3- 200 g turmeric powder + 100 g cornstarch + standard recipe. These formulations were subjected to sensory evaluation to find out the most acceptable formulation.

In assessing the quality of Curcuma Longa Maja, the score sheet was used by the panelists who were composed of 20 TLE Foods and Home Economics trained panelists, and 40 consumers from CTU- Tuburan Campus.

The output of this study was to produce a techno- pack on Turmeric Maja for technology dissemination and adoption.

METHODOLOGY

Based on the result of the findings of Turmeric (Curcuma Longa) Powder using three levels of treatment formulation, the following were the summary of its findings;

The Treatment formulations for Turmeric (Curcuma Longa) Maja were made through mixing all ingredients which vary only on the amount of Turmeric powder.

The most acceptable treatment in terms of color was the treatment 3 or the mixture of 200 g turmeric powder for both TLE Teachers and TLE students; in terms of aroma was the treatment 3 or the mixture of 200 g turmeric powder for both TLE Teachers and TLE students; in terms of taste was the treatment 3 or the mixture of 200 g turmeric powder for both TLE Teachers and TLE students; in terms of texture was the treatment 3 or the mixture of 200 g turmeric powder for both TLE Teachers and TLE students;

As perceived by 60 panelists on the level of acceptability, Treatment 3 was the most acceptable treatment in all attributes.

In terms of color, TLE-Foods Teachers scored the highest mean of 4.40 or Golden Yellow and TLE-Foods students scored the highest mean of 4.15 or Yellow Brown.

Treatment	Foods Students x	Interpretation	TLE/HE Teachers x	Interpretation
1	3.38	Light	3.00	Light
2	3.68	Yellow Brown	3.40	Yellow Brown
3	**4.15**	**Yellow Brown**	**4.40**	**Golden Yellow**

Based from the figures, it can be observed that the color of the Turmeric (Curcuma Longa) Maja was both appealing to the teachers and students. Out from three (3) formulations, treatment 3 got the highest score with an average of 4.28.

This only shows that in terms of color acceptability Treatment or Formulation 3 was the most acceptable in terms of the respondent's acceptability of Curcuma Longa Maja.

In terms of aroma, TLE-Foods Teachers scored the highest mean of 4.50 or Most Pleasant and TLE-Foods students scored the highest mean of 4.53 or Most Pleasant.

Treatment	Foods Students x	Interpretation	TLE/HE Teachers x	Interpretation
1	3.80	Very Pleasant	3.45	Very Pleasant
2	4.13	Very Pleasant	3.90	Very Pleasant
3	**4.53**	Most Pleasant	**4.50**	Most Pleasant

Based from the figures, it can be observed that the aroma of the Turmeric (Curcuma longa) maja was both appealing to the respondents. Out from the three formulations, treatment three got the highest score with an average of 4.52.

This implies that in terms of aroma Treatment 3 was the most acceptable because of the pleasant aroma caused by the influence of Curcuma Longa powder.

In terms of taste, TLE-Foods Teachers scored the highest mean of 4.45 or Highly Palatable and TLE-Foods students scored the highest mean of 4.35 or Highly Palatable.

Treatment	Foods Students x	Interpretation	TLE/HE Teachers x	Interpretation
1	3.90	Very Palatable	3.75	Very Palatable
2	4.03	Very Palatable	3.60	Very Palatable
3	**4.35**	Highly Palatable	**4.45**	Highly Palatable

Based from the figures, it can be observed that the taste of the Turmeric (Curcuma longa) maja is both appealing to the respondents. Out from three formulations, treatment 3 got the highest score with an average mean of 4.40.

This implies that in terms of taste acceptability of Curcuma Longa Maja , Treatment 3 was the most acceptable in terms of the respondent's acceptability of Turmeric Maja.

In terms of texture, TLE-Foods Teachers scored the highest mean of 4.30 or Most Soft and TLE-Foods students scored the highest mean of 4.58 or Most Soft.

Result of ANOVA indicated that there was enough evidences to prove that there were significant differences between the perceptions of the respondent groups.

Treatment	Foods Students x	Interpretation	TLE/HE Teachers x	Interpretation
1	4.20	Most Soft	3.35	Soft
2	4.28	Most Soft	3.55	Very Soft
3	**4.58**	Most Soft	**4.30**	Most Soft

Based from the figures, it can be observed that the texture of the Turmeric (Curcuma longa) maja was both appealing to the respondents. Out from three (3) treatments, treatment three got the highest score with a mean of 4.44.

This simply implies that in texture, Treatment 3 was the most acceptable in terms of the respondent's acceptability of Curcuma Longa Maja.

CONCLUSION

Based on the results of the study, it is hereby concluded that Turmeric powder can be a good ingredient in maja production and can enhance the existing maja in the market.

RECOMMENDATION

Based on the findings of the study, the following recommendations are formulated:

Maja can be formulated using 200 g Turmeric powder.

The techno pack prepared in this study will be used as guide in the production of Turmeric Maja.

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KNOWLEDGE ON AND ACCEPTABILITY OF FEDERALISM AMONG LOCAL GOVERNMENT OFFICIALS OF MOUNTAIN PROVINCE

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ABSTRACT

A key component in the platform of Philippine President Duterte is the shift from unitary to federal form of government in the Philippines. This study was therefore framed with the Social Contract Theory which proposes that any change in the policy and process of governing must have the approval and agreement of the governed. The study assessed the knowledge of elected and non-elected local government officials of Mountain Province on Federalism as well as its acceptability to them. Local government officials were chosen as respondents with the idea that they are the key movers in the said system. To gather the needed data, a questionnaire was distributed to local government officials of the ten municipalities of Mountain Province namely Bontoc, Sadanga, Barlig, Natonin, Paracelis, Sabangan, Bauko, Tadian, Sagada and Besao. From the data gathered, computed results manifest that local government officials of Mountain Province generally have good knowledge on the concepts of Federalism. There is no significant difference in knowledge between the elected and non-elected officials. There is also no significant difference in knowledge as compared by municipality. In terms of the acceptability of Federalism for the Philippines, Mountain Province local government officials generally have a favorable response. Despite the positive acceptability and good knowledge however, interviews with respondents revealed that there are prevalent issues on the requirements of statehood and financial allocations especially that Mountain Province is part of CAR which is now hoping to achieve autonomy. Out of these, it is recommended that the positive response be downloaded to the grassroots level by developing an IEC material that is appropriate for them. A massive multi-level information campaign is also recommended in order to address whatever issues and concerns the stakeholders and local government officials have regarding Federalism .

Keywords: Federalism, government, system, policy, change, IEC

INTRODUCTION

Decentralization has seemingly found its place in the development of nations and government in the recent years. The shift towards decentralization is striking and has faced several obstacles in its practice in governments that have attempted and pushed for its establishment. When decentralization is mentioned, federalism comes into the picture.

Since the change from unitary to federal form of government is one of the hallmarks of the present dispensation, it is expected that this would happen within 2016-2022. It is estimated that discussions on the amendments to the Constitution will start in 2018 and will be subjected to a plebiscite by 2019. In 2022, at the end of President Duterte's term, the first federal elections will possibly take place. It is therefore important that this early, the sentiments of the people must be gauged so steps could be taken in order to mitigate problems in the transition. The people must understand the underlying principles relative to federalism before they make decisions, and thus, this research will point out issues that have to be given importance in the debate, discussion, and deliberation of federalism. It is equally necessary to look into the readiness of the people to accept such impending transition. Looking into the acceptability of federalism by the local government officials is important because their sentiments will determine their actions and stance in the plebiscite.

Since Federalism is of similar path as that of autonomy, a study that shall determine Cordillerans' stand on the transition to Federalism is also essential. This study's thrust is on that direction. With Mountain Province sharing a considerable part of the identity of the Cordillera, the stand of its people or at the least of those that have roles in governance, administration and processing of the government system are important to the achievement of favorable reaction in case Federalism gets into realization. This will make the province ready in its quest to having a lasting growth in terms of its economy and heritage in partnership with the federal sub-state's government and the national government as a whole. This is the reason why the LGUs were chosen as respondents in the study especially that in a federal system, local governments are given more significant roles as compared to what they have now in a unitary state. Also, as President Duterte puts it, the LGUs will be the primary beneficiaries of federalism since when federalism is already established, the LGUs will be getting a bigger share of their income as compare to what they already are getting through the Income Revenue Allotment (IRA) of the present unitary system.

In relation to this, Presidential Peace Adviser Jesus Dureza suggested that the Cordillera should strive to achieve autonomous status while the move for federalism will be put in place so that the region will have better leverage in maintaining its status as an autonomous region within a federal state or an independent federal state depending on its capacity to stand alone. Concerned local governments and the Regional Development Council (RDC) in the Cordillera passed separate resolutions conveying their support to the national government's plan to shift from the current presidential form of government and requesting President Duterte to confirm the autonomy bill to be filed by Cordillera lawmakers as an urgent administration measure to guarantee its passage in both the House of representatives and Senate during the term of the present administration. Secretary Andanar said President Duterte will always be a strong advocate for the realization of federalism and autonomy in the regions of the country because he believes devolving the powers of the central government to the federal states or autonomous regions will be the ultimate solution in urging socio-economic growth that will contribute in uplifting the life conditions of the people in the countryside (HENT, 2017).

If indeed Federalism will be established in the near future during the Duterte administration, it is therefore imperative that the LGUs who are directly involved in the system are included in an information campaign aiming for change and development since they are expected to be more active and cooperative in the goals of the government toward a better Philippines. This is in the same direction as educating the youth who, by the time the change in the system happens, they are the ones who are probably already starting to be active in politics and governance.

STATEMENT OF THE PROBLEM / OBJECTIVES OF THE STUDY

This study sought to answer the following questions:

1. What is the level of knowledge of the local government officials of Mountain Province on the concept of federalism?
   a. Is there a significant difference between the perceptions of the local government officials per municipality?
   b. Is there a significant difference between the perceptions of elected and non-elected local government officials?
2. What is the level of acceptability of federalism among the local government officials of Mountain Province?
   a. Is there a significant difference between the perceptions of the local government officials per municipality?
   b. Is there a significant difference between the perceptions of elected and non-elected local government officials?
3. What are the issues and concerns of local government officials on the possible establishment of federalism in the Philippines?

METHODOLOGY

This study made use of the descriptive method of research. A questionnaire was constructed to test the level of knowledge of the respondents on federalism as well as the acceptability of the same to them. Interviews were also conducted in order to determine the issues and concerns of local officials regarding the establishment of Federalism in the Philippines.

This study covered the officials of local government units in Mountain Province in the ten (10) municipalities of Mountain Province namely Barlig, Bauko, Besao, Bontoc, Sabangan, Sagada, Sadanga, Tadian, Natonin, and Paracelis. The elected officials refer to the mayors, vice mayors and the members of the sangguniang bayan while the non-elected officials are department heads in the municipal offices.

To quantify the level of acceptability between the municipalities, a 5-point Likert Scale was used. The significant differences in the level of acceptability between the elected and nonelected officials was computed using Sandler's A test at .05 level of significance. The differences between the different municipalities as to acceptability was computed by using Friedman's test also at .05 level of significance. Level of knowledge between the elected and non-elected officials was computed using t-test while the differences between the municipalities was computed using ANOVA at .05 level of significance. Interviews were conducted to validate the responses in the questionnaire and to determine specific issues and concerns that local officials of Mountain Province have regarding the possible establishment of federalism in the Philippines.

REVIEW OF RELATED LITERATURE

Our being a nation serves as our identity and, as a nation of diverse cultures, we have different identities yet. This led to several disparities in terms of rights and opportunities for our regions. The insurgency in Mindanao has long been one of the problems that came out of this diversity. This caused the upsurge of ideas on how it shall be solved and resulted to the creation of the Autonomous Region in Muslim Mindanao (ARMM). Yet, this seems not to have satisfied the purpose of bringing forth peace in the said region. The 16th Congress, during the time of then President Benigno Aquino III proposed the Bangsamoro Basic Law which again aimed at having peace in Mindanao. The BBL, despite it having stemmed out of the administration of Aquino, is well approved by the current president, Rodrigo Duterte. President Duterte openly mentioned about the BBL as a solution in achieving peace in Mindanao. In a wider perspective, he believes that as federalism decentralizes power and gives more independence to regions, it is also one way to bring prosperity all over the country. In line with this, he eyed having a framework on federalism by the end of 2016.

Though Mindanao seem to be a great factor in proposing a change in Philippine government system, several studies on Federalism have also been conducted and recommended it to be more apt than the unitary system is to the Philippine government setting. It has not become as popular to the Filipinos though until recently that President Rodrigo Duterte himself promotes Federalism as best fit for the country. However, there are still many who oppose the view and that makes the debate on whether the Philippines should adapt Federalism continue. Filipinos are used to what the government is currently set and the question as to whether they are knowledgeable of what federalism entails and if they are ready to accept federalism as a new system of the Philippines shall be raised. Why the Philippines need to transition to such a system shall also be put in place. Also, what is wrong with the current unitary system in the Philippines?

Former Senator Aquilino Pimentel Jr. (2016) says that under the unitary system that has characterized the government for centuries, we only had one center of power, finance and development: Metro Manila. The move to federalize the country is not simply a "political" undertaking, it is also an economic effort to spread progress across the country. As observed, the unitary system in the Philippines is characterized by very extensive opportunities to vote for local executives and local legislatures; election of mayors since 1901 and governors since 1902 and a longstanding tradition of bossism in many localities (Hutchcroft, 2016). The Philippine unitary system has also created an imbalance in economic development and resource and budget allocation among the regions of the country (PDP Laban Federalism Institute, 2016). According to Abueva (2016), the present system of government is "obsolete, a failure and dysfunctional of the quest for genuine governance." Incumbent leaders are deeply engaged in transactional politics, their interests based on their power and ability to give protection and favors. There are no more political parties based on platforms and that what we have now are "just association of politicians that changes members every time there is a new elected President." Similarly, the Institute of Popular Democracy suggests that the present unitary and centralized form of government is a remnant of its colonial past. It continues to be used as a tool for domination and control.

In view of the above, Federalism comes into consideration. Defined, federalism is a system of government where governmental powers and responsibilities are assigned or shared between the national (federal) government and the state (regional and local) governments. Each level has some genuine autonomy from each other and each level is primarily accountable to their respective electorates (PDP Laban Institute, 2016). Federalism organizes the territory of a country into constituent units or regions and allow these units to run their governments with some powers that do not require the national government to be part of the decision making or approval process (Bednar, 2011). The shift to such system is greatly seen as a way to bring about equitable development across the country by sharing political and economic power with regional and local governments across the country. It is seen to provide a system wherein national unity is maintained while recognizing and protecting the diversity of Philippine society. It is also seen to bring about greater autonomy for the people in far-flung regions thus letting them address their needs and problems in their own way and making the resources readily available to them without waiting for the approval of the national government. It shall also allow local government to set local community priorities, increase citizen participation in local affairs and increase efficiency gains by giving communities the capacity to deal with local issues (PDP Laban Federalism Institute, 2016).

In the same direction, May (2007) cited an annotated CMFP draft constitution (2015), edited by the CMFP's advisory committee chairman, Abueva. It lists six advantages of federalism:

First, a Federal republic will build a just and enduring framework for peace through unity in our ethnic religious, and cultural diversity, especially in relation to Bangsa Moro or Muslim Filipinos. Responsive Federalism will accommodate their legitimate interests, end the war in Mindanao, and discourage secessionism. Second, Federalism will empower our citizens by enabling them to raise their standard of living and enhance their political awareness, participation and efficacy in elections and the making of important government decisions. Governance will be improved and corruption will be reduced…. Third, Federalism will improve governance by empowering and challenging State and local leaders and entrepreneurs around the country….the people will be more willing to pay taxes that will finance government programs and services for their direct benefit. Fourth, Federalism will hasten the county's development….There will be inter-State and regional competition in attracting domestic and foreign investments and industries, professionals and skilled workers, good teachers and scholars, artists, and tourists. A renaissance of regional languages and cultures will enrich the national language and culture. The Federal Government will help support the less endowed and developed regions, and the poor and the needy across the land…. Fifth, Federalism, together with parliamentary government, will improve governance by promoting the development of program-oriented political parties that are responsible and accountable to the people for their conduct and performance in and out of power. Sixth, Federalism will broaden and deepen democracy and make its institutions deliver on the constitutional promise of human rights, a better life for all, a just and humane society, and responsible and accountable political leadership and governance.

These hopeful views on federalism lead to the point that decentralization is key to the success of the government system. If such, why not just push further decentralization through the local governments?

After a good deal of initial enthusiasm for the 1991 Local Government Code, critics of the decentralization arrangements emerged. It was noted that provisions for representation of civil society organizations had not always been implemented, that local development councils and other bodies were often ineffective, and that local youth councils were frequently dominated by the children of the political elite. Critics on the left argued that the Code had simply delivered greater power to local dynasties and 'warlords'. Generally, however, assessments of the decentralization initiatives of 1991 and 1995 have been positive; indeed, in announcing her support for federalism in 2005, President Macapagal-Arroyo specifically referred to the success of decentralization in the Philippines. Since 1972 the administrative regions established by Marcos – named Region I to Region XI (to which was added Region XII in 1975) – have acquired some degree of local identity, and seem to be referred to increasingly by locality (for example, 'Region I (Ilocos)', 'Region II (Cagayan Valley)', etc). Moreover, recent additions (there are now seventeen regions) have been given titles (mostly acronyms from the constituent provinces) which identify them with the locality – ARMM, CAR, National Capital Region (NCR), Caraga (Region XIII), CALABARZON and MIMAROPA (Regions IV-A and IV-B, formerly the single region of Southern Tagalog) and SOCCSKSARGEN (the provinces remaining in Region XII (Central Mindanao) following the creation of the ARMM in 1990). In what little discussion there has been about what might constitute the component units of a federal system, the regions seem to have emerged as the appropriate starting point (May, 2007).

Accordingly, why not just further push for autonomy instead?

The indigenous concept of autonomy means that no other community imposes its own rules, laws, or will on any other, thus, explaining partly the presence of short-term alliances, since each village jealously guards its own sovereignty in relation to their internal community political affairs (Prill-Brett, 1987). The quest for autonomy in Mindanao started in the late 1960s due to the growing conflicts associated with territorial encroachments on Muslims' tribal lands by people from the northern Christian provinces. It has continued on until the late 1970s when an agreement between the government and the MNLF was signed to provide autonomy to the thirteen (13) provinces in Mindanao. In the Cordilleras, an armed insurgency, led by the Cordillera Peoples Alliance and supported by the Communist New Peoples Army, emerged, primarily to resist encroachments on ancestral land. As a result of these conditions in the North and the South, the 1986 constitution made special provision to create areas of autonomy in Muslim Mindanao and Sulu (the Autonomous Region of Muslim Mindanao, ARMM) and northern Luzon (the Cordillera Autonomous Region, CAR), and assigned to them a range of legislative powers. The establishment of both autonomous regions have proven ineffective as a result of the plebiscites conducted for the organic acts created for them. Both lacked the support of the provinces they are supposed to represent. According to May (2007), the long saga of attempts to use autonomy arrangements as a way of dealing with ethnic differences and ethno-regional separatism in the Philippines provides little ground for optimism. It is against this background that the idea of federalism began to gain support in the Philippines.

