Asian
Intellect
SEC REGISTRATION NO.
CN201539886

RESEARCH AND EDUCATION JOURNAL

RESEARCH AND EDUCATION JOURNAL

EDITORIAL BOARD

ASIAN INTELLECT

PUBLICATION GUIDELINES

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

2. All the research papers published must have a high degree of scholarship.

3. All the research papers published must be approved by the editorial board.

4. All the research papers published must have undergone evaluation from our corps of referees thru double- blind referee process.

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

6. All contributions must be original.

TABLE of CONTENTS

TABLE of CONTENTS

ENGLISH GRAMMAR PROFICIENCY OF FRESHMEN STUDENTS IN THE COLLEGE OF EDUCATION OF THREE HEIs IN METRO MANILA

CESAR H. GARCIA EdD
Assistant Professor III
Chairperson of English Department
Eulogio "Amang" Rodriguez Institute of Science and Technology, Manila

ABSTRACT

This descriptive study focused on the 100 – item test was given to the college freshmen students to determine their grammatical proficiency in asking questions, responding to questions, combining sentences and expanding sentences. The variable included was the degree program where they were enrolled. The 502 freshmen students who were enrolled in the two degree programs, Bachelor of Elementary Education (BEEd) and Bachelor of Secondary Education (BSEd), offered by the College of Elementary Education of the three HEIs of S.Y 2017-2018 were the respondents of the study. The general level of proficiency of the respondents of the three HEIs in grammatical skills (a) asking questions, (b) responding to questions, (c) combining sentences and (d) expanding sentences is Fairly Proficient. When the respondents were grouped according to the degree program that they were enrolled in, their level of proficiency in the four grammar skills was Fairly Proficient. The respondents did not differ in their skills in asking questions, in responding to questions, in combining sentences, and in expanding sentences when they were grouped according to the variable degree program. The BSEd respondents' ability to ask questions, to respond to questions, to combine sentences, and to expand sentences did not differ from that of the BEEd respondents' ability to perform the same grammar skills. But when the respondents were grouped according to their respective institutions, they differed significantly in the four grammar skills. The teaching of grammar in the tertiary level should be reinforced to enhance students' knowledge and achieve grammatical competence in both written and oral forms.

INTRODUCTION

Linguists believe that language is the soul of a community, the source of dignity and prestige for all people. It stands as the "mine" of a local community for the outsiders. But some experts added an interesting ingredient to this credence. According to Schneider (2005), grammar is an important feature of language that allows human beings to communicate successfully with each other. Further, Chomsky (2005), states that the Theory of Competence is a system of linguistic knowledge possessed by native speakers of a language that makes it possible for them to produce and understand an infinite number of sentences in their language, and to distinguish grammatical sentences from ungrammatical sentences. When a person has the knowledge of grammatical rules which is necessary in understanding and producing grammatically correct sentences, that person demonstrates grammatical competence. It is essential for a person to have a good working knowledge of English grammar rules because it will not only make him appear intelligent and educated but it will also give him credibility. Moreover, if he is looking for a job, with great command of the English language and great grammar proficiency, he will have a clear advantage over someone whose grammar skills are below average.

It has been observed that the most effective way of learning the English language is by entering an academic institution that will serve as a training ground for learners. It is expected that these learners will be confident and knowledgeable enough in facing the world of global competition. According to a study conducted by Pulse Asia in 2008, the grammar performance of Metro

Manila public secondary high school teachers and students (especially those in first and second years) is below average.

To help respond to this alarming status of English language learning, the researcher came up with a decision to conduct this study. He believes that this will help the students identify their weaknesses and strengths when it comes to studying and learning English grammar. Also, teachers, future educators, and administrators of educational institutions will gain some pointers on how to make English grammar learning easier, not fearsome.

It is noticeable that the job market in the present times is increasingly competitive. It seems that the workforce nowadays has very strict qualifications. Other than the job seeker's attitude toward work, one of the most important standards that employers are searching for is the applicant's competency in using English – confidently, correctly, and fluently.

In the light of the foregoing perspective, the present study was designed to provide some information on the competence of the future graduates of HEIs in terms of their English grammar proficiency which is expected of them by prospective employers as shown by the employment requirements advertised in various newspapers.

OBJECTIVES OF THE STUDY

This study was undertaken to determine the English grammar proficiency of freshman students in the College of Education of three HEIs in Metro Manila where the researcher taught English during the School Year 2017-2018.

Specifically, it attempted to answer the following questions:
1. What is the profile of the respondents in terms of Degree Program that they are enrolled?
2. What is the respondents' level of proficiency in terms of the following grammar skills?
   a. Asking Questions
   b. Responding to Questions
   c. Combining Sentences
   d. Expanding Sentences
3. Is there a significant difference among the respondents' levels of proficiency in each of the above-mentioned grammar skills when grouped according to the degree program that they are enrolled?
4. Is there a significant difference among the respondents' levels of proficiency in each of

the above-mentioned grammar skills when grouped according to HEIs?

HYPOTHESES

1. There is no significant difference among the respondents' levels of proficiency in each of the above-mentioned grammar skills when grouped according to the degree program that they enrolled.
2. There is no significant difference among the respondents' levels of proficiency in each of the above-mentioned grammar skills when grouped according to HEIs.

LITERATURE REVIEWS

The teaching of grammar in the classrooms has a framework to help the English Language Teachers be guided how the process should be done to achieve success to both teachers and students.

These are referred to as the dimensions of form, meaning, and use. Because the three are interrelated – that is, a change in one will involve a change in another - it is helpful to view the three dimensions as a pie chart, with arrows depicting the interaction among the three.
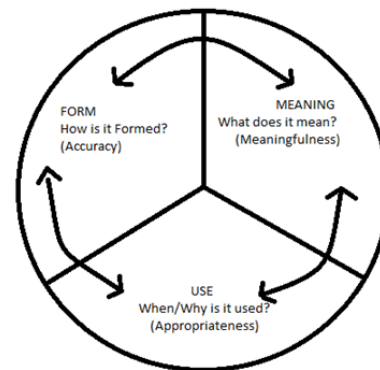
Figure 1. Three Dimensions of Grammar
(Celce - Murcia, 2006)

The first wedge, FORM, deals with how a particular grammar structure is constructed – its morphology and its syntax. MEANING answers the questions, "What does a particular English grammar structure mean?" and "What semantic contribution does it make whenever it is used?" The last wedge, USE, deals with issues concerning the choices that users of a particular language make when language and context are grammati-

calized, or encoded in the structure of a language (Levinson, 1983).

Language teachers must also help their students to use the structures meaningfully and appropriately as well. Thus, the dimensions of form, meaning, and use make explicit the need for students to learn to use grammar structure accurately, meaningfully, and appropriately.

According to Wilkins (2007), "languages possess grammatical system to express meanings." This makes grammar inseparable from a language. Grammar is the pillar of communication competency among individuals. Feldman added that the basic structure of language rests on grammar. Thus, Gleason (2006) asserted that in understanding verbal and written communication, "grammar is the key." Knowledge of grammar rules will allow the students to manipulate the language and will allow them to produce authentic communicative language. It will allow them to express exactly what they want to say. This makes grammar rules essential for future communication.

In the book written by Carillo (2008) entitled "Grammar, Plain and Simple," the need to improve one's English is tackled. He sets as an example how reporters react whenever they encounter poor English from the highest to the lowest ranking official in the country. During media conferences and interviews reporters often face this kind of problem, leaving them confused as to what needs to be done. The first option, he says, is to stick to the reporter's job which is to report the news accurately and clearly without correcting other people's poor English. Another option is to analyze the grammar and semantics of the statement carefully to see how it can be reported properly. Between the two, the second option is the most prudent course of action for any self-reflecting journalist. Evidently, no respectable newspapers should give room for poor English whether attributed or unattributed to the speaker or writer. When poor English is habitually allowed to creep into their stories, it can seriously jeopardize not only the reputation of their writers but also their integrity as newspapers. However, once substantive changes are made in the speaker's exact words, the news item can no longer be treated as directly-quoted material.

The study of Abunas (1992) aimed to investigate the factors related to the students' performance in English along the seven areas in grammar; namely: pronouns, tenses, conjunctions, prepositions, adverbs, adjectives, and sentence order. Results showed that a significant difference existed in the performance in English grammar of the respondents who came from seven schools. Generally, the secondary freshmen were found to be 'average' in their performance level along the seven areas of grammar. It was in the areas of adverbs and pronouns where the respondents found the greatest difficulty as proven by the fact that three of seven schools got the lowest performance level. It was the reverse in the areas of conjunctions and tenses where the respondents found the least difficulty. The findings revealed that the present performance level in English grammar of the secondary freshmen did not reach the 'high' mark and therefore needed improvement specifically in the areas of adverbs and pronouns.

The study of Pulmones (2009) aimed to evaluate the English grammar competence of the - year college students of University of San Agustin. It advanced the hypothesis that there was no significant difference among the English grammar competence of college students along the components of grammar categorized as phonology, morphology, lexical items, syntax and semantics. The findings revealed that the third-year college students of the University of San Agustin had a high level of English grammar competence with a narrow spread of competence and therefore homogeneous.

The review of related literature and studies by both foreign and local authors and researchers has added so much enlightenment to the researcher. These materials have in one way or another shown relationship to the present study in terms of objectives, research methodology and instrumentation. The only variation is the choice of respondents, setting and some variables. In addition, the reading of related literature and studies helped the researcher in arriving at conclusions derived from the findings of the proposed study which could be of help to language theorists, specialists and researchers for the improvement of English language learning.

METHODOLOGY

The **descriptive method** through questionnaire was employed to determine the college freshmen's proficiency level in English grammar and to examine if significant differences exist among the ratings obtained by the students on the grammar proficiency test. This method was used by the researcher because this study was "an analysis of the present condition that may lead to the

identification of the problems for which the researcher sought to answer.

Convenience sampling was used to determine the representativeness of the freshmen population from the College of Education of each of the three HEIs.

The **respondents** of the study were the 502 freshmen students of the College of Education of four HEIs in Metro Manila. As bonafide students, they passed all the requirements needed to be qualified for enrollment in their respective HEIs such as passing a college entrance examination, a minimum grade of 80 in high school English, math and science, and passing an interview with the college dean or his representative. They were either male or female students who graduated from either public or private high schools.

The **questionnaire** used in gathering the primary data for this study was Ruaya's (1997) "Proficiency Test in English Grammar for the First-Year College Students." To suit the needs of the present study, the researcher made some modifications on certain parts of Ruaya's instrument one of which was increasing the number of items to 100 such that each subtest was made up of 25 items. This instrument assessed four grammar skills, namely: (1) asking questions, (2) negative and affirmative responses, (3) combining statements, and (4) expanding statements

The **procedure** was that the researcher first wrote the president of each of the four HRIs a letter requesting permission to conduct a study. After securing the necessary approval, the researcher presented the letter to the dean of the College of Education of each HEI and talked to the English professors and asked them to allow him to distribute copies of the questionnaire in their English classes at an appointed time. The students were given one hour to answer the different areas of the questionnaire. After the test, retrieval of the administered questionnaires, the responses were checked, tabulated and processed for appropriate statistical treatment.

RESULTS AND DISCUSSION

Table 1 Frequency and Percentage Distributions of Respondents by Degree Program

Degree Program	HEI1		HEI2		HEI3		TOTAL	
	F	%	F	%	F	%	F	%
BEED	38	43.68	50	20.16	30	18	118	23.51
BSED	49	56.32	198	79.84	137	82	384	76.49
TOTAL	87	100.00	248	100.00	167	100	502	100.00

Table 1 displays that out of the 502 respondents, 384 or 76.49 percent were enrolled in the degree program Bachelor of Secondary Education (BSED) while 118 or 23.51 percent were pursuing the course Bachelor of Elementary Education (BEED).

Table 2 Means and Standard Deviations for Asking Questions by HEI

HEI	M	SD	Interpretation
1	12.54	5.31	Fairly Proficient
2	8.90	3.12	Moderately Proficient
3	14.72	4.06	Fairly Proficient
OVERALL	12.05	4.16	Fairly Proficient

Table 2 shows that the overall respondents' level of proficiency in the grammar skill of asking questions with an overall mean score of three HEIs' is 12.05 and with the standard deviation of 4.16 and it is interpreted as Fairly Proficient.

Table 3 Means and Standard Deviations for Responding to Questions by HEI

HEI	M	SD	Interpretation
1	14.07	4.54	Fairly Proficient
2	11.41	3.66	Fairly Proficient
3	15.89	3.55	Proficient
OVERALL	13.79	3.92	Fairly Proficient

Table 3 presents the proficiency level of HEI3 respondents alone is Proficient in the grammar skill of responding to questions as indicated by their mean score of 15.89. Overall, however, the respondents' general level of proficiency in said grammar skill is Fairly Proficient as indicated by the three HEIs' overall mean score of 13.79 in Subtest 2 (Responding to Questions).

