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#### EPISTEMOLOGICAL BELIEFS, MISCONCEPTIONS AND ACADEMIC PERFORMANCE OF COLLEGE STUDENTS IN PLANE TRIGONOMETRY AND SELECTED CORRELATES

MARIA CECILIA GARO-UY

Doctor in Mathematics Education

#### ABSTRACT

This study is directed towards investigating the epistemological beliefs about mathematics as well as misconceptions and academic performance of CSU Piat students in Plane Trigonometry and their selected correlates. The study is basically a quantitative research utilizing the descriptive-correlational research design. A total of 261 participants were covered in the study from the three colleges, namely: College of Agriculture, College of Criminal Justice and Administration and College of Information Technology. The Epistemological Beliefs Survey for Mathematics (EBSM) was utilized to measure the Mathematics Belief Scale of the participants. This study adopted various descriptive statistics used for data analysis such as weighted mean, ANOVA and Pearson Product Movement Correlation. Descriptive statistics revealed that first year students of Cagayan State University (CSU) Piat Campus do not meet the minimum competency and mastery level of basic and tertiary mathematics. Such poor academic performance is principally attributed to some misconceptions about essential concepts, procedures and principles in Mathematics. Significantly, they have less developed epistemological beliefs, understandings and appreciations of the nature of Mathematics as a discipline. Furthermore, females and those enrolled in the College of Agriculture have less understanding of the nature and learning process in mathematical knowledge. Interestingly, although females have less developed epistemological beliefs in Mathematics, they nonetheless, performed better in their Plane Trigonometry subject which explains the absence of correlation between epistemological beliefs and Mathematics performance. It must be noted that, academic performance in Plane Trigonometry cannot be attributed to a single factor like epistemological beliefs because there are numerous factors that interplay in one's understanding and mastery of the subject. Finally, the correlates of academic performance in Plane Trigonometry are high school Mathematics grade and first semester College Mathematics grade. This showed a direct relationship between Basic Mathematics and College Algebra arades in influencing one's performance in Plane Trigonometry.

*Keywords:* Epistemological beliefs, misconception, academic performance, Plane Trigonometry

#### INTRODUCTION

Assumptions or beliefs about knowing and knowledge, termed as "epistemological beliefs," play an important role in the learning process. To understand how students learn a subject, it is essential to examine their understanding and viewpoints about it. It is said that the goal of education is to foster epistemological development, indicative of broader intellectual development. This is framed on the idea that learning is influenced by the epistemological beliefs that individuals hold.

Epistemology plays a vital role in students' knowledge, reasoning, study strategy and participation. It can also be a strong indicator for teachers to understand students' behavior and thinking as well as why they enjoy learning the subject and obtained high academic performance in it. The explanation to this is posited by Schommer-Aikins & Hutter (2012), who asserted that "individuals" beliefs about the nature of knowledge and learning are linked to their comprehension, math comprehension, interpretation of information, and persistence in working on difficult academic tasks. In college, Mathematics is personally observed as a barrier to success for many students. It is viewed as a difficult subject to master due to its symbolic and abstract nature. Students who are unsuccessful in mastering mathematics skills lose opportunities to finish their degree. This can be explained by the fact that students' success in a developmental mathematics course has a direct effect on success in subsequent mathematics courses and ultimately persistence in college (Penny & White, 2013). Significantly, factors affecting students' success in mathematics are the students' personal epistemological beliefs about Mathematics. Educators believed that students' beliefs about the nature of knowledge in mathematics may affect the way in which they approach the task of learning Mathematics. When students memorize the knowledge in order to learn, they are said to be rote learners. If the students try to understand the knowledge by relating it to other knowledge, then, they are said to be meaningful learners.

Plane Trigonometry is an area of Mathematics that students believe to be particularly difficult and abstract as compared with the other Mathematics subjects. Trigonometry is also an important school

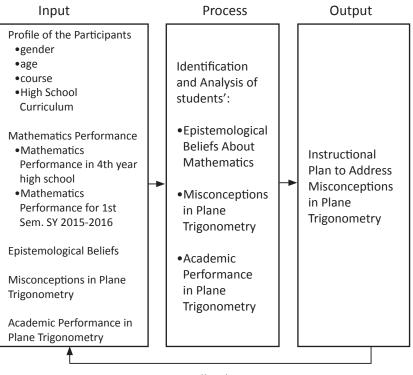
subject, not only in Mathematics but also in other disciplines. It has many important applications in engineering, astronomy, physics, architecture, and so on. In terms of Mathematics, it is one of the fundamental topics in the transition to Advanced Mathematics and its applications. A firm understanding of Trigonometric functions is required in Calculus and Math analysis. Hence, Trigonometry has an important place in the curriculum of Agriculture, Education, Criminology, Information Technology, Veterinary Medicine and the like.

Learning Plane Trigonometry may carry with it some misconceptions. Usually, serious misconceptions can arise when students are introduced to new mathematical meanings. This may be that they are not so ready to exploit the new mathematical meanings or this may be that the new mathematical meanings are so abstract. In order to avoid serious misconceptions, it is essential to assess students' understanding of new concepts by observing their own use of the terminology or concept. Significantly, the misconceptions interfere with students' learning when they use them to interpret new experiences. These misconceptions are big impediments in students' meaningful learning which affect their academic performance in the subject. More importantly, the students' permanent mistakes in this subject create great difficulties for the mathematics educators to reach their goals if these are not resolved on time.

On a personal note, the researcher has observed that numerous students experienced difficulty learning Trigonometry and they manifested numerous misconceptions and low academic performance in the subject. More than 50% of her students experienced difficulty and committed misconceptions in learning Plane Trigonometry. This poses her to ask whether or not the students' epistemological beliefs in Mathematics influence their misconceptions and academic performance. It is in this context that this study has been conceptualized in order to investigate their epistemological beliefs about Mathematics as well as their misconceptions and academic performance of students at CSU Piat in Plane Trigonometry. This is done with the end goal of developing an instructional intervention to address their misconceptions.

#### **Conceptual Framework**

The result of the assessment was used to come up with an instructional plan to address misconceptions in Plane Trigonometry. The feedback assessed whether the enhancement program from the output will be attained and will be fitted based on the inputs and processes involved in the study.



Feedback Figure 1. Paradigm of the Study

Figure 1 presents the paradigm of the study. As the paradigm reflects, the input of the study is the profile of students in terms of gender, age, course and high school curriculum students' Mathematics performance, Epistemological Beliefs, Misconceptions in Plane Trigonometry and academic performance in Plane Trigonometry. The process utilized in the study is the identification and analysis of the students' epistemological

beliefs about Mathematics, misconceptions and academic performances in Plane Trigonometry. Unraveling these concepts become the bases for crafting the output of the study, which is the instructional intervention addressing the misconceptions, redirecting unfavorable beliefs and increasing the academic performance of the students in Plane Trigonometry. Moreover, four (4) inferential questions were tested in the study. First, there is no significant difference in the participants' epistemological beliefs about Mathematics when grouped according to their profile variables. Second, there is no significant difference in the participants' academic performance in Plane Trigonometry when grouped according to their profile variables. Third, there is no significant relationship between the academic performance of the participants in Plane Trigonometry with their epistemological beliefs about Mathematics as well as their Mathematics performance. Lastly, there is no significant relationship between the students' Mathematics performance and their epistemological beliefs about Mathematics.

#### Statement of the Problem

This study is directed towards investigating the epistemological beliefs about mathematics as well as misconceptions and academic performance of CSU Piat students in Plane Trigonometry and their selected correlates.

Specifically, the study investigated the following research questions:

- 1. What is the profile of the students in terms of gender, age, course, and high school curriculum?
- 2. What is the students' performance in mathematics as reflected in the mathematics performance in 4th year high school and mathematics performance for 1st Sem. SY 2015-2016?
- 3. What is the level of students' epistemological beliefs about mathematics with respect to the Source of Knowledge, Certainty of Knowledge, Structure of Knowledge, Speed of Knowledge Acquisition, Innate Ability and Real World Applicability?

- 4. Is there a significant difference in the participants' epistemological beliefs about mathematics when grouped according to their profile variables?
- 5. What is the participants' academic performance in Plane Trigonometry?
- 6. Is there a significant difference in the students' academic performance in Plane Trigonometry when grouped according to their profile variables?
- 7. Is there a significant relationship between the participants' academic performance in Plane Trigonometry and their epistemological beliefs about Mathematics, and Mathematics performance?
- 8. Is there a significant relationship between the students' Mathematics performance and their epistemological beliefs about Mathematics?
- 9. What are the students' misconceptions in Plane Trigonometry?
- 10. What instructional intervention can be crafted to address students' misconceptions and to enhance students' performance in Plane Trigonometry?

#### METHODOLOGY

#### **Research Design**

The study is basically a quantitative research utilizing the descriptivecorrelational method. The descriptive component of the study was the determination of the profile of participants, their mathematics performance in 4th year high school and their Mathematics performance for 1st Semester SY 2015-2016. Other descriptive elements of the study are the participants' epistemological beliefs about Mathematics, their academic performance in Plane Trigonometry and their misconceptions in Plane Trigonometry. On the other hand, a correlational analysis on the academic performance of the participants in Plane Trigonometry with their epistemological beliefs about mathematics as well as their mathematics performance; was undertaken. Further, the study investigated whether there is a significant relationship between the students' Mathematics performance and their epistemological beliefs about Mathematics.

#### Participants of the Study

The participants (n=261) of the study were the students enrolled in Plane Trigonometry for 2nd Semester, SY 2015-2016. These students came from three (3) colleges, namely: College of Agriculture, College of Criminal Justice and Administration, and College of Information Technology. The sample size was obtained by using the Slovin's formula at 5% margin of error. Simple stratified sampling was utilized to determine the sample size taken in each college.

#### Instrumentation

The Epistemological Beliefs Survey for Mathematics (EBSM) was utilized to measure the Mathematics Belief Scales of the participants. The instrument was developed by Peter Kloosterman and Elizabeth Fennema (2005). It is a 75-item instrument that uses a Likert-type format in a strongly agree, agree, uncertain, disagree, or strongly disagree continuum. Essentially, the instrument measures six (6) dimensions of epistemological beliefs, namely; (a) source of knowledge, (b) certainty of knowledge, (c) structure of knowledge, (d) speed of knowledge acquisition, (e) innate ability, and (f) real world applicability. The misconceptions of the students were determined from the results of the summative test in Plane Trigonometry. The items in the summative test were obtained from the test item bank of the researcher. The summative test was thoroughly checked by the adviser and other Mathematics teachers teaching Plane Trigonometry at CSU Piat. The result of this test was analyzed through the solutions presented by the students. Specifically, these learning tasks ascertained the participants' misconceptions related to (a) mathematical object and symbol or given facts; (b) misconceptions related to process; and (c) misconceptions related to prior knowledge. The academic performance of the students was measured using their final grade in Plane Trigonometry. These data, together with their Mathematics grades in fourth year high school and Mathematics grade point average for 1st semester, SY 2015-2016, were obtained from the Office of the Registrar in CSU Piat.

#### Data Gathering Procedure

After the study has been approved by the panel of examiners of SPUP Graduate School, the researcher sought permission from the Campus Executive Officer of CSU Piat for the conduct of the study. Moreover, similar request letter was also given to the different College Deans to administer the questionnaire on Epistemological Beliefs Survey for Mathematics (EBSM) and the summative test in Plane Trigonometry. Another letter was prepared for the Campus Registrar seeking for the release of the participants' final grade in Plane Trigonometry, mathematics grade point average for 1st semester, SY 2015-2016 and mean grade in fourth year high school mathematics subjects. The questionnaire on Epistemological Beliefs on Mathematics was administered personally by the researcher to the participants. This was done for two reasons. One is to allow her to explain the intent of the study and to ensure that everything was clearly understood. Second is to guarantee 100 percent retrieval of the questionnaires. During the administration of the questionnaires, questions were entertained as well as issues and concerns that the participants need to clarify. The administration of questionnaires to the participants was done as a group through a schedule duly approved by the college deans. It was undertaken in any of the rooms of the different colleges. The examination lasted for 15-20 minutes at an average.

#### Data Analysis

Descriptive statistics was used to analyze the mean grade in fourth year high school mathematics, mathematics grade point average for 1st semester, SY 2015-2016, epistemological beliefs in Mathematics, misconceptions and academic performance in Plane Trigonometry. These include frequency count, percentage and mean.

Since the items in the Epistemological Beliefs Survey for Mathematics (EBSM) are written in naïve order, the computed overall mean, higher than 3 as a midpoint, conveys naïve, immature and less sophisticated epistemological beliefs. Conversely, computed overall mean, less than 3, reveals mature, sophisticated and developed epistemological belief.

To further analyze the mean mathematics performance and academic performance in Plane Trigonometry, the scale used was (95 - 100) Excellent; (90 - 94) Very Satisfactory; (85 - 89) Satisfactory; (80 - 84) Fair; (75 - 79) Poor and (Below 75) Very Poor.

Furthermore, the misconceptions were analyzed qualitatively through the assistance of the three (3) teachers teaching Plane Trigonometry. The basis for analysis was the summative test prepared by the researcher for the subject. To determine the significant difference in the epistemological beliefs and academic performance in Plane Trigonometry when grouped according to their profile variables, One-way ANOVA was used. However, Pearson Product Moment Correlation was utilized to investigate the significant relationship between epistemological beliefs and academic performance in Plane Trigonometry, Mathematics performance in 4th year high school and Mathematics performance for the 1st Semester SY 2015 - 2016. Finally, the hypotheses in the study were tested at 0.05 level of significance.

#### **RESULTS AND DISCUSSION**

#### Participants' Profile

Majority or 57.85% of the participants are female; most or 49.04% of them are 17 years of age; and are graduates of Basic Education Curriculum (BEC).

#### Students' Performance in Mathematics

Result revealed that the participants' mean grade for 4th year high school mathematics and mean grade for 1st Semester college mathematics both have a descriptive interpretation of "fair" with a weighted mean of 79.51. The "fair" performance grade in high school mathematics of the participants implied that they have not met the minimum competencies desired in the subject. Moreover, they have not mastered the basic concepts required in high school mathematics.

#### Level of students' epistemological beliefs about Mathematics

Result unveiled that the participants hold naïve, immature and less sophisticated epistemological beliefs about Mathematics as reflected by the overall weighted mean which is greater than 3.73. They are more inclined to believe that mathematical knowledge is handed down by authority, absolute, isolated, quick, fixed at birth and exclusive concern of mathematicians.

### Significant difference in the participants' epistemological beliefs about Mathematics when grouped according to their profile variables

ANOVA test showed a significant difference in the epistemological beliefs of the participants based on sex and course but not for age and curriculum. The difference in the epistemological beliefs along speed of knowledge and innate ability of the participants based on sex reveals that females tend to be more naïve, immature and less sophisticated in their epistemological belief about Mathematics as compared to males. On the other hand, participants from the College of Agriculture hold naïve and immature belief compared to their counterparts with respect to all dimensions of epistemological beliefs.

#### Participants' academic performance in Trigonometry

Result indicated that the academic performance of the participants in Plane Trigonometry has a descriptive interpretation of "poor". The highest grade obtained is "excellent" while the lowest is "very poor" with an overall mean of 77.59. The "poor" academic performance of the participants in Plane Trigonometry reveals that they have not obtained the minimum level of the basic competencies required in the course. In short, they have not reached a "satisfactory level" or "mastery" of the basic concepts in the subject. It also conveys that there is much to be done to further improve their competency in this course.

#### *Difference in the participants' academic performance in Plane Trigonometry when grouped according to their profile*

ANOVA test revealed that except for sex, there is no significant difference in the academic performance of the participants in Plane Trigonometry when they are grouped according to course, age and high school curriculum. Significantly, females have better academic performance in Plane Trigonometry than the males.

#### Relationship between the participants' academic performance in Plane Trigonometry and their epistemological beliefs about Mathematics

Pearson-r test implied no significant correlation between the participants' academic performance in Plane Trigonometry and their epistemological beliefs except for certainty of knowledge. On the other hand, there is a significant negative association between participants' epistemological belief along certainty of knowledge and academic performance in Plane Trigonometry. They just rely on what they have learned in the past from their previous mentors on how to solve problems and they do not exert effort to question, challenge and modify what has learned and taught to them.

#### *Relationship between the participants' academic performance in Plane Trigonometry and their Mathematics performance*

Pearson-r test indicated a significant correlation between academic performance in Plane Trigonometry and their Mathematics performance. Participants who performed well in their 4th year mathematics and 1st semester college mathematics performed better in their Plane Trigonometry. In short, there is a direct relationship between these variables, that is, students' mathematics performance influences to a great extent their performance in Plane Trigonometry.

## Relationship between the participants' fourth year high school mathematics performance and their epistemological beliefs

Pearson-r test showed no correlation between the participants' high school mathematics performance and their epistemological beliefs except for real world applicability. The participants' high school mathematics performance is not influenced by their epistemological beliefs. However, there is a significant relationship between participants' mathematics performance in 4th year high school and their epistemological beliefs along real world applicability.

### *Relationship between the participants' 1st semester college Mathematics performance and their epistemological beliefs*

There is no significant relationship between the participants' 1st semester college mathematics performance and their epistemological beliefs along source of knowledge, certainty of knowledge and structure of knowledge. Meanwhile, there is a negative correlation between participants' epistemological beliefs along speed of knowledge acquisition, innate ability and real world applicability and College Mathematics Performance for 1st semester, SY 2015 –2016.

## *Students' Misconceptions in Plane Trigonometry relative to trigonometric functions or ratios of acute angles and right triangles*

The misconceptions of the participants along trigonometric functions/ratios of acute angles and right triangles are (a) evaluating angle measure using inverse trigonometric function; (b) determining the trigonometric function of an angle that is equal to a given ratio of the sides of a given triangle; (c) evaluating trigonometric function values of an angle using a calculator; and (d) solving equations involving radicals. On the other hand, the three (3) most common misconceptions of the participants along trigonometric function values of special and quadrantal angles are (a) evaluation of exact values of special angles; (b) determining the values of x, y and r from a point (x,y) on the terminal side of the angle; and (c) determining the reference angle.

#### CONCLUSION

On the basis of the foregoing findings, it can be concluded that first year students of Cagayan State University Piat Campus did not meet the minimum competency and mastery level of basic and tertiary mathematics. Such poor academic performance is principally attributed to some misconceptions about essential concepts, procedures and principles in Mathematics. Significantly, they have less developed epistemological belief, understanding and appreciation of the nature of Mathematics as a discipline. Furthermore, females and those who are enrolled in the College of Agriculture have less understanding of the nature and learning process in mathematical knowledge. Interestingly, although females have less developed epistemological beliefs in Mathematics, they nonetheless, performed better in their Plane Trigonometry subject which explains the absence of correlation between epistemological beliefs and Mathematics performance (mathematics performance in 4th year high school and for first semester SY 2015-2016) as well as academic performance in Plane Trigonometry. It must be noted that academic performance in Plane Trigonometry cannot be attributed to a single factor like epistemological beliefs because there are numerous factors that interplay in one's understanding and mastery of the subject. Finally, the correlates of academic performance in Plane Trigonometry are high school mathematics grade and first semester college mathematics grade. This shows a direct relationship between basic mathematics and college algebra in influencing one's performance in Plane Trigonometry.

#### RECOMMENDATIONS

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

The researcher may seek support for the endorsement of the College Dean regarding the adoption of the instructional plan as this shall address the misconceptions and difficulties of the participants in Plane Trigonometry.

The researcher may disseminate the result of the study for Mathematics teachers in Piat Campus to be aware of so that they

could help improve the academic performance of the students in College Algebra and Plane Trigonometry through a more effective and meaningful teaching and learning approach. Efforts should be focused on addressing students' misconceptions so that they will improve their mathematics achievement. Specifically, teachers teaching algebra and basic mathematics should lay a strong foundation in these subjects as they predict the success of the students in Plane Trigonometry.

To transcend from the immature, naïve and less sophisticated epistemological belief of the participants, teachers may explore and utilize a more student-centered approach such as discovery learning, manipulative-based learning, reflective learning and inquiry-based learning. In this way, they get to expose students to a deeper, more comprehensive and meaningful understanding of mathematical concepts, procedures, formulas and the like.

Teachers may revisit their approaches, methods and strategies in teaching Plane Trigonometry in order to suit to the learning needs and learning beliefs of the students.

A similar study on epistemological belief may be conducted; with focus on learning style, mathematics attitude, and mathematics anxiety as these may also influence students' mathematics performance.

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#### PROPOSED e-HRM SYSTEM FOR ISABELA STATE UNIVERSITY

JHOAN S. VALDEZ-PAGUIRIGAN

Doctor in Information Technology

#### ABSTRACT

Using the descriptive and developmental design, it aimed to expedite the transactions and modernize the documentation processes at Human Resource Management (HRM) office of Isabela State University (ISU). There were 60 participants involved: nine (9) HR personnel, forty-three (43) teaching/non-teaching staff and eight (8) IT experts. Questionnaire and Library/Internet were employed as research instruments. With the use of the weighted mean, the study ascertained that the current processes and services module of HR office were rated efficient. This could further mean that the HR personnel were accustomed with the existing kind of processes at present but aiming for a better way of doing their job. The problems encountered in the current processes and services of HR are: lack of manpower; delay in the issuance of needed reports; lack of system software; traditional/manual way of keeping; organizing and sorting of files; inefficient checking/computation of leave credits; and, inconsistency in the implementation of policy. These maybe the reasons why there were paper documents misplaced. The proposed e-HRM was assessed by the participants as "very efficient". This further implies that the teachers, who are the majority of the participants, manifest satisfaction in relation to the organization/agency where they belong because they are contented with the services of the HR office. As regards the proposed e-HRM system, the participants expressed apprehensions on the manpower needed, preferably an IT expert, who can use or operate the system. The proposed e-HRM, in terms of the different software quality characteristics was assessed to a "great extent". This means that the proposed system met most of the users' requirements and it is in compliance to ISO 9126 standards. Therefore, the developed e-HRM system ensures better processes and services of HR office as compared to the current processes and services.

Keywords: e-HRM system, human resource management

#### INTRODUCTION

Republic Act No. 9485 (s. no 2589 and H. no 3776) – 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 therefore. This act is known as the "Anti-Red Tape Act of 2007". Which declares the policy of the state to promote integrity accountability, proper management of public affairs and public property as well as to establish effective practices aimed at the prevention of graft and corruption in government (Section 2). Towards this end, the State shall maintain honesty and responsibility among its public officials and employees, and shall take appropriate measures to promote transparency in each agency with regard to the manner of transacting with the public, which shall encompass a program for the adoption of simplified procedures that will reduce red tape and expedite transaction in government.