With the Cordillera Administrative Region again hopeful to be on its way to achieving autonomy, another plebiscite in favor or not of its realization is expected to come into contact with the Cordillerans once again, for the last time. Since the past two plebiscites were not approved by the Cordillerans, studies trying to answer why they did not go in favor of the establishment of an autonomous regions were conducted. As cited by Ciencia (2016), Ladia (1990) mentioned that the following are substantial explanations as to why the first Organic Act was rejected. First, there are concerns about a "unified security force" in the region. Second, there are concerns about additional taxes and about prosperous Baguio and Benguet "subsidizing" the other areas. Third, voters did not approve of provisions on ancestral domain and ancestral lands. Fourth, there were fears of "reverse discrimination" as expressed by No advocates and lastly, a question was raised: Can a lowlander be Cordilleran? On a similar note, the autonomy pulse survey of the RDC validated that both Organic Acts (Republics Act 6477 and 8438) were mainly rejected due to lack of understanding and appreciation of what autonomy was all about as contained and explained in the two Organic Acts. Many communities unfortunately, were not involved in the information campaign (NEDA-RDC, 2016).

In her study Federalism: An Alternative System of Government for the Philippines, Duron (2017) asserts that the government of any country should be able to deal with various and peculiar problems of different groups under varying agenda. In dealing with problems like these, the government recognizes that strategies which depend on culture, resources and capabilities must be used. It is also expected to tackle the parochial problems of tribal groups and in the process prevail upon them to form themselves into unified groups that ultimately constitute one nation. The government is thereby empowered to pursue and attain its goals more effectively and efficaciously as envisioned by thoughtful individuals.

In view of the above, social contract theory says that people live together in society in accordance with an agreement that establishes moral and political rules of behavior. Some people believe that if we live according to a social contract, we can live morally by our own choice and not because a divine being requires it. Over the centuries, philosophers as far back as Socrates have tried to describe the ideal social contract, and to explain how existing social contracts have evolved. Philosopher Stuart Rachels suggests that morality is the set of rules governing behavior that rational people accept, on the condition that others accept them too. Social contracts can be explicit, such as laws, or implicit, such as raising one's hand in class to speak. The U.S. Constitution is often cited as an explicit example of part of America's social contract. It sets out what the government can and cannot do. People who choose to live in America agree to be governed by the moral and political obligations outlined in the Constitution's social contract. Indeed, regardless of whether social contracts are explicit or implicit, they provide a valuable framework for harmony in society (Institute for Government, 2017). This theory therefore raises the concern on the voice of the Filipinos in whatever change that is proposed for the country. Their agreement is critical in the change to a different form of government for the country and the information they have about the proposed new system should be given attention such that they be educated and well informed on how a federal system works.

FINDINGS, DISCUSSION, AND INTERPRETATION

In order to answer the questions earlier stated, the findings of the study are presented and interpreted below.

Knowledge of Local Government Officials on Federalism

Change in the system is a clamor among Filipinos; and with the transition to the present administration, change has become a battlecry. One of the changes introduced is for the Philippines to adopt a federal government during the administration of now President Rodrigo Duterte. Its implementation in the near future is seen possible which is why government and private sectors started initiatives in informing the public about what federalism is about for the Philippines.

With the introduction federalism, the popularity of the proposal of CAR becoming an autonomous region has increased. Many of the critiques of autonomy have changed sides. Councilor Dugao of Sagada openly admits that he was a strong critique of autonomy before. However, due to his interest in attending consultations about the topic, he has somehow learned that with federalism at hand, autonomy shall then be put in place first. The Regional Development Council have been conducting IECs on autonomy for long now. Through the NEDA-CAR, the RDC continues to banner the 'autonomy first towards federalism' slogan in seminars such as the "Autonomy IEC Training and Retooling Workshop" for interested Information, Education, and Communication (IEC) speakers. One of the highlights said workshop was the introduction of federalism as part of the enhanced autonomy IEC module. The Global Autonomy Governance and Federalism Forum as initiated the Institute for Autonomy and Governance was also conducted in October of 2016 as initiated by the Institute for Autonomy and Governance. There are also several forums and seminars where private individuals and local officials are invited to.

Therefore, with the idea supported by the social contract theory that it is important for the governed to be well informed first before they are to accept a proposed change in the system, this study sought to find out the level of knowledge of its participants on federalism.

A questionnaire containing 20 concepts of federalism were distributed to elected and non-elected officials of Mountain Province. Each respondent was scored according to the correct answers in the questionnaire and were subjected to t-test to check if there is a significant difference in the level of knowledge between elected and non-elected officials of each of the municipalities of Mountain Province. The mean scores are therefore the ones presented in the table below.

Table 1. Level of Knowledge of LGU officials according to Municipality

MUNICIPALITIES	Mean	Descriptive Equivalent
BESAO	12.35	Good
SABANGAN	13.92	Very Good
BARLIG	11.93	Good
BAUKO	12.76	Good
BONTOC	12.54	Good
TADIAN	12.28	Good
NATONIN	12.52	Good
SADANGA	12.23	Good
SAGADA	13.78	Very Good
PARACELIS	12.29	Good
GRAND MEAN	12.71	Good

The above table shows findings that knowledge of the participants on federalism is generally good. At 0.05 level of significance with ANOVA (F test), it was also found that there is no significant difference in knowledge in federalism among the ten municipalities. Although Sabangan and Sagada resulted to a very good rating, statistics showed no actual difference among the ten municipalities. With this, it is manifested that local officials of Mountain Province have an idea and are informed about what federalism is about. They may have questions and reservations in aspects involving CAR becoming a separate state and other matters like financial capability, budget allocation and sharing of powers, but they have at least a background on what federalism is and are not totally blank on how it may work. Being politically involved and concerned, local officials are expected to be interested in a change in the government system. They often read newspapers and are informed of events and processes of the government and this certainly gives them an edge when it comes to information about the environment where they evolve. What local officials therefore now need is to be given a clearer view of the framework of a federal government for the Philippines so that they can also have an understanding of the functions and roles they are to have in a federal system.

Table 2. Level of Knowledge of Elected and Non-elected officials of Mountain Province

MUNICIPALITIES	NON-ELECTED	DESCRIPTIVE EQUIVALENT	ELECTED	DESCRIPTIVE EQUIVALENT	SIGNIFICANCE
BESAO	14.33	Very Good	17.14	Excellent	NOT SIGNIFICANT
SABANGAN	13.83	Very Good	14	Very Good	NOT SIGNIFICANT
BARLIG	14.33	Very Good	11.63	Good	NOT SIGNIFICANT
BAUKO	12.6	Good	13	Very Good	NOT SIGNIFICANT
BONTOC	12.43	Good	12.67	Good	NOT SIGNIFICANT
TADIAN	11	Good	13.55	Very Good	NOT SIGNIFICANT
NATONIN	11.5	Good	13.89	Very Good	NOT SIGNIFICANT
SADANGA	13.5	Very Good	9.38	Good	SIGNIFICANT
SAGADA	14.4	Very Good	13	Very Good	NOT SIGNIFICANT
PARACELIS	14	Very Good	10	Good	SIGNIFICANT
GRAND MEAN	13.192	Very Good	12.826	Good	NOT SIGNIFICANT

The table above shows findings from a statistical analysis using t-test as tool. At 0.05 level of significance, it was found that generally, there is no significant difference in the level of knowledge of elected and non-elected officials. This manifests that the efforts of private and government initiated consultations, seminars, and trainings are reaching not only the elected officials but also the non-elected. The secretary of the sangguniang bayan or the legislative department of Sadanga mentioned that in one of the seminars for legislative secretaries she attended, one speaker spoke about federalism. However, since it is just one of the topics in the seminar, a background on federalism was only given and was not discussed in detail. From this, more discussions and consultations should therefore be conducted in order that the base information of local officials about how the government system will work in a federal state will be enhanced.

The table also shows that when the municipalities are observed individually, Sadanga and Paracelis manifest a significant difference between the elected and non-elected officials in terms of their knowledge on federalism. In both municipalities, it is the non-elected officials who know more about federalism compared to the elected. Sadanga elected officials openly admitted that they need more information about federalism since most of them have not joined consultations about the said system of government. Their situation is different from that of Besao and Sagada where local officials, especially those elected go to consultations on autonomy and federalism. Sagada even recently held a consultation on autonomy which was funded by the Regional Development Council. This may also explain why they have a higher degree of knowledge on the concepts of federalism. Sadanga SB members, on the other hand are requesting that a public consultation on federalism and autonomy be held in their office and in the barangays of their municipality. They are concerned that officials as well as their constituents should be knowledgeable of federalism and the proposed plans and changes for the Philippines. Interviewed participants in other municipalities such as Tadian, Bauko, Barlig and Natonin have also signified their interest in IECs to be conducted in their areas.

Acceptability of Federalism among Local Government Officials of Mountain Province

A requisite to the change of the form of government to a federal system is a plebiscite or the vote of the general electorate. It is therefore important that the system being introduced, the federal system for the Philippines in this case, should be of wide acceptance among the electorate in order that a plebiscite will yield favorable results. This study looked into the acceptability of federalism among the local government officials of Mountain Province. The local government officials were chosen because they are seen as the prime movers in the system and that they are also a better source of information of their constituents when it comes to how the government works. In Mountain Province, local people look up to their elders and local leaders. Their knowledge and perceptions are therefore a great factor in the decisions and choices of their constituents.

Table 3. Acceptability of Federalism among Elected and Non-elected LGU Officials of Mountain Province

MUNICIPALITIES	ELECTED	DESCRIPTIVE EQUIVALENT	NON-ELECTED	DESCRIPTIVE EQUIVALENT	SIGNIFICANCE
BARLIG	3.78	Much Acceptable	3.87	Much Acceptable	NOT SIGNIFICANT
BONTOC	3.73	Much Acceptable	3.72	Much Acceptable	NOT SIGNIFICANT
BAUKO	3.83	Much Acceptable	4.28	Very Much Acceptable	SIGNIFICANT
TADIAN	3.73	Much Acceptable	4.73	Very Much Acceptable	SIGNIFICANT
SABANGAN	3.96	Much Acceptable	3.70	Much Acceptable	SIGNIFICANT
NATONIN	4.42	Very Much Acceptable	3.84	Much Acceptable	SIGNIFICANT
BESAO	4.69	Very Much Acceptable	3.89	Much Acceptable	SIGNIFICANT
SAGADA	1.86	Slightly Acceptable	3.97	Much Acceptable	SIGNIFICANT
PARACELIS	3.54	Much Acceptable	3.99	Much Acceptable	SIGNIFICANT
SADANGA	3.89	Much Acceptable	3.89	Much Acceptable	NOT SIGNIFICANT
GRAND MEAN	***3.74***	***Much Acceptable***	***3.99***	***Much Acceptable***	***NOT SIGNIFICANT***

The above table shows the level of acceptability of federalism among elected and non-elected officials in each municipality of Mountain Province. When observed according to individual municipality, there is significant difference between the elected and non-elected officials in seven (7) of the ten municipalities. These are Bauko, Tadian, Sabangan, Natonin, Besao, Sagada, Paracelis. For Bauko, Tadian, Sagada and Paracelis, it is the non-elected officials who manifested a higher level of acceptability. Elected officials in these area accepts federalism of the Philippines at a lower degree. This can be explained by their reservations on the possible shift to federalism before CAR achieves autonomy. Mayor Abraham Akilit explained in an interview that autonomy shall be attained first by CAR before federalism. He believes that with autonomy in place before federalism is introduced, gives an advantage for CAR. This is also affirmed by Councilor Dugao of Sagada and even Mayor Limmayog of Sadanga. As for Natonin, Sabangan, and Besao, it is the elected officials who accept federalism more which is explained by their same positive acceptance of autonomy manifested in the interviews. In a discussion with the councilors of Besao, they have revealed a positive view of autonomy, a product of their being participative in seminars and consultations on autonomy and federalism. This acceptance they have of autonomy is carried over to federalism and they are even still willing to have more information and education campaigns, this time also including their constituents when possible.

Table 4. Acceptability of Federalism among LGU Officials of Mountain Province according to Municipality

ITEMS	Barlig	Bontoc	Bauko	Tadian	Sabangan	Natonin	Besao	Sagada	Paracelis	Sadanga	MEAN FOR EACH INDICATOR	Descriptive Equivalent
1	4.14	4.15	4.42	4.29	3.92	4.44	4.75	3.17	4.04	4.10	4.14	Much Acceptable
2	4.34	4.37	4.26	4.73	4.50	4.29	4.24	3.08	4.15	4.18	4.21	Very Much Acceptable
3	3.73	3.63	4.20	4.41	3.79	3.98	4.13	3.17	3.48	3.93	3.84	Much Acceptable
4	4.09	3.32	3.77	4.11	3.81	3.98	4.07	3.33	3.83	4.02	3.83	Much Acceptable
5	3.66	3.72	4.22	3.99	3.94	3.97	4.67	2.92	3.77	3.86	3.87	Much Acceptable
6	3.35	3.69	3.85	4.21	4.00	3.94	4.59	3.25	3.81	3.88	3.86	Much Acceptable
7	3.67	3.77	4.37	4.68	3.79	4.39	4.43	3.00	4.31	4.14	4.05	Much Acceptable
8	4.15	4.09	4.19	4.41	4.10	4.38	4.50	3.17	3.73	4.11	4.08	Much Acceptable
9	3.93	3.52	3.75	4.19	3.79	4.05	4.34	3.17	3.52	4.03	3.83	Much Acceptable
10	3.80	3.52	4.10	4.24	3.79	4.24	4.42	3.00	3.33	4.00	3.84	Much Acceptable
11	3.63	3.45	3.96	4.32	3.43	4.06	4.67	3.17	3.48	3.95	3.81	Much Acceptable
12	3.59	3.50	4.30	4.24	4.10	3.76	4.17	3.42	4.00	3.79	3.88	Much Acceptable
13	4.00	3.36	3.40	3.94	3.41	3.58	3.52	3.00	3.71	3.37	3.53	Much Acceptable
14	3.21	3.38	3.08	3.21	3.87	4.01	2.79	1.92	3.50	3.00	3.20	Moderately Acceptable
15	3.81	3.67	4.45	4.41	3.47	4.22	4.43	3.08	3.58	3.95	3.91	Much Acceptable
16	3.54	3.92	3.88	4.34	3.61	4.07	4.35	2.33	3.81	3.48	3.73	Much Acceptable
17	3.95	3.86	4.23	4.26	3.69	4.24	4.67	2.25	3.96	4.06	3.91	Much Acceptable
18	3.70	3.93	4.42	4.21	3.86	4.24	4.59	2.50	3.73	8.00	4.32	Very Much Acceptable
19	4.02	3.93	4.23	4.12	3.86	4.39	4.25	2.67	3.73	4.00	3.92	Much Acceptable
20	4.21	3.79	4.01	4.37	3.93	4.33	4.25	2.67	3.88	4.19	3.96	Much Acceptable
MEAN FOR EACH MUNICIPALITY	***3.82***	***3.73***	***4.05***	***4.23***	***3.83***	***4.13***	***4.29***	***2.91***	***3.77***	***4.10***	***3.89***	**MUCH ACCEPTABLE**
DE	**Much Acceptable**	**Much Acceptable**	**Much Acceptable**	**Very Much Acceptable**	**Much Acceptable**	**Much Acceptable**	**Very Much Acceptable**	**Moderately Acceptable**	**Much Acceptable**	**Much Acceptable**	**MUCH ACCEPTABLE**	

The above table shows findings on the level of acceptability of federalism among LGU officials in each of the ten municipalities of Mountain Province. Using Friedman's test at 0.05 level of significance, it was found that there is no significant difference on how local officials accept the concepts of federalism for the Philippines. In general, the twenty presented indicators of federalism were rated much acceptable. These include getting a commensurate share of funds from fees and taxes collected in their areas of jurisdiction, devolution of decision-making roles to local governments, decongesting Metro Manila since jobs will be distributed in the regions, recognition of regional diversity, development of local specialization, criteria on the formation of states, sharing of powers between local and national governments as well as the amendment of the constitution.

One item in the questionnaire stands out. This is question no. 14 which states: Cordillera region will become part of the State of Northern Luzon. It was rated lowest among all the listed indicators at moderately acceptable level only. Among the issues raised by the participants concerns this concept which is embodied in the proposed clustering Igorots of the Mountain Province included, will always bring about their concerns on autonomy and its approval in a plebiscite by the people in the near future.

Issues and Concerns of Mountain Province Local Government Officials on the possible establishment of Federalism in the Philippines

The following are the major issues raised by Mountain Province local government officials in case the government of the Philippines will be changed to federal form.

Mayors and councilors of the different municipalities, in separate interviews raised that the proposed autonomy is better approved first for Cordillera Administrative Region before federalism is put in place in the Philippines. Since federalism is a national agenda, higher priority can be accorded to federalism over autonomy which will not be an advantage for the Cordillera to which the Mountain Province is a part of. Also, since the different proposals as to the clustering of provinces into separate states do not include CAR as a separate state, it can become part of Northern Luzon instead which is not acceptable to many if not all of the participants of this study. This raises the second issue.

Mountain Province and the other provinces that compose CAR have unique cultures to protect. It is important to preserve the indigenous character of the province and that when it becomes part of the Ilocos region, it has chances of losing its identity. This is a concern of one Sagada councilor which goes back to the issue on having CAR as an autonomous region first. Becoming an autonomous region is seen as an advantage for CAR becoming a separate state in a federal government. As one mayor of a municipality puts it, the good time for autonomy for the Cordilleras is now before federalism steals the scene.

Out of the concept of the Philippines adopting a federal government, the third issue is raised. In as much as most of the participants have a high level of acceptance as to the features of federalism is concerned, there is also a prevailing concern regarding the financial capacity of the Cordillera Administrative Region in any case it becomes a separate state. Mountain Province on its own has municipalities which are mostly classified as fifth class municipalities. They are very much dependent to the IRA or the Internal Revenue Allotment which comes from the Philippine national government. This scenario raises the question as to the ability of the CAR to sustain itself as a state if its provinces like Mountain Province are composed of local units that are reliant to shares from the national government funds.

On the other hand, this seeming difficulty in terms of finances becomes a challenge for Mountain Province and its co-provinces in CAR. With a clearer view of decentralization in a federal government, the interviewed participants manifested that the given ability to independently determine the needs of constituents will be an advantage for them. Having a better understanding and knowledge of the situation of their own localities, local state officials will be able to prioritize and make decisions that are more relevant in scope. Actual conditions, problems, or strengths will therefore become the basis for critical decisions that are helpful in development. As Caccam (2017) asserts, the policies made by local regions will represent their wants unique to them and relevant to their needs. Necessarily, economic resources should be effectively managed for inclusive growth.

Lastly, local officials of Mountain Province are concerned with what the actual set up will be when federalism is adopted in the Philippines. Sadanga sangguniang bayan officials, specifically, are already requesting for an information campaign in their office as well as in their municipality. They particularly pointed out the need for them to know how federalism works and what their roles be in case federalism is put in place. There are also lingering questions as to how an autonomous region functions in a federal state.

These mentioned are the major issues of the local officials of Mountain Province. More specific questions may still be raised especially when the participants are already better informed.

CONCLUSIONS

With the above findings of the study, it is concluded that local government officials of Mountain Province have a background of what federalism is about. The information they have on federalism comes lessons in college as well as lectures, forums and consultations held by the Regional Development Council and other government agencies.

In terms of acceptability, local government officials of Mountain Province take Federalism in a positive note. However, federalism to be adopted in the Philippines produces issues that need to be addressed and answered. The situation of Cordillera Administrative Region to which Mountain Province is part of and to which it has a foundation for its identity is distinct especially that CAR is striving to achieve regional autonomy. When federalism is discussed in Mountain Province, concerns on the approval of CAR as an autonomous region is inevitable.