The proficiency level of HEI3 respondents alone in the grammar skill of combining sentences is Proficient as indicated by their mean score of 15.90. Overall, however, the respondents' general level of proficiency in the said grammar skill is Fairly Proficient as indicated by the three HEIs' overall mean score of 13.46 in Subtest 3 (Combining Sentences). In addition, the proficiency level of HEI3 respondents in the grammar skill of expanding sentences is Proficient as indicated by their mean score of 17.84. Overall, however, the respondents' general level of proficiency in said grammar skill is Fairly Proficient as indicated by the three HEIs' overall mean score of 14.82 in Subtest 4 (Expanding Sentences).

There is no significant difference among the respondents' level of proficiency in the skill of asking questions when grouped according to degree program as indicated by the obtained probability of 0.405 which is greater than the 0.05 level of significance. That is, the BSEd respondents' skill in asking questions does not significantly differ from that of the BEEd respondents'. It can be gleaned that there is no significant difference among the respondents' level of proficiency in the skill of responding to questions when grouped according to degree program as indicated by the obtained probability is 0.619 which is greater than the 0.05 level of significance. That is, the BSEd respondents' skill in responding to questions does not significantly differ from that of the BEEd respondents'. Furthermore, there is no significant difference among the respondents' level of proficiency in the skill of combining sentences when grouped according to degree program as indicated by the obtained probability of 0.960 which is greater than the 0.05 level of significance. That is, the BEEd respondents' skill in combining sentences does not significantly differ from that of the BSEd respondents'. It also indicates that there is no significant difference among the respondents' level of proficiency in the skill of expanding sentences when grouped according to degree program as indicated by the obtained probability of 0.810 which is greater than the 0.05 level of significance. That is, the BSEd respondents' skill in expanding sentences does not significantly differ from that of the BEEd respondents'. On the other hand, there is a significant difference among the respondents' level of proficiency in the skill of asking questions when grouped according to HEIs as indicated by the obtained probability of 0.000 which is lesser than the 0.05 level of significance. That is, the respondents from the three HEIs differ significantly from each other in terms of their skill in asking questions. However, it shows that there is a significant difference among the respondents' level of proficiency in the skill of responding to questions when grouped according to HEIs as indicated by the obtained probability of 0.000 which is lesser than the 0.05 level of significance. That is, the respondents from the three HEIs differ significantly from each other in terms of their skill in responding to questions. At the same time, it illustrate that there is a significant difference among the respondents' levels of proficiency in the skill of combining sentences when grouped according to HEIs as indicated by the obtained probability of 0.000 which is lesser than the 0.05 level of significance. That is, the respondents from the three HEIs differ significantly from each other in terms of their skill in combining sentences. In the same way, it shows that there is a significant difference among the respondents' level of proficiency in the skill of expanding sentences when grouped according to HEIs as indicated by the obtained probability of 0.000 which is lesser than the 0.05 level of significance. That is, the respondents from the three HEIs differ significantly from each other in terms of their skill in expanding sentences.

CONCLUSIONS

On the basis of the findings of the study, the following conclusions were drawn:
1. A great majority of the respondents were pursuing the degree program Bachelor in Secondary Education (BSEd) rather than in Bachelor of Elementary Education (BEEd).
2. The general level of proficiency of the respondents from the three HEIs in terms of the four English grammar skills was Fairly Proficient.
3. When the respondents were grouped according to the variable degree program, their general level of proficiency in the four English grammar skills was Fairly Proficient. In other words, the BSEd respondents' ability to ask questions, to respond to questions, to combine sentences, and to expand sentences did not differ from that of the BEEd respondents' ability to perform the same grammar skills.
4. When the respondents were grouped according to their respective institutions, they differed significantly in their skills in asking questions, in responding to questions, in combining sentences, and in expanding sentences. In other words, the respondents from each of the three HEIs differed from each other in their ability to perform the same grammar skills.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations presented by some experts in the field of English language teaching, are hereby offered with the hope that they can help students reach the proficiency level of Proficient, if not Very Proficient.

1. Results of this study can be used by all instructors and professors in the College of Education of the three HEIs to expose education students to the different methods of asking and answering questions before they are asked to form them on their own. After giving them the content on how to form questions and answers these questions, students should be given a number of exercises in order for them to master this skill. To apply this skill in actual situation, students are asked to form group discussion and talk about any of the social problems of their choice. They will discuss the main cause of the problem and give possible solutions and learn something by asking questions and responding to their classmates to enhance their knowledge on the given issues.
2. Engaging the BSEd and BEEd students in coordination and subordination work is an excellent way to practice the skill of combining sentences. Students can be presented with sentences from a text or shown samples of their own or other students' work; they can be asked to determine whether the sentences are properly formed and to fix those that are not.
3. An effective self-drill method in teaching education majors in expanding sentences utilizing the structures of modification, predication, complementation, and coordination would be for students to make up for their own (verb + complement) sentences on a verb-class-by-verb-class basis and, after verifying the grammaticality and idiomaticity of these sentences, to reread or, better, recite their sentences at home, attending to their meaning. By making the relevant association of verb with complement, students will use this approach to the actual situation.
4. Instructors and Professors of the three HEIs should try and explore other useful techniques in teaching grammar offered by experts based on research to enhance learners' consciousness about how the language works and to focus on the distinctive features of a particular grammatical form, meaning and use so that they will learn English structure accurately, meaningfully, and appropriately.
5. Similar studies should be undertaken to identify other variables that could explain the strengths and weaknesses of students in terms of linguistic competence. These variables may be on IQ, attitudes, values and interest of students, qualifications of teachers, and teaching-learning processes. It is also recommended that data be gathered prior to students' graduation.

REFERENCES

Abunas, R. O. (1992). *Performance in English grammar roficiency of Secondary Freshmen in the Division of Capiz*. (Unpublished master's thesis). Colegio de la Purisima Concepcion, Roxas City.

Carillo, J. A. (2008). *English Plain and Simple: No-nonsense ways to learn Today's Global Language.* Manila: The Manila Times Publishing Corp.

Celce - Murcia, M. (2006). *Teaching English as Second or Foreign language*. Pasig City: Anvil Publishing, Inc.

Chomsky, N. (2005). *Rules and representation*. Columbia: Columbia University Press

Gleason, H.A. (2006). *Grammatical prerequisite. Annals of the New York Academy of Sciences*. 211, 27 33. doi: 10.1111/j.1749-6632.1973.tb49463.x

Levinson, C.S. (2003). *Space in language and cognition. Explorations in cognitive diversity.* Cambridge: Cambridge University Press.

Pulmones, M. I. T. (2009). *Level of English grammar competence of the Third Year College Students in the University of San Agustin: Basis for enrichment in the language program.* (Unpublished master's thesis). University of San Agustin, Iloilo City.

Ruaya, F. V. (1997). *The English grammar proficiency of the First Year College Students of PMI Colleges-Bohol, school year 1996-1997:*

Implications to effective English instruction (Unpublished master's thesis) University of Bohol.

Schneider, E. (2005). *Linguistics and language education in the Philippines and beyond*. Michigan University: Linguistic Society of the Philippines.

Wilkins, D. P. (2007). 'Same argument structure, different meanings: Learning 'put' and 'look' in Arrernte'. In M. Bowerman and P. Brown (Eds.), *Cross linguistic*. Mahwah, N.J.: Lawrence Erlbaum Associates.

EFFECTS OF INTERNET USE IN THE ACADEMIC PERFORMANCE, PHYSICAL AND EMOTIONAL HEALTH OF THE STUDENTS

ALLAN SANCHEZ TIEMPO, PhD
Co-authors: DEO ARIES T. CUTAMORA, MAED
LEANDRO C. TORREON, PhD
Bohol Island State University- Candijay Campus, Cogtong, Candijay
Bohol, Philippines

ABSTRACT

Internet has become the universal source of information for millions of people, at home, at school, and at work. The primary aim of this study is to determine the effects of internet to the academic performance, physical and emotional health of the students in Ubay District, Ubay, Bohol, Philippines. The descriptive – correlational survey and purposive sampling method was employed to get the profile of the students and the perceived effects of internet to the 200 Grade Ten students from the 8 secondary schools. Student-respondents were selected according to these two categories; (1) respondents must have knowledge in using the internet and (2) respondents usually use the internet at least once a week. It was revealed that the student's age have the positive and negative effects of internet use. However, the significant relationship existed between the time spent in the positive and negative effect of internet usage. Furthermore, the activities of internet use in relation to the academic performance and physical health show significant relationship between the positive and negative effect of internet use while insignificant relationship existed in the activities in emotional health between positive and negative effect of internet practices. Based on the results, the researchers suggested that the parents, students and the school personnel may convene for awareness seminar/symposia on the guidance on how to use the internet properly in order that there is a proper guidance for their child and set time limits to school-related activities only.

INTRODUCTION

The internet has changed our world. It enriches our lives by providing entertainment, information, social networking, gaming, and connections to people all over the world. However, internet use can grow into a problem. In America, too much internet used by the students have been linked with negative mental health consequences such as Depression, Attention Deficit/ Hyperactivity Disorder (ADHD), hostility, social phobia , problematic alcohol use, self-injurious behavior, and sleep difficulties, including insomnia, snoring, sleep apnea, nightmares and difficulty staying awake during the daytime. In addition, problematic internet use has been associated with the following academic problems: absences, poor grades, and academic dismissal (Snyder et al, 2015). Research reports indicated that Internet addiction is the worst destruction faced by the Filipino students today (Anacta, 2010). In the classroom setting, instead of listening to the discussion done by the teachers. Students having an access of the internet can open their social media account like Facebook and Twitter. They spend more time on checking their emails without looking to the account that they already missed their lessons. Students also failed to do their research because they tend to open wrong websites which is not intended for their school work (Labucay, 2012). Department of Education-Bohol Division links to different stakeholders to protect the school children and students from the influence of internet addiction which poisons the minds of the school children and students (www.depedbohol.org, 2016). Recent reports recorded, involving great numbers of children in both elementary and secondary levels have significantly affected their attendance in school activities because of cutting classes just to waste their time and money in the internet cafe, which will eventually leading to the increase of the dropout rate

(pia.gov.ph, 2016). These reasons made the researcher to conduct a survey about the effects of the internet use to the student's emotional health, physical health and academic performance. The result of the study would hopefully determine the perceived effects of internet to the emotional health, physical health and academic performance of the students and would give the students a way on how to use the internet. Through this, it will give the student an idea that the internet provides a vital role with regards to their learning and social development. Findings will serve as bases in proposing strategies and measures to improve the students' internet usage.

Theoretical Background

One of the theories is Roger's theory which supports that social networking facilitates connections between people. In this theory, it says that a communication network characterized as consisting of "interconnected individuals who are linked by patterned communication flows". A communication network analysis studies "the interpersonal linkages created by the sharing of information in the interpersonal communication structure" that is, the network (Rogers, 1986). Another theory is Social Constructionist Approach that views gender acquisition as a self-fulfilling prophecy. This theory explains gender polarization; men and women are different and these differences constitute a central organizing principle of social life where boys and girls have different learning. They develop different needs, wants, desires, skills, and temperaments. This relates to this study about the difference of number of users of internet in terms of gender.

Legal Bases. The aforementioned theory of learning is legally supported by the provision of the Philippine Constitution of 1987 specifically states in Sec. 24 of the Article II that the State recognizes the vital role of communication and information in nation – building". Also, Section II of Cybercrime Prevention Act of - state recognize the importance of providing an environment conducive to the development, acceleration, and rational application and exploitation of information and communications technology (ICT) to attain free, easy, and intelligible access to exchange and/or delivery of information; and the need to protect and safeguard the integrity of computer, computer and communications systems, networks, and databases, and the confidentiality, integrity, and availability of information and data stored therein, from all forms of misuse, abuse, and illegal access by making punishable under the law such conduct

or conducts (www.gov.ph, 2012). Thus, the adaptation of technology is not only beneficial for the country's government and some organizations but also in the field of education. The use of internet encourages the students to enhance their learning styles and to strengthen relationships with other people through social networking, one of the functions of internet. At the same point, students are encouraged to use different learning strategies and use internet as a tool to enhance their learning and improve their Higher Order Thinking Skills (HOTS) and Creativity.

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

Related studies. The following research readings and studies were reviewed to provide insights into the focus of the problem. Teo and Lim's (1997) as cited by Ismail (2011) study in Singapore indicated that there is a differential access between boys and girls in terms of technology. They indicated that internet users in Singapore are predominantly males with females comprising only about 11 percent of Internet users. Their study found out that females and males engaged in different activities. Females spend more time on the Internet for messaging activities, promotional campaigns while males are more into downloading and purchasing activities. Thus to certain extent, male and female do use the Internet for different purposes. Anderson (2015) states that young people spend 2 hours or more doing online activities such as watching YouTube channel, chatting with friends in their social media, playing online games and doing research. Boys and girls at aged 16 – 24 spent more than 27 hours a week on the internet (Anderson, 2015). It's no question that adolescents and teenagers make up some of the biggest demographics in social networking sites. Experts agreed that it actually help them to build stronger ties with their peers. This is one of their reasons why they engage into it- to build relationship with their peers (Acurantes, 2011). Other than connecting with peers some teenagers spend their time on their Internet work such as doing their homework or making the Internet as a work for study (Anderson, 2015). Maypole (2013) added that internet technology also affects positively on kids' knowledge by opening learning games to enhance their skills in multiplication, spelling while having fun using the internet. The modern computer offers children a powerful de-

vice that if used appropriately can enhance the development of the child's physical, cognitive and social skills. Spending more time online was associated by with positive effects for those socially anxious individuals. Social supports in the internet leads to the development of new friendships and helped the person to develop greater online social competence, thereby increasing confidence and strengthening of face-to-face friendships (Mazalin, 2011). Wang, Chen and Liang (2011) reveal that most people stay long being online. They open Facebook, watching videos and doing online games. Anderson (2015) young people often stay longer online because they are already addicted to the internet using social media, communicating with friends online gambling and online dating (Howard et al., 2015).