Administrative Order (AO) No. 161, Series of 2006 on "Institutionalizing Quality Management Systems in Government" was issued on 5 October 2006 as one of the National Competitiveness Summit (NCS) Action Agenda to effect actual improvements in public governance in recognition of the International Organization for Standardization (ISO) 9000 series which ensures consistency of products and services through quality service processes, One of the strategic goals in the Strategic Plan of Isabela State University for 2012-2017 under Administration and Finance, particularly at the Records and HRM office, is to device and implement automation of all services in the Personnel and Records Management that includes time keeping system, leave administration, Personal Data Sheet (PDS). The HR personnel, in collaboration with the MIS coordinator, submit reports to the main campus at Echague, Civil Service Commission (CSC) and Commission on Higher Education (CHED) as required. What challenges them is that, the process of generating reports in which they are done manually. They do tedious search of the documents or files from the folders, they will sort, copy and paste the needed data which entail a lot of time accomplishing the tasks. In addition, the burden of searching the document inside a loaded filing cabinet, retrieving data one at a time from the different files, the voluminous PDS for each employee

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consumes so much space in the cabinet and in the entire office space.

The existing HR function is in need of approach to meet the fast changing digital environment to improve its services in meeting customers' satisfaction. Thus, the proposed e-HRM aims to improve the present processes at the HR Office. The study aimed to modernize the processes at the HRM Office of ISU-Ilagan, implement the paperless communication policy, as well as to respond to citizen's charter or RA 9485 seeking to reduce Anti-Red Tape Act (ARTA) Law and to meet customer satisfaction as stated in the Executive Order No. 605, Institutionalizing the structure, mechanisms and standards to implement the Government Quality Management Program, amending for the purpose of Administrative Order No. 161 s. 2006.

#### **Conceptual Framework**

The proposed e-HRM utilized the SCRUM methodology for the development of the system and it would be implemented in Local Area Network (LAN) architecture to be installed at the Human Resource office.

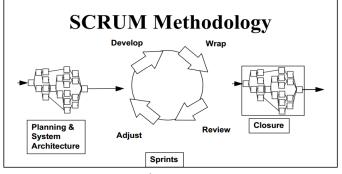


Figure 3 – The SCRUM Process

The SCRUM software development method is appropriate in the development of the proposed e-HRM system, since the SCRUM is suitable for producing prototype or new systems. The SCRUM life cycle includes the pregame, game and postgame. The first phase includes planning and system architecture for the proposed e-HRM system. This phase involves the assessment of the current processes and services of the HR office, planning the deliverables which include the five modules, namely; recruitment and selection, attendance monitoring, Personal Data Sheet management, leave management and employees' performance evaluation. The second phase involves development where the system was developed in modular approach; each module is coded and tested which results in easy modification of the system whenever an error occurs. As soon as the proposed system meets the entire user's requirement through implementation and testing, the system reaches the closure or postgame phase.

#### Statement of the Problem

The study entitled "Proposed e-HRM System for Isabela State University" sought to develop a Human Resource Management system that would improve the processes and the delivery of the services of the Human Resource Office.

Specifically, it sought to answer the following:

- 1. What is the assessment of the participants on the efficiency of the current processes and services of the HR Office in terms of the following:
  - 1.1. Recruitment and selection of applicants;
  - 1.2. PDS management;
  - 1.3. Attendance monitoring;
  - 1.4. Leave card management; and
  - 1.5. Performance Evaluation?
- 2. What are the problems, issues regarding the current processes and services of the HR Office?
- 3. What is the assessment of the participants on the developed system in terms of the following:
  - 3.1. Recruitment and selection of applicants;
  - 3.2. PDS management;
  - 3.3. Attendance monitoring;
  - 3.4. Leave card management; and
  - 3.5. Performance Evaluation?

- 4. What are the problems, issues regarding the implementation of the developed system?
- 5. What is the extent of compliance of the proposed e-HRM in terms of the Functionality, Reliability, Usability, Efficiency, Maintainability and Portability?
- 6. What improvements can be incorporated to further enhance the proposed e-HRM?

#### METHODOLOGY

#### **Research Design**

The study made use of the descriptive survey and research systems development to describe the software quality characteristics of the developed e-HRM in order to enhance the HR processes and services at ISU system.

#### Participants of the Study

There were three groups of participants of the study, the nine (9) HR personnel who comprised the HR Officers/personnel of ISU system who participated in evaluating the proposed e-HRM, the 43 teaching/ non-teaching staff of City of Ilagan campus who volunteered to take part of the evaluation as well as the eight (8) IT expert group which includes the IT professional such as the University Software Developer, IT faculty or IT staff. The IT Expert group was composed of the IT faculty and staff. The IT experts were the only group who were asked to evaluate the proposed e-HRM system as to the extent of compliance to software quality characteristics stated under ISO 9126.

#### Instrumentation

The research instruments used to gather data are the following:

Questionnaire. The combination of self-made questionnaire and ISO 9126 international standard attributes of good software were used to

evaluate the proposed e-HRM. The questionnaire was subjected to tryout and validation. The adviser went over the questionnaire to ensure the content validity of the questionnaire prior to its final administration.

Library/Internet. This is where the researcher searched for the related literatures and studies relevant to the proposed e-HRM and other related information that pertains to the conduct of the study.

#### **Data Gathering Procedure**

The researcher asked permission to conduct the study through a letter addressed to the University President, then forwarded to the different HR personnel of ISU system. Interviews with the HR Officer who keeps records of all employees' data and MIS Coordinator who collects data from HR office for consolidation and who prepares reports of ISU-I employees were done to gather information for the conduct of the study. The HR officer and MIS Coordinator were the principal sources of data and information for the feasibility or need for the study. The floating of the guestionnaire was done before and after the demonstration of the proposed e-HRM for assessment of the current processes and services of the HR and evaluation of the proposed e-HRM. The proposed e-HRM was pilot tested at the HR office of ISU, City of Ilagan. The pilot testing was done using the black box testing, a software testing method in which the HR officer and the HR staff interact with the system by providing inputs and examining outputs and without knowing how and where the inputs are worked upon without having any knowledge of the interior workings of the application. The tester is oblivious to the system architecture and does not have access to the source code.

#### Data Analysis

The following were used to analyze the data gathered:

Frequency and Percentage Distribution. It was used for the profiling of the participants.

Weighted Mean. It was used to measure the assessment of participants on the current processes and services of the HR office as

well as the proposed system. It was also used to measure the extent of compliance of the proposed e-HRM using ISO-9126 software quality characteristics as well as the extent of implementation of the proposed system.

#### **RESULTS AND DISCUSSION**

### Assessment of the participants on the efficiency of the current processes and services of the HR office

On recruitment and selection of applicants, the current processes and services of HR office under the recruitment and selection module were assessed as "efficient" with a category mean of 2.99. This means that the HR personnel may find it easy to retrieve the report, since the file was just saved in Excel file but not the process of preparation of reports.

The PDS management, Under the PDS management module were assessed as "efficient" with a category mean of 2.89. This means that the HR personnel find it difficult to manage the voluminous PDS located in the office cabinet particularly in giving feedback, searching and sorting of employees' information and preparation of reports.

In terms of attendance monitoring, result unveiled that the current processes and services of HR office were assessed as "efficient" with a category mean of 2.98. This may mean that the participants assessed the processes as fairly efficient because the existing attendance monitoring through face recognition biometric will only produces report such as employees DTR once a month.

With respect to leave management, result unfolds that the current processes and services of HR office were assessed as efficient with a category mean of 2.84. This mean that the HR personnel find it more difficult to compute and update leave credits of employees manually especially so that there are a lot of leave types, such as sick leave, vacation leave, special privilege leave, mandatory leave, etc. Not all these types of leave are applicable to all the employees since the leave depends on the type, designation and function of the employees. Furthermore, a certain type of leave is applicable in a case to case basis. On performance evaluation, result revealed that the current processes and services of HR office were assessed as efficient with a category mean of 2.96. This means that the HR personnel being incharge of collecting, computing, sorting and ranking employees' individual performance rating or evaluation and preparing reports, find the processes as tedious and require a lot of effort and time.

### Problems and Issues on the current processes and services of the HR office

The participants' common problems and issues on the current processes and services of the HR office include lack of manpower preferably IT expert or professional, delay in the issuance of needed information and the extent of implementation of HR policies. Other issues also emerged such as lack of a system or software that helps HR office enhance their productivity in terms of speedy preparation of structured or unplanned reports anytime they are needed by the campus and other agencies such as CSC or CHED, and traditional way of keeping, organizing and sorting data, files and reports, and space for storing paper documents.

#### Assessment of participants on the proposed e-HRM

Along recruitment and selection, result showed that the proposed e-HRM was assessed as "very efficient" with a category mean of 4.11. This reveals that most of the ISU-I employees were satisfied with the performance of the system in terms of the "promptness in identifying qualified applicants", "checking and verification of recorded scores for applicants" and "retrieving, sorting and searching of information about the applicants".

In terms of PDS management, result revealed that the proposed e-HRM was rated as "very efficient" with a category mean of 4.11. This implies that the PDS management module records and keeps vital employees information which results to easy retrieval, searching and sorting of needed information or reports when needed.

On attendance monitoring, result revealed that the proposed e-HRM was assessed as "very efficient" with a category mean of 4.25.

This implies that the attendance monitoring through DTR conforms to the CS ruling in accomplishing DTR since the proposed system produces format of DTR required by the CS called the CS form 48.

For leave management, result unveiled that the proposed e-HRM was rated as "very efficient" with a category mean of 4.16. This may mean that despite the complexity in updating and computing of leave credits, the HR personnel is confident with the performance of the proposed e-HRM system in terms of promptness in computing, updating of used and unused leave credits, and producing of user-defined reports such as employees' leave card. The system also allows easy retrieval and searching of information that result in prompt production of reports when needed.

Along performance evaluation, result showed that the proposed e-HRM was rated as "very efficient" with a category mean of 4.33. This reflects that the two groups of participants were satisfied with the performance of the module in terms of promptness specifically on giving feedback to concerned employee, producing reports, maintaining accuracy and consistency of reports and searching and sorting of required information. This is because the system provides a data bank of the employees' performance rating every semester for three consecutive years which is considered as one cycle for NBC 461 evaluation.

#### Problems and issues on the Proposed e-HRM System

As regards the proposed e-HRM system, the participants expressed apprehensions on the manpower needed, who is preferably an IT expert who can use or operate the system.

## Extent of compliance of the proposed e-HRM in terms of the different software quality characteristics

The proposed e-HRM was assessed by the IT expert/professional/ teaching/non-teaching participants as compliant to a "very great extent" in terms of its maintainability and portability with category means of 4.63 and 4.66, respectively, while great extent in terms of functionality, usability, efficiency, and reliability with category means of 4.40, 4.17, 4.38 and 4.31, repectively.

#### Improvements to further enhance the proposed e-HRM

The participants recommended that the system should produce Leave Service Credits, PDS and other reports based on the required format and be implemented not only in LAN but also in WAN to allow the employees to retrieve their leave credits and other personal information anytime and anywhere.

#### CONCLUSION

Based on the findings, the researcher arrived at the following conclusions:

The proposed e-HRM system will certainly expedite the transactions at the HR office since it will collect and organize data, information and produce reports when needed. The proposed system helps top level management in their decision making specifically on recruitment, ranking and promotion. It also enables administrators to easily identify recommendees for seminars/trainings and study leave based on available data provided by the e-HRM system. The developed e-HRM system ensures better processes and services of HR office as compared to the current processes and services specifically in terms of recruitment and selection of applicants, management of PDS, attendance monitoring, management of leave credits and employees' performance evaluation.

#### RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are derived:

The school may support the implementation of the developed e-HRM system in order to expedite the transactions at the HR office in response to citizens' charter and Administrative Order (AO) no. 161 series of 2006.

Further studies may be conducted by future researchers to include the recommendations of the participants, which the system should produce a hard copy of LSR and PDS and other needed reports based on the prescribed format. The HR office may implement the developed e-HRM system not only in a LAN but also in WAN to reduce administrative cost as well as to minimize administrative task.

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#### TEACHING PERFORMANCE, LEARNING RESOURCES AND NATIONAL ACHIEVEMENT TEST PERFORMANCE OF COMPLETE ELEMENTARY SCHOOLS OF RIZAL DISTRICT, DIVISION OF KALINGA

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#### ABSTRACT

The quantitative-descriptive design principally investigated the relationship between the teaching competence, learning resources and the NAT Performance of the complete elementary schools in the District of Rizal, Division of Kalinga with the involvement of the 79 teacherparticipants of the said district. The primary instrument used was the Competency Based Performance: Appraisal System for Teachers (CB-Past). Frequency and percentage, weighted mean and ANOVA were employed for data analysis. Results revealed that majority of the school-participants have "less adequate" learning resources. This implies that there are more schools in the district that have limited learning resource materials. Schools do utilize whatever available learning resource materials they have. The teacher-participants have "very satisfactory" performance. This is an evidence that the participants had performed and discharged well their duties in their respective schools. There is an increasing trend in the overall NAT performance of the entire district, although there are some schools which recorded slight decrease from the SY 2013-2014 results to those in SY 2014-2015. ANOVA test revealed whether the pupils are taught in multi-grade or mono-grade level, their NAT performance is not affected. ANOVA test showed that the adequacy of learning resources, teacher training, school type and class have no significant impact on students' academic performance in terms of the National Achievement Test. The performance of teachers in class poses impact on students' achievement in terms of the National Achievement Test as evidenced by the increasing rating of the teachers, at the same time, increasing mean scores of students per school.

*Keywords*: Teaching performance, learning resources, National Achievement Test (NAT) performance

#### INTRODUCTION

In the Philippine setting, the country has aligned its constitution in upholding the right of all Filipinos to quality basic education and mandates "a complete, adequate and integrated system of education, relevant to the needs of the people and the society." The 1987 Philippine Constitution declares that education, particularly basic education, is a right of every Filipino. On this basis, government education policies and programs have been primarily geared towards providing access to education for all, ensuring that school-age children, regardless of religion, race or political affiliation, are provided equal opportunity for basic education. The Philippine education is committed to provide access and quality education to all Filipino children who are equipped with essential competencies and skills for lifelong learning and can acquire basic preparation that will make them enlightened, disciplined, nationalistic, self-reliant, God-loving, versatile, creative and productive members of the national community. Teachers play a big role in the fulfillment of the DepEd's vision-mission on providing access and quality education.

According to Panda and Mohanty (2003), teachers are the pivot of the educational system; they are the strength of the nation for they give unreservedly of themselves in order to attain this mission; and, they are the prime movers of learning in the educational system for their instructional performance play a key role in the students' academic achievement. With the learners at the center, teaching serves as the most important means of awakening and nurturing the learners' interests and potentials. Being the focal figure in education, teachers must be competent and knowledgeable as they are regarded as light to the Filipino youth. Teaching, according to Clinton (1998), is the profession that is shaping education in molding the skills of the future workforce and laying the foundation for good citizenship. Without qualified, caring and committed teachers, neither improved curricula, nor safe schools, not even the highest standards in the world will ensure that the children are prepared for the challenges and opportunities.

To measure the teaching performance of the teachers, the Department of Education formulated a unified standard of expected

competencies for teachers, an assessment and a benchmarking tool for teachers. This is called the Competency-Based Performance System for Teachers (CB-PAST) which is embodied in R.A. 9155. The primary purposes of CB-PAST are to ensure support for the continuous professional growth of teachers and to recognize the quality of teacher's accomplishments.

The Philippine education is committed to provide access and quality education to all Filipino children who are equipped with essential competencies and skills for lifelong learning and can acquire basic preparation that will make them enlightened, disciplined, nationalistic, self-reliant, God-loving, versatile, creative and productive members of the national community. In line with the thrust of enhancing quality education in the Philippines, the Department of Education realigned its vision-mission to produce responsible and productive citizens who are responsive to the just demands of the society and to produce better graduates who are skilled and competent and which are needed to meet global standards.

The Department of Education envisions every learner to be functionally literate, equipped with life skills, appreciative of arts and sports, and imbued with the desirable values of a person who is makabayan, makatao, makakalikasan, at maka-Diyos. The Vision is in line with DepEd's mission to provide quality basic education that is equitably accessible to all and lays the foundation for lifelong learning and service for the common good. This vision-mission is a guiding principle of every teacher in Rizal District to be committed in their work in the realization of accessible and quality basic education to all the school children regardless of their culture and beliefs.

Rizal District was ranked one of the lowest in the National Achievement Test (NAT) administered to Grade 6 in the Division of Kalinga. The Mean Percentage Scores (MPS) of Grade 6 pupils in the NAT in the district from School Year 2012-2013 to School Year 2014-2015 were below the passing MPS of 75 percent. The district NAT results showed an MPS of 65.15 percent for SY 2012-2013, 69.48 for SY 2013-2014 and 71.13 for SY 2014-2015. The elementary MPS was still away from the targeted 75 per cent with 68.9 MPS in SY 2012-2013. This academic performance

of grade 6 pupils could be attributed to teacher-related factors. It is in this context that this study was conceptualized. This study aimed to obtain baseline information on the teachers' teaching competence and the NAT performance as bases in the formulation of intervention programs for the improvement of academic performance of the learners in Rizal District, Division of Kalinga.

#### **Conceptual Framework**

The result of the assessment was used to come up with an action plan to improve the academic performance of the learners. The feedback assessed whether the enhancement program from the output will be attained and will be fitted based on the input and process involved in the study.

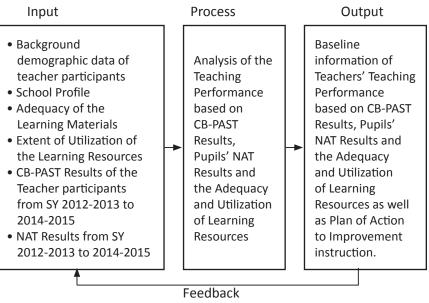


Figure 1. The Conceptual Paradigm of the Study

Figure 1 shows the conceptual paradigm of the study. The research paradigm employed the Input-Process-Output (IPO) model. The input contains the demographic background of the teacher, the school profile

of the school-participants, adequacy and the extent of utilization of the learning resources, results of the Competency-Based Performance: Appraisal System for Teachers (CB-PAST) of the teacher-participants from SY 2012-2013 to SY 2014-2015 and the NAT Results from SY 2012-2013 to SY 2014-2015. These data were analyzed to provide baseline information for designing interventions to improve the academic performance of the learners, as an output.

## Statement of the Problem

This study investigated the relationship between the teaching competence, learning resources and the NAT performance of the complete elementary schools in the District of Rizal, Division of Kalinga. Through the study, the researcher proposes an action plan to improve the teaching performance, learning resources, and National Achievement (NAT) Performance of Complete Elementary Schools of Rizal District, Division of Kalinga.

Specifically, it sought to answer the following:

- 1. What is the profile of the school-participants in terms of type and class size?
- 2. What is the profile of the teacher participants in terms of position or title, highest educational attainment, length of service and number of seminars or trainings attended?
- 3. How adequate are the learning resources in the district?
- 4. To what extent are the learning resources utilized?
- 5. What is the level of teaching performance of teachers for school years 2012-2013 to 2014-2015 based on their CB-PAST result?
- 6. What is the NAT Performance of the complete elementary schools of Rizal District, Division of Kalinga for school years 2012-2013 to 2014-2015?

- 7. Is there a significant difference in the NAT performance when grouped according to school profile and teachers' profile?
- 8. Is there a significant difference in the NAT performance of schools when grouped according to adequacy of learning resources?
- 9. Is there a significant difference in the NAT performance of schools when grouped according to the extent of utilization of learning resources?
- 10. What action plan can be developed to improve the teaching performance, learning resources, and National Achievement (NAT) Performance of Complete Elementary Schools of Rizal District, Division of Kalinga?

## METHODOLOGY

## **Research Design**

This research made use of the quantitative descriptive design. The descriptive component of the study is apparently in the investigation of the adequacy and utilization of instructional materials and the profile of the public elementary schools in terms of teachers' teaching performance and pupils' performance in the NAT.

## Participants of the Study

The participants of the study were the teachers of complete elementary schools of Rizal District, Division of Kalinga. Seventy-nine (79) teachers were tapped in this study with the following size per school:

School	Teacher Participants
Anonang Elementary School	6
Bagbag Elementary School	6
Calaocan Elementary School	7
Kinama Elementary School	4

Liwan East Elem School	7
Liwan West Elem School	7
Macutay Elementary School	6
Rizal Central School	16
Romualdez Elementary School	4
San Francisco Elem School	3
San Pedro Elementary School	3
Santor Elementary School	5
San Vicente Elem School	2
Tagapan Elementary School	3
Total	79

Moreover, the adequacy and utilization of the learning resources were evaluated by the teachers in each school. The National Achievement Test (NAT) results included were the average performance per school for the past three years.

## Instrumentation

The primary instrument used in the study is the Competency Based Performance: Appraisal System for Teachers (CB-PAST). CB-PAST is under the self-direction of the teacher who undertook self-assessment through the Teacher Strengths and Needs Assessment (TSNA) as the primary source of information. It is output-based performance evaluation system recognized by the Civil Service Commission to assure that teachers shall be evaluated objectively as to their performance. The summative process is a combination of self-appraisal, actual classroom observations and review or verification of evidences by instructional leaders to include all aspects of teaching performance, which are (I) Instructional Competence, (II) School, Home and Community Linkages and (III) Personal, Social and Professional Growth.

The data on the pupils' NAT performances were obtained from the results of NAT of Grade VI pupils of Rizal District, Division of Kalinga from S.Y. 2012-2013 to S.Y. 2014-2015. The adequacy and extent of utilization

of learning resources were evaluated by the school-participants using the DepEd assessment tool on the adequacy of learning resource materials.

#### **Data Gathering Procedure**

- In pursuing this study, the following steps were undertaken:
- 1. The researcher requested permission from the Schools Division Superintendent and the Coordinating Principal of Rizal District to conduct the study.
- 2. A letter of request pertaining to the conduct of the study was given to the respective principals and school heads of each school participant accompanied by a letter of endorsement from the Coordinating Principal of Rizal District.
- 3. The researcher sought informed consent and personally floated and administered the questionnaires to the participants. At the same time, made an analysis of the NAT performance of the pupils in the different schools in Rizal District, Division of Kalinga.
- 4. The data were tallied, tabulated and organized by the researcher and were subjected to appropriate statistical tools.