RECOMMENDATIONS

Out of the findings of this study, it is recommended that:

- The knowledge of local government officials and their perceptions on the acceptability of federalism be downloaded to the grassroots level by developing an IEC material that will allow them to be informed of what federalism is about.
- A wide information dissemination be conducted in all the municipalities of Mountain Province in order to address the issues and concerns of local officials as well as their constituents regarding the actual features of the federal system that the national government proposes.
- The national government provide a framework of its proposed federal government in order that local governments will become aware and can plan ahead for their localities.

ACKNOWLEDGMENT

This research may not have been possible without the support of the MPSPC Research, Development and Extension Unit lead by Dr. Annie Grail F. Ekid, Mr. Joel C. Faroden, and Mr. Elmer D. Pakipac. Their guidance and encouragement made this research finally reach its completion.

The participants, from all the local government units of Mountain Province are the reasons why this research was conducted and eventually completed. Our heartfelt thanks for their accommodation and cooperation in the floating and retrieval of questionnaires. Our thanks as well to Councilor Jaime Dugao of Sagada, Mayor Abraham Akilit of Bauko, Mayor Jose Limmayog Jr. of Sadanga, Mayor Wooden of Tadian, Councilor of Sadanga for giving time to be interviewed. Their inputs contributed to the strength of this research.

Above all else, to God be the glory!

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DOCUMENTATION OF WILD MUSHROOMS IN BAUKO, MOUNTAIN PROVINCE

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ABSTRACT

The study aimed to document the different indigenous mushrooms found in Bauko, Mountain Province from May 2015 to April 2016. The documentary descriptive study made use of personal key interviews, direct observations, and photo documentation, and library works. The informants of the study were the local residents regarded as the source of reliable information. The study documented mushrooms which are very common in the pine forest that are edible and non -edible or considered poisonous. The edible mushrooms which are identified with their local names are the bo-o, damdamillan, lablaba-an, segsegman, masmasdem/lablabi, pappa-it, kodi, o-ong/saluyot, and the kom-owan/kentegan/ul-uling. Results of the interview revealed that wild mushrooms grow abundantly during onset of rainy season when there are lightings and season of new moon cycle in identified places while poisonous mushrooms grow all throughout the rainy season at any place in the forest. The most prominent poisonous wild mushroom is the tagtaga because as observed it can cause insanity and continuous vomiting that can lead to death.

RATIONALE

Mushrooms are fungi and classified in the class Basidiomycetes. Mushrooms are microfungus with distinctive fruiting body which can either be epigeous (above ground) or hypogeous (below ground), large enough to be seen by the naked eye to be picked up by hand. They are characterized by the presence of gills under the umbrella – shaped cap called pileus.

The most important microscopic feature for identification of mushrooms is the spores. Their color, shape, size, attachment, ornamentation, and reaction to chemical tests often can be the crux of an identification. Edibility may be defined by criteria that include absence of poisonous effects on humans and desirable taste and aroma.

Just as plants, mushrooms have seeds responsible for propagating the species; they produce dust- like spores. These species are very minute and microscopic and they are dispersed and disseminated through the air with the wind. When they happen to fall on a suitable substrate, these spores will germinate and develop into mycelium. If conditions are favorable, it continuous to grow, ramify and develop into fruits. These fruits or fruiting bodies are actually what we call mushrooms.

Mushrooms is one of our natural resources. Natural foods such as mushrooms are found in the forest at the onset of the rainy season. Many types of mushrooms are edible though some are poisonous. Mushroom is a fleshy, spore- bearing fruiting body of a fungus, typically produced above ground on soil or on its food source.

The act of consuming mushrooms dates back to ancient times. Edible mushroom species have been found in association with 13,000 year old archeological sites in Chile. But the first reliable evidence of mushroom consumption dates back to several hundred years B.C. in China. The Chinese value mushrooms for medicinal properties as well as for food. Ancient Romans and Greeks particularly the upper classes used mushrooms for culinary purposes. Food tasters were employed by Roman Emperor to ensure that mushrooms were safe to eat.

For thousands of years ago medicine and natural products have been linked through the use of traditional medicines and natural poisons. Mushrooms have an established history of use in traditional oriental medicine, where traditional mushroom preparations are regarded as tonic. That is, they have beneficial health effects without known negative side effects and can be immediately used on a regular basis without harm Mushrooms comprise a vast and yet largely untapped source of powerful new pharmaceutical products. As a tropical country, the Philippines has very rich mycological resources which unfortunately are still in the wilderness growing on fallen logs , decomposing piles of straws, l awns, meadows, and gardens. Emergence of wild mushrooms via the germination of spores commences on May and lasts until September when there is sufficient moisture and and optimal temperature (Bulseco et. al, 2005; Mariano et. al. 2005, Musngi et. al. , 2005, Paderes et. al. 2004, Reyes et. al. 2006, Reyes et. al. 2003, Reyes and Abella 2002, San Agustin et. al. , 2004). This situation makes the collection of edible mushrooms from the wild seasonal. Even though most Filipinos are known to be mushroom eaters, their consumption of edible mushroom is limited by the unavailability of research –based production technology and the lack of information on the edibility and nutraceutical benefits of these mushroom (FAO Statistics, 2007).

To popularize the production and consumption of cultured mushroom from the Philippines, research have been initiated in the last decade for the development of mushroom production technologies using locally available agro-industrial residues in a more practical yet economical yet rewarding financial set up. Efforts have been done to domesticate lentimus tigrimus (Dulay 2012a and b), the more popular vulvoriella volvacca(Reyes et.al.2004b, Reyes 2000),collybia reikeana which used to be a wild edible species from Puncan, Caranglan, Nueva Ecija, Philippines (Reyes et.al.2004a), coprinus comatus (Reyes et. al. 2009a) and S.commune , a wild edible mushroom known to the Bicolanos as kurakding , to the visayan as kudopdop , to the Ilongos as kudyadyi and to the Ilocanos as kudit (Gisala et.al. 2005, Garcia et. al. 2004).Exotic species of lignin lytic edible mushrooms such as pleurotus sajor-cajuan, P.florida have been successfully grown in the rural areas of the county (Reyes et.al. 2009b).

At the turn of the 21st century, the mushroom eating habit of Filipinos and their perception of mushrooms have changed . Imported mushrooms-based nutraceutical products such as Ganoderma and Agaricus blazei coffee, Ganoderma –based dietary supplements in addition to dried Lentinula edodes and Auricularia from China and canned Agaricus bisporus from the US were introduced in the local markets. As such mushrooms are no longer regarded as simply gourmet food but as nutraceutical commodities as well.

Nutraceuticals are substances that may be considered as food or part of a food that exhibit medical or health benefits (Khatun et.al. 2012). Mushrooms are considered as one of the nutraceutical commodities because they possess functionalities such as anti-tumor, arteriosclerosis and chronic hepatitis (Takaku et.al. 2001). Being nutritious food sources, they are richly endowed with all essential and commonly non-essential amino acids (Quimio 2004), which indeed elucidated their nutritional role in the human diet.

With these premise, our research had started initiating intensive efforts of documenting and if possible domesticate wild mushrooms from pine and mossy forest in Mountain Province to find out not only their neutraceutical but other potentials and to discover appropriate post-harvest technologies

OBJECTIVE OF THE STUDY

1. To document edible and non-edible wild mushrooms in the pine and mossy forest of Mountain Province

PROCEDURE /METHODOLOGY

Documentation and actual interviews were conducted as to the verification on the edibility of wild mushroom. Hand picking and photo documentation were employed during the collection of wild mushrooms.

RESULTS AND DISCUSSION

Wild mushrooms grow at the onset of rainy season from April to early November in Guinzadan, Bauko, Mountain Province of which some are edible while others are not or poisonous. Edible mushrooms are recognized as kom-owan/ ul-uling/kentegan, damdamillan, segsegman, masmasdem/lablabi, bo-o, o-ong/saluyyot, kodi, and papa-itan. Most familiar of the poisonous mushroom is the tagtaga while most does not have local names.

Personal interviews revealed that only edible wild mushrooms were gathered and hunted as food supplement and delicacy. It was observed that most edible mushrooms grow during new moon season in identified places of the forest from season to season especially the kom-owan/ ul-uling/ kentegan. Most experts claimed that most of the delicious mushrooms especially the o-ong varieties are now extinct. Some claimed that edible mushrooms can be poisonous when gathered at the onset of rainy season and wild mushrooms should not be eaten raw. Gills, stalk, cap, color, shape, and smell were the terms used to characterize the wild mushrooms.

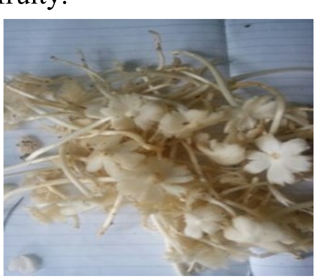
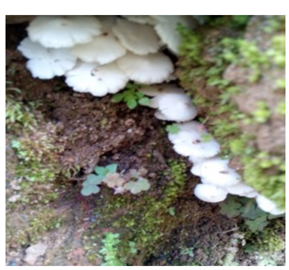
 

Most familiar known edible wild mushroom is the bo- o. It grows on the onset of rainy season from April until late October on a pine forest. It does not have gills and stalk. The usual color is yellowish to dark white. The shape is round. No observed markings and cap, and color does not change when touched. The mushroom smells fruity when freshly gathered.

This wild mushroom is locally named carabao mushroom since the favorite habitat is in pasturelands with much carabao manure. It is very attractive but poisonous. It does not have gills, short and brown stalk, yellowish to orange in color, cap is round shape, no markings because it does not have rings on stalk, color does not change when touched or bruised, and the smell is fruity.

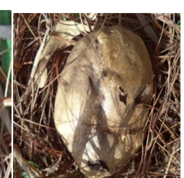
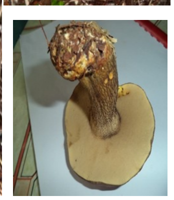
The Local name of this wild edible mushroom is o-ong or saluyot. It is one of the varieties of o-ong that is rarely found in the locality. O-ong is the most delicious of all wild mushrooms. Some are big in size and others are very small. They grow abundantly in identified places and not necessarily in the forest. Based on observation, it does not grow in polluted areas. Some grow on land and others on decaying logs. Most of the varieties are now extinct.

Gills are long and attached to the slender and white stalk, colored snow white, cap shape is round and pointed, no markings since it does not have rings on the stalk, does not change in color when touched or bruised. This variety grows rarely on decaying logs in moist environment and the smell is fruity.

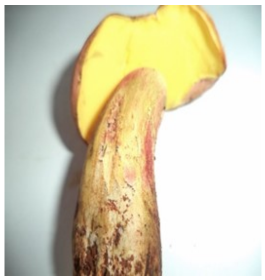
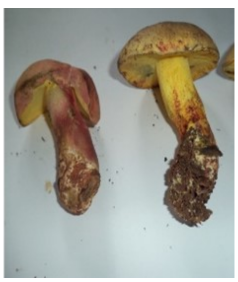
 

The local name of this wild edible mushroom is masmasdem or lablabi because it easily change color when touched or bruised to dark blue or black. It has no gills, stalk is short, color is yellow orange, smell is fruity, and cap is round with yellow color and light orange, and has no markings since it does not have rings on the stalk. It grows abundantly in a pine forest with decaying grasses at the onset of rainy season.

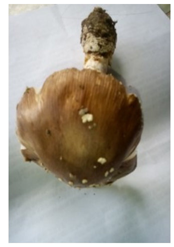
The local name of this wild edible mushroom is pappa-it because the taste is bitter when cooked. As to description, it does not have gills, stalk is short and black, colored black and white, cap shape is round and short, no ring on the stalk, no change in color when bruise or touch. It has fruity smell and grows abundantly at the onset of the rainy season in a pine forest with decaying grasses.


This wild edible attractive mushroom is identified as segsegman. It does not have gills, stalk is short and light red, color of the cap is yellow and light with round shape, no ring on the stalk, the color turns to dark blue when scratched or bruised. The favorite habitat of this mushroom is in slopes in a pine forest with many ferns. It rarely grows at the onset of rainy season and does have a fruity smell.





Most identified poisonous mushroom is the tagtaga in local dialect . It is noted as the most poisonous of all indigenous mushrooms but very attractive. It is usually mistaken as o-ong. It is uses by some local residents as repellant to flies. Poisoning are evidenced by insanity and continous vomiting which can cause death. Gills are attached to the slender and white stalk, colored black and dark brown, cap shape are dark with white spots, has prominent rings on the stalk, no change in color when scratched or bruised. It is very attractive and smells fruity. It grows abundantly in a pine forest with many pine needles from April to early November. The most prominent of identifying mark of this variety is the presence of rings and the white spots on the cap.



This wild edible small mushroom is damdamillan. It does not have gills, stalk is short and light red, color of the cap is yellow and light with round shape, no ring on the stalk, no change in color when scratched or bruised, and very slippery. The favorite habitat of this mushroom is a slope in pine forest with many ferns and grasses. It grows in small quantities at the onset of rainy season until late October and does have a fruity smell.


The local name of this mushroom is lab-laba-an. The gills are attached to a stalk which is short and white. It easily breaks when picked. It has a very attractive colored red round cap, no rings, no change in color when touched or bruises. The favorite habitat of this mushroom is pine forest with thick pine needles. It is edible and grows at the onset of rainy season till late October. They grow in small numbers of five and maximum of ten and does have a fruity smell.



This small mushroom grows abundantly all throughout the rainy season in a pine forest. Since it is not edible, it does not have an identified local name. No gills, stalk is short and yellowish, colored yellow, cap shape is round, no rings on the stalk, no change in color when scratched or bruised, cap shape is round and yellowish. The favorite habitat is decaying manure of carabaos and cows in a pine forest. It grows abundantly all year round. The smell is annoying.

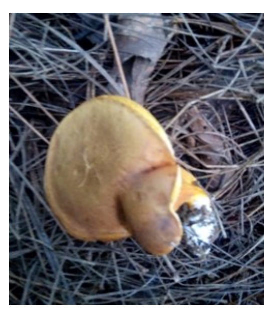



This local mushroom is kodi in local dialect. These are used as food delicacies but not often times since these are very hard. In the past, some claim that they have been using the juice as pain reliever for rheumatism. No gills and stalk, color is brown, white, and light red, with no specific shape, very hard, no change in color when touched, favorite habitat is decaying woods with moist environment. It grows the whole year round. Some are edible and some are not and does not have smell.

This wild mushroom has no identified local name and is not edible. Its gills are very short and attached to the stalk, color is brown, cap shape is round, no markings since it does not have rings on the stalk, and no change in color when touched or bruised. The favorite habitat of this mushroom is in decaying logs with moist environment. The smell of the mushroom is fruity and is the favorite mushrooms for rats and birds.


No local name is identified for this non-edible wild mushroom. Its gills are long and attached to the stalk, color is dark orange, cap shape is round, no markings since it does not have rings on the stalk, and no change in color when touched or bruised. The favorite habitat is in a pine forest with moist environment. The smell of the mushroom is fruity. It is very attractive and very rare with no smell.


This mushroom has no identified local name. It is non- edible. Its gills are long and attached to the stalk, color is dark blue, cap shape is round with white linings, has no markings since it does not have rings on the stalk, and no change in color when touched or bruised. The favorite habitat is in a decaying pine wood with moist environment. This mushroom is very rare with no smell.




This mushroom has no identified local name. It is non- edible. Gills are long and attached to the stalk, colored dark orange and dirty white, cap shape is round, no markings since it does not have rings on the stalk, and no change in color when touched or bruised. The favorite habitat of this mushroom is in a pine forest and grows rarely during rainy season till early October.

This wild mushroom is round in shape like the edible bo-o but very much smaller in size and does not grow abundantly but regularly during rainy season from April to October not necessarily in a pine forest. It is non- edible and does not have gills and stalk. The usual color is dark white. It has no observed markings, cap, and color does not change when touched. The mushroom smells fruity when freshly gathered. It can either be epigeous (above ground) or hypogeous (below ground), large enough to be seen by the naked eye and to be picked up by hand.

This wild mushroom has no identified local name. It is non- edible. Its gills are very short and attached to the stalk, colored dark orange, cap shape is round, no markings since it does not have rings on the stalk, and no change in color when touched or bruised. It usually grows on wet slope and not necessarily under pine forest. It does not grow abundantly but regularly during rainy season. This mushroom is very attractive

This mushroom is kom-owan in Guinzadan, ul-uling in Poblacion Bauko, and kentegan in some municipality of Mountain Province. It is the most known edible mushroom. Some localities call it kentegan because it is hard and can last for weeks after picking as long as it is always dry. Others call it ul-uling because it is colored charcoal when matured. The color is white when it is young. No gills, stalk is short and black, colored black and white, cap shape is round and short, no ring on the stalk, no change in color when bruise or touch. The smell is fruity. It is abundant during the month of June to October on a designated place during new moon cycle.

CONCLUSION

1. Wild mushrooms are found in pine forest of which some are proven to be edible, poisonous, and not determined. Edible mushrooms are recognized as kom-owan/ul-uling/kentegan, damdamillan, segsegman, masmasdem/lablabi, bo-o, o-ong/saluyyot, kodi, and papa-itan. Most familiar of the poisonous mushroom is the tagtaga while most does not have local names.

RECOMMENDATIONS

1. Laboratory analysis should be employed to test other uses of wild mushrooms such as medicine and insect repellant.

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INTERNAL AUDIT MANAGEMENT PRACTICES OF SMALL SIZED COOPERATIVES

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ABSTRACT

Internal audit management serves as a good line defense in detecting and preventing fraud. Hence, having a sound internal audit management practices is vital in any business' survival. This study aimed to assess the internal audit management practices of the small sized cooperatives in Mountain Province, focusing on the level of knowledge; extent of application; and the relationship of these two variables on internal audit management practices. It also includes the level of influence of factors affecting the internal audit management practices of the cooperatives. Using purposive sampling, the study consisted of 69 Board of Directors and 35 Audit Committee members. Questionnaires and informal interviews were used to gather data. Both groups of respondents were moderately knowledgeable and moderately applying internal audit management practices except for some concepts. Moreover, the level of knowledge of the respondents is significantly associated to their internal audit management practices. Lastly, there were various factors affecting the internal audit management practices of the respondents such as: knowledge on internal audit management, presence of cooperative policies on the conduct of audit, and the presence of audit manuals, systems and procedures. In view of the above findings, a professionalization program for the Board of Directors and Audit Committee members should be crafted by the cooperatives. Further, Operation and Audit Manual and written internal control policies and procedures should be adopted by cooperatives. Finally, a standard Audit Committee report should be made by the cooperatives to capture all the findings and recommendations of the Audit Committee.

Keywords: professionalization of cooperative officers, cooperative internal control, cooperative fraud, internal audit manual, cooperative audit systems and procedures

INTRODUCTION

Every year, foreclosure stories of companies are all over the news. Malversation of funds, fraud and misrepresentation cases are quite alarming. With these, the presence of a strong audit system is vital to a company's existence. Establishing an internal audit function provides a vital step in the growth of any business (Brown, & Media, n.d.) and these should be established by the Board of Directors and Audit Committee as part of their oversight role. Cooperatives had played a significant role in fulfilling economic objectives of many individuals as one of the development mobilizers, thus it is important that cooperative funds be utilized effectively. However, as of 2014, the Cooperative Development Authority (CDA), the governing body of Cooperatives, reported a 45% decrease in the total registered cooperatives. Some of these had failed and no longer exist. Of those existing cooperatives, only few are considered financially strong and healthy and most are small, weak and unsustainable. Further, the failures of these cooperatives were attributed to the following reasons: poor governance, mismanagement, inadequate reserves, absence of internal control, and lack of prudential rules and regulations (www.cda.gov.ph).