According to Carballo (2010), "The social networking sites to which Facebook is the leader are popular as a way for people to share experiences, photos, videos, stories, update other users with current events. These sites allow one to construct a public or semi-public profile, share a list of other users they are connected with, and view this list as well as those made by others within the system. This is the reason the term 'Facebook Generation' was coined, to refer to an entire generation of people who live to share personal information with the rest of the world via the internet. Personal information exhibitionism is what I call it because of the obvious delight in the exercise – a kind of high that has proved addicting to millions". This relates also with the present study since behavior may be influenced by other people.

Another literature review states that communication on the Internet increases social resources by providing an added avenue for interaction, that is, a way to keep up with distant friends and family, and that this could lead to a larger social network. The implication is that those who use the Internet to communicate with friends and family will show well-being benefits, which is consistent with work showing that communication (and the ensuing social resources) is associated with better psychological functioning, lower stress, and greater positive affect. By contrast, those who communicate little and have fewer social resources have poorer psychological functioning and higher levels of depression. Moreover, some research has suggested that Internet communication is also associated with better psychological well-being. Interacting with strangers online may harm psychological well-being, especially among those who have already-existing social support and other social resources, perhaps by displacing strong social ties with weaker ones (Bessière, 2012).

Another study states that internet interaction has been positively linked to the development of social capital of a person (Best and Krueger, 2006, Ellison et al., 2007, Ellison et al., 2011, Gross et al., 2002, Hampton and Wellman, 2003, Kavanaugh et al., 2005, Kraut et al., 2002, Quan-Haase et al., 2002 and Robinson et al., 2000) as cited by Salvatore (2015). This is supported by Erdoğan (2016) that internet provides an ideal social environment for lonely people to interact with others and produce a vastly expanded social network and altered social interaction patterns online that may be particularly attractive to those who are lonely.

However, too much internet use will turn the person to internet addiction (Hecht, 2013). Interacting through text messages, instant messaging, or e-mail, a large portion of how humans interact is gone and the result could be loneliness. It also encourages Narcism, or the excessive love or admiration of oneself, which can negatively affect how we see ourselves, as well as how we treat and perceive others (Carballo, 2010).

Also, Internet addiction will lead to different negative emotional effects such as depression, anxiety and anger. Where, the person will isolate himself from the real world and prefer to be alone while do surfing. Instead of going outside and doing different physical activities, persons who are Internet addicts experienced enjoyment and excitement playing different online games which lead them to loneliness (Kubey et al, 2011). Person considered as Internet addicts are lack of experiences are needed that is needed in their development as they grow old.

Another effect of internet addiction is escapism, this is a type of mental disorder that a person will prefer to be alone, stay online longer and escapes the real world (Mikey, 2014). Excessive use of the Internet for gaming and gambling has been tied to increased depression. Finally, use of the Internet for escape may have both positive and negative outcomes, resulting in the overall impact on well-being remaining relatively neutral (Kraut, 2012). Aboujaoude and Liu (2011 states that obsessive computer used caused depression to teens. Moreover, in the study conducted by Akhter, 2013; Jalalinejad et al., 2012; Yen et al., 2007; Young, 2004 as cited by Ocagachi (2015) that prevalence of depressions has been found to be high in manifestation in the internet use among the youth in Asia, America and Europe.

Internet is a very important source of information and it can be used for learning purposes. Judd and Kennedy (2010) as cited by Bhatti (2014) states that most of the students depend on the different information tools for seeking information, mostly Google and Wikipedia to support their learning activities. Moreover, Bhatti (2014) added that young people prefer to access information through online services because of its convenience while they have difficulties in accessing their required information from traditional information services. In the study of Baruchson – Arib and schor (2002) as cited by Kuma (2015) found that students use internet as a venue for research because it is comfortable and has a wide variety of sources such as internet search engines, e-print servers, author websites, full-test data base, electronic journals and print resources. Moreover, Kuma (2015) added that students prefer general search engines in finding their topics than to library resources. Wisdump (2013) states that internet positively affects the students. Students have a great potential in achieving their success because of the internet. They increase their knowledge, inspired from the webs, writing down their thoughts and ideas, and build better relation with other persons online. Jackson et al. (2006) as cited by Hasnain et al. (2015) studies the impact of home internet use in academic performance. Academic performance of participants was measured by GPA and standardizes test scores. The degree of internet use was calculated by the number of minutes per day spent online, logins per day, number of domains visited per day and number of emails sent per day. Result suggests that children with greater internet use had higher GPAs and standardized test scores.

A recent study tested on how being part of a highly connected network (like the Internet) affected the propagation of correct information, as well as the underlying cognitive strategies needed to generate correct information, in a group of university students (Rahwan, I. et al. 2014).The results of the study suggest that being part of a highly connected network can help the individual to solve problems by facilitating the propagation of correct information. However, Brändström (2011) states that internet's ease of access come disadvantages one of that is students will always depend on the data they can get in the web. They rely on Wikipedia and Google to answer their homework questions, the less they are required to use their own minds to come up with independent thoughts and opinions which cause to false and inaccurate information. Also, the patent volume of research materials online can make it too easy for the students to find the data they require, allowing them to compile the whole facts by copying and pasting without actually having to understand or analyze the information and able them to plagiarize others work without realizing that it is a mistake. Another negative effect of internet to the students is that students who grow up in the Internet time expect rapid gratification. They may easily get online and look for anything they want, from the favorite music videos & TV shows to difficult homework answers. The Internet helps them not to wait and give them immediate results with a minimal effort. These traits will not translate to the school, where teachers expect their students to work for the grades. Students, as a result, are often unable to understand problems. In addition, they also fail to control their time efficiently (Nguyen, 2016).

Furthermore, Bhatti (2014) states that internet is like a double edge sword which can be used for both positive and negative purposes. This means that even internet has positive effects it can also negatively affect the students' academic, physical and emotional health. Dependent on how the person deals the technology, if the internet is used properly then it will have a beneficial effect to the person. Likewise, if the internet are used abusively then and without a proper guidance then, it can cause negative to the user. Because of the following reasons, the researcher wants to study on the perceived effects of the internet in the academic performance and physical and mental health of the students who used the Internet.

OBJECTIVES

The primary aim of this study is to determine the effects of internet to the academic performance, physical and emotional health of the students in Ubay District, Ubay, Bohol, Philippines.
The specific objectives of the study are:
1. Determine the profile of Students as to Age, Sex and Time Spent in using Internet
2. Determine the different internet activities done by the students in relation to their:
    2.1. Academic Performance;
    2.2. Physical Health; and
    2.3. Emotional Health?
3. Identify the positive Effects of Internet Usage in relation to students':
    3.1 Academic Performance;
    3.2 Physical Health; and
    3.3 Emotional Health?

4. Identify the negative Effects of Internet Usage in relation to students':
    4.1 Academic Performance;
    4.2 Physical Health; and
    4.3 Emotional Health?
5. Is there a significant relationship between Positive Effects of Internet Usage and Effect of Internet Use in terms of:
    5.1 Academic Performance;
    5.2 Physical Health; and
    5.3 Emotional Health?
6. Is there a significant relationship between the Negative Effects of Internet Usage and Effect of Internet Use in terms of:
    6.1 Academic Performance;
    6.2 Physical Health; and
    6.3 Emotional Health?
7. Develop Enhancement Program to Improve Internet Usage

RESEARCH METHODOLOGY

Design

This study utilized the descriptive – correlational survey and purposive sampling method to get the profile of the students and the perceived effects of internet to the 200 Grade Ten students from the 8 secondary schools. Student-respondents were selected according to these two categories; (1) respondents must have knowledge in using the internet and (2) respondents usually use the internet at least once a week. A modified questionaire was adopted from Wanajak, K. (2011).

Environment and Participants

Ubay, the research locale of this study, is a first class municipality in the province of Bohol, Philippines. It is located in the northeast of the province and has an area of 335.06 square kilometers (129.37 sq. mi.) with 61 km. (38 mi.) of coastline. The study will include the grade 10 students of eight (8) secondary schools in Ubay District, Ubay, Bohol namely: The Bulilis High School of Bulilis, Ubay, Bohol, Hambabauran High School of Hambabauran Ubay, Bohol, San Pascual National Agricultural High School of San Pascual, Ubay, Bohol, Ubay National Science High School of Fatima, Ubay, Bohol, Camambugan National High School of Camambugan, Ubay, Bohol, Tapal Integrated High School of Tapal, Ubay, Bohol, Tubog National High School of Tubog, Ubay, Bohol and the Biabas Trade High School of Biabas, Ubay, Bohol. Student-respondents were selected according to these two categories; (1) respondents must have knowledge in using the internet and (2) respondents usually use the internet at least once a week.

Instrument/Tool

The main instrument used by the researcher in determining the perceived effects of Internet to emotional and physical health and academic performance of the students was a modified questionnaire about the use of internet and its impact on secondary schools; a study from Kelvin Wanajak (2011).

The first draft of the questionnaire is the Demographic Profile which comprises the age and gender of the respondents. Followed by the accessibility in using the internet which evaluates the accessibility of students, time and duration of the internet use.

Third part of the questionnaire is the list of different activities and effect of using of internet. In this part, students will answer different questions that will assist to the emotional and physical health and academic performance of the respondents.

The last part of the questionnaire comprises different questions in which the respondents will identify the degree on how internet will affect to them emotionally, physically and to their academic performance.

Data Gathering Procedure

To collect the required data in this research, the researcher asked permission from the Schools Division Superintendent, Department of Education, Division of Bohol, to conduct a research on the Perceived Effect of Internet to the Emotional and Physical Health and Academic Performance of the students. After securing permission to the Schools Division Superintendent, the researcher asked permit from the principal of the selected schools to conduct his study. The researcher personally distributed the questionnaires to the respondents and explained them thoroughly on the importance of the study and assisted them in answering the questionnaire.

Data Analysis

The data gathered were analyzed and interpreted through projection and deduction inferred from the percentages.

To determine the profile of the students in terms of age, sex, internet accessibility and time and duration of internet use, the researcher used the percentage formula:

P = (F/N) * 100
Where:
    P = Percentage;
    F = Frequency; and,
    N = Total sample size.

To determine the students' profile on the effects of internet in terms of Academic Performance, Physical Health, Emotional Health, Positive and Negative effect, the average weighted mean formula will be used.

Formula:
    WM=(f1X1+f2X2+···fkXk)/(f1+f2+···fk)
Where:
    WM = Weighted mean
    f1, f2 = Frequency multiplied by the assigned value
    x1, x2 = Items given

To determine the profile of the students in terms of age, sex, internet accessibility and time and duration of internet use, the arithmetic mean formula will be used.

Formula: $x = \frac{\sum x}{N}$
    Where:
        x = Mean
        $\sum x$ = Sum of all data values
        N = Number of respondents

To find the relationship between the Negative and Positive Effects and the Effects of Internet to students in terms of Academic Performance, Physical Health, Emotional Health and the students' age, sex, internet accessibility and time and duration of internet use, the Pearson Product Moment Coefficient of Correlation is used.

Formula:
$$r = \frac{N\,(\sum XY) - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)2)(N\sum Y^2 - (\sum Y)2)}}$$

Where:
    A t-test will be conducted to determine its significant relationship

Formula: t = (r√(n-2))/√(1-r^2)

THE FINDINGS

Table 1 Profile of Students as to Age, Sex and Time Spent in using Internet
N = 200

Age	F	Percentage
19 – 20	10	5
17 – 18	40	20
15 – 16	150	75
Total	**200**	**100**
Sex		
Male	72	36
Female	128	64
Total	**200**	**100**
Time Spent in Using Internet		
4 hours or more	29	14.5
3 hours	41	20.5
2 hours	71	35.5
1 hour	33	16.5
30 minutes or less	26	13
Total	**200**	**100**

As reflected in Table 1 for Age distribution among the respondents, there were 150 or 75% of internet user has the age range of 15 - 16 years. This is supported by the article of statista.com (2014) it was found out in their survey that from the age of 15 – 24, 65% of daily internet user belongs to the aged of 15 - 16 years old. This particular of age belongs to the high school and college student and most of them are already expert in using the internet in finding their lessons and doing internet related activities. Erikson's Psychosocial Stages of Development explains the age-appropriate developmental task, meaning persons that age 15 to 16 years old are more interested in using the internet than to those person that aged 19 and above. Likewise, the theory explained that the interest of the persons vary on the needs and habit as they grows old.