## Data Analysis

To analyze the data gathered, descriptive statistics were used.

Frequency and percentage were utilized to obtain the profile of the participants in terms of the position title, highest educational attainment and length of service.

Weighted Mean was used to determine the teachers' teaching competence, NAT performance of pupils, adequacy and utilization of the learning resources.

The Analysis of Variance (ANOVA) was used to determine if there is

a significant difference on the NAT performance when they are grouped according to school, teachers' profile, adequacy and utilization of learning resources.

#### **RESULTS AND DISCUSSION**

## School Profile

Along type of School, Majority or 57.14% of the school-participants are monograde while 42.86 are multigrade school. This means that majority of the teachers in the district handle only one class.

In terms of Class size, most or 42.86% of the school-participants have an average class size of 31-40 followed by those who have average class size of 15-20 and 21-25, with the same frequency of four (4). None of the school-participants has an average class size of 26-30. This means that majority have an ideal classroom since it has the ideal pupil-teacher ratio of 25:1 (DEPED, EO #77 S, 2010).

## Teachers' Profile

With respect to teaching position, majority or 68.36% of the teacherparticipants are teacher III, followed by teacher I with a percentage of 20.25 and teacher II which has a percentage of 11.39.

On educational attainment, Majority or 53.17% of the teacherparticipants have earned some units in master's degree, 24.05% are with masters' degree and the remaining 8.86% have earned some of the PhD. Units. This means that the teacher-participants are qualified for the teaching job and that they possess appropriate educational qualifications for elementary school teachers. This finding also indicates that the participants are taking steps to upgrade themselves in order that they will become more competent teachers and be updated with recent developments and trends in education, particularly in terms of innovative teaching approaches and strategies.

Along with the length of service, Majority or 31.65% of the teacher-

participants are with 6-10 years length of service, 18.99% having 0-5 years of service and 12.66% having 11-15 years of service and teachers with 21-25 years of service got the same and lowest percentage of 11.39. This indicates that most of the teacher-participants are relatively young in the teaching profession, thus, they may need more experiences and trainings to enhance their instructional competencies. This further implies that teachers, though they are young in the field of teaching, may adopt better methods and techniques so that teaching and learning becomes effective. It can be noted therefore that those teachers who teach effectively and efficiently is an advantage to the pupils; they have been giving their best and generally performing their duties well even when they are young in the field of teaching.

With respect to the number of seminars/tranings attended, result reveals that teacher-participants have attended 7-9 district, division and national trainings yielding the percentage of 46.84, 45.57 and 43.03 respectively. While some of them have attended 4-6 trainings. This implies that there are a number of trainings that the teachers are made to attend which extends from district level to national level. This means that the school heads as well as the teachers themselves take opportunities for professional advancement through attendance in faculty development programs or in-service trainings.

## Adequacy of the learning resources in the district

Majority of the school-participants have less adequate references, worksheets, maps and encyclopedia. Half of the school manifests "fewer adequacies" while 6 or 42.86% are "moderately adequate" in charts. There are 11 schools that do not have televisions, computers and laboratories. This implies that there are more schools in the district that have limited learning resource materials. The limited learning resources in the district could hinder the teachers in their role in molding the children to be productive and responsible citizens of the country. Extent of utilization of resources

Majority or 78.57% of the school-participants have greatly utilized the references; half of the school-participants have moderately utilized the worksheets. Charts are utilized in "moderate" and "low" extent.

Maps and encyclopedias have very low extent of utilization. No extent of utilization was recorded for the use of televisions, computers and laboratories. This implies that schools utilize whatever available learning resource materials they have. This indicates that teachers deliver accurate and updated content knowledge in the classroom; however, there were no learning resources available which would hinder them to meet the diverse needs of the learners.

## Teachers' level of performance

Majority or 68.35 % of the teacher-participants have "very satisfactory" performance while 25 or 31.65% of them have outstanding level of competence. In the different performance standards set by the Department of Education, teachers were assessed as "proficient" for all the school years investigated. This is an evidence that the participants had performed and discharged well their duties in their respective schools. This further implies that the majority of the teachers in the district are dedicated to their profession. They perform their jobs beyond what are required of them which are manifested by a yearly increase of the number of teachers in the outstanding category and decrease in the "very satisfactory" level.

## School performance in the National Achievement Test

Result indicated that the mean percentage scores of the complete elementary schools in the district of Rizal in NAT is 65.12 (Average Mastery) for school year 2012-2013, 69.46 (Moving Toward Mastery) for school year 2013-2014 and 71.14 (Moving Toward Mastery) for school year 2014-2015.

The results show an increasing trend in the overall NAT performance of the entire district, although there are some schools which recorded a slight decrease from the SY 2013-2014 results to those in SY 2014-2015.

The 68.57% overall performance of the pupils in NAT for School year 2012-2013 to school year 2014-2015 fall short of the DepEd standard that is 86% which is just closely approximating mastery and still way far to the mastered level of 95%.

# Test of significant Difference on Schools' NAT Performance when grouped in terms of school profile

ANOVA test revealed no significant difference on the NAT Performance having school profile as the grouping variable. This means that whether the pupils are taught in multi-grade or mono-grade level, their school type does not affect their NAT performance. Moreover, the class size also has nothing to do with pupil's NAT performance.

ANOVA test showed a significant difference on NAT Performance in terms of the number of district seminars attended by teachers. This means that teacher preparations as may be learned or enhanced in district level seminars help uplift their quality of teaching, thereby, affecting student performance. While there is no significant difference on NAT Performance in terms of the position, educational attainment, length of service, number of division and national seminars attended and teaching performance. Further, this implies that the profile of the teachers do not tend to affect the NAT Performance of the pupils in the district.

# Significant difference on Schools' NAT Performance when grouped according to adequacy of learning resources

ANOVA test revealed no significant difference of NAT performance when schools are grouped according to the adequacy of learning resources. This implies that the adequacy of learning resource materials does not affect the NAT Performance of the complete elementary school pupils in the District of Rizal.

# Significant difference on Schools' NAT performance when grouped according to extent of utilization of learning resources

ANOVA test revealed a significant difference on NAT performance when schools are grouped in terms of their extent of utilization of televisions inside the classroom. However, there is no significant difference was observed in the NAT Performance when schools are grouped according to the extent of utilization of references, worksheets, maps, charts, encyclopedia, and computers. It could be deduced from this result that if schools have available but not utilized learning resources relevant to the needs of the teachers and pupils in the teaching learning process, then the learning goals set would not be attained. Consequently, a teacher who makes use of appropriate instructional materials to supplement his teaching will help enhance students' innovative and creative thinking as well as will help them become plausibly spontaneous and enthusiastic.

## CONCLUSION

Based on the analyzed data and summary of findings, it was concluded that:

Adequacy of learning resources, teacher training, school type and class have no significant impact on students' academic performance in terms of the National Achievement Test. The performance of teachers in class poses impact on students' achievement in terms of the National Achievement Test as evidenced by the increasing rating of the teachers, at the same time, increasing mean scores of students in the NAT per school.

## RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are drawn:

Schools may provide adequate learning resources (ie.Worksheets and workbooks) and ICT facilities to enhance teaching-learning process.

School heads of Rizal District may benchmark from top performing schools in NAT to enhance instruction that will eventually improve the academic performance of the pupils.

Rizal District may come up with strategic plans on how to improve their NAT performance.

Schools may conduct remediation and analysis of school NAT results to improve the learners' academic performance.

More trainings may be conducted to prepare teachers and upgrade their skills and knowledge toward excellent delivery of content and use dynamic and authentic assessments to encourage engaged learning in the classrooms and to sustain the high proficiency level of the teachers in teaching.

Teachers may continue upgrading themselves and pursue vigorously their graduate studies to become more competent.

The action plan formulated by the researcher may be adopted and implemented by the Rizal School District through the District Supervisor to improve the academic performance of the pupils.

The findings of the study may be disseminated to the schoolparticipants and the Division Office of the DepEd since the study will serve as basis for providing the necessary needs of the teachers to ensure the quality performance of pupils.

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#### INTERCULTURAL COMMUNICATIVE COMPETENCE OF BSED MAJOR IN ENGLISH STUDENTS: BASIS FOR PROPOSED INTEGRATION OF INTERNATIONALIZATION IN BSED MAJOR IN ENGLISH CURRICULUM OF CAGAYAN STATE UNIVERSITY

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Doctor of Philosophy in Rhetoric and Linguistics

#### ABSTRACT

This study aimed to investigate the intercultural communicative competence of the BSED Major in English students of Cagayan State University as a basis for proposed integration of internationalization in the BSED Major in English Curriculum. The descriptive-correlational research design was employed. The participants were the first, second and third year BSED major in English with a total population of 92. A structured questionnaire by Dombi Judit was adopted as an instrument. Utilizing the frequency count and percentage, mean, standard deviation, ANOVA, t-test and Pearson-r, this study assessed that intercultural communicative competence of the BSED major in English students of Cagayan State University in relation to variables that facilitate and enhance it, is at "competency" level. The BSED students major in English are skillfully endowed with the capacity in discovering and interpreting a culture of their own and others, adept about facts or information about their own culture and others, and are broadly open to their own culture and others. Along affective variables, perceived communicative competence, intercultural contact and perceived second language competence, students in the BSED major in English have the ability to communicate and interact across cultural boundaries. It is then appropriate to integrate internationalization in the BSED major in English curriculum in order to sustain, maintain, enhance and bring into equal level of Intercultural communicative competence subcomponents that need to be developed among these students who are future teachers of the nation. Pearson-r test unveiled that intercultural communicative competence is significantly correlated with the affective variables, perceived intercultural communicative competence and other individual differences (perceived communicative competence, intercultural contact and perceived second language competence). ANOVA test revealed a significant difference on students' intercultural communicative competence when grouped according to profile variables, while on students intercultural communicative competence along skills is found to have no significant relationship with perceived intercultural communicative competence and with the affective variable in terms of willingness to communicate.

*Keywords*: Intercultural communicative competence, internalization, English Curriculum, English competence

#### INTRODUCTION

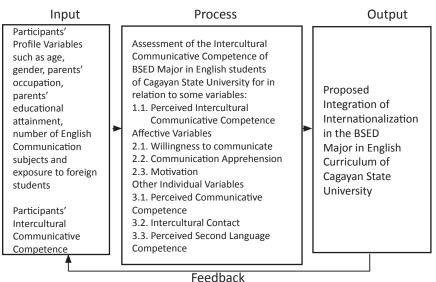
The onset of internationalization in the 21st century fostered the essential modification of various aspects of educational endeavors. Considerable attention is now given to teaching and learning delivery in a multi-cultural classroom and school environment with the influx of foreign students to the country. Henceforth, adaptation has become the key to advancement of learning - from technology to facilities and curriculum content. Communication has become an elemental factor in pushing the frontiers of education. Today, the advancement, interaction and progress of all human aspects have tremendously evolved. However, these must account in how people accept each other's differences and the ability to understand such differences that eventually leads to harmonious society of people with diverse beliefs, practices, customs, traditions and languages. As such, internationalization poses a great challenge to the communicative ability of all sectors in the school setting. This is because communication fosters meaningful interaction in all educational endeavors. With communication, meanings are perceived and understandings are reached among human beings (McFarland, 2009). As the school setting becomes diverse, there is the need for learners to acquire intercultural competence to cope with their learning environment.

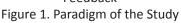
The notion of intercultural competency suggests a set of cognitive, affective and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts and settings (Williams, 2009). This determines a successful encounter and communication between people from different cultures and backgrounds. Furthermore, cultural competence promotes the ability to discuss cultural meanings in order to execute an appropriate effective communication and behavior recognizing identities in a specific cultural environment. In this study, it is expressed that one of the characteristics of internationalization is the admission of foreign students to the professional studies of Cagayan State University (CSU). It is not therefore a far-fetched reality that sooner or later, foreign students in the undergraduate level will enroll in its different programs.

It is then necessary to orchestrate concerted efforts in order to respond to the challenges brought about by internationalization. Foreign students are now immersed with local students having various cultural backgrounds, while; local students interact with foreign students with unique cultural affiliation. With the situation, there lies the question on the manner how teachers prepare both local and foreign students to foster common understanding among these students. This is the aim of this research to bring Intercultural Communicative Competence to the fore as a response of Cagayan State University to the challenges of internationalization. Furthermore, the study examined students' intercultural knowledge in order to analyze their intercultural communicative competence and the necessary concepts that they need to learn in intercultural communication relative to the factors affecting the Intercultural Communicative Competence of the participants (Judith, 2013). It also endeavored to explore its implications to classroom practice. Finally, this study may provide information to language administrators on the importance of Intercultural Communication as a major course in the English curriculum, particularly in the locale of the study and in the Philippines as a whole; hence, triggering and justifying its inclusion in the roster of courses necessary to keep pace with globalization.

## **Conceptual Framework**

The Input-Process-Output model was utilized to investigate the intercultural communicative competence of the BSED Major in English students of Cagayan State University as a basis for proposed integration of internationalization in the BSED Major in English Curriculum.





The paradigm illustrates that this study is aimed at determining the Intercultural Communicative Competence of the BSED Major in English students of Cagayan State University as a basis for the integration of internationalization in the BSED Major in English Curriculum. Hence, the input is the current intercultural communicative competence of the BSE students as well as their demographic profile namely age, gender, parents' occupation, parents' educational attainment, number of English Communication subjects, and exposure to foreign students. The results of the assessment brought awareness to the intercultural communicative competence of the participants, which, at the outset was used as a basis for the integration of internationalization in the BSED Major in English Curriculum of Cagayan State University. The entire output of which will be used as a feedback mechanism for the continual improvement of the BSED Major in English Curriculum of CSU.

## Statement of the Problem

Generally, this study investigated the intercultural communicative competence of the BSED Major in English students of Cagayan State University as a basis for proposed integration of internationalization in the BSED Major in English Curriculum.

Specifically, it endeavored to answer the following questions:

- 1. What is the profile of the participants in terms of age, sex, parents' educational attainment, parents' occupation, number of communication english subjects and exposure to foreign students?
- 2. What is the level of students' intercultural communicative competence in terms of the following Knowledge, Skills and Attitude?
- 3. What is the level of students' perceived intercultural communicative competence?
- 4. What are the students' affective variable scores in terms of the willingness to communicate (WTC), communication apprehension (CA) and motivation (MOT)?

- 5. What are the students' other individual differences' variable scores in terms of the Perceived Communicative Competence (PCC), Intercultural Contact (ICO) and Perceived Second Language Competence (P2LC)?
- 6. Is there a significant relationship between the participants' Intercultural Communicative Competence and Perceived Intercultural Communicative Competence, participants' Intercultural Communicative Competence and Affective variables and participants' Intercultural Communicative Competence and other Individual Differences?
- 7. Is there a significant difference in the participants' Intercultural Communicative Competence when grouped according to profile variables?
- 8. What internationalization initiatives can be proposed to improve the BSED Major in English Curriculum of CSU based on the results of the study?

#### METHODOLOGY

## **Research Design**

The descriptive-correlational research design was employed in the study. The demographic personal profile, level of Intercultural Communicative Competence and Perceived Intercultural Communicative Competence, affective variable scores, and other individual differences' variable scores of the participants were described in the study. Comparison was also employed to determine if there are differences in the Intercultural Communicative Competence of participants when grouped according to profile variables. On the other hand, correlation analysis was adopted in determining the relationship between ICC and Perceived Intercultural Communicative Competence, affective variables and Intercultural Communicative Competence, and other individual difference variables and Intercultural Communicative Competence.

## Participants of the Study

The participants of the study were the first, second and third year Bachelor of Secondary Education (BSED) Major in English students

of Cagayan State University for Academic Year 2015-2016. The total populations of 92 students were taken as participants of the study.

#### Instrumentation

A structured questionnaire by Dombi Judit, 2013 was adopted as the instrument used in gathering the data needed to answer the research problems. The questionnaire is composed of 111 items. For this study, some words and phrases were modified to fit into the specific context and direction of this research.

#### **Data Gathering Procedure**

Permission to conduct the study was sought from the University Dean of the College of Teacher Education. Upon approval, questionnaires were distributed to all the participants of the study. Thereafter, the data were tallied, statistically treated, and analyzed to shed light and understanding on the results of the investigation.

#### **Data Analysis**

The following statistical tools were used in this research:

Frequency Count and Percentage. These were used in presenting the participants' demographic profile.

Mean and Standard Deviation. These were used to describe the participants' Intercultural Communicative Competence along Knowledge, Skills and Attitude, Perceived Intercultural Communicative Competence, affective profile variables, and individual differences variables.

One Way Analysis of Variance (ANOVA). This was used to determine wether there exists a significant difference in the participants' Intercultural Communicative Competence when grouped according to profile variables such as parents' occupation, parents' educational attainment, number of English Communication subjects, and exposure to foreign students. T-test for Independent Samples. This was used to determine if there exists a significant difference in the participants' Intercultural Communicative Competence when grouped according to sex.

Pearson Correlation Coefficient. This was used to determine if there exists a significant relationship between the participants' Intercultural Communicative Competence with Perceived Intercultural Communicative Competence, affective profile variables, and individual difference variables.

## **RESULTS AND DISCUSSION**

## Participants' Profile

On age, most or 31.77% of the students are at the age of 18. The findings reveal that majority of the students are relatively at the right age for collegiate students in the Philippines as regards to actual age line suggested by the Department of Education and Commission on Higher Education.

Along sex, majority or 71.88% of the students are females while 28.13% are males. This implies that the participants who are enrolled in the College of Teacher Education are female-dominated.

On mothers' educational attainment, majority or 51.56% of them finished high school. Relatively, majority or 55.21% of the fathers finished high school.

With respect to the parents' occupation, majority or 71.35% of the students' mothers are housewives while the occupations with the least frequency includes dressmaking, sales, farming and janitorial services. This implies that the mothers of the participants have meager income in support of their spouses' effort to provide the needs of their children. On the other hand, majority or 60.94% of the fathers' occupation are farming while the occupation with the least frequency include Overseas Contract Workers, pastor, baker, electrician and musician.

Most or 40.10% of the participants have 3 English communication subjects. This is closed to the required number of communication subjects they need to complete their training to become good in their level of linguistic competence. These subjects exposed them to knowledge, skills and attitude in the use of both second language and foreign language for others.

Majority or 69.79% of the participants have zero week exposure to foreign students. This implies that students of the campus have a very slim chance to be exposed to foreign students despite the fact that there are foreign students in the University premises.

## Level of Intercultural Communicative Competence

With respect to the level of intercultural communicative competence, the participants are rated "highly competent" in terms of knowledge and attitude with categorical means of 3.47 and 3.69 and "competent" in terms of skills with a categorical mean of 3.37. These imply that BSED English major students of Cagayan State University are interculturally competent -ready to fit in on the possible internationalization of academic activities that will be embedded in the curriculum. However there must be more effort in the integration of intercultural communicative competence in the language teaching of the University.

## Level of perceived intercultural communicative competence

All statements are given a "very high competent" interpretation with a categorical mean of 84.89 which means, hypothetically, students perceived themselves are very competent in communicating and interacting with others who have different cultural practices and beliefs.

## Students' Affective Variable Scores

On willingness to communicate, result reveals that most of the statements are given an interpretation of "very high extent" with a categorical mean of 80.28, which explains that most of the students have high degree of willingness in interacting with others, using English as a second or foreign language.

In terms of communication apprehension, the participants were rated as "moderate competent" with a categorical mean of 3.38. This implies that students do not have to combat any feelings of discomfort during communication and interaction with others using English as a common language.

Result showed a "very high level" of motivation with a categorical mean of 4.23. This explains that students perceive their motivation as a strong driving force in improving their language ability.

## Students' other individual differences variable scores

Result reveals that students have "very high" perceived communicative competence with a categorical mean of 82.37. This means that they have very high perception with regards to their Perceived Intercultural Communicative Competence when given the chance. The finding further manifests that the participants are open to whoever they are talking with in wherever and whatever circumstances they may be.

With regard to the intercultural contact, the participants rated it as "sometimes" with a categorical mean of 2.90. This means that foreign students are not seen much in the neighborhood. International students are sometimes seen in the university where the participants study, but not as it is in their neighborhood.

The participants rated the perceived second language competence as "highly competent" with a categorical mean of 3.67. This means that they are highly competent in comprehending the second language.

## Significant relationship between Intercultural Communicative Competence and Perceived Intercultural Communicative Competence, affective variables and Intercultural Communicative Competence and other individual differences

Pearson-r test unveiled that the intercultural communicative competence has a significant relationship with perceived intercultural communicative competence.

Meanwhile, students' intercultural communicative competence along knowledge correlates with their affective variables along willingness to communicate, communication apprehension and motivation. In like manner, intercultural communicative competence along skills, and affective variables along motivation. Furthermore, intercultural communicative competence along attitude, and affective variables along willingness to communicate and motivation are found to have significant relationship.

The students' intercultural communicative competence and other individual difference variables (perceived communicative competency, intercultural context, perceived second language competence) have a significant relationship. Students' intercultural communicative competence along knowledge with that of perceived communicative competence is found to have a significant relationship. There also exists a significant relationship between students' intercultural communicative competence along attitude with their perceived communicative competence.

Pearson-r test showed a significant relationship between the students' intercultural communicative competence along knowledge, skills and attitude with their intercultural contact.

In the same manner, intercultural communicative competence in terms of knowledge, skills and attitude are found to have significant relationship with perceived second language competence.

## Significant difference in the participants' Intercultural Communicative Competence when grouped according to profile variables

ANOVA test showed that in terms of the significant difference of the students' intercultural communicative competence when grouped according to profile variables, age, sex, mothers' educational attainment, fathers' occupation and number of English communication subjects, the results showed a significant difference in all the variables mentioned.

In contrast, students' intercultural communicative competence along skills is found to have no significant relationship with perceived intercultural communicative competence. The students' intercultural communicative competence along skills is found to have no significant relationship with affective variable in terms of willingness to communicate.

In like manner, students' intercultural communicative along skills is also found to have no significant relationship with affective variable along communication apprehension.

Furthermore, students' intercultural communicative competence along skills has no significant relationship with other individual differences variable along perceived communicative competence.

As regards significant difference of students' intercultural communicative competence when grouped according to fathers' educational attainment, mothers' occupation and number of weeks exposed to foreign students, the results showed no significant difference in all the variables mentioned.