In this connection, all CDA registered cooperatives are mandated to be subject to various audits and to create their Audit Committees. However, although cooperatives were able to set up their respective Audit Committee and have the Board of Directors inside the cooperative, the lack of basic audit skills can leave them to remain non-functional and is further aggravated by the large number of non-auditable cooperatives due to the absence of basic accounting and management systems in place.

In a study conducted by Rojo (2001), on the "Status of Millionaire Cooperatives in the City of Baguio", the success or failure of the millionaire cooperatives depends upon the management and financial functions of the board of directors.

In Mountain Province, various cases of management frauds are also being encountered which include splitting up of cooperatives, foreclosures and millions of uncollectible loans due to fraud or mismanagement which occurred inside the cooperative.

People then start to ask whether it is still safe to put their money in their respective cooperatives. Further, the credibility of the Audit Committee and Board of Directors members are also in a hot spot. This is where the study comes into light. The study aims to assess the internal audit management practices of small sized cooperatives in Mountain Province and to determine whether the members of the Audit Committee and Board of Directors have the proper knowledge and skills to deal with internal audit related concerns of their cooperatives including the extent of factors which might have affected these practices.

STATEMENT OF THE PROBLEM

The study aimed to assess the internal audit management practices of Small Sized Cooperatives in Mountain Province.

Specifically, it provided answers to the following variables:

1. What is the level of knowledge of the Audit Committee and the Board of Directors on internal audit management practices of small sized cooperatives in Mountain Province?
   1.1. Is there a significant difference between the level of knowledge of the Audit Committee and the Board of Directors on the internal audit management practices of small sized cooperatives in Mountain Province?
2. What is the extent of application of internal audit management practices of the Audit Committee and the Board of Directors of small sized cooperatives in Mountain Province?
   2.1. Is there a significant difference between the extent of application of internal audit management practices of the Audit Committee and the Board of Directors of small sized cooperatives in Mountain Province?
3. What is the relationship of the level of knowledge on internal audit management to the extent of application of internal audit management practices by the Audit Committee and the Board of Directors of small sized cooperatives in Mountain Province?
4. What is the extent of effect of the factors affecting the internal audit management practices of the Audit Committee and the Board of Directors of small sized cooperatives in Mountain Province?
   4.1. Is there a significant difference between the extent of effect of the factors affecting the internal audit management practices of the Audit Committee and the Board of Directors of small sized cooperatives in Mountain Province?

METHODOLOGY

The study was conducted on selected municipalities in Mountain Province where the identified respondents are located. The study consisted of 104 respondents from 13 different cooperatives who have a total asset of 3 to 15 million total assets or those classified as small cooperatives.

Structured questionnaire was used as the main data gathering tool. The audit procedures used in the questionnaires were taken from the Standard Audit System Manual for Cooperative (2001) as prescribed by the Audit Standards and Practices Council. The 5-point Likert Scale was utilized and data gathered were tested using the T-test. Informal interviews were also used to supplement and validate the data gathered.

REVIEW OF LITERATURE

A study was conducted by Singleton, Messina and Turpen (2003) on "Waving the Red Flag" and the top four red flags reported were: unusual activity, unexplained losses, poor internal control and changes in the life style or behavior of an employee or management. The two latter indicators are no surprise, in that they have been found to be red flags in many prior research studies on fraud while poor internal control leads to fraudulent activities.

Another study conducted by Bio (2000) entitled "An Evaluation of the Top Ten Multipurpose Cooperative (MPC) in the Province of Abra" found out that the internal control system of the top ten MPCs showed the lack of basic source documents and did not have up to date records. Their internal control systems were also not in conformity with the generally accepted accounting principles.

Internal auditors then must possess the knowledge, skills, and other competencies collectively termed as professional proficiency needed to perform their individual responsibilities (The Institute of Internal Auditors, 2012). The significance of their financial knowledge and skills has been linked with their greater capability to comprehend and effectively perform their financial oversight duties in comparison to other directors' knowledge. (Saat, 2012)

According to the Grant Thortons' forensic accounting fraud and investigation services "Today's white-collar criminals are sophisticated. Thus in order to address this issue, having a professional trained in various disciples to uncover fraud and mismanagement is needed.

There have been a lot of reviews and manuscripts to support that trainings can enhance employee proficiency. A properly trained and updated employee can serve better the interest of his organization thus funding for trainings should be given importance. (Putra,1999). With this, all members of the audit committee and members of the board should seek periodic continuing professional education both inside and outside the boardroom. (KPMG, 2009). However, reports are consistently showing the non-support for training by these BODs and audit committee members.

FINDINGS

Level of Knowledge of Respondents on Internal Audit Management Practices of Small Sized Cooperatives in Mountain Province

Table 1. Level of Knowledge of the Board of Directors and Audit Committee on Internal Audit Management Practices of Small Sized Cooperatives

AUDIT ACTIVITIES	MEAN	DE
I. Pre-engagement and Audit Planning		
1. Adequate technical training and proficiency on fields related in the conduct of functions as a Cooperative Officer	3.19	MoK
2. Independence	3.44	MK
3. Due professional care	3.26	MoK
4. Adequate understanding of the Cooperative's business and industry	3.56	MK
5. Consider materiality and audit risk	3.11	MoK
6. Development of Over-all Audit Plan	3.01	MoK
WEIGHTED MEAN	3.26	MoK
II. Study and Evaluation of Accounting System and Control		
1. Understanding of the Accounting System	3.04	MoK
2. Conduct preliminary determination on whether to rely on internal	2.80	MoK
WEIGHTED MEAN	2.92	MoK
III. Compliance or Functional Procedures		
1. Aware on the applicable rules and regulations both internal and external affecting the cooperative	3.44	MK
2. Conduct test designed to obtain reasonable assurance that internal controls are present and effective.	3.20	MoK
3. Evaluate whether internal control are functioning properly	3.12	MoK
4. Assess the reliability of the internal control	3.03	MoK
5. Conducts compliance procedure	3.01	MoK
WEIGHTED MEAN	3.16	MoK
IV. Substantive Test Procedure		
1. Obtain evidence as to the completeness, accuracy and validity of the data produced by the accounting system.	3.34	MoK
2. Conduct of analytical review procedures	3.50	MK
3. Validation of ending balances of all accounts.	3.39	MoK
4. Third party confirmation	3.08	MoK
WEIGHTED MEAN	3.33	MoK
V. Audit Conclusions and Reporting		
1. Review and evaluation of all audit procedures	3.32	MoK
2. Formulate type of opinion and timely audit report	3.12	MoK
3. Ensure all audit work and conclusions are properly documented	3.36	MoK
4. Analyze and plan necessary/ corrective actions in relation to the audit	3.21	MoK
WEIGHTED MEAN	3.25	MoK
GRAND MEAN	**3.18**	**MoK**

The result poses respondents' moderate level of knowledge on Internal Audit Management Practices of Cooperatives in Mountain Province. Findings show that internal audit management is not new for both groups yet knowledge on these concepts still needs an upgrade. Moreover, among the required training curricula of cooperative officers as promulgated by the CDA includes Audit Management and that at least once a year these cooperatives are being subject to external audit making them expose on some auditing concepts. However, the Mountain Province Cooperative Union (MPCU), an accredited training provider, reported that not all officers mandatorily required to attend trainings on audit management were able to attend the training within the prescribed period. This was affirmed further by the reports from the CDA-CAR Extension Office (Lab-oyan, 2015).

To address the issue on non-compliance, the CDA issued sanctions such as the non-issuance of Certificate of Compliance resulting to the non-issuance of Certificate of Tax Exemption by the Bureau of Internal Revenues (www.bir.gov.ph). As a result, the cooperatives are exposure of paying more taxes. Aside from monetary penalties, revocation of the cooperative's certificate of registration can also be imposed for grave cases (www.cda.gov.ph).

Specifically, the respondents showed the least knowledge on the study and evaluation of accounting system and control which is explained by the idea that internal control is not a concept easily understood and appreciated due to its complexity. According to the respondents, the existence of a written internal control systems and procedures does not exist in their cooperatives so they address issues concerning internal control as it arises.

Compliance or functional procedure had also a low level of knowledge by the respondents basically because BODs and Audit Committees are elected officials from the cooperative members. This means some might not have sufficient knowledge and experiences. It was learned from interviews that majority of the members of the BODs and Audit Committees belong to the community of farmers or non-business related professionals and most of them are not well rounded on how to deal with financial things. To address this setback, RA 9520 Article 44 requires cooperative officers and staff to comply with the training requirements to prepare them for their functions and be more competent on the type of job that they are to perform.

Substantive test procedure on the other hand is the most commonly known by the respondents as these are frequently used and encountered by them. This procedure involves the conduct of analytical review procedures which is perceived to be the most common substantive test since the Board of Directors use this during their planning or decision making and the Audit Committee when conducting the audit. In Fung's study (2010), analytical review is being commonly used in non-audit and assurance engagements.

Conversely, third party confirmation is the least substantive test known by the group because it is very costly and time consuming especially to small cooperatives that have few numbers of employees (Sheridan, 2014).

Comparison of Perceptions of the Board of Directors and Audit Committee on their Level of Knowledge on Internal Audit Management Practices

Table 1.1 Difference of Mean Perceptions of the Respondents on Their Level of Applying Internal Audit Management Practices

AUDIT ACTIVITIES	BOD	DE	AC	DE	t-value	p-value	critical value	Findings
I. Pre-engagement and Audit Planning	3.30	MoK	3.22	MoK	1.7621	0.1384	2.5706	NOT SIGNIFICANT
II. Study and Evaluation of Accounting System and Control	3.08	MoK	2.75	MoK	169.2857	0.0038	12.7062	SIGNIFICANT
III. Compliance or Functional Procedures	3.16	MoK	3.17	MoK	-0.1859	0.8616	2.7764	NOT SIGNIFICANT
IV. Substantive Test Procedure	3.31	MoK	3.35	MoK	-1.4635	0.2395	3.1824	NOT SIGNIFICANT
V. Audit Conclusions and Reporting	3.18	MoK	3.33	MoK	-1.9180	0.1509	3.1824	NOT SIGNIFICANT
WEIGHTED MEAN	**3.21**	**MoK**	**3.16**	**MoK**	**0.4269**	**0.6740**	**2.0860**	**NOT SIGNIFICANT**

Statistical analysis showed that there is no significant difference on the level of knowledge on internal audit management practices since the computed value of t at 0.4269 is lower than the critical value of 2.0860 at 0.05 level of confidence with a degree of freedom of 20. This is because the qualification to become a BOD and an Audit Committee are more or less the same especially on the educational aspects and related experiences. Moreover, it had been a common observation that individuals occupying the cooperative committee positions and the BODs are the same people. They are just incorporating rotations when they reached the maximum number of terms for the position they are in.

Extent of Application of Internal Audit Management Practices Of Small Sized Cooperatives in Mountain Province.

Table 2. Extent of Application of the Board of Directors and Audit Committee on Internal Audit Management Practices of Small Sized Cooperatives

AUDIT ACTIVITIES	MEAN	DE
I. Pre-engagement and Audit Planning		
1. Adequate technical training and proficiency on fields related in the conduct of functions as a Cooperative Officer	3.40	MoA
2. Independence	3.52	MA
3. Due professional care	3.62	MA
4. Adequate understanding of the Cooperative's business and industry	3.60	MA
5. Consider materiality and audit risk	3.03	MoA
6. Development of Over-all Audit Plan	3.08	MoA
WEIGHTED MEAN	3.38	MoA
II. Study and Evaluation of Accounting System and Control		
1. Understanding of the Accounting System	3.26	MoA
2. Conduct preliminary determination on whether to rely on internal control	3.05	MoA
WEIGHTED MEAN	3.15	MoA
III. Compliance or Functional Procedures		
1. Aware on the applicable rules and regulations both internal and external affecting the cooperative	3.46	MA
2. Conduct test designed to obtain reasonable assurance that internal controls are present and effective.	3.30	MoA
3. Evaluate whether internal control are functioning properly	3.10	MoA
4. Assess the reliability of the internal control	2.98	MoA
5. Conducts compliance procedure	2.89	MoA
WEIGHTED MEAN	3.15	MoA
IV. Substantive Test Procedure		
1. Obtain evidence as to the completeness, accuracy and validity of the data produced by the accounting system.	3.42	MA
2. Conduct of analytical review procedures	3.40	MoA
3. Validation of ending balances of all accounts.	3.32	MoA
4. Third party confirmation	3.03	MoA
WEIGHTED MEAN	3.29	MoA
V. Audit Conclusions and Reporting		
1. Review and evaluation of all audit procedures	3.32	MoA
2. Formulate type of opinion and timely audit report	3.22	MoA
3. Ensure all audit work and conclusions are properly documented	3.33	MoA
4. Analyze and plan necessary/ corrective actions in relation to the audit findings	3.18	MoA
WEIGHTED MEAN	3.26	MoA
GRAND MEAN	**3.25**	**MoA**

Table 2 presents that the respondents had been reasonably applying the internal audit activities. According to an external auditor in the province, during the cooperative annual audits, some clients were able to submit some of the necessary documents for audit showing that an internal audit management is being practiced such as cash count sheets, schedules, and for some, audit committee reports.

It was also observed that level of application by the respondents on the study and evaluation of accounting system and control and compliance or functional procedures were both least applied and are of the same extent. This is because these two procedures are related to each other. Cooperatives especially SMEs according to the CDA Statistical Report as of 2014 mentioned that cooperatives in CAR have an average number of five employees (www.cda.gov.ph) which means some internal control procedures are not applicable since few persons may have been performing two separate duties and thus segregation of duties may be missing or severely limited (Cabrera, 2007). In a study conducted by Oseifuah and Gyekye (2013), where internal control practices among small business sector are low with only 45% of the surveyed enterprises have adequate internal control systems in place due to their business size. Jiang and Li (2010) affirmed this in their study stating that due to the business scale, human resource, financial and its own conditions, many SMEs are unwilling to establish the standard internal control system. They believe that establishing internal control system is a high cost method, which can bring heavy burden to the enterprise and maybe without significant results cannot compare with the managers manage all aspects of business directly.

Moreover, Compliance Procedure demands for a good knowledge on laws and regulations, both internal and external in nature affecting the cooperative. The Compliance Audit Handbook (2006), provides that auditors should have the necessary knowledge and skills to apply audit principles, procedures and techniques when undertaking compliance audits. Comparing to private corporations, cooperatives don't provide a very strict qualification in becoming a BOD and an Audit Committee member.

Comparison of Perceptions of the Board of Directors and the Audit Committee on their Extent of Application on Internal Audit Management Practices

Table 2.1 Difference of Mean Perceptions of the Respondents on Their Level of Applying Internal Audit Management Practices

AUDIT ACTIVITIES	BOD	DE	AC	DE	t-value	p-value	critical value	Findings
I. Pre-engagement and Audit Planning	3.27	MoA	3.49	MA	-4.5507	0.0061	2.5706	SIGNIFICANT
II. Study and Evaluation of Accounting System and Control	3.09	MoA	3.22	MoA	-5.2651	0.1195	12.7062	NOT SIGNIFICANT
III. Compliance or Functional Procedures	3.12	MoA	3.17	MoA	-1.7154	0.1614	2.7764	NOT SIGNIFICANT
IV. Substantive Test Procedure	3.14	MoA	3.44	MA	-3.7151	0.0339	3.1824	SIGNIFICANT
V. Audit Conclusions and Reporting	3.12	MoA	3.40	MoA	-4.7381	0.0178	3.1824	SIGNIFICANT
WEIGHTED MEAN	**3.15**	**MoA**	**3.34**	**MoA**	**-6.4130**	**0.0000**	**2.0860**	**SIGNIFICANT**

Statistical analysis showed that there is a significant difference on the extent of application on internal audit management practices of cooperatives since the higher computed value of t at -6.4130 is higher than the critical value of 2.0860 at 0.05 level of confidence with a degree of freedom of 20 where the Audit Committee have a higher extent of application as compared to the BODs. First and foremost, the Audit Committees were the ones conducting the actual audit activities of the cooperative starting from the preliminaries to the preparation of the audit report while the BODs' major concern is the establishment and maintenance of a healthy and stable financial status of the cooperative (Mendoza and Castillo, 2006). As such, their function in internal audit management visibly starts when they receive the audit report submitted by the Audit Committee for board action.

Relationships of the Level of Knowledge and Extent of Application of Internal Audit Management Practices of Selected Cooperatives in Mountain Province

Table 3. Relationships of the Level of Knowledge and the Extent of Application of Internal Audit Management Practices of Small Sized Cooperatives in Mountain Province

Indicators	Level of Knowledge	Application
Mean	3.18	3.25
Variance	0.0377	0.0431
r-value	0.803	
critical value	0.433	
FINDING	**SIGNIFICANT**	

Statistical inference showed a "significant" relationship between the level of knowledge and extent of application of Internal Audit Management as perceived by the respondents. The more knowledgeable the BODs and the Audit Committee are on internal auditing, the higher is their extent of application. This is clearly revealed when the conduct of compliance procedure showed a low mean for the level of knowledge and also garnered the lowest mean on the extent of application. Studies had supported that the practice of an auditor will be affected by his level of knowledge in auditing. In a study conducted by Sulaiman, Abdullah, Ismail and Sapiei (2013), most of the respondents fully agreed with the importance of the auditor's knowledge, skills, and personal qualities of the audit personnel for attainment of high audit quality. Not having the needed qualification will affect the audit practices an auditor will be using.

Extent of Effect of Factors Affecting the Internal Audit Management Practices of Selected-Cooperatives in Mountain Province.

Table 4. Extent of Factors Affecting Internal Audit Management Practices of Small SizedCooperatives in Mountain Province

Factors Affecting Internal Audit Management Practices	MEAN	DE
1. Knowledge in Internal Audit Management	4.02	ME
2. Availability of Funds or Budget for Trainings	3.65	ME
3. Presence of an Auditing Manuals or Audit Systems and Procedure	3.93	ME
4. Honorarium and incentives of BODs and Audit Committee	3.12	MoE
5. Extent of implementation of regulatory agencies on audit compliance	3.59	ME
6. Availability of trainings on Audit Management	3.74	ME
7. Cooperative policy on the conduct of audit	3.95	ME
8. Composition of the audit committee and BOD	3.68	ME
9. Screening and qualifications of BODs and Audit Committee	3.61	ME
10. Cooperative attitude on the audit management	3.76	ME
GRAND MEAN	**3.70**	**ME**

Over-all, the extent of effect of factors affecting the internal audit management practices is quite significant and leaving these unaddressed will expose the cooperative to future problems.

Among the top most factor is the knowledge in internal audit management. Members of the Audit Committee should ensure that they have sufficient expertise and knowledge of the audit process and statutory requirements to effectively review and assess the performance of their company as a whole. Zhang and Zhou (2006) concluded in their study that firms are more likely to be identified with internal control weaknesses, if their audit committees have less accounting and non- accounting financial expertise. In connection to this, many directors have also taken for granted the need to improve on their knowledge of accounting and finance. Many have not yet realized the serious limitations they have in performing their overview functions without in-depth accounting and financial knowledge (Vivas, 2003).

Further, cooperative policy on the conduct of audit ranked second among the identified factors on achieving a good internal audit management practice. Cooperative policies are the basis for every action the cooperative is doing. It exemplifies the acceptable performance boundaries while simultaneously addressing the employees' needs (Zelman and Media, 2006). As cooperatives mature and longtime directors and employees retire, many oral and implied policies are lost.