As for Sex distribution, 72 or 36% of the respondents were male while 128 or 64% were female. As can be seen majority of the respondents for this study were female. It is supported by the study of Jenaru et al. (2007) as cited by S.I Chui, Hung and S.L Chui (2013) which reveals that 56.3% of females are classified as heavy internet users than to male which is only 28.6%.

As to time spent in using the internet, the table shows that majority of the respondents spent two hours in using internet (35.5%). While 35% of the students responded that they are using inter-

net 3 hours or more and the remaining 29.5% answer that they spent time using internet for 1 hour or less.

This agree to the study of Anderson (2015), which states that young people spend 2 hours or more doing online activities such as watching YouTube channel, chatting with friends in their social media, playing online games and doing research.

We cannot assign responsibility for a fault if students are addicted to the internet. Internet can offer different activities to the person who logs into the web. It provides a cheap reasonably accessible, mechanism for multi-way international communication (Bellovin, 1990). Likewise, it provide geographic distribution, Universal access to be used in their learning, group communication, email and virtual space which would help the people in their research.

Table 2. Profile of Different Internet Activities Done by the Students in Relationship to their Academic Performance, Physical and Emotional Health.
N = 200

Academic Performance	Weighted Mean	Description
1. I exchange e-mails with my classmates to discuss matters related with my academic work.	2.36	D
2. I use email to communicate with my lecturers.	2.39	D
3. I inform my friends concerning useful websites related with the courses taken.	2.48	D
4. I use forums to exchange opinions on academic matters with my friends.	2.50	D
5. I access the library website to search for academic books.	2.65	A
6. I put bookmarks to websites related to my study so that I could access them easily in future.	2.66	A
7. I s7ek the latest information online to enhance my knowledge related to the subjects taken.	2.82	A
8. I use the Internet as the main source of information for my studies.	2.83	A
9. I search for materials from the Internet to complete my assignment.	2.96	A
10. I seek information from the Internet for learning activities.	3.05	A
Average Weighted Mean:	**2.7**	**Agree**
Physical Health		
1. I will skip my meals just to use the internet.	2.20	D
2. I play online games when using the internet.	2.34	D
3. I often neglect household chores to spend more time online.	2.42	D
4. I still sleep on time even when using the internet.	2.48	D
5. I communicate persons through social medias rather in personal life.	2.69	A
6. I use the Internet to improve my work performance.	2.80	A
7. I use the Internet to enable to accomplish my task more quickly.	2.81	A
8. I prefer to stay at home using the internet than playing outside.	2.86	A
9. I feel headache when I use the internet in a long period.	2.86	A
10 I use the internet in the long period of time.	2.93	A
Average Weighted Mean:	**2.6**	**Agree**
Emotional Health.		
1. I often feel depressed, moody or nervous when I'm offline, which goes away once I'm back online.	2.28	D
2. I often snap, yell, or act annoyed if someone bothers me while I'm online.	2.32	D
3. I often feel preoccupied with the Internet when offline, or fantasize about being online.	2.37	D
4. I often fear that life without the Internet would be boring, empty, and joyless.	2.41	D
5. I often become defensive or secretive when anyone asks me what I'm doing online.	2.43	D
6. I often form new relationships with fellow online users.	2.48	D
7. I often lose sleep due to late-night log-ins.	2.52	D
8. I often isolate myself to the persons around me just to use the internet.	2.52	D
9. I often prefer the excitement of the Internet to spending time with my friends in person.	2.65	A
10. I often use the Internet to escape from other problem in my life.	2.78	A
Average Weighted Mean:	**2.48**	**Disagree**
Composite Mean:	**2.6**	**Agree**

Legend:

Range	*Descriptive Value*
3.26 – 4.00	*Strongly Agree (SA)*
2.51 – 3.25	*Agree (A)*
1.76 – 2.50	*Disagree (D)*
1.00 – 1.75	*Strongly Disagree (SD)*

Table 2 presents the profile of different activities of the students in relation to their academic performance, physical and emotional health. As reflected in the academic activities, it shows that item "I seek information from the internet for learning activities" got the weighted mean of 3.05 with the descriptive value of A (agree) got the highest rank on other hand item ". I exchange e-mails with my classmates to discuss matters related with my academic work." with the weighted mean of 2.36 and descriptive value of D (Disagree) got the lowest rank. The result of this study is supported by Judd and Kennedy (2010) as cited by Bhatti (2014) which states that most of the students depend on the different information tools for seeking information, mostly Google and Wikipedia to support their learning activities. Moreover, Bhatti (2014) added that young people prefer to access information through online services because of its convenience while they have difficulties in accessing their required information from traditional information services.

In physical health, item "I use the internet in the long period of time" got a weighted mean of 2.93 and descriptive value of A (agree) got the highest rank. However, item "I will skip my meals just to use the internet" with the weighted mean of 2.2 and descriptive value of D (Disagree) got the lowest rank. Wang, Chen and Liang (2011) reveal that most people stay long being online. They open Facebook, watching videos and doing online games. Anderson (2015) young people often stay longer online because they are already addicted to the internet using social media, communicating with friends online gambling and online dating (Howard et al., 2015)

As for emotional health, "I often use the Internet to escape from other problem in my life" got the weighted mean of 2.78 with the descriptive value of A (agree) got the highest rank. While, item "I often feel depressed, moody or nervous when I'm offline, which goes away once I'm back online" with the weighted mean of 2.28 and descriptive value of D (Disagree) got the lowest rank.

This result is supported by the study of Mikey (2014) which state that people that has mentality disorder because of internet addiction often stay online longer to escape the real world and isolate there selves to people which lead them to escapism. The overall result shows that the students ""Agree" with the average weighted mean of 2.6 this means that students agree on the different activities listed on table 2 in relation to their academic performance, physical and emotional health. Spending time on the internet can have a positive effect on young people. Depending on how they use the internet, as shown in table below.

Table 3 . Profile of the Positive Effects of Internet in the Academic Performance, Physical and Emotional Health of the Students
N = 200

Table 3 presents the profile of the positive effects of internet to students in their academic

Academic Performance	Weighted Mean	Description
1. Promotes Video conferencing.	2.80	A
2. Educational games.	2.81	A
3. It promotes online tutorials.	2.92	A
4. It promotes interactivity.	2.97	A
5. It has Digital encyclopedias.	3.01	A
6. It promotes collaborative learning.	3.03	A
7. It helps to check the grammar.	3.13	A
8. It Expand knowledge base.	3.20	A
9. It helps to find the topics easily.	3.28	SA
Average Weighted Mean:	**3.02**	**Agree**

Physical Health		
1. It helps to get enough sleep.	2.26	D
2. It controls weight.	2.34	D
3. It boosts energy	2.49	D
4. It makes active throughout the day.	2.58	A
5. It decrease risk of health conditions.	2.61	A
6. It improves my work performance.	2.85	A
Average Weighted Mean:	A 2.52	**Disagree**
Emotional Health		
1. It can cause relaxation.	2.71	A
2. It promotes self-fulfillment.	2.93	A
3. It can cause pleasure.	2.96	A
4. I promotes positive outlook.	2.99	A
5. It improves mood.	3.08	A
6. It can cause enjoyment.	3.20	A
7. It brings happiness.	3.24	A
8. It can cause being friendly.	3.25	A
Average Weighted Mean:	A 3.05	**Agree**
Composite Mean:	2.86 C	**Agree**

Legend:
Range	Descriptive Value
3.26 – 4.00	Strongly Agree (SA)
2.51 – 3.25	Agree (A)
1.76 – 2.50	Disagree (D)
1.00 – 1.75	Strongly Disagree (SD)

performance physical and emotional health. In terms of Academic Performance, the highest rank is item "It helps to find the topics easily" with a weighted mean of 3.28 with the descriptive value of SA (Strongly Agree). On other hand item "Promotes Video conferencing" with the weighted mean of 2.80 and descriptive value of A (Agree) got the lowest rank. In the study of Baruchson – Arib and schor (2002) as cited by Kuma (2015) found that students use internet as a venue for research because it is comfortable and has a wide variety of sources such as internet search engines, e-print servers, author websites, full-test data base, electronic journals and print resources. Moreover, Kuma (2015) added that students prefer general search engines in finding their topics than to library resources.

Results in physical health shows that item "It improves my work performance" got the weighted mean of 2.85 with the descriptive value of A (agree) got the highest rank. But Item "It helps to get enough sleep" with the weighted mean of 2.26 and descriptive value of D (Disagree) got the lowest rank. According to Viswanath (2016) in his article "Ways that Internet can Boost Your Health" internet can be used as a powerful tool to improve the performance of the person in relation to his health and work. This is done by doing correct exercise through watching online video exercise, medical information that would track the health of the person and seeking information to the internet to enhance knowledge. He also added

that by using the internet in searching physical and medical purposes will help to improve the performance of the person in his work.

For emotional health, item "It can cause being friendly" with the weighted mean of 3.25 and the descriptive value of A (agree) got the highest rank. However, item "It can cause relaxation" with the weighted mean of 2.93 and descriptive value of A (Agree) got the lowest rank. Similar to this result another study states that internet interaction has been positively linked to the development of social capital of a person (Best and Krueger, 2006, Ellison et al., 2007, Ellison et al., 2011, Gross et al., 2002, Hampton and Wellman, 2003, Kavanaugh et al., 2005, Kraut et al., 2002, Quan-Haase et al., 2002 and Robinson et al., 2000) as cited by Salvatore (2015). This is supported by Erdoğan (2016) that internet provides an ideal social environment for lonely people to interact with others and produce a vastly expanded social network and altered social interaction patterns online that may be particularly attractive to those who are lonely. With the beneficial effects of the internet to the students likewise, it can cause also a negative effects if they tend to misuse the internet as reflected on the table.

Table 4. Profile of the Negative Effects of Internet in the Academic Performance, Physical and Emotional Health of the Students
N = 200

Academic Performance	Weighted Mean	Description
1. Cause of skipping classes.	2.41	D
2. Cut back on school activities.	2.49	D
3. It promotes cheating.	2.58	A
4. It make Less attention span.	2.59	A
5. Accessing prohibited websites.	2.6	A
6. Playing online games.	2.65	A
7. Distraction of to study.	2.8	A
8. Relying too much in the internet.	2.81	A
Average Weighted Mean:	**2.61**	**Agree**
Physical Health		
1. It promotes sleep deprivation.	2.67	A
2. It can cause joint stiffness.	2.76	A
3. It can cause strain on hands/arms.	2.79	A
4. It can cause weight gain.	2.85	A
5. It can cause back pain.	2.85	A
6. It can cause headache.	2.91	A
7. It can cause fatigue.	2.92	A
8. It can cause eye strain.	2.97	A
Average Weighted Mean:	**2.84**	**Agree**
Emotional Health		
1. It can cause loneliness.	2.7	A
2. It can cause fear.	2.71	A
3. It can cause of feeling sad.	2.72	A
4. It can cause anxiety.	2.77	A
5. It can cause insomnia.	2.84	A
6. It can cause anger.	2.9	A
7. It can cause depression.	3.63	SA
Average Weighted Mean:	**2.9**	**Agree**
Composite Mean:	**2.78**	**Agree**

As reflected on the table in terms with the academic performance "Relying too much in the internet" in item no 6 have the weighted mean of 2.81 with the descriptive value of A (agree) got the highest rank. On other hand item no. 7 "Cause of skipping classes" with the weighted mean of 2.41 and descriptive value of D (Disagree) got the lowest rank. Similar to this is study of Brändström (2011) which states that internet's ease of access come disadvantages one of that is students will always depend on the data they can get in the web. They rely on Wikipedia and Google to answer their homework questions, the less they are required to use their own minds to come up with independent thoughts and opinions which cause to false and inaccurate information. Also, the patent volume of research materials online can make it too easy for the students to find the data they require, allowing them to compile the whole facts by copying and pasting without actually having to understand or analyze the information and able them to plagiarize others work without realizing it.

On other hand in physical health. Results show that item no. 6 "It can cause eye strain" got the weighted mean of 2.97 with the descriptive value of A (agree) got the highest rank on and item no. 7 "It promotes sleep deprivation" with the weighted mean of 2.67 and descriptive value of A (Agree) got the lowest rank. This study is supported by Hellmich (2014) which state that spending hours each day looking at computers, cellphones, and tablets with the association of the use of internet will suffer from digital eye strain, also known as computer vision syndrome. Somehow, for those person that has a problematic use of internet, they may feel depressed as shown that item no. 3 "It can cause depression" got the weighted mean of 3.25 with the descriptive value of SA (Strongly Agree) got the highest rank on and item no. 2 "It can cause loneliness" with the weighted mean of 2.70 and descriptive value of A (Agree) got the lowest rank. Parallel to this result is the study of Aboujaoude and Liu (2011) which states that obsessive computer used caused depression to teens. Moreover, in the study conducted by Akhter, 2013; Jalalinejad et al., 2012; Yen et al., 2007; Young, 2004 as cited by Ocagachi (2015) that prevalence of depressions has been found to be high in manifestation in the

internet use among the youth in Asia, America and Europe.