Finally, the integration of the internationalization of the BSED major in English curriculum of Cagayan State University is just appropriate and timely in preparation for the school's goal to produce graduates of the university who are at par in skills, knowledge and attitude with foreign students towards ASEAN integration.

## CONCLUSION

Based on the aforementioned findings, it is concluded that intercultural communicative competence of the BSED major in English students of Cagayan State University in relation to variables that facilitate and enhance it, is at "competency level". The BSED students major in English are skillfully endowed with the capacity in discovering and interpreting a culture of their own and others, adept about facts or information about their own culture and others, and are broadly open to their own culture and others. Along affective variables, perceived communicative competence, intercultural contact and perceived second language competence, students of the BSED major in English have the ability to communicate and interact across cultural boundaries. It is then appropriate to integrate internationalization in the BSED major in English curriculum in order to sustain, maintain, enhance and bring into equal level of Intercultural Communicative Competence subcomponents that need to be developed among these students who are future teachers of the nation.

#### RECOMMENDATIONS

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

Teachers may provide authentic activities that serve as an avenue for practice or skills enhancement in the use of the English language to enhance their intercultural communication technicalities and facts.

Students may be engaged in actual immersion activities in an environment with varied cultural beliefs and practices in order to practice their skills in intercultural communicative competence.

The English teachers of Cagayan State University may develop an English international level matrix in the BSED curriculum in order to expose students to intercultural communicative competence practices.

Future researchers may conduct a similar research in the Philippine setting that has foreign students mixed with Filipino students in the program in order to compare the results of the current study where students have no actual interaction with foreign students.

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## EFFECTIVENESS OF ENHANCED COMMUNITY-BASED PROGRAM FOR HYPERTENSION IN KNOWLEDGE, LEVEL OF ADHERENCE TO THERAPEUTIC REGIMENS AND BLOOD PRESSURE OF HYPERTENSIVE PATIENTS

#### PAULO CARL G. MEJIA

Doctor in Nursing Science

## ABSTRACT

This study sought to determine the effectiveness of the enhanced community-based program for hypertension in the degree of knowledge, level of adherence and blood pressure of the Hypertensive patients. The study was conducted at a Parish-owned community in Baranaay Lumana Bayan, Plaridel, Bulacan. The study utilized randomized, two-aroup, experimental design. A total of 30 hypertensive patient participants participated in the study which was divided into two groups, namely: control (15) and experimental groups (15). The researcher utilized the following research instrument tools, namely: Degree of Knowledge (DOK) pretest/posttest tool; Treatment, Medication, Activity, and Diet (TMAD) adherence tool; and OMRON digital wrist blood pressure manometer cuff. The study utilized mean, standard deviation, and t-test for independent samples. The findings of the study revealed that generally, the communitybased program for hypertension is an effective health education program in improving hypertensive patients' increasing degree of knowledge to key health strategies, improving adherence to treatment regimens, and significantly reducing systolic and diastolic blood pressure among hypertensive patient participants.

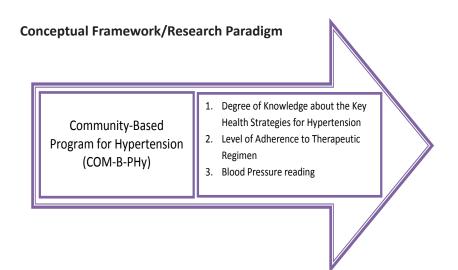
*Keywords:* Community-based program, hypertension, adherence, therapeutic regimen, blood pressure, hypertensive patients

## INTRODUCTION

Cardiovascular diseases comprise 16.7 million of total global deaths (Reyes, 2006). The rapid rise in the prevalence of cardiovascular disease represents one of the major health challenges to the country, and globally in the coming century. Cuevas (2007) even emphasized that it was estimated that 35 million mortality have occurred which contributes to 60% of deaths worldwide.

The Philippine Society of Hypertension (2004) cited that the Philippines have the highest rates of prevalence of hypertension in Southeast Asia with 70% of all cardiovascular patients suffering from it. Around 12.6 million Filipinos are diagnosed with hypertension but half of them are unaware that they are hypertensive unless they suffered from complications. Hypertension is a major risk factor for heart diseases, heart attack, cardiac arrest, heart failure and stroke. Untreated hypertension triples a person chance of developing coronary heart diseases or arteriosclerosis, six-fold chance of congestive heart failure, and sevenfold chance of developing stroke.

In line with this, there is no standardized community-based intervention program for hypertension widely implemented as part of the primary health care service in the country. The researcher, being a former public health nurse, a member of cardiovascular nurse practitioner in the Philippines, and a nursing educator, would like to enhance a communitybased program for hypertension. This prompted the researcher to develop such health education program that will increase self-awareness about hypertension as an illness, will improve adherence to therapeutic regimens, will reduce blood pressure, will improve hypertension control, will promote awareness of the prescribed therapeutic diet for hypertension, will promote healthy lifestyle, will prevent sedentary lifestyle, and will utilize different coping and stress management strategies. This study, in return, will prevent complications, morbidity and mortality associated with hypertension, will promote better clinical health outcomes, will lead to a favorable health prognosis and lastly, will improve quality of life among hypertensive patients.



This experimental study aimed to determine the effectiveness of the enhanced community-based program for hypertension in the level of adherence to therapeutic regimen. This research paradigm is comprised of independent and dependent variables. The independent variable in the study was the community-based program for hypertension. This community health education program consisted of 5 key intervention strategies, namely: disease awareness strategy, medication strategy, dietary strategy, healthy lifestyle strategy and stress reduction strategy. Such program aimed to promote optimum cardiovascular health, prevent complications associated with hypertension and promote behavior modification. This community based program for hypertension as an independent variable, was given as an intervention to the experimental group. On the other hand, the outcome measures are the dependent variables of the study. Such measures comprise of the following: a) degree of knowledge to key health strategies, b) level of adherence to therapeutic regimens, and c) blood pressure readings. Mean scores were measured before and after the implementation of intervention in order to determine the effectiveness of the community based program for hypertension.

## Statement of the Problem

Generally, this research sought to determine the effectiveness of the enhanced community-based program for hypertension in the knowledge, level of adherence and blood pressure of the hypertensive patients.

Specifically, it sought to provide answers to the following questions:

- 1. What are the mean scores of the control and experimental groups before the implementation of community-based program for hypertension in terms of:
  - 1.1. Degree of knowledge about:
    - 1.1.1. Disease awareness;
    - 1.1.2. Medication regimen;
    - 1.1.3. Dietary regimen;
    - 1.1.4. Healthy Lifestyle; and
    - 1.1.5. Stress Management?
  - 1.2. Level of adherence to therapeutic regimens
    - 1.2.1. Treatment regimen;
    - 1.2.2. Medication regimen;
    - 1.2.3. Activity regimen; and
    - 1.2.4. Dietary regimen?
  - 1.3. Blood Pressure readings
    - 1.3.1. Systolic blood pressure; and
    - 1.3.2. Diastolic blood pressure?
- 2. Is there a significant difference in the mean scores of the control and experimental groups before the implementation of community-based program for hypertension in terms of degree of knowledge, level of adherence to therapeutic regimens; and blood pressure reading?
- 3. What is the enhanced community-based program for hypertension?
- 4. What are the mean scores of the control and experimental groups after the implementation of community-based program for hypertension, in terms of:

- 4.1.Degree of knowledge about:
- 4.1.1. Disease awareness;
- 4.1.2. Medication regimen;
- 4.1.3. Dietary regimen;
- 4.1.4. Healthy Lifestyle; and
- 4.1.5. Stress Management?
- 4.2. Level of adherence to therapeutic regimens
  - 4.2.1. Treatment regimen;
  - 4.2.2. Medication regimen;
  - 4.2.3. Activity regimen; and
  - 4.2.4. Dietary regimen?
- 4.3. Blood Pressure reading
  - 4.3.1. Systolic blood pressure; and
  - 4.3.2. Diastolic blood pressure?
- 5. Is there a significant difference in the mean scores of the control and experimental groups after the implementation of community-based program for hypertension in terms of degree of knowledge, level of adherence to therapeutic regimens; and blood pressure reading?
- 6. Is there a significant difference between the mean scores of the control and experimental groups before and after the implementation of community-based program for hypertension in terms of degree of knowledge, level of adherence to therapeutic regimens, and blood pressure reading?

## METHODOLOGY

## **Research Design**

The study is focused on determining the effectiveness of the enhanced community-based program for hypertension. The research design that was utilized was randomized, two-group experimental design.

## Participants of the Study

A total of 30 hypertensive patients participated in the study

which was divided into two groups, namely: control and experimental groups. Each group contained 15 subjects which means, there were 15 participants included in the control group and another of 15 participants in the experimental group.

Inclusion criteria specify the population characteristics that are eligible to participate in the study. (Polit, 2004). In this connection, the inclusion or eligibility criteria for the study include (a) participants must be a hypertensive patient-preferably primary/essential hypertension; (b) newly diagnosed hypertensive patients, (c) pre-hypertensive patient participants are also included with blood pressure measurement reading of (130/80); (c) hypertensive patient participants with controlled hypertension as evidence by normotensive blood pressure measurement reading (within normal blood pressure reading of 110/70); (d) hypertensive patient participants taking their anti-hypertensive maintenance medications for their hypertension; (e) participants must be of legal age (18 years old and above) in order to participate in the study; (f) participants must be a bona fide resident of Jubilee Homes Subdivision, Barangay Lumang Bayan, Plaridel, Bulacan. and (g) the participants must belong to young adulthood (18 to 39 years old) and middle adulthood age group (40 to 65 years old) in order to participate.

Exclusion criteria are criteria that entitled participants not eligible nor to participate in the study including (a) participants who are not of legal age (18 years old and below) because for the legal purpose of signing the informed consent. (b) Participants who are over age and belong to late adulthood stage (more than 65 years old) because this community based program for hypertension requires physical endurance and mental alertnessduetovigorousandincreasedphysicalactivities(topreventfatigue and physical exhaustion among elderly) and didactic health education program in order to prevent exaggerated existing clinical condition. (c) Participants who belong to secondary hypertension classification. They are excluded to participate in the study because the cause of their high blood pressure is due to presence of secondary disease comorbidity such as Diabetes mellitus, Stroke, Cardiac dysrhythmias, Heart Failure and Renal disorders. (e) Participants with presence of mental impairment, unstable mental condition, hearing disturbance and physical impairments. (f) Participants who can't speak, read, write and understand Tagalog language because this is the primary medium of instruction that will be utilized all throughout the study and intervention program. (g) Hypertensive patient participants with chronic or long-term hypertension because this ten-week community based program might be too short to have an impact to these chronically diagnosed hypertensive patients. (h) Lastly, hypertensive patient participants with hypertensive crisis or uncontrolled hypertension (blood pressure reading of more than or equal to 180/120 mmHg) because the program entails physical promotional activities that might aggravate the present medical condition. This study entitled "The effectiveness of the proposed community-based program for hypertension to the knowledge, level of adherence and blood pressure of hypertensive patients" was conducted in 5-hectare land housing project which is a Parish-owned community situated in Barangay Lumang Bayan, Plaridel, Bulacan. The locale of the study was chosen because this is the workplace of the researcher. This is where the University of Santo Tomas College Of Nursing conducts their community health nursing immersion program. Thus, it will be easier, convenient and accessible on the part of the researcher if chosen this basic ecclesial community.

## **Data Gathering Procedure**

The data gathering happened from June 22 to September 4, 2015. First, the researcher submitted a letter of request to the Diocese of Malolos, Bulacan to conduct a study at their parish-owned community located in Plaridel, Bulacan. Second, the researcher performed content validation of the research instrument tools, conducted pilot testing to pre-hypertensive patients and test of validity and reliability of the said tools. Third, the researcher started actual data gathering by identifying the pre-hypertensive patients for pilot study of the said research instrument tool. Fourth, the hypertensive patients as the participants for the study were selected based on the case finding from the patient's treatment record or health record from the files at community health center. Fifth, the researcher contacted the chosen participants and conducted thorough medical history taking and blood pressure screening in order to identify eligibility to participate in the study using the inclusion and exclusion criteria guidelines provided by the researcher. Sixth, the

researcher provided an informed consent to the participants who agreed to participate in the study. In here, the researcher explained the purpose of the study, discussed the potential risks and benefits and assured the participants of the confidentiality and anonymity of the information that were gathered, explained the rights to participate and rights to withdraw from the study, and lastly answered all the necessary questions/queries of the participants. Seventh, the researcher utilized proportionate stratified participants to the target population using two strata (age and gender). Randomization of the participants as a sampling technique to determine participants who were randomly selected as either control or experimental group was done. Eighth, the researcher determined the mean scores to both experimental and control group before the implementation of community based program using three outcome measures (namely: degree of knowledge to key health strategies, level of adherence to therapeutic regimens, and blood pressure measurement readings). Ninth, both the control and experimental groups received the usual treatment and traditional regimens for hypertension in the community health center. Tenth, the participants for control group were not exposed to the community intervention program. On the other hand, the participants of the experimental group were exposed in the community-based program for hypertension (as the intervention for a ten-week experiment). Each two-week pertains to a particular health promotion program and hypertension disease prevention strategy for a total of ten weeks. Such strategies include disease awareness, medication regimen, dietary and nutrition, lifestyle practices and stress management strategies. Tenth, the researcher determined the mean scores to both experimental and control group after the implementation of communitybased program using three outcome measures (namely: degree of knowledge to key health strategies, level of adherence to therapeutic regimens, and blood pressure measurement readings). Eleventh, the researcher collated, tallied, tabulated, presented, interpreted, discussed and analyzed the results of data.

## Data Analysis

The mean (x) is the average value of all data in the set. It is the average of the scores which is also the mathematical center of a distribution. This

is the most commonly used measure of central tendency (Dayrit, 2007). In this study, the mean as a statistical tool determined the pre-test and post-test mean scores of the control and experimental group before and after the administration of community-based program for hypertension in terms of their degree of knowledge (regarding hypertension as a disease process, anti-hypertensive medications, diet and nutrition, healthy lifestyle practices, and coping and stress management). It also determined the mean scores on the level of adherence to the appendic regimens of the control and experimental groups before and after the implementation of the said program. Moreover, the systolic and diastolic blood pressure readings of the control and experimental groups before and after the program also utilized mean. The researcher utilized t-test for independent samples. Such technique is commonly used to compare the difference of means of two groups. Also, this statistical tool was used to measure the significant difference between two samples/groups (Dayrit, 2007). The t-test tested the significant difference between the pretest and posttest mean scores of the control and experimental groups before and after the implementation of Community-based program for hypertension. It also tested the significant difference between the level of adherence to therapeutic regimens of the control and experimental groups before and after the implementation of community-based program for hypertension. Moreover, this study also validated if there is a presence of significant difference in the blood pressure readings of the control and experimental groups before and after the implementation of program.

## **RESULTS AND DISCUSSION**

## Mean Scores on the Degree of Knowledge to Key Health Strategies Before the Implementation of the Community-Based Program for Hypertension

Based from the results of the study, the control group had a pretest mean score of 7.79, which means that, control group had "inadequate" knowledge about the different key health strategies. Meanwhile, it shows that the experimental group has a pretest mean score of 7.64 which means that the experimental group also has "inadequate" knowledge about the different key health strategies. Inadequate knowledge on the different key health strategies for hypertension implies a low level of understanding to disease awareness, medication regimen, dietary regimens, healthy lifestyle, and stress management key health strategies. Community-based program for hypertension is necessary to improve patient's level of understanding, increase degree of knowledge, have better educational level, and increase health literacy about hypertension. Hypertension awareness program must be established to improve patient's education and establish an effective communication in the promotion of optimum cardiovascular health, behavior modification, healthy lifestyle, favorable clinical health outcomes, and adequate blood pressure control among hypertensive patients. Moreover, Health education strategy for hypertension is necessary to prevent risks of cardiovascular events, prevent morbidity and mortality, prevent unfavourable patient outcomes and delay disease progression.

# Mean Scores on the Level of Adherence to Therapeutic Regimens before the Implementation of the Community-Based Program for Hypertension

There is a "moderate level" of adherence to treatment regimens both in the control and experimental group before the implementation of community-based program for hypertension with mean scores of 2.00 and 2.19, respectively.

## Mean Scores on the Pre-Systolic and Pre-Diastolic Blood Pressure Readings of the Control and Experimental Groups

For the pre-systolic blood pressure readings, the average BP reading for the control group is 143.33mmHg (SD± 21.60), which means, majority of the participants were experiencing stage 1: mild hypertension at the time of pre-implementation phase. Meanwhile, the average reading for the experimental group is 140.00 mmHg (SD± 14.64), which means, majority of the participants is experiencing stage 1: mild hypertension at the time of pre-implementation phase. For the pre-diastolic blood pressure readings, the average reading for the control group is 92.67 mmHg (SD± 12.23) which means majority of the participants is experiencing stage 1: mild hypertension at the time of pre-implementation phase. Meanwhile, the average reading for the experimental group is 90 mmHg (SD± 8.45) which means that, majority of the participants is experiencing stage

1: mild hypertension at the time of pre-implementation phase. Although the blood pressure readings of the hypertensive patients remain to be mild and not in moderate, severe, and crisis hypertensive state, still it remains to have their blood pressure in an elevated condition. Despite being hypertensive for several years, it implies a poor hypertensive control among participants which might lead to cardiovascular risk, poor clinical outcomes, and even unfavorable disease prognosis. This implies that the community-based program for hypertension must be developed to improve the systolic and diastolic blood pressure of the hypertensive patients, as one of the outcome measures of the study. Such program also targets uncontrolled hypertension in order to prevent life-threatening complications like cardiovascular diseases, disease progression, unfavorable clinical outcomes, morbidity and mortality.

## Test of Significant Difference in the Mean Scores in the Degree of Knowledge to Key Health Strategies of the Control and Experimental Groups

For the difference on mean scores on the degree of knowledge to key health strategies (disease awareness, medication regimen, dietary regimen, healthy lifestyle and stress management) of the control and experimental group before the implementation of community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no significant difference in the pretest degree of knowledge to different key health strategies of the control and experimental group is accepted.

# Test of Significant Difference in the Mean Scores in the Level of Adherence to Therapeutic Regimens of the Control and Experimental Groups

In terms of the difference on mean scores on the level of adherence to therapeutic regimens (treatment, medication, activity and dietary) of the control and experimental group before the implementation of community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the mean scores of the level of adherence to therapeutic regimens of the control

#### and experimental group is accepted. *Test of Significant Difference in the Pre- Systolic and Pre-Diastolic Blood Pressure Readings of the Control and Experimental Groups*

With respect to the difference on systolic and diastolic blood pressure readings of participants before the implementation of community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the mean scores of the pre-systolic and pre-diastolic blood pressure readings of the control and experimental group is accepted.

## Mean Scores on the Degree of Knowledge to Key Health Strategies after the Implementation of the Community-Based Program for Hypertension

Based from the results, it showed that the control group has a posttest score of 7.48, which means that, the members of the control group still remain with "inadequate" knowledge about the different key health strategies. Meanwhile, it shows that the experimental group has a posttest score of 12.84 which means that the members of experimental group have "adequate" knowledge about the different key health strategies.

# Mean Scores on the Level of Adherence to Therapeutic Regimens after the Implementation of the Community-Based Program for Hypertension

Based from the results, it is revealed that the control group had a pre-adherence mean score of 2.17 (SD $\pm$  0.40), which means that, control group had "moderate level" of adherence to therapeutic regimens. Meanwhile, it shows that the experimental group has a post-adherence mean score of 2.57 (SD $\pm$  0.29) which means that experimental group had "high level" of adherence to therapeutic regimens.

# The Mean Scores on the Systolic and Diastolic Blood Pressure Readings of the Control and Experimental Groups

The systolic and diastolic blood pressure readings of the participants after the implementation of community-based program for hypertension, for the post-systolic blood pressure readings, the average BP reading for the control group is 136.67 mmHg (SD $\pm$  21.27), which means that, majority of the participants showed statistical significant reduction in their systolic arterial blood pressure from stage 1: mild hypertension and now into a prehypertensive stage. Meanwhile, the average systolic BP reading for the experimental group is 124.67 mmHg (SD $\pm$  9.90) which means that majority of the participants showed statistical significant reduction in their systolic arterial blood pressure from stage 1: mild hypertension and currently into a prehypertensive stage.

## Test of Significant Difference in the Intervention Mean Scores in the Degree of Knowledge to Key Health Strategies of the Control and Experimental Groups

The difference on mean scores on the degree of knowledge to key health strategies (disease awareness, medication regimen, dietary regimen, healthy lifestyle and stress management) of the control and experimental group after the implementation of community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the posttest degree of knowledge to key health strategies of the control and experimental group is rejected.

# Test of Significant Difference in the Mean Scores in the Level of Adherence to Therapeutic Regimens of the Control and Experimental Groups

With respect to the difference on mean scores on the level of adherence to therapeutic regimens (treatment medication, dietary, activity and diet) of the control and experimental group after the implementation of community-based program for hypertension, at 0.05 level of significance, there is no significant difference in the mean scores of the level of adherence to therapeutic regimens (drug and activity regimens) of the control and experimental group. On the other hand, study showed presence of significant difference in mean scores of the level of adherence to therapeutic regimens (treatment and diet regimens) of the control and experimental group.

# *Test of Significant Difference in the Post-Systolic and Post-Diastolic Blood Pressure Readings of the Control and Experimental Groups*

In terms of the difference on systolic and diastolic blood pressure readings of participants after the implementation of communitybased program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the post-systolic blood pressure readings of the control and experimental group is accepted (t=1.981, p=0.058). While the null hypothesis of no statistical significant difference in the post-systolic blood pressure readings of the control and experimental group is accepted (t=2.319, p=0.028).

# Test of Significant Difference in the Pretest and Posttest Scores in the Degree of Knowledge to Key Health Strategies of the Control and Experimental Groups

With regard to the difference on mean scores on the degree of knowledge to key health strategies (disease awareness, medication regimen, dietary regimen, healthy lifestyle and stress management) of the control and experimental group before and after the implementation of enhanced community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the pretest and posttest degree of knowledge to key health strategies of the control group is accepted. On the other hand, the null hypothesis of no statistical significant difference in the pretest and posttest degree of knowledge to key health strategies (medication, lifestyle and stress reduction strategies) of the experimental group is rejected.