Moreover, it was also evident that presence of audit manuals or auditing systems and procedure is also a factor in the internal audit management practices of cooperatives. The audit manual summarizes the operations of the internal audit function and delineates the policies, standards, and procedures which generally govern the internal audit function. The use of the Manual should help bring a systematic and disciplined approach to the audit of an entity, risk management and control processes and assist the internal auditor meet the goal of adding value to their respective organizations.

On the other hand, honorarium and incentives of BODs and Audit Committee was perceived to have the lowest effect. It is good to know that elected cooperative officers are aware of the honorarium and incentives that they will be receiving and so it was not a very big factor affecting their job performance.

Comparison of Perceptions of Board of Directors and Audit Committee on the Factors Affecting Internal Audit Management Practices of Small Sized Cooperatives in Mountain Province.

Table 4.1 Differences of Mean Perceptions of the Respondents on the Factors Affecting Internal Audit Management Practices of Small Sized Cooperatives in Mountain Province

Factors Affecting Internal Audit Management Practices	BOD	DE	AC	DE
1. Knowledge in Internal Audit Management	4.07	ME	3.97	ME
2. Availability of Funds or Budget for Trainings	3.80	ME	3.50	ME
3. Presence of an Auditing Manuals or Audit Systems and Procedure	4.03	ME	3.83	ME
4. Honorarium and incentives of BODs and Audit Committee	3.27	MoE	2.97	MoE
5. Extent of implementation of regulatory agencies on audit compliance	3.71	ME	3.47	ME
6. Availability of trainings on Audit Management	3.78	ME	3.70	ME
7. Cooperative policy on the conduct of audit	4.07	ME	3.83	ME
8. Composition of the audit committee and BOD	3.83	ME	3.53	ME
9. Screening and qualifications of BODs and Audit Committee	3.61	ME	3.60	ME
10. Cooperative attitude on the audit management	3.73	ME	3.80	ME
WEIGHTED MEAN	3.79	ME	3.62	ME
SD	0.0586		0.0803	
t-value	4.0576			
p-value	0.0029			
critical value	2.2622			
FINDING	SIGNIFICANT			

Statistical analysis showed a significant difference between the perceptions of the BODs and the Audit Committee on the factors affecting the internal audit management practices. It is noticeable that the BODs portrayed a higher mean perception compared to that of the Audit Committee members. Basically, although it is the Audit Committee who is performing most of the procedures on internal audit management, it is the BODs who ultimately assume full responsibility for the efficient and effective management of the cooperative (Mendoza and Castillo, 2006).

CONCLUSIONS:

The conclusions drawn from the findings are:

- The Board of Directors (BODs) and the members of the Audit Committee were moderately knowledgeable on Internal Audit Management Practices wherein although the BODs and the audit committee had knowledge on internal auditing, there are still audit concepts they need to know particularly on the concepts of the study and evaluation of internal control and compliance and functional procedures.
- The BODs and the Audit Committee mem-

bers were moderately applying some internal audit management practices but there are still audit activities which are not yet being applied particularly on the study and evaluation of internal control, and compliance and functional procedures. Further, the Audit Committee members apply actual internal audit activates while the BODs wait for the audit reports as a basis for decision making.

- The extent of knowledge of the respondents on internal audit management practices affects their extent of application of these practices.
- There were various factors affecting the internal audit management of the BODs and the Audit Committee which are as follows: knowledge on internal audit management; cooperative policy on the conduct of audit; and presence of Auditing Manuals or Audit Systems and Procedures

RECOMMENDATIONS:

The recommendations based on the conclusions are:

- The cooperatives should craft their own professionalization program for the BODs and the Audit Committee. This can be collaborated with the Mountain Province State Polytechnic College Extension Unit.
- The cooperatives should craft their Manual of Operation and Internal Audit Manual.
- The cooperatives should craft their cooperatives set of internal control policies and procedures and if no separate Internal Control Manual is maintained by the cooperative, these internal control policies and procedures can be incorporated in their Operations Manual.
- Finally, cooperatives should design their standard Audit Committee report form that can enable the cooperative to capture all the procedures conducted by the Audit Committee including the findings and recommendations given by them.

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CONTINUING PROFESSIONAL EDUCATION NEEDS OF NURSES IN PRIVATE HOSPITALS IN THE CITY OF MALOLOS: PERSPECTIVE IN DEVELOPING A TRAINING PROGRAM FOR NURSES

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ABSTRACT

The study aimed to determine Continuing Professional Education (CPE) needs of staff nurses in accordance of the eleven Key Areas of Responsibility (KAR) through the staff nurses' self-evaluation and their chief nurses' evaluation of them. The following specific objectives guided the investigation: (1) determine the self-perceived performance of staff nurses; (2) determine the chief nurses' evaluation of the performance of staff nurses; (3) analyze if there is a significant difference between the self-evaluation of the staff nurses and their superior's evaluation; (4) identify the learning needs of nurses; (5) develop a training program from the identified CPE needs of nurses. A descriptive-comparative method of research was employed in the study. The respondents were the staff nurses and chief nurses in secondary private hospitals in the City of Malolos. The universal sampling method was utilized. To analyze generated responses, statistical treatments include descriptive statistics, measures of dispersion, t-test, and ranking. The staff nurses' self-perceived that their performance was "Very Good" as well as the evaluation from the chief nurses. Both evaluations revealed significant differences given their computed statistical values. Learning needs of nurses were in the areas of research, quality improvement, personal and professional development, health education, and lastly, legal responsibility. Nurses identified learning needs in the different areas of responsibility despite the already very good evaluation which signified their willingness to commit to lifelong learning. Training programs in the areas of perceived learning needs may be implemented to address the learning needs of nurses .

Keywords: Continuing Professional Education, Learning Needs of Nurses, CPE, KAR

INTRODUCTION

Continuing Professional Education (CPE) is a responsibility on top of the shoulders of nurses most especially in hospital settings as they are regarded as the heart of the institution for them to keep abreast of the ever-changing healthcare environment (Ross, Barr, and Stevens, 2013).

Why pursue CPE? This gives a room for nurses to improve themselves as well as their practice of the profession and at the same time, it gives a nurse an edge among the many rivals (Price and Reichert, 2017). Graduate school education, for example, is a continuing professional education activity that can facilitate critical thinking and development of advanced clinical skills, which are vital for achieving expertise in nursing practice. Education at this level enhances the credibility of nurses and their influence at an organizational level as they may be ranked in managerial position (Currie, 2004; Hayajneh, 2009) as evidenced by the directive of the Department of Health of the Philippines that chief nurses in hospitals should have at least a master's degree in nursing. Another reason for nurses engaging in CPE is that the employers require them to do so (Ross et.al, 2013). This can be exemplified by the Intravenous Therapy Training provided by Association of Nursing Service Administrators of the Philippines (ANSAP) where nurses undergo a training program for intravenous catheter insertion and administering intravenous fluids, medications and blood products. After course completion, an IV therapy license is issued to the nurse which is renewable every three years but upon license renewal, the nurse is required to attend three update courses. Another example is the Critical Care Course which is a training program for Intensive Care Unit (ICU) nurses that is required in a hospital with a critical care unit before the institution will be approved and issued a license to operate for such. But, some nurses enroll in CPE activities because they are unemployed and had nothing to do after passing the licensure examinations way back to the time when there has been an oversupply of nurses in the country.

Several studies revealed conflicting findings in the association between CPE and nursing practice. O'Sullivan, Meehan, Havice, and Pruitt (2006), stated that to bridge the gap between the varying educational backgrounds of nurses, continuing education is an essential component of practice development. While Costante (2001) stated that it promotes collaboration, an understanding of healthcare issues and nursing practice, and a higher quality of care. The same thing is true for Bullock, Libbus, Lewis, and Gayer (2002) that professional nurses must engage in lifelong educational activities to support and enhance nursing practice. On the contrary, some authors like Griscti and Jacono (2006) and Tame (2012) opposed the proposition that continuing education affects nursing practice.

Determining the CPE needs of nurses in the City of Malolos is a kind of needs assessment which paves the way for identifying deficiencies in knowledge, skills, and attitudes in the current practice as well as anticipating future needs in response to the changing healthcare environment. Employers, educators, policymakers, and the nurses themselves should deal with the identified learning needs to meet role requirements (Valaitis et al., 2014). Some medical educators use needs assessment to develop curriculum for training programs and proposed that it should be conducted before any educational activity for the resources to be maximized to its fullest for the benefit of the learners (Ratnapalan and Hilliard, 2002). Thus, learning needs assessment is the matchmaking process of fitting the pieces of what should be taught to the participants of a continuing education activity for the gaps to be filled.

The study assessed the continuing professional education needs of staff nurses in the perspective of the nurses themselves and from their superiors, namely their chief nurses, in contrast with the 11 Key Areas of Responsibility (KAR) expected of a professional nurse based from the curriculum mandated by the Commission on Higher Education Memorandum Order No.14, Series of 2009 which stipulates that these are the essential areas wherein a nurse is expected to have competencies with. In addition, the research would like to address the identified gaps. The research findings may give light to educators, policymakers, administrators, and nurses on how to address CPE needs and strengthen competence in practice through modifying existing policies and/or formulating new training and teaching programs for nurses.

OBJECTIVES

The researcher conducted a study to expound on the Continuing Professional Education needs of nurses in private hospitals in the City of Malolos within the perspective of the staff nurses themselves as well as their chief nurses and be able to propose a training program for them to address identified learning needs against the eleven KAR. In particular, the following specific objectives guided the investigation

1. . to determine the self-perceived performance of staff nurses in relation to the eleven KAR
   - 1.1 safe and quality nursing care
   - 1.2 management of resources and environment
   - 1.3 health education
   - 1.4 legal responsibility
   - 1.5 ethico-moral responsibility
   - 1.6 personal and professional development
   - 1.7 quality improvement
   - 1.8 research
   - 1.9 record Management
   - 1.10 communication
   - 1.11 collaboration and teamwork
2. to determine the chief nurses' evaluation of the performance of their staff nurses in relation to the eleven KAR
3. to analyze if there is a significant difference between the self-evaluation of the staff nurses and their superior's evaluation in relation to the eleven KAR
4. to identify the learning needs of nurses
5. to develop a training program from the identified Continuing Professional Education needs of nurses.

METHODS

A descriptive-comparative method of research was employed in the study. The respondents of the study were the staff nurses and their respective chief nurses who are employed in secondary private hospitals in the City of Malolos. The universal sampling method was utilized.

The instrument that the researcher employed was adapted from the 11 Key Areas of Responsibility by Philippine Board of Nursing and Association of Deans of Philippines Colleges of Nurses (2006), published in the CMO No.14 Series of 2009 and was utilized in the dissertation of Crespo (2012). The first part comprised the demographic profile; the second part was the eleven KAR, its corresponding core competencies, and nursing activity statements as indicators; the third part comprised the nurses' identification of areas that need more professional enhancement. The researcher requested three experts namely a chief nurse at a private hospital, a nursing program head coordinator, and the dean of the graduate school to further validate the questionnaire. Suggestions and comments were incorporated prior to data gathering. A 5 (five)-point Likert scale was used as rating scale of the instrument. It consisted of statements expressing a viewpoint on the level of competency of the evaluator on a topic. The respondents were asked to indicate their rating with each indicator on the scale using one numerical value for each item. The rating corresponds to the following: 5- strongly agree (range of 4.50 – 5.00); 4 – Agree (range of 3.50 – 4.49); 3- Undecided (range of 2.50 – 3.49); 2- Disagree (range of 1.50 – 2.49); and 1 – Strongly Disagree (range of 1.00 – 1.49).

The initial step in the data gathering phase was seeking permission to conduct the study from the graduate school dean. Once approved, the letter was given to the hospital directors through the chief nurses of the identified secondary private hospitals in the City of Malolos. Nurses were asked to give informed consent to take part in the study. The purpose of the study was disclosed to the respondents and they were told that they are free to withdraw from participating in the study anytime they feel the need to do so without any consequences. After consent has been sought, the researcher personally distributed the questionnaires to the staff nurses and their chief nurses. It has been followed up through phone and in-person afterward. Lastly, the researcher ascertained privacy and confidentiality of the respondents and the data gathered.

The gathered data was organized and quantified using SPSS (Statistical Packages for Social Sciences). To appraise the performance of staff nurses in the eleven KAR and its corresponding core competencies as perceived by themselves and from the perspective of their chief nurses, descriptive statistics such as frequency distribution, central tendency specifically determining means, and measure of dispersion such as standard deviation were utilized. Meanwhile, t-test was used to determine the difference between self -evaluation of staff nurses and their superior's evaluation. Lastly, ranking was utilized to analyze generated responses from nurses about their identified Continuing Professional Education needs in relation to the eleven Key Areas of Responsibility.

FINDINGS

Performance of Staff Nurses in the Eleven Key Areas of Responsibility as Perceived by Themselves and as perceived by their respective Chief Nurses

The self-perceived performance of the staff nurses in the eleven KAR revealed all weighted means of the staff nurses' responses were on the range scale of 3.5 to 4. 49. All these indicators have the corresponding descriptive equivalent of "Very Good". However, the key area indicative of ethico-moral responsibility has the highest weighted mean of 4.16 while research has the lowest weighted mean of 3.54 among the eleven. While the performance of staff nurses as perceived by the chief nurses using the eleven KAR as indicators resulted in all computed weighted means of each of the indicators has a corresponding descriptive equivalent of "Very Good" ranging from the highest weighted mean which is 4.23 for ethico-moral responsibility and the lowest of the weighted means computed was 3.62 for research. The weighted mean values for each of the KAR are reflected in Table 1.

Difference between the Self-Evaluation of the Staff Nurses and their Superior's Evaluation in relation to the Eleven Key Areas of Responsibility

Table 1 depicted the difference between the staff nurses' self-evaluation and their chief nurses' superiors' evaluation in the eleven KAR using T-test at a 0.05 level of significance (α = 0.05). There were eight areas namely, safe and quality nursing care with computed t value = 3.322 and p value = 0.001; management of resources and environment with t = -3.191 and p = 0.002; health education with t = 5.329 and p = 0.000; legal responsibility with t = 4.438 and p = 0.000; ethico-moral responsibility with t = -2.13 and p = 0.036; research with t = -2.631 and p = 0.01; record management with t = 2.656 and p = 0.01; and communication with t = -5.655 and p = 0.000 with an identified significant difference given that their obtained t-values associated p-values are less than the given level of significance which is 0.05.

Table 1
Difference between the self-evaluation of the staff nurses and their superior's evaluation in relation to the Eleven Key Areas of Responsibility

Areas	Mean Staff Nurses	Mean Chief Nurses	t-value	p-value
Safe and quality nursing care	4.02	4.06	3.322	0.001*
Management of resources and environment	3.91	3.85	-3.191	0.002*
Health education	3.81	3.86	5.329	.000*
Legal responsibility	4.00	4.11	4.438	.000*
Ethico-moral responsibility	4.16	4.23	-2.13	0.036*
Personal and professional development	3.87	3.84	0.035	0.972
Quality improvement	3.75	3.90	1.422	0.159
Research	3.54	3.62	-2.631	0.01*
Record Management	4.05	4.17	2.656	0.01*
Communication	4.02	4.15	-5.655	.000*
Collaboration	4.01	3.87	1.459	0.149

Learning Needs of Nurses

The identification of learning needs of nurses collectively yielded from the staff nurses and their chief nurses in relation to the eleven KAR revealed responses that had been tabulated, frequencies were obtained and were then ranked. The Key Area of Responsibility that was identified with the highest frequency equivalent to 92 is research, followed by the second highest frequency of 41 for quality improvement, third was personal and professional development with a frequency of 38, fourth was health education with a frequency of 25 and fifth was legal responsibility having the frequency of 23. Safe and quality nursing care, management of resources and environment and collaboration have earned the same frequency equal to 21 and had been assigned the average rank of 7 to them instead of giving them different ranks when in fact their values were the same. Ethico-moral responsibility had the frequency of 18 which obtained a rank of 9. Lastly, areas of record management and communication garnered a frequency of 14 and were assigned the average rank of 10.5.

Training Program Developed from the Continuing Professional Education Needs of Nurses

The proposed training programs were the Research Capacity Building Program, Quality Improvement Program, Personal and Professional Development Program, Health Education Program and Legal Responsibility Reinforcement Program.

GOALS

1. To address the continuing professional education needs of nurses in the City of Malolos for competency enhancement in relation to the eleven Key Areas of Responsibility.
2. To ensure a reservoir of competent nurses in the locale that adapts to the demands of the modern day nursing practice.

Appendix A to E illustrated the training programs proposed from the five identified learning needs of nurses, its corresponding objectives, strategies, activities to be performed, responsible person/s and the consequent performance indicators.

DISCUSSION

The National Education Framework for Cancer Nursing Competence (2008) stipulated that the appraisal of the performance of the staff nurses as perceived by them is a way of acknowledging their own strengths and weaknesses. In addition, it is an avenue of monitoring the quality of care rendered to their clients (Bose, Oliveras and Edson, 2001). Self-evaluation of nurses is a means to determine areas of professional development that in turn enhances performance and competence (Udani, 2002). On the other hand, the chief nurses keep an eye on their subordinates. They have the responsibility to see to it that their staffs possess the competency to attend to the healthcare needs of the patients through conducting continuous assessments. Supervisors' evaluation determined the most customary technique used for quality assessment and continuous improvement. For the researcher to verify staff nurses' responses to their self-perceived evaluation, their superiors were tasked to rate their performance as well for according to Ward, Gruppen and Regehr (2002), self-assessments have consistently shown that its accuracy is poor.

Significant differences were sought from the two types of evaluation utilized in the study namely the self-evaluation from the nurses themselves and their superior's evaluation. In this manner, one counter checked the other and this gave one the full perspective of the given situation. The study results were congruent to Lazarte's (2014) that there was a significant difference between the staff nurses' self-evaluation and the chief nurses' superior-evaluation given the same indicators for evaluation but with a different type of respondents and setting.

Akhtar-Danesh, et.al (2010) anticipated that learning needs assessment was a vital stage in every educational process that aspires to identify changes in trends of nursing practice and policies for CPE programs. Along with that, needs assessment precedes building a curriculum for training programs and it was suggested that it should be performed prior to conducting any form of educational activity to give way for maximization of the resources to its fullest for the good of the learners (Ratnapalan and Hilliard, 2002). Hence, the study assessed the learning needs of nurses in the City of Malolos and allowed for the identification of insufficiencies in knowledge, skills and attitudes in the contemporary practices as well as to look forward to future health care needs in response to the changing healthcare environment which the employers, educators, policymakers, and the nurses themselves should be able to deal with in meeting role requirements (Valaitis et al., 2014).

The proposed program provided the nurses within the City of Malolos, Bulacan the knowledge and awareness of aspects of CPE needs in relation to the eleven KAR and its core competencies. The topics that were identified from the data gathering phase covered research, quality improvement, personal and professional development, health education and legal responsibilities which served as the program focus and each core competencies underlying the identified KAR were used as the basis for objectives formulation. The researcher as a nurse practically applied the nursing process namely assessment, diagnosis, planning, implementation, and evaluation into conducting the study up to the training program development phase. The study has appraised the staff nurses' self-perceived performance and their chief nurses as their superiors had evaluated them as well equated to the assessment phase wherein it answered the research objectives numbers 1 and 2. The diagnosis phase corresponded to determining if there was a significant difference between the two evaluations and identification of learning needs which points out research objective numbers 3 and 4. The planning stage was regarded as to the development of a training program for nurses which was the research objective number 5 while the remaining phases of the process namely the implementation and evaluation remained as a limitation of the study.