Table 5. Relationship between Positive Effects of Internet Use and the Activities of Internet Use
N = 200

Positive Effects of Internet Use and	r	t-value	t-critical value	Decision	Interpreta-tion
Academic Performance	0.726	2.59	1.96	Reject H_0	Significant
Physical Health	0.733	2.64	1.96	Reject H_0	Significant
Emotional Health	0.249	0.630	1.96	Accept H_0	Insignificant

In terms of the relationship between the positive effects of internet use which is reflected in table 2 and activities of the internet use which can be found in table 3. The academic performance shows that the t-value which is 2.59 is greater than critical value of 1.96. This indicates that the null hypothesis is rejected, there is a significant relationship between the positive effects of using the internet and the activities of internet use in terms of academic performance. In the same table, the t-value which is 2.64 in the activities of internet use in terms of physical health is greater than the critical value which 1.96 this also signifies that null hypothesis rejected there is a significant relationship between the positive effects of internet use and the physical health activities. While, in emotional health activities, the t-value of 0.630 shows smaller than the critical value which is 1.96. Thus, the null hypothesis is accepted, there is no significant relationship between the positive effect of internet use in the emotional health of the students.

If the internet will be used wisely it will give benefits to the person using the technology. Internet is a very important source of information and it can be used for learning purposes. Regoniel, (2017) reveals that with the use of internet research is easier to do and no need to visit library to access materials relevant to their research topic. Through the use of internet student can exchange ideas using different social media and collaborate with other student to supplement their study. This implies that involvement of student will develop their learning's.

To maintain physical health other person use internet like online coaching and classes to become more health-conscious, active and educated about what it takes to maintain a healthy lifestyle, a growing number are looking to alternatives from traditional workout outlets like the gym, group classes and expensive personal training sessions (Swan, 2015).

Table 6. Relationship between Negative Effects of Internet Use and the Activities of Internet Use as to Academic Performance, Physical Health and Emotional Health
N = 200

Negative Effects of Internet Use and	r	t-value	t-critical value	Decision	Interpretation
Academic Performance	0.786	3.12	1.96	Reject H_0	Significant
Physical Health	0.904	5.18	1.96	Reject H_0	Significant
Emotional Health	0.397	1.06	1.96	Accept H_0	Insignificant

Table 6 reflects the relationship between the different activities of internet that displayed in table 2 and the negative effects of internet use that can be found in table 4. The computation reveals that the t-value in academic performance shows greater than the critical value, this means that there is a significant relationship between the activities in the academic performance to the negative effects of internet use. In the same table the t-value of physical health activities which is 5.18 shows greater than to the critical value, this indicates that the null hypothesis is rejected. There is a significant relationship between the negative effects of internet use and the physical health activities of the students. While for emotional health, it shows that the t-value which is 1.06 is lesser than to the critical value. This signifies that the null hypothesis is accepted, there is insignificant relationship between the negative effect of internet and its emotional health activities.

Internet activities produce negative effects to the students, although it gives them a quick result to search their lessons, internet helps them not to wait and give them immediate results with a minimal effort. Thus, they just copy and paste anything what was written in the article without reading the content. These traits will not translate to the school, where teachers expect their students to work for the grades. Students, as a result, are often unable to understand problems. In addition, they also fail to control their time efficiently (Nguyen, 2016).

Moreover, students absent from their class and went to internet café just to access internet to play online games, watch movies and accessing social media.

Conrad, (2013) state that abusive use of internet may cause significant weight gain or loss due to poor eating habits and lack of physical activity,

headaches, neck aches, back problems tired, dry, and/or red eyes, Irregular, unhealthy eating habits.

CONCLUSIONS

Based on the findings, the following are hereby concluded:

1. Age of the students mostly belonged to the age group of 15 – 16 while 64% of the respondents were female and as to time and duration, 35.5 % of the students spent 2 hours in using the internet while 13% access internet for 30 minutes. Moreover, there were 31% of the students log to internet 3 times per week and 4% use internet 6 times per week.
2. Students used internet to seek information from the internet for their academic learning activities. While most of the respondents used the internet in the long period of time thus, it affect their physical health and for their emotional health, they often used the Internet to escape from other problem in their lives.
3. As to the students' academic performance, they found it out that internet have a positive effect for it helps them find the topics easily. On the other hand, Internet used improved the work performance of the students got a Positive Effects as to the Physical Health of the Students. While as to Emotional Health of the Students, it gave a positive effect due to their reasons that it can cause and make them being friendly.
4. For the negative effect of Internet to the Academic Performance of the Students, students agreed that they are relying too much in the internet. Thus, hamper the development of their creative mind. On the other hand, majority of the students agreed that internet has a negative effect to their physical health for it can cause eye strain. While as to their emotional health, they strongly agreed that internet usage can cause depression.
5. There were a significant relationship between positive effects of internet use and the academic performance and physical health of the students, while there were an insignificant relationship between the positive effects of internet use to the emotional health of the students.
6. There were a significant relationship between negative effects of internet use and the academic performance and physical health of the students, while there were insignificant relationships between the negative effects of internet use to the emotional health of the students.

Therefore, it is concluded that internet brought positive effects to the students especially in their academic performance which helps them largely in seeking information for their learning but has no connection to their emotional health whether it makes them happy or sad. Otherwise, internet also affects negatively to the students academically and physically especially if they spent too much time in the internet and using the internet unrelated to their purposes. Internet also negatively affects when there is no guidance on how to use it properly.

RECOMMENDATIONS

Based on the findings together with the conclusions, the following are hereby recommended:

1. Students, parents, and school personnel convene an Awareness Seminar/Symposia on guidance on how to use the internet properly.
2. Parents must guide their child and set time limits when using the internet.
3. Community leaders make regulation regarding internet café operation.
4. School administrator must improve internet access in school and imposed students' research in their subject to increase academic performance.
5. Use video conferencing in ICT subjects to promote technology and allow interactive experience for students with people skilled in the field being discussed.
6. A study should be made by other researchers on variables not covered on this study.

BIBLIOGRAPHY

Abdulahi, A, Samadi, Gharleghi (2014) *"A study on the negative effects of social networking sites such as Facebook among Asia Pacific University Scholars in Malaysia.* pp. 135 - 136.

Aboujaoude and Liu (2011) *Co-morbidity of internet addiction with anxiety and depression.*

Acurantes, Lauren (2011) *"Why teenagers very*

fond of social networking sites?"

Anderson E. (2015). *How internet has ballooned in the last decade.*

Bargh J.A. and McKenna, K.Y.A. (2004). *The internet and social life*. New York University, New York, New York 10003. pp. 2-4, 9-11.

Bhatti R. (2014). *Experience of internet utilization by post graduate students at Nishter Medical College*, Multan, Pakistan.

Brändström C. (2011) *Using the internet in the education – strength and weaknesses.*

Carballo, J. P. (2010) *A study of the use of social media by business college students.*

Chongtham Beda Devi, Nil Ratan Roy(2012). *Internet use*
among university students: A case study of Assam university silchar. pratidhwani,1(2).

Cocke, Anna (2013) *Physical and social effects of internet use in children.*

Fish, T. W (2015). *Internet slang and high school students*: a teacher's perspective. pp. 14-15

Durkee, T. et al. (2012). *Prevalence of pathological internet use among adolescents in europe*: demographic and social factors. addiction 107, 2210–2222

Erdoğan Y. (2016) *Exploring the relationships among internet usage, internet attitudes and lowliness of Turkish adolescent.*

Graton,Laura (2016) *Studying online networks.* journal of computer-mediated communication, centre for urban and community studies, University of Toronto, 455 Spadina avenue, 4th floor, Toronto Canada m5s 1a1.

Gebremariam, M.K. et al. (2013). *Are screen-based sedentary behaviors longitudinally associated with dietary behaviors and leisure-time physical activity in the transition into adolescence?* Int. J. Behav. Nutr. Phys. Act. 10, 9

Greenhow C. (2008). *"Educational benefits of social networking sites uncovered",*

Hasnain, Hira, Nasreen, Ijaz (2015) *Impact of social media usage on academic performance of university students.*, page 3.

Hellmich N. (2014) *Digital device can lead to eye strain – US today.*

Jarche H. (2011) *Introduction to social networking.*

Jonathan D. James. (2014-11-16). *"The internet and the Google age*: prospects and perils". Research-publishing.net. PP 27-49

Kubey et al. (2011) *The role of internet user characteristics and motives in explaining three dimensions of internet addiction.*

Kumar, M. P. (2015) *International research journal of library and information.*

Kraut Robert E. (2012) *The relationship between Facebook use and well-being depends on the communication type and tie strength.*

Labucay,I. A.(2012).*Internet use in the Philippines*. social weather stations, Philippines, June 2011. pp.2-5.

Mazalin, Dennis (2011) *Social anxiety and the internet*: positive and negative effects., pp. 2-3.

McLeod, Saul (2013),"Erik Erikson", *Simply psychology*, retrieved 23 July 2016.

Meeker, M. & Wu, L. (2013) *"Internet trends"*, D11 Conference 2013, Kleiner Perkins Caufield Byers. www.kpcb.com/file/kpcb-internet-trends-2013 (onlineaccess: 5th March 2014)

Mills, K. L. (2014) *Effects of internet use on the adolescent brain*. Institute of Cognitive Neuroscience, University College London, London, UK. Child Psychiatry Branch, National Institute of Mental Health, Bethesda, MD, USA. p. 1

Muniandy, L. (2011) *Cyber security behavior among higher education students in Malaysia.*

Nield, D (2016) *"What is the internet doing to relationships?"*

Nielson, (2014) *Hacking health*: How consumers

use smartphones and wearable tech to track their health.

Osunade, O. (2003) *An evaluation of the impact of internet browsing on students' academic performance at the tertiary level of education in Nigeria.* International Development Research Center (IDRC) in Canada and the Academy for Educational Development (AED) in USA And USAID – Washington. pp 7- 9.

Passy, Don and Milligan Christine (2013) *Ageing and the se of internet.* Page 15.

Patrick, Josh (2015) *Physical and social effects of internet use in children.*

Purcell, K. et al. (2012) *How teens do research in the digital world, pew internet & American life project*

Rahwan, I. et al. *(2014)* Analytical reasoning task reveals limits of social learning *in networks.* J. R. Soc. Interface 11, 20131211

Regoniel, Patrick, (2017) Positive and negative use of internet.

Romer, D. et al. (2013) *Older versus newer media and the well-being of united states youth*: results from a national longitudinal panel. J. Adolesc. Health 52, 613–619 7

Santrock, John (2012) *Educational psychology*, 5th Edition. Pp. 214 -215

Salvatore (2015) *Online social networking in adolescence*: patterns of use in six European countries and links to psychosocial functioning.

Shao-I Chui, F.Y Hong and S.L Chui (2013) *An analysis on the correlation and gender difference between college students' internet addiction and mobile phone addiction in Taiwan.*

Sparrow, B. et al.(2011*) "Google effects on memory: cognitive consequences of having information at our fingertips".* 10.1126/ science.1207745

Swan, Tim (2015) *Faculty of sport and exercise medicine.*

Tuncer, H., Mishra, S. & Shenoy, N. (2012) *"A survey of identity and handoff management approaches for the future internet"*, Computer Communications, no. 36:63-79

Viswanath (2016) *Ways that internet can boost your health.*

Wanajak, K. (2011) *Internet use and its impact on secondary school students in Chiang Mai, Thailand.* pp. 13-14

Wang, Chen and Liang (2011) *The impact of social networking – the Clute institute.*

Electronic Materials/Links

https://ejournals.library.ualberta.ca/index.php/ cjlt/article/view/26462/196440

http://it.pedf.cuni.cz/~bobr/role/ch56.htm

http://www.gov.ph/2012/09/12/republic-act-no-10175/

http://news.pia.gov.ph/article/ view/1101467617948/tagbilaran-city-implements-curfew-for-minors

http://science.opposingviews.com/importance-internet-education-1232.html

http://www.rappler.com/business/.../96337-FELTA-PH-EDUCATION MODERNIZA-TION

http://www.ukessays.com/essays/education/the-role-ofcomputers-\in-education-education-essay.ph

PROPOSED ENHANCEMENT PROGRAM TO IMPROVE INTERNET USAGE

AREAS OF CONCERN	SPECIFIC OBJECTIVES	STRATEGIES	PERSONS INVOLVED	TIME FRAME	SUCCESS INDICATORS	BUDGET
FORMULATION OF BARANGAY ORDINANCE PROHIBITING GAMES AND PORNOGRAPHIC WEBSITES IN ALL INTERNET CAFES' NEARBY SCHOOLS	To improve internet usage of the students and to avoid them playing games and surfing pornographic websites that might affect their studies.	Conduct orientation or information dissemination for them to be aware about the said ordinance regarding the use of internet by students	High school students in Ubay School teachers School heads Parents Barangay Officials	2017 onwards	Students are aware with the proper use of internet and are guided on the penalties on the violation of such ordinance.	P 100,000.00
INORMATION DISSEMINATION CAMPAIGN	To disseminate information regarding the negative effects of the internet and to improve internet usage of the students.	Conduct seminar regarding the use of internet by students	High school students in Ubay School teachers School heads Parents	2017 onwards	Students are aware with the proper use of internet	P 60,000.00
MONITORING PLAN	To monitor the ongoing strategies implemented in Improving Internet Usage.	Organize functional committee on proper use of internet.	School heads Teachers Parents	2017 onwards	Goal sustained and success attained	P 60, 000.00

ASSESSING THE GRAMMATICAL COMPETENCE OF GRADE 7 STUDENTS AS BASIS FOR PROPOSED LANGUAGE ACTIVITY SHEETS

CARMIJANE J. PEŇA
Gattaran National Trade School
DepEd-SDO Cagayan

ABSTRACT

English is the most often used language in the present and globalized world. It has become the lingua franca for communication, education and opportunity in general. However, as observed, most students failed in the English subject because their ability to express their thoughts in written form using the English language is hardly done. Thus, this study aimed to assess the grammatical competence of the students and determine how they relate to their profile. Out of 46 Grade 7 student-respondents, it was found out that the mean age of the subjects is 12.52, majority are males, their parents finished high school and most of the fathers are farmers and mothers are housewives, speak Iloko and they read textbooks at home. In terms of grammatical competence, there are lesser proportions of competent students along correct usage (30% competent), subject-verb agreement (7%) and verb tenses (39%). Further, there are profile variables that relate to the competence of the students. Language activity sheets were developed based on the results of the assessment in which this study is proposing for future educational use.