# Test of Significant Difference in the Mean Scores in the Level of Adherence to Therapeutic Regimens of the Control and Experimental Groups

The difference on mean scores on the level of adherence to different therapeutic regimens (treatment, medication, activity and diet) of the control and experimental group before and after the implementation of the enhanced community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the pre- and posttest degree of knowledge to key health strategies of the control group is accepted. On the other hand, the null hypothesis of a/no statistical significant difference in the pretest and posttest degree of knowledge to key health strategies (medication, lifestyle and stress reduction strategies) of the experimental group is rejected.

# Test of Significant Difference in the Mean Scores in the Systolic and Diastolic Blood Pressure Readings of the Control and Experimental Groups

The difference on systolic and diastolic blood pressure readings of the control and experimental group before and after the enhanced community-based program for hypertension, at 0.05 level of significance, the null hypothesis of no statistical significant difference in the presystolic and postsystolic (t=2.320, p=0.036) and prediastolic and postdiastolic (t=0.642, p=0.531) blood pressure readings of the control group is accepted. The null hypothesis of no statistical significant difference in the presystolic and postsystolic (t=3.595, p=0.003) blood pressure readings of the experimental group is rejected.

### CONCLUSION

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

Generally, the community-based program for hypertension is an effective health education program in improving hypertensive patients' increasing degree of knowledge to key health strategies, improving adherence to treatment regimens and significantly reducing systolic and diastolic blood pressure among hypertensive patient participants.

Specifically, the community-based program for hypertension is an effective program in improving the degree of knowledge to key health strategies. Thus, the said health education program is effective in increasing the level of understanding to disease, medication regimen, dietary regimen, healthy lifestyle and stress management. Moreover,

the ten-week community-based program for hypertension is an effective program that promoted awareness, health teaching and patient education among hypertensive patients.

Further, the community-based program for hypertension is an effective program in promoting statistical significant improvement in the level of adherence to therapeutic regimens. Thus, the said health education program is effective in increasing compliance to recommended treatment, medication, physical activity and dietary regimens. Also, the community based program for hypertension is an effective health educational campaign that is proven to promote significant difference in the level of adherence to therapeutic regimens among hypertensive patients of the control and experimental groups.

The community-based program for hypertension is an effective program in promoting statistically significant improvement in the arterial blood pressure of the hypertensive patients. Specifically, the study revealed a statistical significant reduction in the systolic and diastolic blood pressure readings before and after the implementation of the community intervention program from a blood pressure reading of stage 1: mild hypertension (BP of 140/90) and now significantly reduced into a pre-hypertensive stage (130/80). Thus, it must be noted that the said health education program is effective in the control of hypertension that promoted better clinical health outcomes, optimum cardiovascular health, better hypertension control, and favorable disease prognosis. Moreover, the said intervention is effective in the prevention of uncontrolled blood pressure, high cardiovascular risk, severity, complications, disease progression, unfavorable clinical outcomes, morbidity and mortality.

#### RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are derived:

The researcher highly recommends this Community-Based Program for Hypertension in the Department of Health, Municipal Health Office of Bulacan, Primary Health Care Facilities such as Community Health Center, Barangay Health Station and Rural Heath Unit. Hypertension awareness program should be utilized in the community health settings to promote optimum cardiovascular health, promote behavior change, lifestyle modification, maintain appropriate health care behavior, health maintenance monitoring, establish healthy lifestyle, promote positive clinical health outcomes, promote favorable disease prognosis, prevent uncontrolled hypertension and maintain adequate blood pressure control among hypertensive patients. Likewise, health education strategy for hypertension is necessary to prevent risks of cardiovascular events, prevent morbidity and mortality, prevent unfavorable patient outcomes and delay disease progression.

Future researchers may extend the community-based program for hypertension to a longer period of time because the short duration of the intervention that is limited only to a ten-week lifestyle intervention exposure, is too short to further test its impact in the community Likewise, the researcher also recommends future researchers to utilize other approaches or interventions to manage hypertension.Such approaches may include comprehensive-based program, integratedbased, home-based approaches, and hospital-based approach. Moreover, the study entailed focusing on random, two-group experimental design. Thus, future studies would be more significant if they were designed as randomized control trial, longitudinal experiment, cohort studies, structural equational model, double-blind experimental design, and cross sectional study among others.

Future researchers may utilize other parameters in the subsequent studies related to community-based program for hypertension. Such parameters include cardiovascular (cardiac rate, pulse rate, pulse pressure, mean arterial pressure, cerebral perfusion pressure, proportional pulse pressure), anthropometric/biometric parameters (body weight, height, waist circumference, body mass index), and biochemical analyses (cholesterol, total lipid profile, low density lipoprotein, high density lipoprotein, glycemia, nitrate). All of these parameters are scientifically proven to have direct effect on the presence of hypertension. The study is focused on the test of significant difference of mean scores before and after the intervention program. Thus, the researcher recommends on studying test of significant relationship of mean scores in the degree of knowledge to the level of adherence, and to the blood pressure of hypertensive patients and vise versa.

Lastly, the researcher recommends using the same communitybased intervention program for hypertension to the study participants in the control group as well as to other hypertensive and prehypertensive patients in the chosen research locale. This program can be the solution to hypertension as the priority and actual health problem prevalent in the said parish-owned community in Plaridel, Bulacan.

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## ORAL ENGLISH LANGUAGE SKILLS OF GRADE 6 PUPILS OF ST. THERESA'S COLLEGE QUEZON CITY

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#### ABSTRACT

The study investigated on the oral English language proficiency of the Grade 6 pupils of St. Theresa's College, Quezon City for the A.Y 2011-2012. It applied both the quantitative and qualitative approaches. Self-Assessment Questionnaire, Oral test, interview questions, rubric for the Oral Proficiency Test and checklists were employed as research instruments. There are two aroups of participants in the study, namely: the eighty-three (83) pupils who were taken from each of the seven sections through random sampling and the three (3) teachers at the Grade 6 level, including the researcher herself, who served as raters or evaluators. Frequency and percentages as well as the thematic analysis were used for data analysis. Results unveiled that the pupils' assessment of their oral English language proficiency level is within the "established" level while on teachers' assessment of their pupils' oral English language proficiency level is within the "proficiency level 3" notably that pupils "commit few errors in the pronunciation of the critical sounds," "speak with few errors in syllable stress and does not clearly emphasize content words in a sentence," "does not blend some English sounds," makes few errors in phrasing" and "slightly confused with the use of the intonation patterns." This implies a call for reinforcement and enhancement in the higher level. This, therefore, poses a challenge to the high school teachers as they teach speech to these students. The study further assessed that the pupils' difficulty in expressing themselves in English is an indication of their non-mastery of the skills in English regarding accent, fluency, confidence, phonological and grammar structures. All these bring about ineffective communication since listeners do not master the oral English language skills. Therefore, enhancement of these skills is deemed necessary to make themselves competent and confident speakers of the English language.

*Keywords:* Oral english language skills, accent, fluency, phonological structures, grammar structures

#### INTRODUCTION

Language is a man's essential tool. Using language, man develops himself and helps others develop themselves, too. Through language, he receives and transmits the great ideals of his civilization and those of other people. Therefore, the fulfillment of man's aims and aspirations as an individual and of his role in his direct and broader community depends on his great ability to communicate. With language, man can conquer and stand the tumult of events directly. As he struggles and explores the various facets of life, he has to deal with others. In other words, man communicates as a gesture of existence. His ability to communicate is vital for the success of his endeavour. Hence, communication skills are essential in any sphere of human interaction. Today, the English language is only one official language that links people with one another in any part of the world. The use of the English language cannot be overemphasized in an increasingly interconnected and globalized world. English provides access to people and things across the nations and gives people the chance to have a wider vision of the world. In this era of globalization, people across the globe share a single commonality - to speak English in dealing with one another.

At St. Theresa's College, Quezon City, it has been a major problem for the teachers to let the students speak English naturally and engage in a substantial conversation using the target language. To support this argument, the majority of the Grade 6 students, who were asked about the reasons why they hesitate to speak in English, responded that they are not sure of their grammar and pronunciation. They do not also know the appropriate words to use in expressing themselves, and this, consequently, prompts them to switch to the Filipino language. They that confess their lack of confidence in using the English might bring them embarrassment in class. It is in this light that as language teachers, the need to assess the level of the oral English language proficiency of students is vital to find out their verbal communication abilities, their oral communication skills as well as their oral language difficulties. Assessing their oral language proficiency level would certainly give the language teachers a clear picture of their strengths and weaknesses in the target language. This would help them use proper approaches and employ appropriate strategies to make them speakers of the English language.

## **Conceptual Framework**

Based on the theories and from other readings of the researcher on the assessment of the oral proficiency of the language learners, the conceptual framework below has been formed and designed to carry out the objectives of the study.

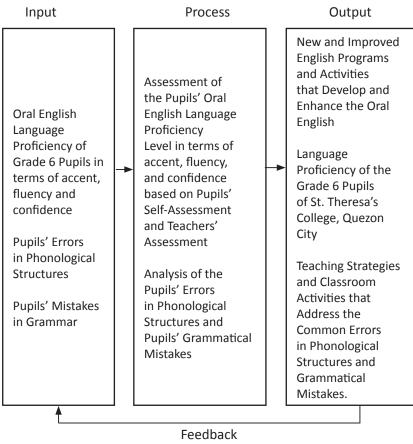


Figure 1. The Paradigm of the Study

The pupils' assessment of their oral English language proficiency level and the teachers' assessment of the pupils' oral English language proficiency were the indicators of the pupils' oral English proficiency level. As such to ascertain the oral English language proficiency level of the pupils, self-assessment and oral proficiency tests on oral English language proficiency were used in this study.

Likewise, checklist on the errors in phonological structures and grammatical mistakes were also utilized to determine the pupils' errors in phonological structures and mistakes in grammar. Results of these oral English language proficiency tests were analyzed and assessed in the light of this study.

With the ascertained oral English language proficiency level of the pupils, innovations, improved programs, and meaningful activities in teaching English were designed. These innovations, programs and activities envision improving the oral English language proficiency level of the Grade 6 pupils of St. Theresa's College, Quezon City to address their weaknesses in phonological structures and in grammar.

# Statement of the Problem

This study sought to ascertain the oral English language proficiency level of the Grade 6 pupils of St. Theresa's College, Quezon City for the school year 2011-2012.

Specifically, the study sought to answer the following questions:

- 1. What is the oral English language proficiency of the Grade 6 pupils as assessed by themselves regarding:
  - 1.1 accent; 1.2 fluency; and
  - 1.1 confidence?
- 2. What is the oral English language proficiency of the Grade 6 pupils as assessed by their teachers in terms of:
  - 2.1 accent;
  - 2.2 fluency; and
  - 2.3 confidence?

- 3. What are the phonological errors of the Grade 6 pupils on:
  - 3.1. segmental phonemes
    - 3.1.1 critical vowel sounds;
    - 3.1.2 critical consonant sounds; and
    - 3.1.3 final sounds?
- 4. What are the grammatical mistakes of the Grade 6 pupils in oral English communications?

# METHODOLOGY

# **Research Design**

This study applied both the quantitative and qualitative methods of research. The qualitative approach was used in the study since the teacher underwent an analysis on the oral skills of pupils based on their oral responses.

The data were collected from the results of the pupils' assessment of their oral English language proficiency level, the teachers' assessment of their pupils' oral English language proficiency level, and from the checklists on phonological structures and grammatical mistakes.

# Participants of the Study

There are two groups of participants in the study; the pupilparticipants and teacher participants. There were eighty-three (83) pupils that were randomly selected from the 314 pupils in the Grade 6 level of St. Theresa's College, Quezon City enrolled for the school year 2011-2012. Since this is an all-girls school, all the participants were female. These pupils were taken from each of the seven sections through random sampling. The three teacher-participants who are English teachers served as raters or evaluators of the pupils' oral English language proficiency. Each teacher-participant rated all the 83 pupils in terms of their oral English proficiency.

#### **Research Instruments**

Self-Assessment Questionnaire, Sentences for the Oral Test, Interview Questions, Rubric for the Oral Proficiency Test, checklist on Errors in Phonological Structures, and Checklist on Grammatical Mistakes were utilized as tools for data gathering.

In the Self-Assessment Questionnaire answered by the pupils, there were 3 categories included to describe the pupils' oral English language proficiency such as Accent, Fluency and Confidence.

The following scale and its descriptive interpretation, based on the 1999 ACFTL Oral Proficiency Interview Tester Training Manual (Swender 1999) and W-APT k-Model and ACCESS for ELLs, were used to indicate the participants' own assessment of their oral English language proficiency level in terms of Accent, Fluency and Confidence:

Scale	Descriptive Interpretation	
5	Proficient	
4	Mastered	
3	Established	
2	Developing	
1	Beginning	

A checklist was utilized to identify the mistakes that the pupils incurred while answering the interview questions. The checklist on errors in phonological structures included the segmental phonemes and supra-segmental phonemes. The checklist on grammatical mistakes included subject-verb disagreement, misuse of pronouns in relation to their antecedents, redundancy, wrong tense of verbs, adjectives used as adverbs, misuse of prepositions, wrong choice of words, starting a sentence with a conjunction/incomplete and run-on sentence.

## Data Collection Procedure

To facilitate the collection of the data needed, the researcher undertook the following procedures:

- 1. A letter of request addressed to the School Directress was written to seek permission to conduct the study to the Grade 6 pupils of St. Theresa's College, Quezon City.
- 2. A letter of permission was also sent to the parents of the participants to allow their daughters to participate in the study.
- 3. With the approval of the School Directress, through the Grade School Principal, and with the permission of the parents of the participants, the researcher administered the Self-Assessment of the Pupils' Oral English Language Proficiency and conducted the Oral English Proficiency Test with the pupils, together with the teacher-raters.
- 4. In answering the Self-Assessment Questionnaire, the pupils rated themselves according to their assessment of their oral English language proficiency level.
- 5. After the Self-Assessment, the researcher, together with the two other English language teachers in the level, administered the oral English Language Proficiency Test to the participants. The Rating of the teachers was done at the same time.
- 6. All the results of the Self-Assessment and Oral Proficiency Test were collated, and appropriate statistical tools were employed for further analysis and interpretation.

### Data Analysis

The researcher analyzed the data by summarizing the answers of the pupils in the Self-Assessment Questionnaire, by collating the ratings of the three teachers in the Oral English Language Proficiency Test, and by determining the frequency of the errors in phonological structures and mistakes in grammar.

#### **RESULTS AND DISCUSSION**

#### On pupils' assessment of their oral english language proficiency level

On Accent, most or 45.8% of the pupils assessed their oral English language proficiency is at the "established" level. This implies that pupils have not mastered the skills related to accent. Thus, it calls for reinforcement and enhancement in the higher level.

On Fluency, the highest percentage of the pupils claimed that their oral English language proficiency is at "established" level with an overall frequency of 33 or 39.8%. This implies that the Grade 6 pupils have acquired the basic and necessary skills regarding fluency during their elementary years.

On Confidence, results revealed that the highest percentage or 39.8% of the pupil-participants believed that their oral English language proficiency is at the "established" level. This means that as Grade 6 pupils, they have already established themselves confidence in speaking, yet they need more of this to communicate with others more easily and more efficiently.

# On teachers' assessment of their pupil' oral english language proficiency level

Along Accent, more than half or 55.5% of their pupils are under "Proficiency Level 3" which denotes that pupils "commit few errors in the pronunciation of the critical sounds," "speak with few errors in syllable stress and does not clearly emphasize content words in a sentence," "does not blend some English sounds," "makes few errors in phrasing" and "slightly confused with the use of the intonation patterns" with an overall mean of 50.6%. This means the majority of the grade 6 pupils are not yet proficient regarding skills related to accent. This, therefore, poses a challenge to the high school teachers as they teach speech to these students.

In terms of Fluency, majority or 50.6% of their pupils are under "Proficiency Level 3" notably, pupils "commit few errors in the

pronunciation of the critical sounds," "speak with few errors in syllable stress and does not clearly emphasize content words in a sentence," "does not blend some English sounds," "makes few errors in phrasing" and "slightly confused with the use of the intonation patterns." Belonging to this level, pupils make conscious attempt to speak with relative ease. Students have a limited vocabulary, and make few errors in the choice of words; use idiomatic expressions and figures of speech to a certain extent; have some grammatical lapses but don't interfere with meaning, and organize ideas with some effort when speaking.

On Confidence, more than half or 55.4 of their pupils are under "Proficiency Level 3" notably, pupils "commit few errors in the pronunciation of the critical sounds," "speak with few errors in syllable stress and does not clearly emphasize content words in a sentence," "does not blend some English sounds," "makes few errors in phrasing" and "slightly confused with the use of the intonation patterns". Since the majority of the pupils belong to "Proficiency Level 3", it is inferred that they display some nervousness and manifest fluctuating energy level when speaking. Therefore, enhancement of these skills is deemed necessary to make themselves competent and confident speakers of the English language.

### On errors in phonological structures committed by students

Among all errors in phonological structures perpetrated by the pupils along segmental phonemes, the common errors frequently committed by pupils in their speech are the errors on the contrastive sounds of /l/-/i:/ and / $\theta$ /-/ $\delta$ / and the sound of /t/ and /z/. This shows that pupils do not clearly emphasize the distinct sounds of /l/-/i: / and / $\theta$ /-/ $\delta$ / in their speech, and they find difficulty in applying the rules governing the sounds of /t/ and /z/.

Among all errors in phonological structures committed by the pupils along suprasegmental phonemes, the common errors frequently committed by pupils in their speech are the errors on sentence stress, pausing within the sentence, and difficulty on using rising-falling intonation. This implies that they have trouble highlighting or emphasizing important words in a sentence, saying words or ideas together for a clearer message, and saying a sentence following the rising-falling intonation.

#### On grammatical mistakes committed by students

Among all grammatical mistakes in the English grammar, the errors on starting a sentence with a conjunction/incomplete sentence, redundancy/repetition of words/use of fillers (like um and ah), and subject-verb disagreement are the most frequent errors committed by the pupils in their speech. This clearly communicates that pupils have the difficulty composing their ideas when speaking and that they need to develop and enhance their knowledge and skills in English grammar to achieve grammatical competence in speaking.

## CONCLUSION

From the findings, the researcher concludes that pupils' difficulty in expressing themselves in English is an indication of their non-mastery of the skills in English regarding accent, fluency, and confidence. Pupils' errors on phonological structures indicate that they have not mastered the skills along segmental and supra-segmental phonemes. Likewise, the pupils' mistakes in grammar are indicators of their non-mastery of these grammar structures. All these bring about ineffective communication since listeners do not clearly get their message due to the mispronunciation of the critical vowels, consonants, and final sounds, the non-observance of proper stress, phrasing/pausing, and intonation in speaking, and the occurrence of grammatical mistakes in their speech.

#### RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are drawn:

# On School Curriculum

That English language teachers may realign content and skills in English, focusing on the communicative competence of the pupils. The

activities, lessons, and expertise they give to the pupils should be geared towards development and enhancement of the oral language proficiency of the pupils.

That English language teachers may do streamlining of lessons and spiraling of content and skills in Reading and Language at all levels to ensure that the pupils are well-prepared for the next level. That English language teacher should provide varied and engaging classroom activities to develop the pupils' oral English language proficiency.

## **On Classroom Instruction**

The English teachers may provide the pupils with different activities that would allow them to express themselves in English. The Speak-upand-be-Heard activity, the opportunity to ask a question (OTAQ), oral performances, oral tests, oral evaluations, and other oral activities that enable them to speak freely and confidently using the target language.

That other subject teachers may provide their pupils opportunities for speaking, discussion, and expression of ideas, experiences, and opinions across the whole curriculum. This would involve a range of experiences in which the size and type of audience, the situation, and purpose will all vary. Teachers should establish good strategies to manage all forms of communication to ensure that all students have their interpersonal speaking and listening skills (e.g. large and small group discussions).

# **On School Facilities**

That administration may consider putting up a speech laboratory that could help the pupils acquire and master oral language skills through the process and method of learning this laboratory gives. This provides an avenue for the students to improve the way they pronounce words and be corrected by the teacher whenever necessary. It helps students to pronounce certain words correctly. Small details like accent, stress, and blending of words can also be corrected as young as they are. Teachers and education specialists could also make use of the laboratory in creating unique materials and other relevant materials. Language learning in laboratories can be done privately and at their pace, students who are slow in learning the language, become more confident as they try to develop their proficiency in the language. Though it is expensive to put up a language laboratory, the school should still invest on it. In fact, the advantages it can get it outweigh the overall cost.

### **On Instructional Materials**

That English language teachers may help the head of the Instructional Media Center in acquiring materials that develop the oral communication skills of the pupils and use these materials to a great extent to improve the oral English language proficiency of the pupils.

#### **On School Activities**

That the school may intensify its "Speak English Campaign" to encourage the pupils to speak in English, thus helping them to develop and enhance their oral English language proficiency.

That English language teachers and the SINAG (Socialized Instructional Activities for the Advanced Group) and SIG (Samahan Interest Groups) facilitators may intensify the oral proficiency of the pupils by exposing them to different speech acts like Speech Choir, Readers' Theater, Chamber Theater, Oration, Extemporaneous Speech, and Declamation. These various speech forms could help them develop their accent, fluency, and confidence in speaking.

#### **On Future Researchers**

Those future researchers make this study as a basis for their research as they assess the oral English language proficiency of the pupils as well as identify their common errors in phonological structures and grammar. This study may be replicated to seek more relevant information about oral proficiency not only of the pupils but also of the teachers and commit them to finding more ways to develop and enhance the oral English language proficiency of pupils and educators.

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## WOMEN'S AUTONOMY AND EXTENT OF UTILIZATION OF MATERNAL AND CHILD HEALTH CARE IN PUSKESMAS KONGBENG, INDONESIA

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## ABSTRACT

The descriptive-correlational research sought to assess the relationship between the extent of women's autonomy and maternal and child health-care utilization in Puskesmas Kongbeng, Indonesia. The participants were the 210 mothers; 30 mothers from each village. Modified questionnaire patterned from Indonesia Demographic Health Survey (IDHS, 2012) was employed for instrument. Using frequency count and percentage, mean, and chi-square for data analysis results unveiled that women in Puskesmas Kongbeng area have an active role in decision making about theirs and family's healthcare, economy household, food, and about having a child. The differences in the extent of autonomy in decision making have been affected by the number of living children. Age and work status of women have affected the extent of autonomy among women in Puskesmas Kongbeng in freedom of movement, which means that Indonesian government programs for women empowerment have been achieved. However, Indonesia is a Patriarchal country which means that most of the Indonesian women show respect to their husbands as leaders in the household. They can go out to other places on their own, but they respect the decision of their husbands before leaving. The differences in age, ethnicity, number of living children and educational attainment affect the utilization of antenatal care services. The differences in age, ethnicity, gross monthly income and number of living children affect the utilization of intrapartum/childbirth services. Lastly, the differences in age, religion, ethnicity, gross monthly income, the number of living children and educational attainment affect the extent of child health care utilization. The extent of women's autonomy is a significant contributory factor on their extent of utilization of maternal and child health care services in Puskesmas Kongbeng.