CONCLUSIONS

Based on the findings stated, the following conclusions were drawn:

1. The staff nurses' self-perceived that they were competent in terms of their performance on the eleven KAR specifically safe and quality nursing care; management of resources and environment; health education; legal responsibility; ethico-moral responsibility; personal and professional development; quality improvement; research; record management; communication; and collaboration and teamwork.

2. The chief nurses' ratings on their staff nurses' performance with the eleven KAR revealed that the nursing service in private hospitals in the City of Malolos was of quality.

3. Although the two types of evaluation disclosed that nurses were competent, significant differences on the areas of safe and quality nursing care, management of resources and environment, health education, legal responsibility, ethico-moral responsibility, research, record management, and communication were identified. In lieu of these, the performance of nurses varied from the person evaluating them and the indicators from which the evaluation was based. Leaving a gap that needs to be filled and paving the way for more professional enhancement.

4. As nurses identified learning needs in the areas of research, quality improvement, personal and professional development, health education, and legal responsibility, despite the already very good evaluation signified that nurses in the City of Malolos were willing to commit to lifelong learning.

5. The developed training programs of the researcher on the areas of research, quality improvement, personal and professional development, health education and legal responsibility were expected to deal with the learning needs of nurses through its specified objectives, strategies, activities, responsible persons, budget and performance indicators.

RECOMMENDATIONS

With the conclusions stated, the following recommendations were proposed:

1. Nurses should continuously assess themselves of their competencies. Given that they already have self-perceived that their performance in the 11 KAR was “Very Good”, nurses need to strive to be excellent in their practice. Nurses have to make sure their knowledge is up to date, sustain the skills and attitudes necessary, identify areas that are in need of more professional improvements, never stop learning and take every opportunity to widen their perspective through participating to CPE programs.

2. Although chief nurses perceived that their staff nurses are already "Very Good" in their performance in relation to the indicators, they should be vigilant to the needs of the staff and evaluate them fairly so that they may be able to push their nurses to be excellent in rendering quality services to patients. Being one of the institution's leaders, they should lead their nurses to better practice and be advocates of continuous professional enhancement through being a good example and creating or altering policies so that nurses will be encouraged to partake in CPE activities.

3. In measuring staff performance and competence, the researcher recommends that future researchers devise a specific measurement tool/s and guidelines to mandate such. Include the perceived assessment of patients as they were the primary benefactors of the competencies and skills that the nurse exhibits in practice.

4. Nurses should build on overcoming their identified needs and capitalize on their strengths while the healthcare organizations must recognize the value of spending resources to assure that quality service is delivered by their institution.

5. The researcher recommends that the training programs developed to be utilized by the chief nurses and hospital administrators for the enhancement of their staff nurses' competencies and quality care improvement.

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Appendix A

Research Capacity Building Program

Learning Needs	Objectives	Strategies	Activities	Responsible Person/s	Budget	Performance Indicator
1. Research						
1.1 Methodologies	• Identify research methods and data gathering methodologies	• Enhance nurses' knowledge, skills and attitude on research. • Acquaint nurses in the research process. • Reinforce the utilization of Evidenced-based Nursing (EBN) in practice.	• Seminar on the topic of Research Process • Case Analysis o EBN practice samples • Video Presentations	• Program committee head / Research Coordinator • Sub-committee leader	• Honorarium for the speaker: - ₱ 5,000 • Venue: - ₱ 5,000 Good for 30 participants • Food: AM Snack: - ₱ 2,000 Lunch: - ₱ 3,000 PM Snack: - ₱ 2,000 • Seminar Kit: - ₱ 1,500 • Certificates: - ₱ 3,000 Total: ₱ 21,500	• Identifies methods of research • Determines the type of research method for research undertaking
1.2 Data Analysis and interpretation	• Evaluate data analysis and interpretation techniques					• Analyze data with appropriate statistical tools
1.3 Action recommendations	• Analyze recommended actions for research implementation					• Identifies solutions to raised problems
1.4 Dissemination of research findings	• Determine ways to disseminate research findings in hospital settings					• Presents research findings with the health care team, patients, family and to other stakeholders
1.5 Research application in nursing practice	• Discuss ways to utilize research findings in nursing practice					• Utilizes EBN

Appendix B

Professional Development Program

Learning Needs	Objectives	Strategies	Activities	Responsible Person/s	Budget	Performance Indicator
2. Personal and Professional Development						
2.1 Identifies own learning needs	• Recognize one's own strengths and weaknesses including learning needs	• Identification of personal and professional learning needs • Provide options for continuing education activities • Active involvement with professional organizations and activities • Empower nurses to act and perform as dynamic professionals that accept criticisms and challenges • Allow for flexible schedule of hospital duties whenever a staff nurse is to attend CPE	• In-service training program • Workshop o Values-Enhancement o Work Ethics • Conferences and Convention o Schedule and Attendance • Manuals Review	• Nursing Service Head • Human Resource Head	• Food: AM Snack: - ₱ 2,000 Lunch: - ₱ 3,000 PM Snack: - ₱ 2,000 • Certificates: - ₱ 3,000 Total: ₱ 10,000	• identifies own professional goals
2.2 Pursues continuing education	• Identify available continuing professional activities					• Participate in continuing professional education activities • Pursues graduate degree/ programs
2.3 Gets involved in professional organizations and activities.	• Determine professional organizations available					• Partake actively in applicable professional, social, civic and religious activities • Membership in professional organizations
2.4 Projects a professional image of a nurse	• Exhibit right conduct and proper manners always					• Conforms to the Code of Ethics for the profession.
2.5 Possesses positive attitude towards change and criticism.	• Discuss ways to constructive criticism					• Listens to recommendations and adapts to changes willingly
2.6 Performs functions according to professional standards	• Analyze professional practice standards					• Acts in accordance with professional practice standards

Appendix C
Quality Improvement Program

Learning Needs	Objectives	Strategies	Activities	Responsible Person/s	Budget	Performance Indicator
3. Quality Improvement						
3.1 Gathers data for quality improvement	• Identify data gathering techniques	• Guided clinical learning experiences • Individual and group conferences • Case and team conferences	• Group Discussion ○ Identifying and gathering pertinent data • Seminar ○ Clinical Audit ○ Documentation ○ Reportorial Documents • Case review and discussion ○ Review and Documentation of Clinical Outcomes	• Nursing Service Head • Program committee head • HR/Admin Personnel	• Honorarium for the speaker: - ₱ 5,000 • Venue: - ₱ 5,000 Good for 30 participants • Food: AM Snack: - ₱ 2,000 Lunch: - ₱ 3,000 PM Snack: - ₱ 2,000 • Seminar Kit: - ₱ 1,500 • Certificates: - ₱ 3,000 Total: ₱ 21,500	• Identifies suitable quality improvement methodologies
3.2 Participates in nursing audits and rounds.	• Discuss the nursing audit process					• Performs checking of records and shares pertinent data to the healthcare team.
3.3 Identifies and report variances	• Distinguish and Report problems					• Documents and reports identified problems
3.4 Recommends solutions to identified problems	• Determine probable ways of finding solutions to problems					• Suggests probable solutions to problems and communicate them to the team.

Appendix D
Health Education Program

Learning Needs	Objectives	Strategies	Activities	Responsible Person/s	Budget	Performance Indicator
4. Health Education						
4.1 Assesses the learning needs of the clients/partner/s.	• Recognize and record learning needs	• Improve nurses' health teaching methods • Utilize every opportunity to impart age-appropriate learning whenever possible	• In-service training • Lecture on learning-teaching methodologies • Role-playing • Consultation • Video presentation • Prepare teaching aids or materials resourcefully • Involve patient's significant others in the teaching-learning process	• Chief/ head nurse • Staff nurse	• Food: AM Snack: - ₱ 2,000 Lunch: - ₱ 3,000 PM Snack: - ₱ 2,000 • Certificates: - ₱ 3,000 Total: ₱ 10,000	• Obtain relevant data on priority learning needs of patients
4.2 Develops health education plan based on assessed and anticipated needs of clients.	• Discuss health education principles					• Formulate client-centered health education plan
4.3 Develops learning materials for health education	• Identify appropriate teaching aids					• Devise suitable informative teaching materials
4.4 Implementation of health education plan.	• Utilize applicable health education strategies					• Provide an environment that is conducive to learning activities
4.5 Evaluates the outcome of health education	• Distinguish result of the intervention					• Monitor client responses and documents outcome of education.

Appendix E
Legal Responsibility Reinforcement Program

Learning Needs	Objectives	Strategies	Activities	Responsible Person/s	Budget	Performance Indicator
5. Legal Responsibility						
5.1 Adheres to practices in accordance with the nursing law and other relevant legislation including contracts, informed consent	• Identify laws and regulations affecting the nursing profession • Analyze practice application of Nursing Laws	• Reinforce organizational policies and procedures • Review of laws affecting nursing practice • Maintains accurate documentation of care rendered.	• Video presentation • Group discussion • Problem-based learning • Case study • Manuals Review o Policies o Regulations o Code of Conduct and Discipline	• Chief/head nurse • Staff nurse	• Food: AM Snack: - ₱ 2,000 Lunch: - ₱ 3,000 PM Snack: - ₱ 2,000 • Certificates: - ₱ 3,000 • Handouts - ₱ 3,000 Total: ₱ 13,000	• Complies with the legal requisites of nursing practice including accomplishing of legal forms
5.2 Adheres to organizational policies and procedures, local and national.	• Evaluate institutional bylaws.					• Conforms to institutional norms of conduct
5.3 Documents care rendered to clients.	• Adhere to accurate documentation procedures					• Ensure accurate documentation of care rendered.

GRANT OF GOVERNMENT PERMIT AND RECOGNITION TO PRIVATE SCHOOLS IN SORSOGON CITY

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ABSTRACT

This action research made use of descriptive approach to identify the problems met by private school administrators along application for government permit and recognition. Purposive sampling was used, the subjects were particularly the schools who submitted applications for government permit and recognition from 2015 to 2016. A questionnaire was administered and informal interview was conducted with the respondents to gather necessary data. The most common problem identified was lack of knowledge of the provisions of DepEd Order No. 88, s. 2010 otherwise known as the Revised Manual of Regulations for Private Schools in Basic Education, amended by DepEd Order 11, s. 2011, which lays down the requirements and guidelines for grant of Government Permit and Government Recognition. The intervention employed to address the problems met was a work strategy, which involved the conduct of a division conference, ocular inspection of schools, and documentary analysis of application portfolios, focused discussion and one on one technical assistance to the applicant schools. Comparative analysis of Division Profile of Private Schools determined the effectiveness of the intervention employed. Furthermore, the questionnaire also assessed the level of satisfaction of Private School administrators for the assistance given by the SMME Unit. Responses were unanimous, 4 (strongly agree) for all the indicators enumerated. Consequently, the Division Profile of Private Schools shows that Sorsogon City achieved 100% grant of Government Permit and Recognition.

Keywords: Action research, private schools, government permit and recognition, work strategy

INTRODUCTION

The City Division of Sorsogon has 21 registered private schools offering Basic Education, that is from preschool to secondary as of this year, 2017. In 2015, there were schools which have been in existence for more than 10 years yet still, not granted government recognition. Three have been operating without government permit.

DepEd Order No. 88, s. 2010 otherwise known as the Revised Manual of Regulations for Private Schools in Basic Education, amended by DepEd Order 11, s. 2011, lays down the provisions for grant of Government Permit, and Government Recognition. However, it was found out during the One-Day Seminar on Regulations for Private Schools in Basic Education held on September 10, 2015 through Division memorandum No. 70, s. 2015, that those schools which have not yet been granted Government Recognition, as well as those that have been operating without permit, were not aware of the guidelines and process of application for permit and recognition.

In addition, some had complaints in the processing of papers claiming that they have submitted pertinent papers but were not updated as to the status of their application, hence thought that their application was good as approved only to find out that they have been listed as schools operating without permit.

The researcher, as Senior Education Specialist for School Management, Monitoring and Evaluation (SEPS – SMME), is in charge of processing private schools' applications for grant of Government Permit and Recognition. This paper affirmed the problems met by private school administrators, and assessed the effectiveness of the work strategy employed and technical assistance given by SMME unit through the proponent.

STATEMENT OF THE PROBLEM

This paper evaluated the status of the processing of applications of private schools for government permit and recognition. This sought to answer the following questions:

1. How many applications for government permit and recognition were received and indorsed overdue in 2015?
2. What are the problems met by private school administrators along previous applications for government permit and recognition?
3. How effective was the intervention employed as reflected in the Division Profile of Private Schools with Government Permit and Recognition?
4. What is the satisfaction level of private school administrators with regards the work strategy employed?

METHODOLOGY

This action research made use of the descriptive approach to determine the profile of private schools with regards grant of Government Permit and Recognition. This investigation identified the problems met by schools along application for government permit and recognition. Furthermore, a questionnaire was also used to assess the level of satisfaction of Private School administrators of the assistance given by the proponent.

This paper made use of purposive sampling. The subjects were particularly the schools who submitted applications for government permit and recognition since 2015 to 2016. Specifically, there were 8 applications processed in 2015 and 5 applications in 2016.

Comparative analysis of Division Profile of Private Schools determined the effectiveness of the action employed by the researcher. Furthermore, a questionnaire was used gather necessary data, Part A ranked the problems met by school administrators in applying for Government Permit and Recognition., and Part B assessed the level of satisfaction of Private School administrators of the assistance given by the SMME Unit. The questionnaire was administered during the ocular inspection in private schools conducted by the proponent who is the Senior Education Program Specialist in charge of private schools. The respondents answered the questionnaire as the proponent inspected the structures and facilities of the applicant school. Informal interview was also conducted to gather supporting information.

The first step of the work strategy was the conduct of the One-Day Seminar on Regulations for Private Schools in Basic Education held on September 10, 2015 through Division memorandum NO. 70, s. 2015. It was to evaluate the status of the private schools in the Division as to the number of recognized schools and those under permit status. The primary agenda was the discussion of the mandates of DepEd Order 88, s. 2010 otherwise known as the Revised Manual of Regulations for Private Schools in Basic Education, amended by DepEd Order 11, s. 2011, which lays down the requirements and guidelines for grant of Government Permit and Government Recognition.

It was found out that there were schools which have been in existence for more than 10 years yet still, not granted government recognition. Three have been operating without government permit. School administrators expressed that no such orientation was conducted before, hence they were not aware of the mandates of the Manual of Regulations. In addition, some had complaints in the processing of papers claiming that they have submitted pertinent papers but were not updated as to the status of their application, hence thought that their application was good as approved only to find out that they have been listed as schools operating without permit.

In view of problems met by private schools along application for Government Permit and Recognition, and the identified schools operating without permit, the researcher devised a work strategy to achieve 100% grant of Government Permit and Recognition to private schools in the City Division of Sorsogon. The proponent implemented a strict timeline in the processing of applications for Government Permit and Recognition. He gave one on one technical assistance to private schools in preparing their application portfolios, which are checked and validated within 5 days from the date received in the first submission, and 3 days for the resubmission. After the application portfolios were checked, applicant schools were immediately notified to pick up their documents to comply with deficiencies noted. The researcher called the schools who were not able to return the application portfolios within 10 days from the date the documents were returned to check on the progress of the documentary compliance.

The proponent visited the schools who were not able to return the application portfolio after the 15th day from the day returned. Intensive technical assistance was given to expedite the completion of documentary requirements. The proponent sat with the respective school administrators and school staff in charge of accomplishing the documentary requirements. Documentary deficiencies in the application portfolios were identified and explained to the clients. Notes and instructions were written on specific pages labeled accordingly as to the proper order of entries in the portfolio.

FINDINGS

1. There were 8 applications processed in 2015 (for SY 2015-2016) and 5 applications in 2016 (for SY 2016-2017). All applications were endorsed late as per DepEd mandated timeline, which requires all applications to be endorsed by October prior to the opening of the school year.
2. Ten problems experienced by private school administrators were identified. Table 1 ranks the problems according to the perception of the school administrators, with one as the most serious and common. Lack of knowledge of the provisions of DO No. 88, s. 2010 ranked 1. All 8 respondents said they were not aware of the mandates of the Manual of Regulations. This is followed by Securing pertinent documents e.g. SEC registration, BIR forms, takes too long in rank 2. Inefficient processing of previous applications, and Lack of proper coordination with the Division Office and school personnel in charge of the school's documents ranked 3.5. Application disapproved by the Division Office and School admin forgot to file application for renewal of permit/recognition were last in rank 9.5, these problems were not experienced by the respondents.

Table 1. Common Problems in the Previous Application Processing

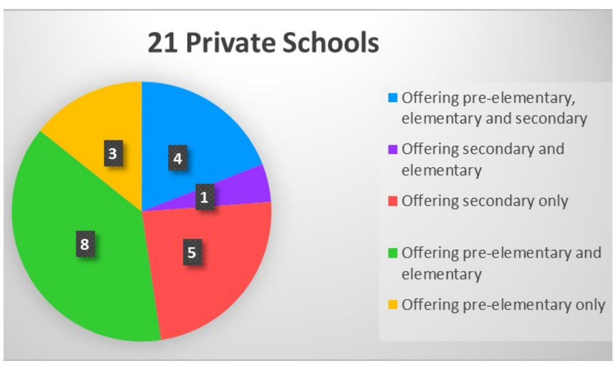
COMMON PROBLEMS	SA 4	A 3	D 2	SD 1	AVE.	RANK
Application disapproved by the Division Office	0	0	0	8	1	9.5
Financial difficulty in settling application fees	0	1	0	7	1.25	7.5
Inefficient processing of previous applications	2	6	0	0	3.25	3.5
Insufficient time for preparing required school records/ documents	1	7	0	0	3.125	5
Lack of knowledge of the provisions of DO No. 88, s. 2010	8	0	0	0	4	1
Lack of proper coordination with the Division Office and school personnel in charge of the school's documents	2	6	0	0	3.25	3.5
Mandated timeline for application is in conflict with school calendar	0	3	5	0	2.375	6
No liaison officer	0	1	0	7	1.25	7.5
School admin forgot to file application for renewal of permit/ recognition	0	0	0	8	1	9.5
Securing pertinent documents e.g. SEC registration, BIR forms, takes too long	6	2	0	0	3.75	2

3. Per Division Profile of Private Schools for SY 2017-2018, all 21 private schools are operating with Government Permit and Recognition. Five applications for SY 2017-2018 were received and endorsed in August, 2016 ahead of DepEd Regional Office V mandated timeline. All 5 applications were approved.