INTRODUCTION

In this present and globalized world, the language used most often is English. The language has become the lingua franca for communication, education and opportunity in general. It occupies a prestige in our country and the need to be proficient on it among non-native speakers has become a global phenomenon. One of the challenges that teachers are facing today is how to make teaching more interesting to their learners. Is the expertise if the teacher enough? Will visual aids help? Does the expression on the face of the teacher or the rise and fall of his or her voice help in making them understand the subject? Surely, there must be creative ways to reach out to the learners and perk up their interest so that they can absorb the lesson being taught. The communicative competence, where the use of the English language is a requirement, of the teacher is an important factor. Considering this, there is a great demand among teachers to be articulate in the classroom. Teachers, particularly in the secondary level, can influence the development of communication skills among their students. Likewise, they are partly incharge of the second language acquisition of their learners.

It is also recognized that one of the vital issues in Philippine Education today which remains unresolved is the role of English language as medium of instruction in schools. Meanwhile, reports revealed that the decrease in school performance in national test is continuously unabated.

Looking into the importance of good communication skills in global arena, it is critical that the education sector in the Philippines must realize that developing this skill among the learners should be primarily mandated.

As observed, most students failed in the English subject because of their difficulty or, the least, inability to express their thoughts in written form using the English language. Although the teaching styles and practices of the teachers continue to improve, there is still a need to identify what dimensions where these difficulties arise in order to address the problem.

Statement of the Problem

This study aimed to assess the Grade 7 students' grammatical competence and determine if it has relationship with their profile. Specifically, it sought answers to the following queries:

1. What is the profile of the students in terms of age, sex, parents' highest educational attainment and occupation, and dialect spoken and reading materials at home?
2. What is the grammatical competence of the students along correct usage, subject-verb agreement and verb tenses?
3. Is there a significant relationship between the profile variables of the students and their grammatical competence?
4. What instructional material can be proposed to improve the grammatical competence of the students?

Framework of the Study

Chomsky (in Mitchell & Myles, 2004) explains that the logical problem of language learning is caused by messy and fragmentary input, making abstract concepts based on limited examples of languages. Gass (in Bailey, 2006) refers to input as "… the language to which the learner is exposed, either orally or visually…", in other words, the language which surrounds learners living in a second language environment. This means that when a teacher is unable to deliver the needed concepts to students, it affects their academic performance.

Furthermore, one of the most pertinent theories that could back up this study is the concept of Krashen (2004) who found out that the essential ingredient for second language acquisition is comprehensible input through teacher's talk and worksheet or activities that would enhance more their skills. The activities should match on learner`s level of comprehension, that is, the learner should be able to understand the concept. With this concept, it is just but important that students should have maximum knowledge on grammar particularly on correct usage, subject-verb agreement and tenses of verb.

Meanwhile, Marinova-Todd (2002) stressed that the availability and the access to good second language input and instruction produce the best outcomes in second language and ensure native-like proficiency. It is in this concept that the researcher embarked on this endeavor. That is, to further investigate grammatical competence of the students in some areas of the English language.

Synthesizing the foregoing important literatures which laid foundation and theoretical basis for this study, the paradigm as shown in Figure 1 shows the approach used in this study which used the Input-Process-Output Model. The input con-

sisted of the theories pertaining to second language acquisition, the English proficiency test in grammar and the students' profile. The process entailed the assessment of the students' grammatical competence. Further, this study also determined if there exists correlation between the students' grammatical competence and their profile. Lastly, the output was the proposed language activity sheets which were developed based on the results of assessing the students' grammatical competence.
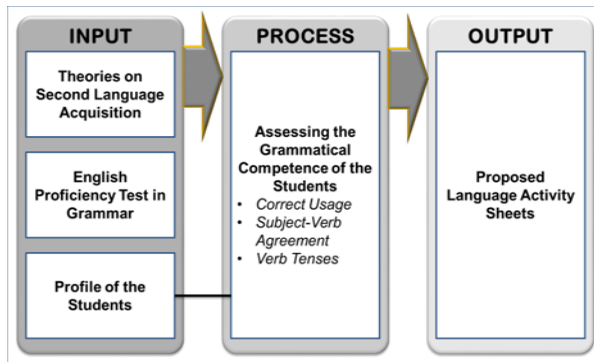
Fig. 1. Paradigm of the study

LITERATURE REVIEW

The Position of Grammar in the Language Teaching Process

The call to uphold the quality of Filipino English reaches out to educational institutions where it plays a vital role in learning. There is a need to brace English to project intelligibility, communicability and acceptability even as a great number of educated Filipinos opt for passive English, understand English in oral and written form, respond accordingly but still communicate in their native tongues or the national language. The challenge to make the Teaching of English as a Second Language (TESL) operational confronts teachers to contend with the inherent inter language of their multilingual wards and facilitate the acquisition of "grammatical competence, phonological awareness and discourse awareness through communicative approaches" (Bourke, 2008).

English nowadays is considered as the universal language for which it is understood by almost all countries in the world. It is used by most people as their second language. First, it is a way of communication in business, negotiations and especially academics. It plays an important role in the basic education, particularly to speaking and writing. (Kumar, 2009)

English proficiency must be treated as an additional skill. In reality, a country needs to build familiarity, friendship and collaborate with other countries as well. It is the obligation of the government to give good quality of education to be able to work and communicate in a wider and competitive world. (Alave, 2006)

English Language in the Philippines

The Philippines has lately been failing to fulfil its duties, particularly to provide good quality of education in English. According to Salazar (2007), it can clearly be seen in the decline of the English proficiency rate at the March 2006 SWS survey where only two out of three Filipino adults said that they understood and could read English in the March 2006 compared to the September 2000 survey.

Poor English has been pointed out by Hidalgo (2005) as culprit for low performances among students who were taught in English. Unsatisfactory English has also been the scapegoat for the defects in our education system, the corruption in government, and the decline in investment. Schools need not remain mum on the issue of unsatisfactory English performances but take a good grip instead on the state of English, and ease problems after its having served as medium of instruction for years.

Second Language Acquisition and Teaching

According to cognitive psychologist J.R. Anderson (1981) language acquisition is a complex cognitive ability and within his theory of production systems, he explains the difference between declarative knowledge and procedural knowledge. Declarative knowledge refers to what we know about something, while procedural knowledge refers to when we know how to do something. This has led to analyzing and discussing the learning strategies considering metacognitive strategies mainly executive and cognitive strategies mainly operative (Kovačević 1999).

Teaching requires the use of good communication skills because teachers model communication attitudes to their pupils. In fact, it is the role of teachers to promote language development. They are also considered role models who can provide opportunities for communication to take place in the classroom.

For language learning to be viewed best, an article by Marckwardt (2007 p.43) disposes that the most important contribution that linguistics can make to the classroom English teacher is in reshaping his view of language and of language learning. These are matters of attitude and concept rather than of one grammatical analysis as compared with another or of a series of judgments about the acceptability of any number of specific forms and expressions.

Linguistically sound materials can be expected to produce satisfactory results only when they are used by linguistically knowledgeable and sophisticated teachers. Such sophistication rests upon an understanding of certain principles.

English as a Second Language (ESL) instruction is designed for teaching English to students living in English – speaking environment but whose primary language is not English.

Teaching grammar includes not only learning the rules, but learning how to manipulate the features used by English speakers, to express certain meanings and relationships. If we want to communicate, we have to be able to produce the language in the way to be understood. Grammar should not be taught separately from the four skills (listening, speaking, reading, writing). Teaching grammar communicatively means that the teacher should present the language in situations in which it is used, and he or she must control the activities that follow, allowing learners to practice it in a controlled situation, then in more communicative activities, and finally in fluency activities.(Irene Rigo 2011)

Learning strategies are a special way of processing the information to help and improve understanding, learning and retaining the information. The age factor is to be considered when discussing and analyzing learning strategies as some are typical for young learners, while others are employed by older learners or adults, due to their different cognitive abilities.

METHODOLOGY

Research Design. This study utilized quantitative research method particularly descriptive-correlational design. It described the students' profile and grammatical competence and correlated them. Further, as an output of this study, proposed language activity sheets were developed.

Respondents. The respondents of the study were the forty-six (46) randomly selected Grade 7 students of Gattaran National Trade School for the School Year 2018-2019. The number of samples were calculated by power analysis using G*Power v.3.1.9 setting the input parameters to effect size = 0.48 (approx. large), level of signifi-

cance (α) = 0.05 and power = 0.95 (actual = 0.9524).

Data Collection and Ethical Considerations. Permissions from appropriate authorities such as the Schools Division Superintendent of the Division of Cagayan and the School Principal of Gattaran NTS were sought first. The selected respondents were then oriented informing them the purpose and process involved in the study. Their profiles were obtained through a survey questionnaire. After which, their grammatical competence were assessed using the test that was patterned from the test questions used by Manuel (2015) in his study titled "Level of English Proficiency among Senior High School Students at Gammad National High School". However, it was pretested in Western Cagayan School of Arts and Trades in Lasam, Cagayan which is also a technical-vocational school to measure the validity and reliability of the test questions. The calculated reliability or internal consistency of the test using Kuder-Richardson Formula, Cronbach's alpha is 0.80 which means acceptable or good. The test consisted of 60 items capturing the three (3) dimensions of grammatical competence --- correct usage (20), subject-verb agreement (20) and verb tenses (20).

Data Analysis. The data for the study were described statistically using frequencies, percentages, ranks, means and standard deviations. For the grammatical competence, a student is considered as "competent" if he/she scored 75 percent of the allotted items to every dimension and sub-dimension, otherwise, he/she is incompetent. The correlation between the students' profile and their level of grammatical competence was calculated using the Pearson Product Moment Correlation Formula. All hypotheses were tested at 0.05 level of significance.

RESULTS AND DISCUSSIONS

1. Profile of the Grade 7 Students

Table 1 presents the profile of the grade 7 students. Apparently, most of the students are at the right age for grade seven as evidenced by their mean age of 12.52 with a standard deviation of 1.32. It was apparent also that there are more males with a frequency of 25 or 54 percent as compared to females with frequency of 21 or 45 percent. It is found out in the same table that 42 or 92 percent of the students speak Iloko while 2 or 4 speak Ybanags and Tagalogs respectively. This is

true because the town is an Iloko-speaking community.

As reflected in the table, 25 or 54 percent of the students read textbooks while the least read materials are magazines with 3 or 7 percent only. This means that the reading materials read by the students are the textbooks issued by the Department of Education, a fact which is revealed by other researches where textbooks are the mostly read materials by students in public schools.

It is revealed that most of the students` fathers and mothers are high school graduates with a frequency of 28 or 61 percent and 26 or 57 percent, respectively. This means that they have the basic education to assist their children in their educational endeavors. On the other hand, 25 or 54 percent of the students have fathers who are farmers. It can be ascribed from the fact that the locality where the students belong is an agricultural area and since the fathers only attained high school, it is very rare that they can land to other occupational opportunities, thus there is no choice left but to venture to agricultural activities. However 34 or 74 percent of the students' mothers are housewives. This means that they have more time to take care of their children as a family culture.