*Keywords:* Women's autonomy, maternal care, child health care, neonatal care, maternal mortality

## INTRODUCTION

Millennium Development Goals (MDGs) were established in 2000 as an ambitious set of International goals for development or improvements during the first 15 years of the new century. The MDGs consist of eight goals backed up by 18 targets, and beneath that is a set of indicators to measure the objectives. The goals are quantitative, global and time bound. The MDGs goals are: 1) Eradicate extreme poverty and hunger, 2) Achieve universal primary education, 3) Promote gender equality and empower women, 4) Reduce child mortality, 5) Improve maternal health, 6) Combat HIV/ AIDS, malaria and other diseases, 7) Ensure environmental sustainability, and 8) Develop a global partnership for development. The aim was to achieve all the MDGs by 2015, taking 1990 levels as the baseline for progress. Three of the goals are specifically related to health (goals 4, 5 and 6). In Indonesia, there was a recorded increase in maternal deaths of 228 people in 2008 to 359 in 2012, whereas Indonesia has a target to reduce maternal mortality to 102 people in 2015 (Indonesia Demographic Health Survey, 2012). Five causes of maternal mortality are hemorrhage, hypertension, infections, obstructed labor/jammed and abortion. Indonesia's maternal mortality is still dominated by three main causes of death, namely: hemorrhage, hypertension in pregnancy, and infection. High rates of maternal, neonatal, and child mortality are associated with inadequate and poor-quality reproductive healthcare, including family planning, antenatal care, skilled attendance at birth, and postnatal care. Hence, achieving the MDG goal on maternal health requires providing high-quality pregnancy and delivery care, including essential obstetric care, and improving women's sexual and reproductive health (World Health Organization, 2011). Researches have been conducted regarding the factors contributing to low utilization of health care services, and most of them are found to be focused on provision and geographic accessibility of services. But very few studies concentrate on women's autonomy and the use of maternal health care services (Furuta and Salway, 2006). Thus, this study aimed at determining the relationship of women's autonomy on the mother and child health care utilization with an attempt to discover the extent of women's autonomy and its relationship to the degree of maternal health care utilization.

## **Conceptual Framework**

This study aimed at examining the relationship between women's autonomy and mother and child health care services utilization among people in Puskesmas Kongbeng, East Kalimantan, Indonesia. The independent variable and dependent variable model including its intervening factors was utilized as the framework of the study. Further, the intervening factors may affect the variable entries.

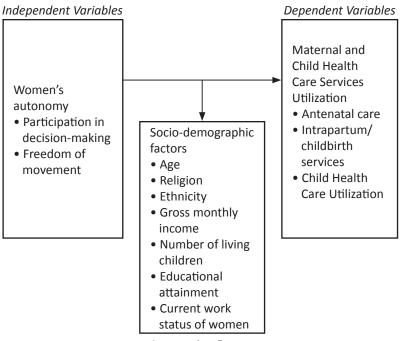




Figure 1. The Conceptual Framework of the Study

Variables of women's autonomy, which include participation in decision making and freedom of movement to seek healthcare are seen as proximate determinants for the utilization of maternal and child health care services, which include antenatal care, intrapartum/childbirth services and child health care services (immunization, weighing and provision of vitamin A). Moreover, such indicators as women's age, religion, ethnicity,

gross monthly income, number of living children, educational attainment, and current work status of women may also influence the utilization of maternal and child health care services, although not as directly as women's autonomy.

## Statement of the Problem

The study sought to examine the relationship between the extent of women's autonomy and maternal and child health care utilization.

Specifically, the study attempted to answer the following questions:

- 1. What is the profile of the participants regarding age, religion, ethnicity, gross monthly income, number of living children, educational attainment and current work status of women?
- 2. What is the extent of women's autonomy of the participants regarding participation in decision making and freedom of movement?
- 3. What is the extent of maternal and child health care utilization of the participants in terms of antenatal care, intrapartum/childbirth services; and child health care utilization?
- 4. Is there a significant difference in the women's autonomy in decision making and freedom of movement when participants are grouped according to profile variables?
- 5. Is there a significant difference in the extent of utilization of the members of the maternal and child care services (MNCH) when grouped according to profile variables?
- 6. Is there a significant relationship between the extent of women's autonomy and the extent of use of MNCH health services?

## METHODOLOGY

## **Research Design**

The descriptive correlational survey method was used in this study to explore whether the extent of women's autonomy in decision-making and freedom of movement and the degree of utilization of antenatal care services during pregnancy, intrapartum/childbirth services, and child health care services.

# Participants of the Study

The participants who were involved in this study were 210 mothers; from each village, 30 mothers were taken as representatives decided using purposive sampling technique with the following criteria: legally married women who live in Puskesmas Kongbeng working area, aged 15-49, and had given birth to her youngest child in the past five years.

# Instrumentation

The researcher used the modified questionnaire patterned from Indonesia Demographic Health Survey (IDHS, 2012). The questionnaires contained the following: Part 1 includes questions about the profile of the participants; Part 2 includes questions about the extent of women's autonomy in participation in decision making and freedom of movement; Part 3 includes the questions about the extent of maternal and child health care utilization such as: antenatal care services, childbirth/intrapartum and child health care services.

# Data Gathering Procedure

The researcher requested permission from the Dean of the graduate school of St. Paul university Philippines to conduct the study. Then the researcher submitted the same to Head of Kongbeng districts. The head gave a letter permitting the conduct of the study and the researcher submitted the letter to the head of Puskesmas Kongbeng. The head accepted and appreciated the researcher to do the study together with Posyandu activities in 7 villages. The researcher prepared questionnaires to be used for data collection. The researcher explained the purpose of the study and explained that data collected will be kept confidential, requested the participants to approve and sign an informed consent; explained the contents of the questionnaire and assisted participants in filling out the questionnaires.

The researcher collected all the filled out questionnaires, coded and analyzed the data with the use of Microsoft Excel and SPSS program. Lastly, the quantitative collated data were classified and tabulated.

### **Statistical Treatment**

The researcher used frequency count and percentage distribution to determine the profile of the participants.

The weighted mean is used to ascertain the extent of the participants' autonomy and the extent of maternal and child health care (MNCH) utilization of the participants. The obtained means were interpreted using the 5 point likert scale.

The researcher used Chi-square test to determine if there is a significant difference in the extent of utilization of the participants on MNCH services when grouped according to profile variables. Further, Chi- square test was also used to determine the relationship between the extent of women's autonomy and the extent of utilization of MNCH services.

#### **RESULTS AND DISCUSSION**

### On the profile of the participants

Majority or 89.5% of the participants' age ranged from 20-39 years old. Among religion, Moslem has the highest percentage of 68.6%. In terms of ethnicity, Javanese got the highest percentage of 56.2%. Most or 40.0% of the participants have monthly gross income below Rp 1,500,000.00. Majority or 76.2% of the participants' living children are 1-2. On participants' educational attainment, 35.2% were primary schools. Majority or 79.0% of the participants' work status is unemployed.

#### On the extent of women's autonomy

The participants have "great participation" in decision making on what to do if a child feels sick (4.01). Since, majority of the participants are unemployed, they are spending almost all of their time with their children at home where they are the ones who are making decisions about what to do if their children feel sick. The lowest mean among the participants' participation in decision making is decision about having another child (2.87), for having another child a family should have many preparations which is also supported by their economic condition level. Therefore, decision about having a child should be discussed by both wife and husband. Generally, the participants have great participation in decision making with an overall mean of 3.41. This result is supported by the study conducted by Acharya (2010) that urban residence does not significantly predict women's decision-making autonomy. Many factors affect the ability of women to take part in the decision making process in the household. Some of these factors relate to the type of decision that is taken and some to the background of the women.

The participants have "great extent" of autonomy in freedom of movement on item "I am allowed to go to just outside my house on my own" (3.70). Most of the mothers' reason to go just outside the house are to clean the environment of their houses or to buy vegetable or household needs like food or other prime consumable commodities. The lowest mean of autonomy in freedom of movement is the item "I am allowed to go to the neighborhood for recreation on my own" (2.70). This is because of women's habit that when they are meeting with their friend, they have tendency to forget about time. Women may tell their husbands before leaving the house to avoid misunderstanding between them. Generally, the participants have moderate autonomy in freedom of movement with an overall mean of 3.17. The same with the research's result of Gunasekaran (2010) who wrote that the autonomy of women on freedom of movement is measured by mean autonomy score attained by women on various indicators of freedom of movement which are education, religion, standard of living, community, type of family, and autonomy of decision making. Overall, the result shows that rural women have substantially more autonomy on freedom of movement than their urban counterparts.

# On the extent of maternal and child health care utilization

The participants have "great extent of utilization" in antenatal care with an overall mean of 3.49. For the achievement of the MDGs by 2015, Minister of Health of the Republic of Indonesia requires the presence of midwives and nurses in every Community Health Center (PUSKESMAS) which can be found in every village in remote areas. The task of nurses and midwives are to ensure the community, especially the pregnant women, the ease in antenatal care (RENSTRA, 2015).

The participants have "great extent of utilization" in intrapartum/ childbirth services with an overall mean of 3.68. The minister of Health of the Republic of Indonesia requires the presence of midwives and nurses in every village (PUSTU) especially in remote areas. The task of nurses and midwives in each village is to ensure that pregnant women will give birth in health centers and assisted by professionally trained staff (RENSTRA, 2015). The Government of Indonesia, through the Ministry of Health, (2013), continues the Safe Motherhood program, which began in 1990 where one of the programs is a partnership between midwives and shamans in an attempt of Making Pregnancy Safer (MPS).

The participants have "great utilization" of child health care services with an overall mean of 3.84. In 1984, the Indonesian government has made the program Integrated Health Service Post (POSYANDU) with descriptions of activities like Maternal and Child Health, Family Planning, Immunization, Nutrition and Prevention of Diarrhea. POSYANDU is held once a month. POSYANDU activities include registration, weighing, filling KMS, counseling, and health services (antenatal care, immunization for the mother and baby, and Vitamin A) (Ministry of Health Indonesia, 2011).

# On significant difference on women's autonomy when grouped according to profile variables

Chi-square test results revealed that, there is no significant difference on women's autonomy to participation in decision making on maternal and child care when grouped according to profile.

Chi-square test results showed that, there is no significant difference

on women's autonomy in freedom of movement when grouped according to religion, ethnicity, gross monthly income, number of living children and education attainment while there is significant difference on the women's autonomy in freedom of movement when grouped according to age and work status.

# On significant difference of maternal and child health care utilization when grouped according to profile variables

Chi-square test results revealed that, there is no significant difference in the use of antenatal care services when the participants are grouped according to religion, gross monthly income, and work status while there is a significant difference in the utilization of antenatal care services exist when they are grouped according to age, ethnicity, number of living children, and education attainment.

Chi-square test results revealed that, there is no significant difference in the utilization of intrapartum/childbirth services when the participants are grouped according to religion, educational attainment and work status while a significant difference in utilization of intrapartum/childbirth services exist when they are grouped according to gross monthly income and the number of living children.

Chi-square test results revealed that, there is no significant difference in the utilization of child health care services when they are grouped according to work status while a significant difference in the utilization of child health care services when grouped according to age, religion, ethnicity, monthly gross income, a number of living children, and education.

# On significant relationship between the extent of women's autonomy and the extent of utilization of MNCH health services

Chi-square test results revealed that, there is a significant relationship between the extent of women's autonomy and in the extent of utilization of maternal and child health care services.

# CONCLUSION

Women in Puskesmas Kongbeng area have an active role in decision making about their health and family's healthcare, economy household, food, and about having a child. The differences on the extent of autonomy in decision making have been affected by the number of living children. They also can go out to other places on their own, but they need to ask permission from their husbands before leaving the house. Age and work status of women have affected the extent of autonomy among women in Puskesmas Kongbeng in freedom of movement which means that Indonesian government programs for women empowerment have been achieved. However, Indonesia is a Patriarchal country which means that most of the Indonesian women show respect to their husband as a leader in the household.

Women in Puskesmas Kongbeng Area have utilized antenatal care services during pregnancy, but they were facing difficulties for laboratory tests since the equipment were prepared by central Puskesmas, which is located in the capital district area, far from other villages. They also come to seek health professionals during childbirth period and use a health facility as a place for giving birth. They also always bring their child to Posyandu to get complete immunizations, vitamin A, and to make sure that their child's weight is always on the green line in the health card. Increasing mother's knowledge about health and programs of government such as the presence of health professional in every village helps mothers to utilize health care services for their family.

The differences in age, ethnicity, number of living children and educational attainment affect the utilization of antenatal care services. The differences in age, ethnicity, gross monthly income and number of living children affect the utilization of intrapartum/childbirth services. Lastly, the differences in age, religion, ethnicity, gross monthly income, the number of living children and educational attainment affect the extent of child health care utilization. The extent of women's autonomy is a significant contributory factor on their extent of utilization of maternal and child health care services in Puskesmas Kongbeng.

#### RECOMMENDATIONS

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

The government may maintain the women empowerment programs like women mover and family welfare empowerment (PKK) program, may provide financial assistance as a reward if one of the PKK teams succeeded in implementing an activity that is beneficial to women's situation in the village. Since laboratory for diagnosis in rural areas can be found only in main Puskesmas (usually one district has 1 of main Puskesmas), the government, through Public Health Facilities (Puskesmas), may also ensure that the laboratory equipment is not only available but also maintained and used.

Since women in Puskesmas Kongbeng have great extent in participation in decision making, also of freedom of movement, the researcher recommends that nurses may strengthen the knowledge of mothers or would-be mothers about the importance of preparation/ planning, delivery (birth preparedness) and preparedness in cases of emergency obstetrics (emergency readiness) (P4K), especially the knowledge about danger signs of pregnancy through health education activities. Knowledgeable mothers help them in taking good decisions for themselves also for deciding the right place where they can go to find help in case of health problems. Delay in recognizing the danger sign of pregnancy is a contributory factor in the increase of the maternal mortality. Nurses may also encourage the pregnant mothers to have their laboratory tests regularly.

The family may increase their knowledge about pregnancy, so that both wife and husband may be more sensitive and be aware of the danger signs of pregnancy. The family may also go to laboratory clinic or to main Puskesmas which has laboratory equipment to do laboratory tests that are necessary for pregnancy. The laboratory test results may help health professionals and family members to determine danger signs of pregnancy.

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## INCIDENCE OF BULLYING IN BASIC EDUCATION UNIT OF ST. PAUL UNIVERSITY PHILIPPINES: BASIS FOR INTERVENTION PROGRAM DEVELOPMENT

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### ABSTRACT

This descriptive research sought to investigate on the incidence of bullying in the Basic Education Unit of St. Paul University Philippines and subsequently an intervention program will be developed to prevent the recurrence of the identified cases and the occurrence of new cases. Eiaht pupils were determined by the BEU Guidance and Counselling Center and the Student Welfare Committee of St. Paul University Philippines as perpetrators of the bullying cases filed for AY 2013-2014 to AY 2014-2015: there were eight victims of the said perpetrators, eight parent representatives for both the perpetrators and victims, eight classmates of both the perpetrators and victims, and eight of the teachers of both the perpetrators and victims. Narrative reports and interviews were utilized for data gathering tools. Frequency count and percentages were used for data analysis. Based on the accounts of the perpetrators, attention seeking and susceptibility to irritation are the factors to bullying. On the part of the victims, they are bullied because they have "low self-confidence" or they are "shy." The most common factors that the parents expressed is a reason for their children's bullying behavior is the "lack of attention." Most of the classmates of the perpetrators reasoned out that the latter bully because of peer pressure; friends and they are seeking attention from others. On the part of the victims, their classmates claimed that they are bullied because they tend to become sensitive. The teachers observed that the perpetrators bully because they lack empathy for others. On the part of the victims, the teachers observed that they are bullied because they tend to have "low self-confidence" or "low self-esteem."

*Keywords*: Bullying, intervention program development, bullying behavior, bullying cases

#### INTRODUCTION

The school is the heart of the formal educational system and a unique environment that facilitates the child's social, intellectual and moral development. It is here where children grow, develop and nurture their talents and skills to reach their full potentials. Every school provides a welcoming and a friendly atmosphere for every learner that comes to enrol. School days are always fun and exciting as each child acquires new ideas, explore and discovers new things and learns to make friends and relates with others. But why can schools be scary and burdensome to some kids at times? What makes it some nightmare that no child wants to look back and remember? What hinders them to enjoy the beautiful opportunities that schools can offer?

In St. Paul University Philippines, Basic Education Unit, it has been a common observation, for the past two years, that there was a growing and alarming number of cases of bullying filed at the Student Welfare Chairman's Office and was brought to the attention of the Administrators. These children who bully engage in hurtful teasing, name-calling, or intimidation, particularly against those who are weak and smaller because they could not defend themselves.

Bullying has already become a social phenomenon that transcends gender, age or culture. It could very well destroy a human's life. Kids can be mentally scarred if they are often teased. Even worse, they could be killed or fatally injured if the bullying gets extreme. There are many causes of bullying which must be taken cared of before bullying can be stopped: TV violence, broken families or families in poverty and misteaching, are just several of the many serious causes of bullying. It is for these reasons that this concept was constructed. The researcher wants to be able to get a literature review on the factors that contribute to the incidence of bullying and to develop a preventive program to combat bullying among children and consequently foster a more peaceful learning climate.

#### **Conceptual Framework**

This study focused on the incidence of bullying at the Basic Education Unit of St. Paul University Philippines. The approaches and processes instituted to address the reported cases were also determined. The results of analysis for all the variables identified was used as bases for the development of a comprehensive intervention program addressing the occurrence and recurrence of bullying at St. Paul University Philippines' Basic Education Unit. This premise was summarized using the paradigm below.

Input	Process	Output	
Bullying Cases at the SPUP-BEU as reported to the Guidance and Counselling Center and Student Welfare Committee. Forms of bullying cases filed Profile of the perpetrators and victims as to: •Sex •grade level •academic performance •family orientation •birth order •family set-up	Assessment of the incidence of bullying at SPUP's BEU as to: Factors to bullying based on the accounts of: •The perpetrators •The victims •The parents of both the perpetrators and the victims •The classmates of both the perpetrators and the victims •The teachers of both the perpetrators and the victims Approaches and processes instituted by the Guidance and Counselling Center and the Student Welfare Committee	Intervention program to address the occurrence and recurrence of bullying at SPUP's Basic Education Unit based on the assessment results.	
Feedback			

Feedback Figure 1. Paradigm of the Study

### Statement of the Problem

This study aimed at analyzing the incidence of bullying at the Basic Education Unit of St. Paul University Philippines, subsequently an

intervention program will be developed to prevent the recurrence of the identified cases and the occurrence of new cases.

Specifically, answers to the following questions were sought:

- 1. What is the profile of the bullying perpetrators and victims in terms of:
  - 1.1 sex,
  - 1.2 grade level,
  - 1.3 academic performance, and
  - 1.4 family orientation regarding
    - 1.4.1 birth order, and
    - 1.4.2 family set-up?
- 2. What are the common forms of bullying as reported to the Guidance and Counselling Center and the Student Welfare Committee of SPUP's Basic Education Unit on the profile variables?
- 3. What is the frequency of occurrence of each of the different forms of bullying?
- What are the factors leading to bullying based on the accounts of: 4.1 The perpetrators;
  - 4.1 The perpetrator
  - 4.2 The victims;
  - 4.3 The parents of both the perpetrators and the victims;
  - 4.4 The classmates of both the perpetrators and the victims; and
  - 4.5 The teachers of both the perpetrators and the victims?
- 5. What were the approaches/processes instituted by the SPUP's Basic Education Unit to address the condition of both the bullying perpetrators and the victims as reported?
- 6. What intervention program can be developed to address the problem of bullying in the SPUP-BEU based on the results of the study?

#### METHODOLOGY

#### **Research Design**

The descriptive research method was utilized in determining the factors contributory to the incidence of bullying at the Basic Education Unit of St. Paul University Philippines so that an intervention program may be developed to address all probable problems relevant to it. The cases filed at the BEU's Guidance and Counselling Center and the Student Welfare Committee were the references in gathering data from the participants of the study. The data collected from the survey included the profile of the participants, the factors leading to bullying as accounted by the participants, and the processes exhausted to address the bullying cases identified.

### Participants of the Study

The participants of the study were eight pupils who were identified by the BEU Guidance and Counselling Center and the Student Welfare Committee of St. Paul University Philippines as perpetrators of the bullying cases filed for AY 2013-2014 to AY 2014-2015; the eight victims of the said perpetrators, eight parent representatives for both the perpetrators and victims, eight classmates of both the perpetrators and the victims, and eight of the teachers of both the perpetrators and the victims.

#### Instrumentation

The researcher made use of the narrative reports from the Guidance and Counselling Center and the Student Welfare Committee of the Basic Education Unit of St. Paul University Philippines as a reference in gathering data to answer the research problems. Series of interviews were also conducted with the bullying cases of perpetrators, the victims, and parents, classmates, and teachers of both the perpetrators and the victims. Key informant interviews were also conducted with the student affairs and other knowledgeable and influential administrators on antibullying to validate the data gathered from the different groups of participants.

### Data Gathering Procedure

The procedures which were used in the conduct of the study are as follows:

- 1. Permission and approval to conduct the study were sought from the Top Management and Administrators concerned from the Basic Education Unit of St. Paul University Philippines.
- 2. A conference with the Guidance and Counselling team and the Student Welfare Committee was conducted to gather data pertinent to the incidence of bullying in SPUP, specifically, on the profile of the perpetrators and the victims and the initial actions undertaken to resolve the reported cases.
- 3. Interviews with the different groups of participants, namely: the perpetrators, the victims, and the parents, classmates, and teachers of both the victims and the perpetrators were conducted to gather significant data for the study.
- 4. Analysis of results and findings were carried out in comparison with previous findings from other studies conducted to validate the results of the current study. Consequently, an intervention program was developed to address the problems on bullying at the Basic Education Unit of St. Paul University Philippines.