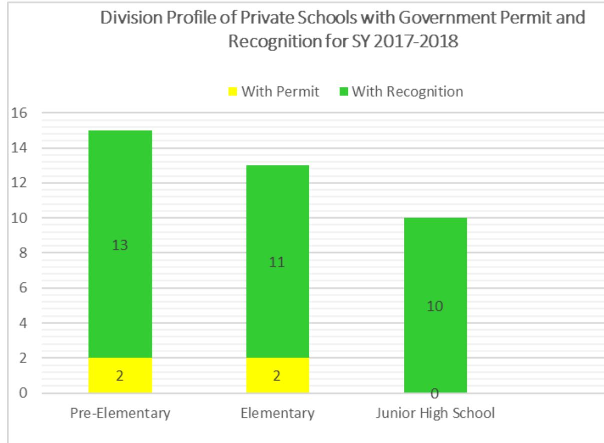
Table 2. Division Profile of Private Schools with Government Permit and Recognition for SY 2017-2018

Name of School	Pre-school	Elementary	Junior High
Aemilianum College Inc.	NONE	GR 02 s1994	GR 02 s1995
Agape Formation and Education Foundation, Inc.	GR 007 s2006	GR 007 s2006	NONE
Annunciation College of Bacon Sorsogon Unit, Inc.	NONE	NONE	GR 003 s2002
Divine Healer Academy of Sorsogon	GR 001 s2011	GR 001 s2011	GR 010 s2016
First Baptist Christian Academy	GR 02 s2002	GR 003 s2002	GR 003 s2002
Immaculate Heart of Mary School of Bacon, Inc.	NONE	NONE	GR 003 s2003
King of Glory Kiddie School	GR 48 s2016	**GP E – 42, s. 2017**	NONE
LWCC Child Learning Center	**Permit P – 050,s. 2017**	**Permit E – 067,s. 2017**	NONE
Mother Mary Montessori School of Sorsogon , Inc.	**Recognition P – 009, s. 2017**	NONE	NONE
Our Lady of Peňafrancia Seminary	NONE	NONE	GR 311 s1966

Name of School	Pre-school	Elemen-tary	Junior High
Sorsogon Chiang Kai Shek School	GR 172 s1993	GR 172 s1993	NONE
Sorsogon Our Lady of Salvation College, Inc.	NONE	NONE	GR 009 s2016
Sorsogon Puericulture Learning Center	GR 13 s2016	GR 005 s2016	NONE
St. Jerome Academy	GR 03 s1997	NONE	NONE
St. Louise de Marillac College of Sorsogon	FAAP Level II Re-Accredited valid until April 2020		
	GR 025 s2009	GR 025 s1997	GR 02 s1995
The Lewis College, Inc.	GR 021 s2007	GR 021 s2007	GR 002 s2004
The Maple School Foundation, Inc.	GR 017 s2008	GR 17 s2008	NONE
Villanueva Gabao Institute, Inc.	NONE	NONE	GR 04 s1986
VIP Learning Center, Inc.	GR 03 s2007	GR 06 s2016	NONE
Yellow Woods Educational Center	GR 002 s2014	**GR E - 004 s2017**	NONE
Speed Computer College (Preschool) *NEW	**GP P – 051 s 2017**	NONE	NONE



Sorsogon City has twenty-one (21) Basic Education private schools. Of this number, four (4) schools are offer complete programs with pre-elementary, elementary and secondary levels. One (1) school offers elementary and secondary courses only. Five (5) offer secondary only. Eight (8) schools offer pre-elementary and secondary courses or programs, and three (3) schools offer pre-elementary or preschool only.



All of the 21 private schools in Basic Education have been granted Government Permit and Recognition for the respective program levels. Of the fifteen (15) schools offering pre-elementary education, thirteen (13) are recognized and two (2) are operating under permit status. Of the thirteen (13) schools offering elementary education, eleven (11) are recognized and two (2) are operating under permit status. All of the ten (10) schools offering secondary have been granted government recognition for the secondary education program, junior high school level.

4. Along satisfaction level of school administrators, ten indicators were presented together with a scale with 4 as the highest score described as strongly agree, and 1 as lowest described as strongly disagree. Responses were unanimous, 4 for all of the indicators enumerated. The descriptive rating used a scale to determine the satisfaction level of the 8 respondents with the lowest bracket 1.0 – 1.9 as not satisfied and the highest bracket 3.6 – 4.00 as very satisfied. The weighted average was computed at 4 revealing that the respondents are very satisfied with the service given by the respondent.

Table 3. Satisfaction Level of School Administrators

INDICATORS	SA 4	A 3	D 2	SD 1	TOTAL	AVE.
Polite in dealing with clients.	8	0	0	0	32	4
Patient in validating our documents.	8	0	0	0	32	4
Was able to orient us on the process and requirements pertinent to application for Government Permit and Recognition.	8	0	0	0	32	4

INDICATORS	SA 4	A 3	D 2	SD 1	TOTAL	AVE.
Was able to process our application/s expeditiously and efficiently.	8	0	0	0	32	4
Personally visit/s our school for inspection and/or monitoring and evaluation.	8	0	0	0	32	4
Contacts us for updates and/or follow up especially on matters regarding operations of private schools.	8	0	0	0	32	4
Keeps in touch and answers calls and text messages when I/we have queries.	8	0	0	0	32	4
Able to give clear answers to queries.	8	0	0	0	32	4
As administrator who applied for Government Permit and/or Recognition, I felt at ease in making transactions with him/them.	8	0	0	0	32	4
I/We find him/them a competent government employee.	8	0	0	0	32	4
Weighted Average						4

SATISFACTION LEVEL

1.0 – 1.9 Not Satisfied	3.0 – 3.5 Satisfied
2.0 – 2.5 Somewhat Satisfied	3.6 – 4.0 Very Satisfied
2.6 – 2.9 Fairly Satisfied	

CONCLUSIONS

Based on the findings of this study, the following conclusions were formulated:

1. The previous work strategy employed in processing applications for Government Permit and Recognition of Private Schools was ineffective hence, there were several problems met and schools operating without permits.
2. Private school administrators were not informed of the provisions of DepEd Order No. 88, s. 2010 otherwise known as the Revised Manual of Regulations for Private Schools in Basic Education, amended by DepEd Order 11, s. 2011, which lays down the mandates for grant of Government Permit, and Government Recognition. There was lack of coordination between private school administrators and the Schools Division Office of DepEd Sorsogon City.
3. As reflected in the Division Profile of Private Schools for SY 2017-2018, the work strategy employed is effective in achieving 100% grant of Government Permit and Recognition to Private Schools in Sorsogon City.
4. The private school administrators are very satisfied with the technical assistance and work strategy employed in assisting them through the process of application for Government Permit and Recognition.

RECOMMENDATIONS

In view of the above conclusions, the following recommendations are given:

1. Transactions in Government Offices must be efficient. Government employees must adhere to mandates of RA 9485 known as An Act to Improve Efficiency in the Delivery of Government Service to the Public by Reducing Bureaucratic Red Tape, Preventing Graft and Corruption, and Providing Penalties as reiterated in Memorandum Circular No. 12, s. 2008, which in this case, employees of the Department of Education.
2. There must be proper coordination between the Schools Division Offices of DepEd and the respective schools within and under its governance, both public and private, to ensure effective information dissemination and advocacy.
3. The work strategy employed in this action research, or a similar intervention, must be adopted in all sections of the Schools Division Offices to ensure satisfactory service to clienteles.
4. The satisfaction of clienteles must be a primary concern of all employees, both in public and private agencies.

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CORRELATION OF SECONDARY SCHOOL PERSONNEL'S LEVEL OF DISASTER PREPAREDNESS TO THEIR FREQUENCY OF EXPERIENCE AND SEVERITY OF IMPACT OF THE NATURAL HAZARD OCCURRENCES

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ABSTRACT

The main concern of this paper is to determine whether the secondary school personnel's level of disaster preparedness has a significant relationship to their frequency of experience and the severity of the impact of the natural hazard occurrences. The descriptive-correlational method was used in this study with 582 school personnel as respondents from the 27 secondary schools in the Congressional District I of Negros Oriental. Spearman Rho was used in testing the significant relationship. Findings reveal that the respondents' level of disaster preparedness is not enough, the frequency of experience of the natural hazard occurrences is generally rare, and the severity of the hazards' impact is not critical. Moreover, there is no significant relationship between the respondents' frequency of experience on the natural hazard occurrences and their level of disaster preparedness in all aspects. It implies that the respondents' frequency of experience on the natural hazard occurrences has no effect whatsoever on their level of disaster preparedness. Furthermore, the severity of the hazards' impact and their level of disaster preparedness in terms of awareness of the school community to the threats and impacts of hazards, risks and vulnerabilities, skills of the school community to cope with the negative impacts of a disaster, and capacity of the institution have significant relationships with moderate positive correlation. This suggests that as the severity of the hazards 'impact increases, the respondents' level of disaster preparedness also increases. It can be indicated that the experience of personal injury or material losses during a disaster can motivate the people to become more prepared for future disaster events.

Keywords: Disaster Preparedness, Frequency, Impact, Secondary School Personnel

INTRODUCTION

In the recent years, dramatic increases in the frequency and impact of the natural hazard occurrences have been experienced around the globe (Ozmen, 2006)) The Philippines as one of the most disaster-prone countries has experienced its share of disasters. According to COA (2014) due to the countries geographical circumstances along two major tectonic plates of the world – the Eurasian and Pacific Plates – it experiences an average of 20 earthquakes per day or 100 to 200 earthquakes every year. There have been 90 destructive earthquakes in the country in the past 400 years. There are also 300 volcanoes in the country, 22 of these are active and 36,289 kilometers of its coastline is vulnerable to tsunami. Typhoons or tropical cyclones are also perennial threats to the country due to its location along the typhoon belt on the North Pacific Basin in the Pacific, where 75% of typhoons originate.

Aside from geographical factor, the modernization of societies worldwide and the harmful effects of the industrial activities have contributed to the environment, many weather-related natural hazards have gained in both frequency and intensity which translates to the increased global impact of disasters at all levels (Sharrieff, 2017).

These disaster events can cause catastrophic impacts on societies, schools, environment, and economy of the affected countries. In the Philippines, Super Typhoon Yolanda in 2013 killed 6,300 people and damaged 3,171 schools (Geronimo, 2013). The 7.2 magnitude earthquake in Bohol in 2013 had a total of Php 2,203,930,000 worth of damaged roads, bridges, flood control, school buildings, hospitals, and other public buildings (NDRRMC, 2013). The 6.9 magnitude earthquake in Negros Oriental in 2012 killed 58 people and damaged government and private infrastructures, agriculture, school buildings, and other properties (Pal & Baesa, 2012).

In other countries, data from SEAMEO (2014) showed that Cambodia experienced extreme floods making academic institutions inaccessible and causing students to drop out. Malaysia's monsoon season likewise affects schools in the country. In Indonesia, more than 70% of schools were found to be prone to earthquake.

Disaster occurrences seriously hamper the education process in many ways, with human losses and injuries, school property damage, students have to leave school for long periods in the recovery period, and their families need their help in providing basic needs (FEMA, 2007). They deprive the students of their right to a continuous quality basic education in a safe environment and threaten the lives of children, their families, and education personnel (School Disaster Risk Reduction Manual, 2012). School preparedness is always the best way to face future disasters to make sure that in the event of a catastrophe, the loss of life is at very least minimal (Smart Schools Program, 2012).

Knowledge about the frequency and severity of impacts of natural hazard occurrences are used as bases for all disaster preparedness activities (FEMA, 2007). Disaster preparedness managers must have the accurate knowledge on the various kinds of hazards to which their communities are vulnerable, and understand the basic characteristics of these hazards such as speed of onset, scope and duration of impact, and potential for producing casualties and property damage as basis in the identification of suitable and effective interventions (FEMA, 2014). Preparedness must start with knowing the facts first (Sutton & Tierney, 2006). It is based on a good risk analysis (UN-OCHA, 2013).

Some researches indicate a correlation between disaster preparedness and severity of previous disaster experience. Espina & Calleja (2015) claim that the severity of previous disaster experience and risk perception predict disaster preparedness. Further, it shows that people who experienced more losses and damage from previous disasters seemed to prepare more for disasters. The study of Sharrieff (2017) shows that how well the negative impacts of a disaster event is handled by the community has much to do with the severity of the impact and the level of preparedness and resilience of the subject impacted.

It is in this context that this study was undertaken. After determining the correlation of the school personnel's level of disaster preparedness to their frequency of experience and the severity of the impact of the natural hazard occurrences, proper interventions can be proposed to reduce the impacts of disaster and improve the level of disaster preparedness of the school communities.

STATEMENT OF THE PROBLEM

The Philippines has suffered from an inexhaustible number of deadly typhoons, earthquakes, volcano eruptions, and other disasters. People must have learned from these disaster events to become more prepared for disasters. It is in this light that the researcher felt the need to test whether or not the respondents' frequency of experience and severity of the impact of the natural hazard occurrences have significant relationships to their level of disaster preparedness.

Specifically, this study answers the following questions:

1. What is the secondary school personnel's frequency of experience on the natural hazard occurrences in their respective school communities?
2. What is the severity of the hazards' impact experienced by the school personnel in their respective school communities?
3. What is the secondary school personnel's level of disaster preparedness in their respective school communities in terms of:
   - 3.1 awareness of the school community to the threats and impacts of hazards, risks, and vulnerabilities;
   - 3.2 skills of the school community to cope with the negative impact of a disaster;
   - 3.3 capacity of the institution;
   - 3.4 school disaster preparedness plans and policies; and
   - 3.5 partnership among all stakeholders?
4. Is there a significant relationship of school personnel's level of disaster preparedness to their frequency of experience and the severity of the impact of the natural hazard occurrences?

RESEARCH HYPOTHESIS

Ho1: There is no significant relationship between the respondents' frequency of experience on the natural hazard occurrences and their level of disaster preparedness.

Ho2: There is no significant relationship between the severity of the impact of the experienced natural hazards and their level of disaster preparedness

METHODOLOGY

This is a descriptive-correlational study utilizing the survey method. This is correlational as it goes to the extent of determining the association between two or more variables. It is descriptive since it describes the school personnel's frequency of experience of the natural hazard occurrences, the severity of the impact of the experienced natural hazards, and their level of disaster preparedness.

The research was conducted in 27 secondary schools offering Science, Technology, Engineering, and Mathematics (STEM) and General Academic Strand (GAS) in their senior high school based on the database of the Department of Education in 2016 in the first congressional district of Negros Oriental. The respondents of this study are the 582 school personnel which includes the teachers and school heads who willingly participated in the survey.

Spearman Rho was used in testing the significant relationship between the respondents' level of disaster preparedness and their frequency of experience and the severity of the impact of the natural hazard occurrences. It is a statistical measure of strength and direction of the association between two ranked variables.

FINDINGS

Table 1. Respondents' frequency of experience on the natural hazard occurrence in their respective school communities

Natural Hazards	Overall $w\bar{x}$ (n=27 Schools)	Description	Rank
Earthquake	3.66	Often	3
Typhoon	4.22	More Often	1
Flood	2.89	Sometimes	4
Landslide	2.22	Rarely	5
Thunder Storm	3.86	Often	2
Volcanic Eruption	1.48	Never	6
Storm Surge	1.36	Never	7
Tornado	1.22	Never	8
Tsunami	1.19	Never	9
Over-all $w\bar{x}$	**2.46**	**Rarely**	

Range of Values	**Verbal Interpretation**
4.21 - 5.00	More Often
3.41 - 4.20	Often
2.61 - 3.40	Sometimes
1.81 - 2.60	Rarely
1.00 - 1.80	Never

The results from table 1 show that typhoon, thunderstorm, and earthquake respectively are the most frequent natural hazard experienced by the secondary school personnel, but over-all, the frequency of experience of the natural hazard occurrences is generally rare. The school's exposure to these natural hazards whether frequent or not suggests that disaster preparedness measures have to be strictly complied for the school community to be ready all the time in case of their occurrences. The result of the study is similar to EM DAT: The International Disaster Database from 1990-2014 which cited typhoon as the most frequent hazard in the Philippines.

The Philippines is highly susceptible to typhoon and earthquake due to its location along the typhoon belt on the North Pacific Basin in the Pacific and along two major tectonic plates of the world (COA, 2014).). Thunderstorms also occur frequently in the country due to its location near the equatorial zone (Philippine Disaster Risk Reduction Resource Manual, 2008).

Table 2. Severity of the hazards' impact

Natural Hazards	Overall $w\bar{x}$ (n=27 Schools)	Description	Rank
Earthquake	2.90	Moderate	1
Typhoon	2.67	Moderate	2
Flood	2.11	Negligible	4
Landslide	1.81	Negligible	5
Thunder Storm	2.24	Negligible	3
Volcanic Eruption	1.14	None	7
Storm Surge	1.10	None	8
Tornado	1.31	None	6
Tsunami	1.06	None	9
Over-all $w\bar{x}$	**1.82**	**Negligible**	

Range of Values	**Verbal Interpretation**
4.21 - 5.00	Catastrophic
3.41 - 4.20	Critical
2.61 - 3.40	Moderate
1.81 - 2.60	Negligible
1.00 - 1.80	None

The findings from table 2 reveal that hazards' impact to the school communities is generally not critical. Only earthquake and typhoon are cited with a moderate severity of impact which suggests that their vulnerability factors have to be addressed accordingly to reduce their impact. Preparedness measures on typhoons and earthquakes can be given more attention and priority by the school authorities without compromising the disaster preparedness efforts of other natural hazards. This study is contrary to the statistics of EM DAT: International disaster database in terms of ranking which shows typhoon as the most disastrous disaster that affected the Philippines based on Typhoon Yolanda (Haiyan) in 2013.

Table 3. Respondents' level of disaster preparedness in their respective school communities

Level of Disaster Preparedness	Overall wx̄ (n=27 Schools)	Description
Awareness of the school community to the threats, impacts of hazards, risks, and vulnerabilities;	3.20	Satisfactory
Skills of the school community to cope with the negative impact of a disaster	3.06	Satisfactory
Capacity of the institution	3.09	Satisfactory
School disaster plans and policies	3.20	Satisfactory
Partnership among stakeholders	3.16	Satisfactory
Over-all wx̄	**3.13**	**Satisfactory**

Range of Values	Verbal Interpretation
4.21 - 5.00	Outstanding
3.41 - 4.20	Very Satisfactory
2.61 - 3.40	Satisfactory
1.81 - 2.60	Fair
1.00 - 1.80	Poor

The result of this study reveals that the level of disaster preparedness of the secondary school personnel is not enough since the preparedness measures are only done sometimes. This is strengthened by some related studies. Viloria, et.al (2013) found out that most barangays in Iligan City are unprepared to disasters due to lack of budget, lack of information, and ignorance of the residents which apparently resulted to negligence. The study of Galindo et.al (2014) showed that government and non-government organizations in Ozamiz City were not adequately prepared for natural disasters due to lack of knowledge, expertise, funds, equipment, leadership, and coordination. Labrague et.al. (2015) revealed that nurses in Catbalogan, Samar were not sufficiently prepared for disasters nor were they aware of disaster management protocols in the workplace.

Table 4. Correlation between the respondents' frequency of experience of the natural hazard occurrences and their level of disaster preparedness

Respondents Frequency of Experience on the Natural Hazard Occurrences Versus their Level of Disaster Preparedness in terms of:	rho	Verbal Interpretation	P-Value α =.05	Remarks
Awareness of the school community to the threats, impacts of hazards, risks, and vulnerabilities;	-.023	Slight correlation	.909	Not significant
Skills of the school community to cope with the negative impact of a disaster	.230	Low correlation	.248	Not significant
Capacity of the institution	.232	Low correlation	.245	Not significant
School disaster plans and policies	.243	Low correlation	.221	Not significant
Partnership among stakeholders	.260	Low correlation	.190	Not significant

r_s-values	Interpretation
±< 0.20	±slight correlation
±0.20 – 0.39	±low correlation
±0.40 – 0.59	±moderate correlation
±0.60 – 0.79	±high correlation
±0.80-1.00	±very high correlation

Data from table 4 reveal that there is no significant relationship between the respondents 'frequency of experience on the natural hazard occurrences and their level of disaster preparedness in all aspects with low correlation. This indicates that no matter how frequent or infrequent the natural hazard occurrences, it has no effect on the respondents' level of disaster preparedness. It is recommended that disaster preparedness in school must be strengthened whether these natural hazard occurrences are frequent or not.

In contrast, many studies imply the high positive correlation between the past experience and disaster preparedness. Studies reveal that past experience can increase the preparedness to a natural disaster since it influences people to gather more information about the natural disaster, it informs the individual about the probability of occurrence of similar events in the future and as a result it brings better judgment toward natural disaster preparedness recovery (Frieman et al., 2011).