Table 1. Profile of the grade 7 students

Variables	f (n=46)		%	
Age				
17 to 19	1		2	
14 to 16	6		13	
11 to 13	39		85	
	Mean = 12.52		S.D. = 1.32	
Sex				
Male	25		55	
Female	21		45	
Dialect Spoken at Home				
Iloko	42		92	
Ybanag	2		4	
Tagalog	2		4	
Reading Materials at Home	*(multiple*		*response)*	
Newspaper	7		15	
Textbooks	25		54	
Magazines	3		7	
Comics	4		9	
Parents'	*Father*		*Mother*	
Highest Educ'l Attainment				
College Graduate	10	22	13	28
High School Graduate	28	61	26	57
Elementary Graduate	8	17	7	15
Occupation				
OFW	5	11	9	20
Farmer	25	54	-	-
Laborer	11	24	-	-
Driver	4	9	-	-
Engineer	1	2	-	-
Housewife	-	-	34	74
Teacher	-	-	2	4
Accountant	-	-	1	2

2. Students' Grammatical Competence

Correct Usage

It is revealed in table 2, that out of 46 students, there are 29 who are grammatically competent along conjunction. This means that the students have the ability to use the correct conjunction in joining sentences, phrases and clauses. As to the use of interjection, there are 24 students who are competent which means that most of the students can identify what expressions are being expressed in sentences. Furthermore, 17 are competent in the use of preposition implying that most of the students are not able to use prepositions correctly thus, affecting their oral and written expressions. Moreover, 25 of the students are competent on the use of adverb which means that majority of the students don't have the ability to use the correct adverb of manner and time in sentences. As to the use of adjectives, 25 of the students are competent signifying that most of the students can identify the correct series of adjectives in a sentence. Likewise, as to the use of pronouns, result shows that majority of them are unable to identify the proper pronouns to be used in a sentence most especially on the cases of pronouns where only 18 are grammatically competent.

Overall, only 14 students or 30 percent of them are grammatically competent along correct usage. This further implies that some students have difficulty in some areas of correct usage. This confirms the findings of Barman (2014) in his paper titled "Report on Grammatical Competence of EFL Learners at Tertiary Level: A Survey" that some students are weak in other areas of grammar despite of learning efforts.

Table 2. Grammatical competence of the students along correct usage

Areas of Correct Usage	Competent	
	F (n=46)	%
Conjunction	29	63
Interjection	24	52
Preposition	17	37
Adverb	25	54
Adjective	25	54
Pronoun	18	39
OVERALL	**14**	**30**

Competent if scored 75% or above

Subject -Verb Agreement

As to subject-verb agreement, greater proportion of the students, at 37 students or 81 percent each, are competent along the categories of "Plural in Form" and "Amount". This means that most of the students can determine if the subject is plural in form but singular in meaning and can also determine the relationship of the subject of the sentence and its verb. The same is true with the agreement between "amount and/or measurements" and its verb.

Moreover, 32 out of the 46 students are competent along "compound students". This means that most of them can determine the agreement of compound students and verbs.

Table 3. Grammatical competence of the students along subject-verb agreement

Areas of Subject-Verb Agreement	Competent	
	F (n=46)	%
Number	4	9
Indefinite Pronoun	20	44
Amount	37	81
Plural in Form	37	81
Intervening Phrase	4	9
Here and There	8	18
Neither / nor	25	54
Compound subject	32	70
OVERALL	**3**	**7**

Competent if scored 75% or above

As to the use of "neither-nor/ either-or", 25 are competent which implies that most of the students can determine the relationship of compound students joined by either- or/ neither-nor and its verbs.

As regards the "intervening phrase", 4 of the students are competent which means that most of them cannot determine the relationship of the students with intervening phrases and its verbs like "as well as, together with and along with". Furthermore, as to the use of "here and there", 8 of the students are competent. This means that most of the students cannot determine the relationship of the students in the sentences that begin with "here" and "there" and its verbs. Lastly, only four students or nine percent are competent under the area of "number" which is already the lowest proportion as to grammatical competence along subject-verb agreement. This means that few of them can determine if the verb agrees with its subject in number.

Findings of this study further implies that majority of the students have a difficulty in determining the singularity and plurality of the students of the sentence and the verb, that their inability to determine their agreement affects their oral and written expressions. This is also apparent from the overall proportion of only three students or seven percent are competent along this area.

Tenses of Verb

As revealed in table 4, 16 of the students are grammatically competent along simple past tense. This means that some of them have a difficulty in using the past tense of the verb and they are unable to identify some time expressions that signify the past form of the verb. As to simple present tense, out of 46 students, 19 are competent. This means that few of them are not yet well-versed with the use of simple present tense in the sentence; they can't decipher some words that signify the present form of the verb. As to future tense, 33 are grammatically competent. This means that few of the students have a difficulty in using the future tense because they can bit recognize "will" and "shall" as signals for future tense.

Overall, 18 students or 39 percent have acceptable grammatical competence along verb tenses. This further implies that although there are those who are knowledgeable in using other tenses, there are still those who are incompetent in transforming verbs in their past forms; hence assistance is needed for them to correctly use verbs in their past tense.

Table 4. Grammatical competence of the students along verb tenses

Areas of Verb Tenses	Competent	
	F (n=46)	%
Simple Present	19	41
Simple Past	16	35
Simple Future	33	72
OVERALL	18	39

*Competent if scored 75% or above

3. Correlation Results between the Profile Variables of the Students and their Grammatical Competence

Correct Usage and Profile

Table 5 presents the correlation results between students' grammatical competence along correct usage and their profile variables. It was found out that students' grammatical competence along with conjunction, preposition and adverb is significantly related to their sex as reckoned by the correlation coefficients of 0.347, 0.351, and 0.415 respectively which means that females (coded 2) are more grammatically competent as compared to males (coded 1).

Table 5. Results of the correlation tests between the students' profile and grammatical competence along correct usage

Profile Variables	Conjunction	Interjection	Preposition	Adverb	Adjective	Pronoun
Age	0.177	0.039	0.025	0.129	-0.057	0.064
	0.239	0.796	0.869	0.393	0.706	0.672
	NS	NS	NS	NS	NS	NS
Sex	**0.347**	0.232	**0.351**	**0.415**	-0.012	0.041
	0.018	0.121	**0.017**	**0.004**	0.935	0.789
	S	NS	**S**	**S**	NS	NS
Fathers' Educ.	0.117	0.060	-0.060	0.240	0.055	0.117
	0.439	0.692	0.694	0.107	0.715	0.440
	NS	NS	NS	NS	NS	NS
Mothers' Educ.	0.212	0.174	**0.297**	0.167	-0.059	-0.032
	0.157	0.248	**0.045**	0.267	0.696	0.832
	NS	NS	**S**	NS	NS	NS
Fathers' Occu.	-0.028	-0.065	-0.113	0.028	0.019	-0.086
	0.854	0.670	0.454	0.853	0.899	0.572
	NS	NS	NS	NS	NS	NS
Mothers' Occu.	0.116	**0.314**	0.279	0.142	0.131	0.016
	0.442	**0.033**	0.060	0.346	0.385	0.915
	NS	**S**	NS	NS	NS	NS
Dialect Spoken	-0.151	0.003	-0.187	-0.014	0.041	0.013
	0.316	0.986	0.212	0.927	0.785	0.932
	NS	NS	NS	NS	NS	NS
Reading Materials	-0.156	-0.129	0.044	-0.136	**-0.299**	-0.194
	0.301	0.395	0.770	0.366	**0.044**	0.197
	NS	NS	NS	NS	**S**	NS

*tested at 0.05 level of significance using Pearson r; the first value is the correlation coefficient followed by the probability value and the statistical inference; bold-faced values are significantly related

A significant relationship exists between the students' grammatical competence along preposition and their mothers' educational attainment which reckoned a correlation coefficient of 0.297 (p=0.045). This finding means that higher mothers' educational attainment relates to better grammatical competence along preposition. On the other hand, Mother's Occupation is significantly related to interjection as evident by the computed r value of 0.314 with a probability of 0.033 which means that better occupation of the mother relates to better grammatical competence along interjection.

A negative correlation existed between reading materials read at home and grammatical competence along adjective as manifested by the computed r value of -0.299 with a probability of 0.044. This finding means that lesser reading materials read at home leads to better grammatical competence along adjective.

Table 6. Results of the correlation tests between the students' profile and grammatical competence along subject-verb agreement

Profile Variables	Number	Indefinite Pronoun	Amount	Plural in Form	Intervening Phrase	Here and There	Neither / nor	Compound subject
Age	-0.134	0.037	0.055	0.055	0.081	-0.161	0.035	0.171
	0.375	0.808	0.716	0.716	0.592	0.284	0.817	0.256
	NS	NS	NS	NS	NS	NS	NS	NS
Sex	0.055	-0.006	0.012	0.012	0.122	-0.114	-0.124	0.037
	0.716	0.968	0.937	0.937	0.420	0.450	0.412	0.807
	NS	NS	NS	NS	NS	NS	NS	NS
Fathers' Educ.	0.040	0.028	0.034	0.034	-0.042	0.066	0.064	-0.030
	0.791	0.856	0.821	0.821	0.783	0.664	0.673	0.845
	NS	NS	NS	NS	NS	NS	NS	NS
Mothers' Educ.	0.008	0.036	0.184	0.015	0.057	-0.102	-0.018	0.207
	0.960	0.812	0.220	0.923	0.705	0.501	0.908	0.168
	NS	NS	NS	NS	NS	NS	NS	NS
Fathers' Occu.	-0.115	-0.172	-0.065	-0.065	0.018	-0.214	-0.161	-0.169
	0.445	0.253	0.670	0.670	0.907	0.152	0.286	0.262
	NS	NS	NS	NS	NS	NS	NS	NS
Mothers' Occu.	0.157	0.223	-0.024	0.078	0.190	0.022	0.009	-0.111
	0.296	0.136	0.872	0.608	0.206	0.886	0.953	0.463
	NS	NS	NS	NS	NS	NS	NS	NS
Dialect Spoken	-0.020	-0.074	-0.101	-0.101	0.031	0.205	0.072	0.193
	0.893	0.625	0.504	0.504	0.836	0.172	0.634	0.199
	NS	NS	NS	NS	NS	NS	NS	NS
Reading Materials	-0.096	-0.223	0.102	0.185	-0.101	-0.255	0.092	0.125
	0.527	0.136	0.498	0.218	0.503	0.087	0.545	0.406
	NS	NS	NS	NS	NS	NS	NS	NS

* tested at 0.05 level of significance using Pearson r; the first value is the correlation coefficient followed by the probability value and the statistical inference; bold-faced values are significantly related

Subject-Verb Agreement and Profile

Table 6 reveals that the profile variables of the subjects are not significantly related to the subjects´ grammatical competence along subject-verb agreement. Thus, the acceptance of the null hypothesis at 0.05 level of significance. This means that the profile variables of the subjects relative to age, gender, parents´ highest educational attainment, parents´ occupation, dialect spoken at home and reading materials read at home do not influence the grammatical competence of the subjects along subject-verb agreement.

Table 7. Results of the correlation tests between the students' profile and grammatical competence along verb tenses

Profile Variables	Simple Past	Simple Present	Simple Future
Age	0.195	-0.134	-0.055
	0.195	0.375	0.715
	NS	NS	NS
Sex	**0.297**	**0.330**	**0.303**
	0.045	**0.025**	**0.041**
	S	**S**	**S**
Fathers' Educ.	0.065	0.040	0.230
	0.667	0.791	0.125
	NS	NS	NS
Mothers' Educ.	0.229	0.008	0.058
	0.126	0.960	0.701
	NS	NS	NS
Fathers' Occu.	0.048	-0.115	0.135
	0.751	0.445	0.371
	NS	NS	NS
Mothers' Occu.	0.208	0.157	0.142
	0.166	0.296	0.348
	NS	NS	NS
Dialect Spoken	-0.047	-0.020	0.172
	0.758	0.893	0.254
	NS	NS	NS
Reading Materials	-0.070	-0.096	-0.262
	0.643	0.527	0.078
	NS	NS	NS

* tested at 0.05 level of significance using Pearson r; the first value is the correlation coefficient followed by the probability value and the statistical inference; bold-faced values are significantly related

Verb Tenses

Table 7 presents the correlation results between students' grammatical competence along correct usage and their profile variables. It was found out that students' grammatical competence along with simple past tense, simple present test and simple future test is significantly related to their sex as reckoned by the correlation coefficients of 0.297, 0.330, and 0.303 respectively. This finding means that females (coded 2) are grammatically competent along with tenses of verbs as compared to males (coded 1).

4. Proposed Language Activity Sheets/ Worksheets to Enhance the Grammatical Competence of the Students

I. TITLE

Language Activity Sheets to Improve Grammatical Skills of Freshmen High School Students of Gattaran National Trade School

II. IDENTIFYING DATA

Proponent: Carmijane J. Peňa
Beneficiaries: Grade 7
Locale: Gattaran NTS

III. RATIONALE

Communicating effectively in a language requires the speaker's good understanding of linguistic, sociolinguistic and socio-cultural aspects of that language. This understanding will enable him to use the right language in the right context for the right purpose and then he can be referred to as communicatively competent. However, the realization of this level of knowledge and understanding is al-

ways a challenge for second language learners. They often struggle through their journey towards the achievement of this goal and are often met with many obstacles. Therefore, activity sheets have been raised for second language contexts to achieve this goal.