## Data Analysis

The thematic analysis was used to analyze the qualitative responses of the different groups of participants.

Frequency count and percentages were also utilized for quantitative data analysis. Other necessary methods of analysis such as data validation through interviews and records at both the Guidance and Counselling Center and the Student Welfare Committee were employed for a more in-depth understanding of all the needed data in answering the research problems.

#### **RESULTS AND DISCUSSION**

#### Participants' Profile

Majority or 75 % are male perpetrators. This trend also holds true when it comes to the frequency and percentage of the victims as there are still more male victims (7 or 87.5%) than female (1 or 12.5%).

Majority or 75% are from the grade school department.

Majority of the perpetrators' academic performance average range from 81-86%.

There are more first born perpetrators of bullying with the frequency of 4 or 50% followed by the last born with 3 or 37.5% and middle born 1 or 12.5%. This supports also the contention of the related literature as stipulated by Alfred Adler (2015) that first born children are by nature dominant. From the victims of bullying, there are more numbers who come from the last born with 5 or 62.5% followed by only child, first born and middle born with 1 or 12.5%, respectively. This finding is again consistent with the theory of Alfred Adler (2015) that the last born in the family are submissive and soft-hearted.

As to family set-up, there are more perpetrators of bullying coming from parents both living together with a frequency of 6 or 75% followed by separated and widowed with 1 or 12.5%, respectively. The same holds through with the family set-up of the victims.

#### Common Forms of Bullying According to Profile

On Sex, the data revealed that there are more males who are engage in physical bullying with the frequency of 3 or 50% and physical bullying with a frequency of 2 or 33.33%. No female is involved in physical and social bullying as they are only engaged in verbal bullying. From the finding, it can be concluded that with respect to different forms of bullying, male pupils have higher tendency than the female, to manifest behaviors that inflict discomfort of varied forms on their classmates. Along Grade Level, majority or 80% of the grade school pupils/ students are engaged in physical bullying than the high school group. As for those who participate in verbal bullying, there is still more grade school students than high school students. It is notable that regarding the incidence of repeated bullying as a basis for the selection of participants; there are more incidence of bullying in the grade school level than in the high school department.

In terms of Academic Performance, out of the five (5) forms of bullying, the students fall under the three (3) forms of bullying, namely: physical, emotional and verbal. It is noteworthy to say that half or 50% of the pupils are engaged into verbal bullying having an academic performance of 81-83% and 87-89%. With regard to physical bullying 3 or 37.5% of the participants have an academic performance ranging from 81-89% while 1 or 12.5% of the participants have an academic performance of 84-86%. These data mean that despite bullying, their academic performance is not higher or lower than the expected grade, in other words, students averagely performed in their class.

With respect to Family Orientation, majority or 66.67% of the first born baby are engaged in Physical bullying. This finding supports the information gathered in the study's related literature as stipulated by Duncan claiming that family orientation is a very significant factor in determining those who have the tendency to engage in bullying. Moreover, participants with parents living together often use physical bullying. Furthermore, verbal bullying is often used by participants with parents living together.

## Common Forms of Bullying

Physical and verbal bullying has the same number of occurrence as to the different forms of bullying with frequency of 30 or 42.25%. This is followed by social bullying with 9 or 12.68% and emotional bullying with 2 or 2.84%.

## Factors in Bullying

Based on the accounts of the perpetrators, attention-seeking and

susceptibility to irritation are the factors to bullying. On the part of the victims, they are bullied because they have low self-confidence or they are shy. Most of the factors that the parents expressed are that their son/daughter lack attention. Most of the classmates of the perpetrators reasoned out that the latter bully because of peer pressure; friends and they are seeking attention from others. On the part of the victims, their classmates claimed that they are bullied because they tend to become sensitive. The teachers observed that the perpetrators bully because they lack empathy for others. On the part of the victims, the teachers observed that they are bullied because they end to have low self-confidence or low self-esteem.

# Approaches/ Processes instituted by the SPUP's BEU to address the condition of both the bullying perpetrators and victims

Based on the records of the Guidance and Counselling Center and the Student Welfare Office, the following services were instituted to address the bullying conditions experienced in SPUP BEU: individual counselling, group counselling, and consultation with parents and teachers' conference.

## Proposed Intervention Program for SPUP-BEU on Bullying

Interventions were constructed based on the results of the forms and factors of bullying. From this, people may know the causes and effects of Bullying.

Interventions	Objectives
Measurement and Reporting	To respond to bullying in its infancy by assessing the size and scope of the bullying problem.
Prevention	To help prevent root causes and consequences of bullying
Awareness	To help prevent root causes and consequences of bullying
Remediation	To establish best and efficient practices that the school and the students should uphold at all times.
Cyberbullying	To institute a follow-up program on the formation needs of perpetrators.

## CONCLUSION

Based from the findings of the study, the following conclusions are hereby drawn:

Both perpetrators and victims of bullying have concerns pertinent to attention needs and self-esteem needs. The perpetrators are projecting a need for attention, which is significant in the development of self-esteem, while the victims are projecting inability to deal with their self-confidence. That's why they are susceptible to bullying.

Bullying is attributed to concerns related to the home since the selfesteem is related to formation within the parameters of the family.

### RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are derived:

To Teachers and Guidance Counsellors: Physical and verbal bullying are rampant in the University. Thus, there is a need to inform and process the students on the negative effects and consequences of such forms of bullying.

To Teachers, Guidance Counsellor, and Parents: The common causes why students bully and get bullied because of lack of attention at home, lack of empathy, low self- esteem, low self-confidence, sensitive and over protectiveness. With this cited information, students may undergo constant dialogues with parents, teachers, and school counsellors to address the said concern and that they become aware of the needs of their children.

To School Administrators, Teachers, and Guidance Counsellors: Cyber bullying is becoming rampant nowadays. Thus, the school may educate the students of the adverse effects and consequences of cyber bullying.

To School Administrators: The Researcher is proposing intervention measures and activities to minimize, if not, stop bullying in the Basic Education Unit of St. Paul University Philippines. This also adopts the interventions and activities of other universities as cited in the results and discussion of this paper.

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## PERSONALITY TRAITS AND DYNAMICS OF CYBERBULLYING: A BASIS FOR A PROPOSED INTERVENTION PROGRAM

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### ABSTRACT

The descriptive quantitative research aimed to look into the personality traits, dynamics and effects of Cyberbullying among the High School students of St. Scholastica' s Academy Marikina School Year 2014 -2015. Slovin's Formula and purposive sampling techniques were utilized in identifying and selecting participants who are knowledgeable about and experienced the study of interest. The Self-made Cyberbullying Survey and the High School Personality Questionnaire, a self-report inventory that measures 14 personality characteristics were used as data gathering tools. Further, frequency and percentage, mean, sten score, Chi-square test, ANOVA and t -test were used for data analysis. From the results of the study, it was assessed that cyberbully participants have a "very low" to "low" experience of the forms of Cyberbullying while the cyberbullied participants have a "low" to "moderate" experience yet both groups of participants still experience the negative effect. Accordingly, flaming is the most commonly used way to victimize the object of Cyberbullying, and the foremost reasons why the participants engage into Cyberbullying are for the bullies to have fun and to avoid face to face confrontation. Hence, the participants felt sad and became conscious of their behavior after the Cyberbullying experience. Thus, the bully participants are more assertive, dominant, individualistic and self-reliant while the bullied participants are submissive, conforming, insecure and self-indulgent.

*Keywords:* Personality traits, dynamics of cyberbullying, cyberbully, cyber bullied

#### INTRODUCTION

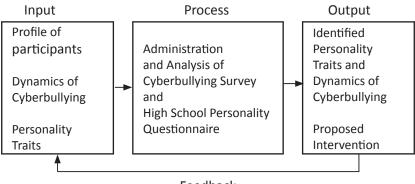
Cyberbullying is a relatively new phenomenon that media and schools have been reporting numbers of cases of such occurrence. Electronic bullying, more commonly known as Cyberbullying, is described as the act of sending or posting harmful or cruel text or images using the Internet or other communication device (Willard, 2007). It involves the use of information and communication technologies like email, cell phone and pager text messages, defamatory personal websites, and defamatory online personal polling websites to support deliberate, repeated, and hostile behavior by an individual or group intended to harm others (Li, 2007).

In the Philippines, the House of Representatives is currently working on Senate Bill No. 2677 or the proposed Anti-Bullying School Policy Act of Sen. Miriam Defensor-Santiago, where schools are required to create policies that would address the increasing incidents of bullying including cyberbullying. In existence, there are limited data and studies in the country. Cases have been increasing in schools and as a School Counsellor, the researcher has been a witness to the difficulties of the students about the effects and impact of cyber bullying in their personal and social life. According to the information presented by the Stairway Foundation Inc. from the Catholic Educational Association of the Philippines (CEAP) Annual Convention in September 2013, Filipinos spend nearly a day or an average of 21.5 hours a day on the Internet (ADMA, 2012). The Philippines ranked 8 of the top 10 countries with 27 million Facebook users. Moreover, it was stated that 9 out of 10 children had access to the Internet and 4 out of 10 children went online at least once a week (Stairway Online Safety Study, 2012). The digital age considers children as the native online citizens. The question of what draws the children to the Internet gives several answers like they would like to explore the world, interact with friends, express themselves, play and meet new friends. Furthermore, the result of the study will contribute to the minority of local studies and researches about Cyber bullying in the country.

## **Conceptual Framework**

The research paradigm presented serves as a guide for the researcher in making the investigation of the problem of the study. In the study, the

underlying reasons of performing the act and the effects of Cyber bullying were explored and established using the Cyber bullying Survey. Results of this study served as basis for the preparation of an intervention program under the guidance program, for the correction of the Cyber bullying phenomenon in schools and the development of the students.



Feedback Figure 1. Paradigm of the Study

## Statement of the Problem

The study aimed to look into the personality traits, dynamics and effects of Cyberbullying among the High School students of St. Scholastica's Academy Marikina, School Year 2014 -2015.

Specifically, the study sought to answer the following questions:

- 1. What is the profile of the participants regarding:
  - 1.1 Grade Level; and 1.2 Classification; 1.2.1 Bully; and 1.2.2 Bullied?
- 2. To what extent are the forms of Cyberbullying experienced by the two groups of participants when they are grouped according to grade level?

- 3. Is there a significant difference in the extent of which the forms of Cyberbullying are experienced by the two groups of participants when they are grouped according to grade level?
- 4. What are the reasons of the bully and the bullied participants for Cyberbullying?
- 5. What are the effects of Cyberbullying to the bully and the bullied participants?
- 6. What are the types of personality traits of the two groups of participants when they are grouped according to grade level?
- 7. Is there a significant relationship between the personality traits and the profile variables of the participants?
- 8. What intervention program can be proposed based on the result of the study?

## METHODOLOGY

#### **Research Design**

The quantitative-descriptive research design was used to gather information about the existing personality traits and dynamics of cyberbullying: a basis for a proposed intervention program.

#### Participants of the Study

The participants of the study were the perpetrators and the victims of cyberbullying among high school students of St. Scholastica's Academy Marikina, during the school year 2014-2015. From the total number of the cyberbully and the cyberbullied students, the Slovin's Formula was used to calculate the appropriate sample size per grade level. Further, the researcher made use of the purposive sampling technique in identifying and selecting participants who are knowledgeable about and experienced the study of interest.

#### Instrumentation

The primary instrument that was used in the study is the Cyberbullving Survey constructed by the researcher. The survey is composed of three sets. The first set was given to identify the cyberbully and the cyberbullied. The second set of the instrument was used to gather data from the cyberbully participants, and the third set of the instrument is to gather information from the cyberbullied participants. The Cyberbullying Survey has 28 items divided into three (3) parts, namely: Forms of Cyberbullying, Reasons for Cyberbullying and Effects of Cyberbullying. To gather information about the participants' personality traits, the results of the High School Personality Questionnaire (HSPQ) was obtained from the students' cumulative record secured from the Student Development Center of St. Scholastica's Academy Marikina. The High School Personality Questionnaire is a self-report inventory that measures 14 personality characteristics. It addresses Warmth, Intelligence, Emotional Stability, Excitability, Dominance, Cheerfulness, Conformity, Boldness, Sensitivity, Withdrawal, Apprehension, Self-Sufficiency, Self-discipline and Tension.

## **Data Gathering Procedure**

The researcher secured permission from the Principal of the high school department of St. Scholastica's Academy Marikina to conduct the survey and to gather other necessary data for the study. After the approval of the Principal, the survey was conducted during the time most convenient for the students, during their Guidance Period. The researcher had a preliminary talk on the general purpose of the survey. It was explained to the participants that all information would be treated with strict confidentiality. The participants were given no time limit to accomplish the survey and free from pressure. The participants were made to identify themselves by writing their names in the survey. In this way, the researcher was able to go with the appropriate set of the survey to be given whether it is for the cyberbully or the cyberbullied. After, the retrieval of the accomplished instruments, scoring, and tallying were made. A Focus Group Discussion was conducted to deepen and validate the responses obtained from the survey. A consent letter to participate in the Focus Group Discussion was explained to the randomly selected students. They were asked to affix their signature in the consent letter. Guidelines were given before conducting the group discussion, and they were informed that the discussion would be recorded for documentation purposes. Lastly, the integration and interpretation of the data followed.

#### Data Analysis

The data were evaluated through: frequency and percentage distribution to present the profile variables, effects and reasons of Cyberbullying, and personality traits of the participants; Mean distribution to present the data on the forms of Cyberbullying experienced by the participants; Analysis of Variance (ANOVA) and t-test for independent samples to determine the significant difference in the extent to which the participants experienced the different forms of Cyberbullying when grouped according to profile variables; Chi-square test was to test the relationship of the personality traits with their profile; and Sten Score to interpret the personality traits from the High School Personality Questionnaire.

#### **RESULTS AND DISCUSSION**

#### Participants' Profile

According to Grade Level, most or 34.10 % of the participants were grade 7 students.

According to Classification (Bully and Bullied), majority or 68. 21% of the participants were bullied.

## Extent of Experience of Bully participants of the Various Forms of Cyberbullying when Grouped According to Grade Level

Results revealed that Flaming (2.09), Denigration (2.06), Exclusion (2.25) and Outing (2.35) are experienced by the bully participants at a "low extent" while Trickery (1.56), Impersonation (1.43), Harassment (1.26) and Cyber Stalking (1.21) are experienced at a "very low extent." The results showed that the bully participants have a "little" experience

of Flaming, Denigration, Exclusion and Outing as a form of Cyberbullying, and they have a "very little" experience of Trickery, Impersonation, Harassment and Cyber stalking as a form of Cyber bullying.

## Extent of Experience of Bullied Participants of the Various Forms of Cyberbullying when Grouped According to Grade Level

Results revealed that Denigration (2.61) is experienced at a "moderate extent" by the bullied participants. Furthermore, Flaming (2.54), Exclusion (2.50), Outing (2. 21), Trickery (2.00), Impersonation (1. 81) and Harassment (2.01) are experienced by the bullied participants at a "low extent" and Cyber Stalking (1.62) is experienced at a "very low extent." Denigration as a form of Cyber bullying is "moderately" experienced by the bullied participants. Also, the bullied participants have a "little" experience of Flaming, Exclusion, Outing, Trickery, Impersonation and Harassment; and have a "very little" experience on Cyber stalking as a form of Cyber bullying. This implies that the participants' experience on Cyberbullying moderately evolves in victimizing through the posting of mean messages or gossips.

#### Difference on the extent to which the forms of Cyberbullying were experienced by the bully participants when they are grouped according to grade level

Chi-square test showed no significant difference on the extent of experience of the bully participants on the different forms of Cyberbullying when they are grouped according to grade level. The results implied that the forms of Cyber bullying used by the bully participants are "more" or "less" the same in all the grade levels.

### Difference on the extent to which the forms of Cyber bullying were experienced by the bullied participants when they are grouped according to grade level

Chi-square test showed a significant difference on the extent of experience of bullied participants on Exclusion as a form of Cyberbullying when they are grouped according to Grade Level. Conversely, there is a no significant difference on the extent of experience of bullied participants on Flaming, Denigration, Outing, Trickery, Impersonation, Harassment, and Cyber stalking as a form of Cyberbullying when they are grouped according to Grade Level. The results imply that there is a difference on the use of Exclusion as a form of Cyberbullying across the grade levels.

# Reasons of Cyberbullying of the Bully and the Bullied participants per Grade Level

Majority or 66.67% of the cyberbully participants said that they engage into Cyberbullying just for fun. While that of the other said that they do it because they hate other person or people and to vent their anger. On the part of the cyberbullied participants, majority of them said that they were cyberbullied because the cyberbully wanted to demonstrate power over them (68.42 %) and for fun (70.27 %).

## Effects of Cyberbullying to the Bully and the Bullied participants

Results showed that majority or 70.91% of the cyberbully participants said that they became conscious of their behavior, and the rest of the participants felt sad after the cyberbullying experience. On the other hand, the majority or 90.00% of the cyberbullied participants said that they felt hurt and sad, while others felt anxious and stressed after the cyberbullying experience.

## Types of personality traits of the bully participants

For the bully participants, there are more reserved or detached than the outgoing participants; there is a greater number of less intelligent participants than the more intelligent; there are more participants who are less emotionally stable than the emotionally stable; there is an equal number of bully participants who are less excitable and those who are more excitable; there are more who are dominant than the submissive; there are more who are expressive than the incommunicative; there are more bully participants who have the tendency to disregard obligations to people and undependable; there are more who are emotionally cautious and withdrawn than the impulsive participants; there are more who are self-reliant and tough-minded than the self-indulgent and insecure participants; there are more who are individualistic than the group-joiner; there are more who are insensitive to people's approval or disapproval and rudely vigorous than the worrying and anxious participants; there is a similar number of bully participants who are apprehensive and selfsufficient; there are more who are careless of social rules and uncontrolled than the socially precise and controlled participants; there are more frustrated and emotional than those who are unfrustrated and relaxed.

## Types of personality traits of the bullied participants

For the bullied participants, there are more reserved or detached participants than the outgoing participants; there are more less intelligent than the more intelligent participants; there are more who are less emotionally stable than the emotionally stable; there are more number of bullied participants who are less excitable than those who are more excitable; there are more who are submissive than the dominant; there are more participants who are incommunicative than the expressive; there are more bullied participants who have the tendency to be conscientious and rule-bound; there are more participants who are emotionally cautious and withdrawn than the impulsive; there are more participants who are self-indulgent and insecure than the self-reliant and tough-minded; there are more participants who are individualistic than the group-joiner; there are more participants who are insensitive to people's approval or disapproval than the worrying and anxious; there are more bullied participants who are self-sufficient than those who are apprehensive; there are more participants who are careless of social rules and uncontrolled than the socially precise and controlled; there are more bullied participants who are frustrated and emotional than those who are unfrustrated and relaxed.

## Significant relationship in the personality traits of the participants and the profile variables

T-test results implied that the level of dominance and sociability regarding classification as the bully and the bullied participants are significantly correlated wherein the bully participants are more "assertive"

and "dominant" while the bullied participants are "submissive" and "conforming." Regarding the level of Sensitivity, the bully participants are more "individualistic" and "self-reliant" while the bullied participants are more "insecure" and "self-indulgent."

#### CONCLUSION

From the results of the study, it is concluded that the cyberbully participants have a "very low" to a "low" experience of the forms of Cyberbullying while the cyberbullied participants have a "low" to a "moderate" experience of the forms of Cyberbullying yet both groups of participants still experience the negative effect.

Flaming is the most commonly used way to victimize the object of Cyberbullying, and the foremost reasons why the participants engage into Cyberbullying are for the bullies to have fun and to avoid face to face confrontation.

Consequently, the participants felt sad and became conscious of their behavior after the Cyber bullying experience.

The bully participants are more assertive, dominant, individualistic and self-reliant while the bullied participants are submissive, conforming, insecure and self-indulgent.

#### RECOMMENDATIONS

Based on the findings and conclusion of the study, the following recommendations are drawn:

The School Administrators may inform the community that there is an existing policy on bullying to garner the support of school staff, parents, and other key partners. In so doing, such awareness may be a preventive measure on the occurrence of Cyberbullying.

The Life Mentors may empower the students by intensifying the dissemination of information related to Cyberbullying. This may be done by conducting activities on self-assertiveness, coping skills, enhancing

communication, relationship building, and resiliency during Guidance Period.

The Teachers may keep their fingers on the pulse of students' concerns, gain insight on the meaning of adolescents' behavior and coordinate with the Life Mentors to be an active partner in the Cyber bullying prevention effort. Topics on self-assertiveness and communication between student and teachers should be included during homeroom period.

The Parents may keep the line of communication open by being present and becoming more sympathetic listeners. Thus, they may become more aware of the activities of their children so that they can take an active role in addressing their children's concerns.

The Students may have a heightened awareness of the dynamics of Cyber bullying and become a part of the prevention effort by initially reporting any Cyber bullying experience to parents, Life Mentors and or school authority.

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#### INCOME GENERATING ENTERPRISES ASSESSMENT OF ISABELA STATE UNIVERSITY, CABAGAN CAMPUS: A BASIS FOR A PROPOSED MANAGEMENT PROCESSES AND POLICY REFORMS

#### JOANA MAY T. DANAO-MANALIGOD

Master in Public Administration

#### ABSTRACT

The descriptive method of research and documentary analysis were utilized to assess the Income Generating Enterprises of Isabela State University, Cabagan Campus: A Basis for Proposed Management Processes and Policy Reforms. A structured questionnaire and interview auide were utilized as principal instruments to the 30 participants involving (10) faculty members, two (2) students, eight (8) support staff and ten (10) blue-collar workers from the non-teaching personnel. Frequency counts, percentage, weighted mean, and t-test or One-Way Analysis of variance were used for data analysis. Results unveiled that the profile of the participants suggested that qualifications of the personnel/staff of each of the projects must be taken into consideration. Improvement in knowledge, skills and training must likewise be considered. Income Generating Enterprises of the Isabela State University, Cabagan Campus is currently in a very challenging situation. Remarkably, the enterprise is facing a significant challenge in almost all aspects of managementadministrative, financial, among others. Project processes, specifically, planning, implementation, monitoring, and evaluation are major areas of concern that need immediate attention and action to save the entire enterprise. If these problems continue to exist, then the organization as a whole will perpetually suffer. Thus, with the current state of the enterprise, major revision and change are required to completely eradicate all of the enumerated problems. Reconstruction of the enterprise is a possible alternative solution that must be taken into consideration.