Minor studies justify the result of this study. Patron et al., (2001) reveals that past experience does not always enhance disaster preparedness of individuals. Experience to disaster might not always directly affect preparedness but its indirect effect has been proven by several studies and it has shown to be one of the preparedness determinants (Lindell and Whitney, 2000). The past experience can be used by the government as a basis to improve the response and preparedness of individuals to future disasters (Said, 2011).

Table 5. Correlation between the respondents' severity of impact of the experienced natural hazards and their level of disaster preparedness

Respondents Severity of Impact of the Experienced Natural Hazards Versus their Level of Disaster Preparedness in terms of:	rho	Verbal Interpretation	P-Value α =.05	Remarks
Awareness of the school community to the threats, impacts of hazards, risks, and vulnerabilities;	.484	Moderate correlation	.010	Significant
Skills of the school community to cope with the negative impact of a disaster	.414	Moderate correlation	.032	Significant
Capacity of the institution	.468	Moderate correlation	.014	Significant
School disaster plans and policies	.347	Low correlation	.076	Not significant
Partnership among stakeholders	.344	Low correlation	.079	Not significant

r_s-values	Interpretation
±< 0.20	±slight correlation
±0.20 – 0.39	±low correlation
±0.40 – 0.59	±moderate correlation
±0.60 – 0.79	±high correlation
±0.80-1.00	±very high correlation

As presented in table 5, the respondents' severity of impact of the experienced natural hazards and their level of disaster preparedness in terms of awareness of the school community to the threats and impacts of hazards, risks and vulnerabilities; skills of the school community to cope with the negative impacts of a disaster; and capacity of the institution have significant relationships with moderate positive correlation. It implies that as the severity of hazards 'impact increases, the respondents' level of disaster preparedness also increases. This further indicates that the experience of the negative effects of the natural hazard occurrences reminds the school personnel to be always ready for disasters. Intense Information drive on hazard impacts can be done to motivate the people to be more prepared for future disasters

The findings of this study may justify the popular adage that "experience is the best teacher." The severity of hazards' impact experienced by the school personnel can make them realize the importance of preparedness.

The result of this study is strengthened by the findings of Takao et al. (2004) that the degree of damage experienced in previous disasters determines preparedness. This suggests that the experience of personal injury or injury of family members, losing family members or relatives, and/or other material losses can leave a lasting imprint on the minds of people. These experiences seem to serve as reminders of the consequences of not being prepared for disasters.

CONCLUSION

The secondary school personnel's frequency of experience on the natural hazard occurrences is generally rare and the severity of the hazards' impact is not critical. Their level of disaster preparedness is not enough since the preparedness measures are only done sometimes. There is no significant relationship between the secondary school personnel's frequency of experience on the natural hazard occurrences and their level of disaster preparedness. The severity of hazards' impact and their level of disaster preparedness in terms of awareness of the school community to the threats and impacts of hazards, risks and vulnerabilities, skills of the school community to cope with the negative impacts of a disaster, and capacity of the institution have positive correlations. Hence, it can be indicated that the severity of the hazards' impact can motivate the people to become more prepared for future disasters.

RECOMMENDATIONS

Whether the natural hazard occurrences are frequent or not, the school officials must implement the disaster preparedness measures strictly for the school community to be ready all the time. The school vulnerability factors must be addressed appropriately by the school officials to reduce the severity of hazards' impact. The school management and the entire school community can work together by conducting a regular needs assessment as the basis for interventions to improve disaster preparedness in school. Regular conduct of information drive can be done by the school authorities to inform, educate, and motivate the school community to be more prepared for future disaster events.

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FINANCIAL LITERACY OF SELECTED PROFESSIONALS: ITS EFFECTS ON THEIR FINANCES

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ABSTRACT

This research was conducted to address the predicament on financial literary of different professionals to promote sound decision-making and ensure sustained economic growth and stability. This descriptive study identified factors that affect the respondents' finances, determined their financial literacy level, and the relationship between the factors affecting finances and the financial literacy level. The primary source of data used in this study were from the responses of the fifty-six (56) Graduate students taking up graduate studies on the field of Management, Public Administration and Education at Palawan State University. A survey questionnaire developed by the researchers was employed in data gathering. To compute the relationship between the level of financial literacy and the factors that affect finances, the Pearson's correlation coefficient through SPSS ver.20 was utilized while Descriptive Statistics was used in describing other variables. This study proved that there was a significant relationship between the level of financial literacy and the factors affecting finances. This denotes that factors affecting a person's finances directly influence the level of financial literacy. With this, it is recommended that seminar or forum that promotes and teaches financial planning and financial literacy among the individuals at risk of financial illiteracy will be conducted. Taking advantage of the good economic trend and preparing oneself to combat any adverse effect of possible economic crisis, are likewise recommended.

INTRODUCTION

With the widespread financial crisis, individual borrowings had grown rapidly, specifically salary loans, car loans, mortgage loans, pawns and the likes. While changes in the design of retirement and pension benefits have significantly forced workers and individuals to be more responsible on saving, investing and accumulating fortune and not to depend solely on retirement or pension plans (Lusardi and Mitchell, 2017), every individual is bound to make complex financial decisions in many aspects of their lives such as managing daily finances, saving for the future and life investment.

With the Philippines' current economic situations, Filipinos are becoming more concerned about financial security, especially for those who lack the skills and means to survive financial market crisis and/or take advantage of its arbitrary growth. Poor financial decision-making is remarkably prevalent that usually disregarded and overlooked until such time crisis become widespread. This compels ordinary people take responsibility in formulating sound financial decisions that might affect their lives greatly.

Increasing financial literacy is everyone's concern so that correct decision to improve well-being can be made. The essence of financial literacy now is the recognition of it, especially in crafting programs essential in achieving stability and growth for both entrepreneurs and ordinary individual. Without proper understanding of the financial literacy level and its implications might lead to challenges, thus, a need for examining and studying said concept is a must.

In this manner, financial literacy has secured its relevance in every discussion aiming at forming reforms essential in surpassing financial crisis. More so, as discussed by Lusardi & Mitchell (2014), a much greater responsibility to obtain a loan, save, invest and recede assets are imposed on households along with the development of financial systems, while Braunstein & Welch (2002) said that inefficient management of money is a result of lack of financial literacy (as cited by Ergün, 2017). Indeed, lack of financial literacy has an impact on an individual's financial long-term goals attainment.

Furthermore, the level of financial literacy varies from person to person, and have different inferences based on the level of income of a country (Xu and Zia, 2012), an individual or an organization. Kempson, Perotti, and Scott (2013) discussed that countries with limited financial capability and low financial systems result to a limited ability of individuals and households to maximize their financial resources, carefully plan their consumption, and control risks. Manulife Philippines revealed that Filipino's high level of personal debts surpassed their rising financial discipline even though generally, Filipinos are prudent savers as mentioned in an article published by The Manila Times (2016). This can be translated that the level of financial awareness among Filipinos is considerably low.

Due to recent stories and/or instances of ballooning borrowings, over indebtedness and bankruptcy in the Philippines, increasing financial literacy is now a general concern. But what really is financial literacy? Why is it important for a person to be financially knowledgeable? How does it affect a person's future or life in general?

Several definitions and discussion can be found and extracted from different literatures and studies. Lusardi and Mitchell (2017) defined financial literacy as the ability of the people to deal with financial information needed for formulating educated decisions on financial planning, amassing wealth, debt, and retirement funds. Similarly, Huston (2010) defined financial literacy as an evaluation of individual's capacity to be familiar with and utilize personal finance-related information. Said definitions are to be summed up as a person's capacity to know, process and make use of financial information he possesses and make clear and calculated decisions appropriate or based on what financial data he has. The discussions of Kempson, Perotti, and Scott (2013) have agreed with the previous notions on financial literacy as they said that financial literacy focuses on people's understanding of how interest rates work, the principal value, and the like.

The result of the study conducted by Lusardi and Mitchell (2011) manifested that financial literacy is evidently low among those who are less educated and low-earners since basic financial understanding played important role on a person's ability to save. They further discussed that planning and financial know-how are interrelated and that financial literacy played a role on saving and investments.

Correspondingly, the study of Máté, Kiss, Takács, and Molnár (2016) which concludes that in order to make consumers empowered in financial markets, enhancing financial education is an effective policy response to improve the level of a person's financial knowledge. This agrees with Xu and Zia (2012) who in their study showed that enhancing financial literacy programs must be tailored to the needs of their target audience, consider interventions that corresponds to ensuring effectiveness.

Alongside many studies pertaining to financial literacy, reviews on the factors affecting financial literacy come at hand as well. Abdullaha and Chong (2014) enumerated and discussed several factors affecting one's financial literacy such as age, sex, social status, culture, socio-demographic, and even educational attainments. This in turn requires a person effectively plan and make wise financial decisions necessary for the attainment of his long-term financial stability (Anderson, Baker, Robinson, 2016).

Different notions previously discussed and presented based on the different and related studies support this present study which deals with financial literacy. This study however, concentrates on the assessment of the financial literacy of different professionals which can be determined by numerous variables such as factors affecting their finances, their financial knowledge and their sources of income.

STATEMENT OF THE PROBLEMS/ OBJECTIVES

The purpose of this study was to assess the financial literacy of different professionals which can be determined by numerous variables such as factors affecting their finances, their financial knowledge and their sources of income.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents;
2. What is the level of the respondent's financial literacy;
3. What are the factors affecting the respondents' finances; and

4. Is there a significant relationship between the level of financial literacy of the identified professionals and the factors affecting one's finances?

This study was conducted to deal with the dilemma on financial literary of different professionals to promote sound decision-making and ensure sustained economic growth and stability. Furthermore, the relationship between the level of financial literacy and factors affecting one's finances will be investigated. Understanding the factors affecting a person's finances, his/her financial knowledge and sources of income would lead to formulation and implementation of possible ways to strengthen financial status and financial literacy of the identified professionals.

METHODOLOGY

a. Design
   The study used a quantitative research method where survey questionnaires were utilized in gathering data or information. Descriptive approach was employed to assess the respondents' level of financial literacy and the factors affecting their finances while correlation method through Statistical Package for Social Sciences (SPSS) ver.20 was utilized in determining the relationship between the level of financial literacy and factors affecting one's finances.

b. Sampling
   This study used a stratified sampling technique where samples from the three (3) graduate programs of PSU-GS were computed and taken to complete the computed sample size. A total of 56 professionals taking graduate studies from the fields of Management and Public Administration, and Education served as the respondents.

c. Data Collection
   A self-completed type of survey questionnaire crafted by the researcher was utilized and personally administered by the researcher to the respondents. Survey questionnaire was developed in two (2) parts. The first part was a supply-type to get the demographic profile of teachers while the second part is in a likert scale format composed of thirty (30) likert items which deal with respondents' financial literacy and factors affecting their finances. It was designed to collect the respondents' perspective on the level of teachers' financial awareness and the factors that affect their finances. The crafted questionnaire was formulated and was reviewed and approved by the collaborating faculty to ensure its validity.

d. Data Analysis
   Data collected were tabulated and presented in tables. Each item was analyzed separately using parametric tests. Descriptive analysis was done using Statistical Package for the Social Sciences (SPSS) ver.20.

RESULTS AND DISCUSSIONS

This part presents and analyzes data that answer the subsidiary problem of the study. These are arranged based on how the research problems were arranged.

Table 1: Respondent's Age

n=56		
Class Interval	Frequency	Percentage
21 – 25	15	27
26 – 30	12	21
31 – 35	14	25
36 – 40	7	12
41 – 45	2	4
46 – 50	3	5
51 – 55	2	4
56 – 60	1	2
Total	56	100

Table 1 shows that majority of the respondents' age were between 21 to 35 years old as 15, 12 and 14 respondents whose age fall under 21-25, 26-30 and 31-35 age brackets, respectively. On the other hand, a total of 8 respondents were aged between 40 to 60 years old with only 2, 3, 2 and 1 respondents under the age brackets of 41-45, 46-50, 51-55 and 56-60 respectively.

Table 2: Respondent's Salary Bracket

n=56		
	Frequency	Percentage
Below 15,000	15	27
15,001-30,000	38	68
30,001-45,000	2	4
45,001-60,000	1	2
more than 60,000	0	0
Total	56	100

As indicated in Table 2, majority of monthly income of the respondents falls under the bracket P15,001 – P30,000.00 having a percentage of 68% and only few have an income more than P30,00.00.

Table 3: Respondent's Sex

n=56			
		Frequency	Percentage
Valid	Female	42	75
	Male	14	25
	Total	56	100

Table 3 shows that the respondents were composed of 42 females and 14 males with 75 and 25 percentages respectively. The respondents of this research were randomly selected regardless of their sex.

Table 4: Respondent's Civil Status

n=56			
		Frequency	Percentage
Valid	Single	28	50
	Married	28	50
	Total	56	100

Respondents' civil or marital status are presented on Table 4. It shows that half of the respondents are single and the other half are married.

Table 5: Respondent's Dependents

		Frequency	Percent
Valid	0	32	57.1
	1	7	12.5
	2	14	25.0
	3	2	3.6
	5	1	1.8
	Total	56	100.0

While Table 4 revealed that 50% of the respondents are single, Table 5 on the other hand, divulged that majority of the respondents has zero or with only 1 or two dependents. It means that most of the respondents spend their income only for themselves.

Table 6: Descriptive Statistics of Respondent's Financial Literacy Level

n=56			
Financial Literacy Indicators	**Mean**	**Std. Deviation**	**Interpretation**
I have a bank account	4.1	1.16427	Agree
Weekly/monthly budgeting is important	4.5	0.83121	Strongly Agree
I set long-term and short-term financial plans	4.0	0.78542	Agree
Keeping a record of my income and expenses is a need	3.8	0.93628	Agree
Whenever I have extra money, I will surely invest it	3.9	0.84034	Agree
I keep a portion of my salary as savings	3.8	0.91435	Agree
Compare prices of goods before buying	4.3	0.93263	Strongly Agree
Knowing interest rates, either for a loan or investment is necessary	4.2	0.95329	Strongly Agree
I am aware of a high-yielding deposits	3.8	0.90292	Agree
Having only one source of income is not enough	4.3	0.92862	Strongly Agree
Enjoy life when you still can	4.1	0.94731	Agree
I let circumstance take care of itself	3.0	1.19087	Neutral
Praying diligently solves my financial problems	3.6	1.00647	Agree
I am having a hard time sticking to my budget allocations	3.3	0.91666	Neutral
I have high hope in winning a lottery and/or raffle draws	2.5	1.26478	Disagree
Bonuses, 13th month pay and the like are usually spent before it is received	2.1	1.18212	Disagree
I rely only to my salary to cover my needs and my family's	3.3	0.95193	Neutral
I usually take a loan whenever there is a need	3.0	1.18308	Neutral
A house is a good investment	3.7	1.02549	Agree
There are shortcuts in becoming rich	1.9	0.99593	Disagree

Interest Survey Scale:
1.0 – 1.8 = Strongly Disagree
1.9 – 2.6 = Disagree
2.7 – 3.3 = Neutral
3.4 – 4.1 = Agree
4.2 – 5.0 = Strongly Agree

The level of financial literacy as reflected in the table above was translated using the survey scale: 1-1.8 as Strongly Disagree, 1.9-2.6 as Disagree, 2.7-3.4 as Neutral, 3.5-4.2 as Agree, and 4.3-5 as Strongly Agree. As shown in Table 6, respondents have strongly agreed to financial literacy indicators: (1) budgeting is important; (2) comparing prices of goods before purchasing; (3) enough knowledge on interest rates is a must; and (4) having only one source of income is not enough. The result suggests that financial literacy is indeed the ability of a person to formulate sound financial decisions such as accumulating fortune, obtain a reasonable loans and secure a good retirement plans (Lusardi and Mitchell, 2017). Whilst having high hopes in winning a lottery and the like, spending before receiving bonuses or 13th month pay, and thinking that there are shortcuts in becoming rich are the financial literacy indicators the respondents disagreed with. It is a good indication that there is a good financial literacy level amongst the respondent, however, it is noted that their stand on letting circumstance take care of itself, sticking to budget allocations, relying solely on their salary, and obtaining a loan as the need arises are neutral or undecided whether to agree or disagree. This might be a deviation from the previous claims of different researchers such as Huston (2010) and Kempson, Perotti, and Scott (2013) where a person assumed to be financial literate is knowledgeable and is able to process and utilize financial information properly.

Table 7: Descriptive Statistics of Factors Affecting Finances

n=56			
Factors	Mean	Std. Deviation	Interpretation
Household expenses (electric/water bills, food, etc.)	4.0	0.99021	Agree
Pursuing graduate studies	3.9	0.94250	Agree
Hospitalization/ Medical Expenses	3.7	1.01098	Agree
Children's education	3.6	1.30122	Agree
Seminars/Trainings Attendance	3.4	1.15643	Agree
Savings	3.4	1.02549	Agree
Personality enhancement/Fashion -related expenses	3.1	1.02438	Neutral
Vacation/travel-related expenses	3.4	0.89279	Agree
Transportation/ gasoline expenses	3.6	1.08592	Agree
Communication related expenses	3.5	0.97218	Agree

Interest Survey Scale:
1.0 – 1.8 = Strongly Disagree
1.9 – 2.6 = Disagree
2.7 – 3.3 = Neutral
3.4 – 4.1 = Agree
4.2 – 5.0 = Strongly Agree

It was revealed in Table 7 that all of the factors affecting person's finances have agreed upon by the respondents except personal enhancement or fashion-related expenses. It only means that the respondents are more likely frugal in spending on something least needed. This is in support with Abdullaha and Chong (2014) findings summed up factors that affects financial literary such as sex, social status and among others.

Table 8
Correlation Between Financial Literacy Level and Factors Affecting Finances

Factors affecting finances	Financial Literacy Level		Interpretation
	Pearson Correlation	Sig. (2-tailed)	
Household expenses (electric/water bills, food, etc.)	.422**	0.001	Significantly correlated
Pursuing graduate studies	.481**	0.000	Significantly correlated
Hospitalization/ Medical Expenses	.537**	0.000	Significantly correlated
Children's education	.514**	0.000	Significantly correlated
Seminars/Trainings Attendance	.510**	0.000	Significantly correlated
Savings	.337*	0.011	Significantly correlated
Personality enhancement/Fashion-related expenses	.357**	0.007	Significantly correlated
Vacation/travel-related expenses	.428**	0.001	Significantly correlated
Transportation/ gasoline expenses	.474**	0.000	Significantly correlated
Communication related expenses	.401**	0.002	Significantly correlated
Valid N List	56		

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

CONCLUSIONS

Based on the results and findings of this study, the researcher hereby concludes that:

There is a significant relationship between the respondents' level of financial literacy and the factors that affects their finances. Their understanding and ability to process and use financial information may directly influence factors affecting their finances.

RECOMMENDATIONS

Having carefully evaluated all the gathered data, recommendations as follows were formulated:

Conduct activities such as seminar or forums that promote and teach financial planning and financial literacy among the individuals at risk of financial illiteracy.

Good financial practices must begin at home. Parents must educate their children about financial planning, correct management of finances and the like as early as possible to inculcate with the children the concept of financial literacy. However, there is still a need for a conduct of a proper financial education.

Take advantage of the good economic trend and better prepare oneself to combat any adverse effect of a possible economic crisis would bring.

This present study had limitations such as small size, limited area coverage and the like, thus, a similar study in a broader scale must be conducted to further discover more facts on the field of financial literacy.

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