*Keywords:* Income generating enterprise, proposed management processes, policy reforms

#### INTRODUCTION

Over the years, public universities in the country have had to innovate to cope with increased competition and diminishing capitation, particularly from the government. The Isabela State University is no exception. As a state university, it struggles to respond to the standards set by the Commission on Higher Education (CHED) in attaining academic excellence as well as in catering the needs of the students, as it starts a public university, it is receiving subsidy from the national government through the General Appropriations Act (GAA). It is also deriving income from tuition fees, donations from various sponsors, research funds from other national government agencies and non-government organizations within or outside the country, and from the Income Generating Enterprises as well. State Universities and Colleges operate in line with its four-fold functions - instruction, research, extension, and production. Republic Act 8292 otherwise known as "The Higher Education Modernization Act of 1997" authorizes SUCs"...to enter into joint ventures with business and industry for the profitable development and management of the economic assets of the college or institution,..." and that "...the proceeds from which will be used for the development and strengthening of the college or university..." Public expenditure on education is a matter of great concern, hence, the need for institutions to generate their income has been motivated to fund other school needs.

Corporatization, as it is being called, is taken as an option to generate much-needed revenues to fill in financial gaps in public universities. Despite government subsidies and other funding coming from the different government, non-government and private institutions; it is still evident that there are financial gaps that need additional funding. To find a way out of this fiscal distress, it is advisable for State Universities and Colleges to mobilize available institutional resources such as land, physical facilities and equipment to generate income to provide the necessary learning resources to enable SUC's to run efficiently. In this note, the researcher finds the following as factors that hinder the further development of Income Generating Enterprises of ISU Cabagan.

### **Conceptual Framework**

The paradigm illustrates the conceptual framework of the study using the Input-Process-Output model. The input composed of the participants' profile, processes involved in the operation, problems encountered by IGE and Recommendations. In-depth analysis of the data gathered/collected/ collated were the processes involved in this study. Accounting that this research is peculiar, the expected output of the study served as basis for the Proposed Management Processes and Policy Reforms.

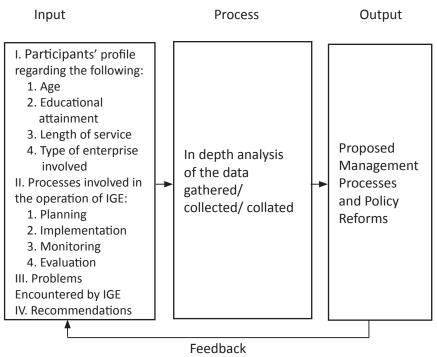


Figure 1. Conceptual Framework of the Study

#### Statement of the Problem

This study examined the Income Generating Enterprises of Isabela State University, Cabagan Campus the result of which shall form as bases for the Proposed Management Processes and Policy Reforms. This study aimed at answering the following:

- 1. What is the profile of the participants regarding the following:
  - 1.1 Age;
  - 1.2 Educational attainment;
  - 1.3 Length of service; and
  - 1.4 Type of enterprise involved with:
    - 1.4.1 Agriculture;
    - 1.4.2 Merchandising; and
    - 1.4.3 Miscellaneous?
- 2. What are the participants' assessments on the extent of implementation of the Income Generating Enterprises processes regarding Implementation, Planning, Monitoring and Evaluation?
- 3. What is the extent of implementation of the income generating enterprises currently operating within the campus along Agriculture, Merchandising and Miscellaneous?
- Is there a significant difference in the extent of implementation of Income Generating Enterprises processes when grouped according to profile

variables?

- 5. What are the problems encountered by the participants in the operation of the enterprise?
- 6. What proposed management processes can be adopted by ISU Cabagan to sustain operation and to intensify further the productivity of the income generating enterprises of ISU Cabagan?
- 7. What are the participants' recommendations to intensify the operation of the Income Generating Enterprises of ISU Cabagan?

## METHODOLOGY

## **Research Design**

The researcher used the descriptive method of research and documentary analysis in gathering the needed information. The descriptive survey method of research is a process of gathering, analyzing, classifying

and tabulating about prevailing conditions, practice, beliefs, trends and cause and effect relationship. The organized data were subjected to interpretation. Correspondingly, documentary method refers to the analysis of documents that contain information about the phenomenon one wishes to study (Bailey 1994). Payne and Payne (2004) describe the documentary method as the techniques used to categorize, investigate, interpret and identify the limitations of physical sources, most commonly written documents whether in the private or public domain.

## Participants of the Study

A total of 30 participants were involved in this study. It consists of ten (10) faculty members who are previously and currently designated as project in-charge/leaders/managers, two (2) students who conducted an experiment in the campus laboratory unit, eight (8) support staff and ten (10) blue-collar workers from the non-teaching personnel.

### **Research Instruments**

A structured questionnaire and interview guide were utilized as principal instruments to gather needed data/information for the study. The instrument consisted of four (4) parts.

Part I gathered information on the profile of the participants specifically; Age, Educational Background, Length of Service and Type of enterprise involved.

Part II dealt on the participants' assessment of the extent of implementation of the IGE processes, namely: planning, implementation, monitoring and evaluation. The questionnaire was adopted from the questionnaire used by De Yro (2010) with slight modifications.

Part III elicited problems encountered by the participants in the operation of the enterprise and

Part IV obtained recommendations from the participants aimed at intensifying the performance of the Income Generating Enterprises of ISU Cabagan.

#### **Data Gathering Procedure**

The researcher sought permission from the Office of the Cluster Executive Officer to conduct the study. Then a copy of the approved request was given to the directors, administrative staff, employees, and students. Furthermore, informal interviews through an interview guide were done to get more in-depth insights from the participants. Documents were obtained regarding the contributions of IGEs, organizational structures, and a number of viable projects, income derived, expenses and revenues required in the operation of IGEs. Relevant documents were collected such as manuals presenting their operational guidelines, policies, review and evaluation purposes. These were done to gain insights on the activities and accomplishments of IGEs.

#### Analysis of Data

Both descriptive and inferential statistical methods were used to analyze the data. Frequency counts, percentage, weighted mean and T-test or One-Way Analysis (ANOVA) were used to statistically treat the data with SPSS version 17 as data analyzer.

#### **RESULTS AND DISCUSSION**

#### Profile of the Participants

On Age, most or 40% of the participants are at the age range of 41-50. This is an indication that the workforce of the enterprise is aging.

Along Educational Background, most or 33.34% of the participants hold a master's degree. This strongly indicates that many among the participants are knowledgeable and well-educated.

In terms of Length of Service (In Years), the highest percentage or 36.67% of the participants have been in the university for 0-10 years. This is a manifestation that many of the participants are still in the process of mastering the processes and techniques involved in the operation of the income generating enterprises of the campus.

With respect to Type of Enterprise, majority or 53.34% of the

participants are involved in the agricultural projects of the enterprise. This serves as a strong implication that the university is striving to develop its agricultural enterprise by focusing on the improvement of its agricultural projects. Baccalaureate degrees in Agriculture, Agribusiness, Agricultural Technology, among others, are the campus' flagship courses, thus, explaining why the university is focusing towards the improvement of its agricultural programs. This is backed by the campus' effort in allotting experimental/laboratory area that serves as the Students Instructional Unit (SIU).

## Extent of Implementation of the Processes Involved in the Operation of the Income Generating Enterprises of the Isabela State University, Cabagan Campus on Planning, Implementation, Evaluation and Monitoring

On Planning, results revealed that planning process implementation is generally at "moderate extent" with a total mean of 2.72, which shows that this specific process is moderately performed. Planning process is very crucial since it is where problems should be properly determined and identified. Therefore, if planning process is not fully performed, it may lead to poor project formulation, as a result. However, it is noteworthy that the extent of implementation with respect to the statements "Plans the recruitment of adequate force or staff in terms of quantity and quality" and "Plans and establishes organizational arrangement that gives the staff a voice in decision making" is little. This implies that the participants play little role in planning the recruitment of adequate workforce or staff and in giving the personnel a voice in making decisions. With this scenario, it shows that there is a poor consideration in recruiting additional staff to work in the enterprise for some reasons, as such, additional budget is another consideration.

On Implementation, results unveiled that the implementation process is largely at "moderate extent" with a mean of 3.23, which means that this particular process is moderately executed. Accordingly, it implies that mostly, projects are not fully implemented. When projects are not fully implemented, it is a waste of money, time, effort and resources.

On Monitoring, results showed that the monitoring process is mostly

implemented at "moderate extent" with a mean of 3.35. Hence, it shows that this exact process is moderately implemented. When a project is moderately monitored, it will become more susceptible to factors that will hinder the success of the project.

On Evaluation, results revealed that the implementation of the evaluation process is at "moderate extent" with a corresponding mean of 2.92. It implies that generally, evaluation of projects is moderately conducted. Project evaluation plays a vital role in the whole cycle because it serves as the determining factor whether the project is successful or not.

### Extent of Implementation of the Processes Involved in the Operation of the Income Generating Enterprises of the Isabela State University, Cabagan Campus on Evaluation, Planning, Evaluation, and Implementation.

Planning process implementation in the agriculture and merchandising enterprises are at "moderate extent" while planning processes implementation of miscellaneous enterprise is at a "little extent." Thus, it basically implies that there is a "moderate" to "poor" project formulation and preparation in the entire enterprise. Evidently, planning process in both agricultural and merchandising enterprises is better implemented than in miscellaneous enterprise. It is because projects under the miscellaneous enterprise category are usually done in a shorter period of time while projects under agricultural and merchandising enterprises need more time to be planned wherein project leaders/managers/proponents have ample time to prepare it.

In totality, the extent of implementation of the Income Generating Projects in the agricultural, merchandising, and miscellaneous enterprises, respectively, are at "great," "moderate" and "little" extent. Evidently, projects belonging to the agricultural enterprise category are given more importance (and are greatly implemented) since most of the projects of the campus are agricultural in nature. However, project implementation in merchandising enterprise is moderately executed, which means that there is more room for improvement during this phase. As for the miscellaneous enterprise where project implementation is at "little extent," it shows that this particular enterprise is being neglected. Entirely, monitoring process for both agricultural and miscellaneous enterprises is implemented at "moderate" extent. It is noteworthy that projects in this category are better monitored than projects in the agricultural and miscellaneous enterprises, respectively.

Evaluation process is better performed in both agricultural and merchandising enterprises than miscellaneous enterprise as evidenced by their individual assessment in terms of extent of implementation.

#### Extent of implementation of the processes involved in the operation of the Income Generating Enterprises of the Isabela State University, Cabagan Campus when grouped according to Profile

The extent of implementation of Income Generating Enterprise in the planning process generally showed a significant difference on the participants' assessment when they are grouped according to age, length of service and type of enterprise. However, no significant different exists when they are grouped according to educational attainment.

Data also revealed that there is a significant difference on the participants' assessment on the level of implementation of Income Generating Enterprises when grouped according to type of enterprise they are involved. It entails that the participants' assessment on the extent of implementation of IGP on the implementation process depends on the type of the enterprise they are working at. This is because every enterprise has varying methods of implementing their respective projects. Therefore, the age, educational attainment, and length of service of the participants do not make any difference on how they assess the extent of implementation of IGP on the implementation process. It is only when the participants are grouped according to the type of enterprise they are involved in that they incur varying assessments on the degree of implementation of IGP on the implementation process.

The levels of implementation of monitoring process according to the assessment of the participants significantly vary when they are grouped according to age, length of service and type of enterprise. For this reason, it can be elaborated that the participants who are more mature and well-trained, and have been in the university for a longer period of time have more knowledge in the project monitoring process. Likewise, data showed that the extent of implementation of monitoring process in merchandising enterprise is higher compared to agricultural and miscellaneous enterprises.

Data revealed no significant differences exist on the assessment of the participants on the extent of implementation of evaluation process when grouped according to age and type of enterprise with corresponding probability values of 0.07 and 0.31, respectively. This indicates that the age and enterprise category of the participants do not necessarily affect the implementation of evaluation process. Based on the participants' assessment, the number of years they have rendered services to the university and the level of their education illustrate that the extent of implementation of the evaluation process incurred substantial difference. For that reason, it can be explained that varying methods of evaluation is employed in each and every project enterprise.

## On problems encountered by the participants in the operation of the enterprise

Categorically, the enumerated problems can be further summarized into five (5) major clusters, namely:

Records Management. Data showed that there is "poor" record keeping within the three enterprises. Important documents such as project proposals, financial reports, and inventories, among others are outdated and incomplete. This is because of insufficient manpower services to serve as a custodian of these important documents. Consequently, if this problem continues to persist, the whole enterprise will be at a very detrimental situation.

Management Support. Another problem that hinders the growth of the entire enterprise is lack of management support. It shows that the Income Generating Enterprises of ISU Cabagan is not being prioritized by the administrators. As a result, the enterprise will continue to be at a very critical state since the management neglects its operation. Financial Resources. In every kind of business, financial resources serve as its lifeblood in order for it to fully operate. Without having sufficient funds, feasible projects will not reach its full potential and projected income will not be realized. Hence, if the management is willing to revive the Income Generating Enterprises of the campus, preferential attention into this matter is of prime importance.

Infrastructure. Records show that infrastructure is one of the major problems that challenges the Income Generating Enterprise of ISU Cabagan. As a business enterprise with distinct nature of operation, it requires a separate office where its own employees can fully perform their duties and responsibilities. If the management will continue to take this problem for granted, the operation of the whole enterprise is at risk.

Monitoring Scheme. Data showed that there are poor monitoring schemes for projects of Income Generating Enterprises of ISU Cabagan. It can be explained that since every enterprise is composed of different projects, different monitoring schemes should be adapted and/or prepared by project leaders/managers depending on the nature and need of the specific project to be monitored. If this particular problem will not be properly addressed, then projects will most likely fail.

It can be noted, however, that problems 1, 2, 3, and 4 are considered "moderate" problems. Therefore, it indicates that these problems have better chance to be resolved.

## On Proposed management processes can be adopted by ISU Cabagan to sustain operation and to intensify further the productivity of the income generating enterprises of ISU Cabagan

Results revealed that "Re-organization of the Income Generating Enterprises of the Isabela State University, Cabagan Campus" is the best alternative policy solution to address the issues and concerns raised in this study.

Based on the findings of the researcher, the Income Generating Enterprises of the Isabela State University, Cabagan Campus is currently facing gigantic challenges not only in revenue generation but also in managerial, financial and administrative areas. To be able to completely address each and every problem, major revision must be considered and implemented. Major changes must start within the organization.

The researcher humbly proposes to establish separate department for the Income Generating Projects manned with skilled labourers and competent manpower services. It begins with proper records management to well-organized and up-to-date financial documents to closely monitor the development of each and every project and ends with over-all smooth flow of operations.

Accompanied by new rules and policies that will serve as its guidelines, new organizational structure will be formed to further understand and describe the duties and responsibilities of each and every stakeholder. Compared with the present organizational structure, the proposed structure clearly specifies additional section for keeping and filing of documents.

## On Participants' recommendations to intensify the operation of the Income Generating Enterprises of ISU Cabagan

The head of the Campus must believe in the importance of a functional IGE because it is where the success of the programs relies upon. There should be an office with complete amenities for CBAO with additional manpower to monitor projects/programs. The IGE Manual should strictly and comprehensively implement policies. There must be a clear-cut definition of the members' functions. Income of the project/s must be properly utilized (such as buying of necessary equipment for the benefit of the program and people involved). There must be proper remuneration to uplift the morale of the workers involved. Review existing IGE projects and stop operation of losing projects. Designation of faculty members withan equivalent should be required before giving the proper equivalent of the workload at the end of the semester. The reports demanded must serve as their output. Before implementation, project proposals must be appropriately reviewed by the committee. Qualification of personnel involved should also be one of the priorities during recruitment, and

a more established program of work and activities should be made to address the IGE needs of the university properly. Personnel involved must have proper training on record keeping and other areas of concern.

#### CONCLUSION

Based from the findings of the study, the researcher, thereby, concludes that the Income Generating Enterprises of the Isabela State University, Cabagan Campus is currently in a very challenging situation.

Remarkably, the enterprise is facing a significant challenge in almost all aspects of management-administrative, financial, among others. Project processes, specifically planning, implementation, monitoring, and evaluation are major areas of concern that need immediate attention and action to save the entire enterprise. The profile of the participants also suggests that qualifications of the personnel/staff of each of the projects must be taken into consideration during recruitment. Improvement in knowledge, skills and training must likewise be considered. If these problems continue to exist, then the organization as a whole will perpetually suffer.

Thus, with the current state of the enterprise, major revision and change are required to eradicate all of the enumerated problems completely. Reconstruction of the enterprise is a possible alternative solution that must be taken into consideration.

#### RECOMMENDATIONS

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

"Re-organization of the Income Generating Enterprises of the Isabela State University, Cabagan Campus." The above-mentioned policy may operate under the initiative and over-all supervision of the Cluster Executive Officer who also acts as the Head of the Campus and under the management of the Campus Business Affairs Office Director with the support and direct participation of division managers, enterprise managers, records officer, accountant and other facilitative staff. By establishing a separate department for the enterprise, the management may practice self-reliance and independence.

As suggested, the administration may take concrete actions to fully address the issues and concerns raised in this study. However, as a higher learning institution looking forward for its integration in the ASEAN Region, the management may take a closer look at the current situation of the enterprise; analyze deeply its areas of improvement and accurately determine its core competencies to be able to come up with a strategic management process that can intensify the generation of much needed income.

May revisit the New IGE Manual of 2010 and incorporate necessary amendments to cater the present needs and demands of the Income Generating Enterprises of ISU Cabagan.

Strict implementation of policies may be given utmost priority for the organization to be truly functional.

Consultations and further studies may be conducted to validate the findings of this study and to establish the need for re-organization and re-construction.

Consider and pursue the implementation of the proposed management process and policy reforms may fully address the issues and concerns raised in this study.

If the proposed policy solution is implemented, monitoring of the same is highly recommended to look into its areas of development and be able to incorporate needed adjustments.

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## **GUIDELINES FOR STUDENT JOURNAL PUBLICATION**

#### PREREQUISITES

- Journal Article must be checked thoroughly by the author's Thesis/ Dissertation Adviser and duly endorsed by the Graduate School Dean prior to submission to RPO.
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- RPO will check the submitted copy using the **GRAMMARLY SOFTWARE**.
- Number of pages: 8 to 20 pages (from Title Page to References)
- Font Family: Calibri
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#### PAPER STRUCTURE AND CONTENT

#### TITLE

- Clearly stated and to the point.
- Catchy, interesting and relevant.
- Able to stand alone to convey the importance of data; communicates contents.
- Not more than 20 words.
- ALL CAPS
- Written in "inverted" pyramid style.

#### ABSTRACT

- Contains Summary of: (INTRODUCTION, METHOD, RESULTS and DISCUSSION (IMRaD)
- Summary of information of what the paper contains.
- Mini-version of the Thesis/Dissertation.
- Also called Executive Summary.
- One-paragraph of 100 to 250 words (300 words for qualitative research, allowable).
- Indented, 1 tab First line.
- Single-spaced (Body of **ABSTRACT**).

#### Format of ABSTRACT

- Title of Research (ALL CAPS), bold, in "inverted pyramid", single-spaced (20 words or less)
- 2 spaces below Title: Name of Researcher/s, bold, UPPER CASE.
- Below researcher's name: Degree/s obtained, lower case, italicized.
- •Between name of author and degree obtained, no space.
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- 2 spaces below **ABSTRACT**: one-paragraph body, with first line indented.
- Below Abstract body, 1 space, then type bold line across the page.
- 2 spaces below the line, then write **Five (5) Keywords**, with no indention.
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#### INTRODUCTION

- Gives the setting/scene/background.
- Describes the problem.
- Relates to other works done for the past 5 years.
- Summarizes the structure of the paper.

*Figures and Tables* (Only minimal number of tables will be included, only the important ones)

#### Tables

- Summarized data.
- Main points described in text.

#### Figures

- Snapshots.
- Conceptual diagrams.
- Instructive and adequately labelled/titled.

#### METHODOLOGY

- Researh Design
- Participants
- Instruments/Tools
- Data Analysis
- Ethics Approval

#### **RESULTS AND DISCUSSION**

- Reports the findings objectively.
- Salient findings must follow discussions that would contain interpretations or implications, especially with respect to the original hypothesis.
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- Follow American Psychological Association (APA) Format.
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For publishable research, the researcher should follow the prescribed format shown below.

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#### INTRODUCTION

**Conceptual Framework Statement of the Problem** 

#### METHODOLOGY

Research Design Participants of the Study Instrumentation Data Gathering Procedure Data Analysis

#### **RESULTS AND DISCUSSION**

#### CONCLUSION

#### RECOMMENDATIONS

References

### HOW TO STATE THE RECOMMENDATIONS

#### Introductory statement of the Recommendations:

Based on the findings and conclusion of the study, the following recommendations are derived:/are offered:/are drawn: (Use any one of the 3 endings).

## Samples (with Target-Implementers). (Just made-up SAMPLES; no particular schools are alluded to).

- The school may consider conducting benchmarking activities with other institutions/agencies for its administrators, Faculty, and personnel to enhance their administrative, teaching, and technical skills.
- The administration may institute measures to solve the problem of faculty in-breeding.
- The faculty are strongly encouraged to speak in English in the campus, inside and outside the classroom to serve as models for Speak-English Policy of the school.
- The registrar's Office may conduct a study on the causes of drop-outs, incomplete grades/projects, failures (for the past three/five years) as basis for instituting appropriate intervention program to address such academic concerns.
- The HR Office may look into the periodic updating of the different School Manual/Handbooks to attune to the needs of the time.
- The Community Extension services Program may undertake an impact study on the effects of the extension services done for each adopted Barangay for better services towards uplifting the life of the poor.
- The Alumni Office may consider the profiling of Alumni.
- The Offices of the Registrar, Finance, Library and Book Store may adopt a "No-Noon-Break" Policy for availability and convenience.
- The Student Services unit may consider revisiting the Student Handbook, with focus on restorative justice, to better address the disciplinary concerns of the students.
- The Research Center may undertake a study focusing on the actual implementation aspect of the recommendations made by the different researches (for the past three or five years), as basis for instituting practical measures towards enforcing the utilization dimension of research.
- This study may be replicated or adopted by other schools on areas applicable to them.



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