Grammar lays the groundwork for effective communication. It is very important because it helps enhance accuracy. This means grammar rules can help learning develop a habit of thinking logically and clearly and will become more accurate when using language.

From this unquestionable truth on the importance of grammar on all facets of life and the nation, every teacher must conscientiously think that grammar skills are crucial to effectively give direction and provide assurance of students` ability. Grammatical competence was a part of communicative competence to obtain effective communication. Hence, students should pay attention to grammar.

Moreover, students who find difficulty in using the different parts of speech correctly, observe the rules of subject-verb agreement and identify the simple past form of the verb will find difficulty in expressing their thoughts in oral or written form. Furthermore, they would also be hard up in developing higher levels of other language skills.

IV. OBJECTIVES

This proposed language activity sheets intend to address the poor grammatical competence of the learners because it was found that most students failed in the English subject because their ability to express their thoughts in written form using the English language is hardly done.

Specifically, the aim of the proposed language activity sheets is to improve the grammatical skills of the Grade 7 students along the three dimensions of grammar which include correct usage, subject-verb agreement and tenses of verb.

V. DESCRIPTION

These proposed language activity sheets are geared towards the improvement and enhancement of the grammatical skills of the students in order to make them communicatively competent.

This learner's material is specifically designed to meet the needs of the K to 12 Basic Education Program for junior high school which aims to develop the learners to become fully functional and literate individuals. The activities provided in this material will equip the students with grammatical skills needed in real-life situations.

This material provides students with interesting literary selections and passages from the Philippines which are written in English. Through these, they will also discover how Philippine literature in English was developed. The material will also develop their skills in reading, writing, language, and literary. It will also give them a chance to enhance their grammatical skills along the three dimensions namely, correct usage, subject-verb agreement and tenses of verb.

The material offers them exercises that they can use to practice their grammatical skills and make them their own. It extends the techniques to wide range of situations: Exercises teach them to communicate and help facilitate partner understanding by communication differences. Step-by-step worksheets, fill-ins, and paragraphs help them avoid communication pitfalls and make long—lasting life enhancing changes.

VI. EXPECTED OUTCOME

Improved/higher grammatical skills of the students in terms of correct usage, subject-verb agreement and tenses of verb

VII. CONTENTS

A. Introduction

This learner's material is specifically designed to meet the needs of the K to 12 Basic Education Program for Junior High School which aims to develop the learners to become fully functional and literate individuals. The activities provided in this material will equip you with grammatical skills needed in real-life situations.

This material provides you with interesting literary selections and passages from the Philippines which are written in English. Through these, you will also discover how Philippine literature in English was developed. The material will also develop your skills in reading, writing, language, and literary comprehension. It will also give you a chance to enhance your grammatical skills along the three dimensions namely, correct usage, subject-verb agreement and tenses of verb.

The material offers you exercises that you can use to practice your grammatical skills and make them your own. It extends the techniques to a wide range of situations. The exercises teach you to communicate and help facilitate partner understanding by communication differences. Step-by-step worksheets, fill-ins, and paragraphs help you avoid communication pitfalls and make long—lasting life-enhancing changes.

There are three (3) parts in this activity sheet which provide you with experience on enhancing your grammatical skills.

Part 1: Correct Usage on Pronoun
Part 2: Subject-Verb Agreement Rule in Number
Part 3: Simple Past Tense

I hope that these activity sheets will help you deepen your understanding on the different dimensions of grammatical competence and to continuously enhance your skills in grammar. Furthermore, I hope that this will help enrich your lives by enhancing your appreciation on Philippine Literature.

B. Tasks' Rationale, Descriptions and Objectives

1. PASSAGE COMPLETION
   Rationale: Pronouns are used in the place of nouns (naming words). This practice provides an opportunity to let the students use their higher order thinking skills. A good suggestion is to let the students improve the passage given by substituting the nouns given.
   Description: Passage completion is an activity in enhancing students` writing ability. Instead of using nouns in the lines, pronouns should be used in passage. Therefore, the reader should be knowledgeable on substituting nouns.
   Objectives:
   To use appropriate pronouns in place of a noun;
   To complete the passage with correct pronouns.

2. SENTENCE COMPLETION
   Rationale: Pronoun worksheets can help develop the sentence construction of students. Developing sentences of students is necessary in teaching reading and literature. One common strategy is the use of sentence completion.
   Description: This is patterned from a passage completion type of test. However, this type of activity uses sentences. These are incomplete sentences therefore, complete these sentences using pronouns.
   Objectives:
   To complete sentences using pronouns;
   To determine the relationship of pronoun and the subject of the sentence

3. PERSONAL VS INDEFINITE
   Rationale: Pronouns such as he, she or it, enrich the reading and writing experience by eliminating redundancy. The pronoun worksheets below are used in place of nouns (naming words).This activity sheet helps the learner to identify the correct pronoun to be used in each sentence.
   Description: Personal pronouns are pronouns that are associated primarily with a particular grammatical person- first person, second person, or third person. It may also take different forms depending on number, grammatical or natural gender, case and formality. On the other hand, an indefinite pronoun does not refer to any specific person, thing or amount; it is vague, not definite. Common indefinite pronouns include" anybody, everyone, nobody, some, few, many, etc.…This pronoun worksheet gives students opportunity to choose the pronoun in each parenthesis to complete the thought of each sentence.
   Objectives:
   To use the correct pronoun to complete the sentence
   To determine the subject of the sentence and match with appropriate pronoun

4. REWRITING PARAGRAPH
   Rationale: Rewriting paragraphs enhances students' writing skills. Usually, students find difficulty in expressing their thoughts in written form. However, they can write if they have basis. This activity encourages students to rewrite the paragraph by substituting an appropriate pronoun.
   Description: Rewriting paragraph is a strategy in enhancing students' writing skills. The paragraph is entitled "The Fortune Teller". Instead of repeating the nouns, it is better if pronouns will be used in place of nouns. The writer should be knowledgeable in using pronouns appropriately.
   Objectives:
   To read the paragraph and determine the subjects of the sentence
   To rewrite the paragraph using the appropriate pronouns

5. FILL ME IN!
   Rationale: Pronouns are used in the place of nouns (naming words). This practice provides an opportunity to let the students use their higher order thinking skills. A good suggestion is to let the students improve the passage given by substituting the nouns given.
   Description: Sentence completion is a strategy in telling a story. Instead of using nouns in the lines, pronouns should be used in the sentences. However, the reader should be knowledgeable on substituting nouns.
   Objectives:
   To use appropriate pronouns in place of a noun
   To complete the sentences by writing the correct pronoun

6. SAMAL GENESIS

Rationale: Learner demonstrate communicative competence through his/ her understanding of Philippine Literature and other texts types for a deeper appreciation of Philippine Culture. This activity helps the learners understand the value of knowing how things came to be in the eyes of our ancestors. Everything on earth, good or bad, has its beginnings. Let the stories of the past inspire learners` future. Through this text, students will be able to identify correct pronoun that agrees with the antecedent.

Description: Legend is a genre of folklore that consists of a narrative featuring human actions perceived or believed both by teller and listeners to have taken place within human history. In this activity, students will be able to know the legend of white rock and this also allows them to supply the correct pronouns to be used in order to complete the composition.

Objectives:
To observe rules on pronoun-antecedent agreement
To identify the correct pronouns that agrees with the antecedent

7. THE ORIGIN OF THIS WORLD (Maranao)

Rationale: Folklores are traditional beliefs, customs, and stories of community, passed through the generations by word of mouth. These activities prepare students to appreciate diversity in our culture. Discover how stories from varied regions in our country reveal ideals, customs, and beliefs regarding our place in the world.

Description: Locating information from the selection is one way to develop the reading comprehension of the students. Furthermore, these tasks help the students to determine whether the subject agrees with its verb through passages.

Objectives:
To locate information in the selection
To determine whether the subject agrees with its verb

8. WORDS OF WISDOM

Rationale: This task allows students to appreciate the wisdom of our ancestors that continues to influence our experiences. Discover how their proverbs serve as guideposts towards strengthening our values.

Description: The task enhances the student's writing skills for it requires the learner to rewrite the sentences if it is ungrammatical. Therefore, the student must know if the statement is grammatically correct or not.

Objectives:
To discover how proverbs serve as guideposts towards strengthening our values
To determine if the sentences are grammatical or ungrammatical.

9. PLIANT LIKE THE BAMBOO

Rationale: Simple past tense is used to talk about actions that happened at a specific time in the past. There can be few actions happening one after another. These can be in terms of events in the past that are now finished, situation in the past and a series of actions on the past.

Description: This task allows the learners to supply the correct past form of the verb in order to complete the sentences and paragraphs.

Objectives:
To read the essay with correct pronunciation and diction
To give the past form of the verb
To complete each of the following sentences by supplying the correct word
To locate all the verbs used by the author
To write a five-sentence paragraph with the use of simple past tense

CONCLUSIONS

The Grade 7 students of Gattaran National Trade School are dominated by male students and with average age of 12.52 years old. Their parents are mostly high school graduates and are mostly employed in farming for the fathers and housewives for the mothers while being Overseas Filipino Workers is an occupation present for both. Most of the students use Iloko in conversing at their homes and the most available reading materials they have are textbooks.

There are lesser proportions of the students who are grammatically competent along correct usage, subject-verb agreement and verb tenses. Along correct usage, students' competence on the use of prepositions and pronouns are the lowest. Along subject-verb agreement, students' competence on the rules on numbers and intervening phrases are the lowest while along verb tenses, students' competence on the use of simple past and simple present tenses are the lowest.

The profile of the students has significant relationship to their grammatical competence. But these profile variables are only limited to:
1. For correct usage,
    a. Sex, specifically female significantly relates to better use of conjunction, preposition and adverb;
    b. Higher educational attainment of the mother relates to better use of preposition;
    c. Better occupation of the mother relates to better use of interjection; and,

39

d. Availability of reading materials at home relates to better use of adjective.
2. For subject-verb agreement, no profile variables significantly relate to it.
3. For verb tenses, sex, specifically female significantly relates to better use of simple present, simple past and simple future tenses of the verb.

Furthermore, based on the findings of this study, the researcher developed and proposed Language Activity Sheets that can be to improve the students' grammatical competence.

RECOMMENDATIONS

In the light of the above findings and conclusions, the researcher hereby recommends the following:
1. English teachers must continue providing varied exercises and activities for the students who are not yet grammatically competent along correct usage, subject verb agreement and tenses of verb to enhance their skills along these dimensions.
2. Teachers must allot time for special instruction to strengthen the students' grammatical competence along correct usage, subject-verb agreement and tenses of verbs.
3. The worksheets proposed by the researcher should be used as activities to enhance the students' grammatical competence along the three dimensions.
4. Further researches along this language component should be conducted with the inclusion of other aspects to further find out other factors contributory to the incompetence of students in the English language.

Acknowledgment

REFERENCES

Anderson, J. (1981). Acquisitin of cognitive skill. APA PsyNET American Psychological Association

Bailey (2006) . Review of research methods in second language acquisition: a practical guide.

Barman B. (2014). Report on grammatical competence of EFL learners at tertiary level: a survey at DIU. Thesis of Daffodil International University

Bourke (2008). A rough guide to language awareness. English Teaching Forum, Vol. 46

Kovacevic (1999). Analyzability, accessibility, and ability for us. In G. Cook and B. Seidlhofer, eds. Principle and Practice in Applied Linguistics. Oxford: Oxford University Press.

Manuel. (2015). Level of English proficiency among senior high school students at Gammad National High School".

Marckwardt (2007). Essential teacher. TESOL International Association

Marinova-Todd (2002). Age and L2 learning: the hazards of matching practical "implications". ResearchGate

Mitchell & Myles (2004). Second language acquisition: a multifaceted process in permanent search of valid and reliable findings.

Rigo, I. (2011). Teaching English grammar in primary school.

Tri Mulyanish, et.al (2016). A correlation study between grammatical competence, verbal linguistic intelligence, and writing ability. International Association for Teaching and Learning (IATEL)

ORGANIZATIONAL CLIMATE AND PROFESSIONAL RESILIENCY OF NOVICE TEACHERS

KIEL LLAGUNO-PURAL
Teacher III, Pili National High School
La Paz, Pawili, Pili, Camarines Sur

ABSTRACT

This study that used Sequential Explanatory Mixed Method Research Design determined the quality of organizational climate and the degree of professional resiliency of novice teachers in public and private Junior High Schools in the 3rd Congressional District of Camarines Sur. The participants of the study were the 106 novice teachers from the top 5 biggest schools in each private and public schools. Data were gathered through the utilization of Organizational Climate Measure, The Resilience Advantage Questionnaire, and a focus group discussion which were analyzed using mean, Pearson Product-Moment Correlation Coefficient and Coefficient of Determination, and ANOVA. Data with significant differences were subjected to Scheffe's Test. The following conclusions were obtained from the study: 1) The overall parameters on organizational climate has high quality. Likewise, in terms of its four categories, the averaged parameters are also interpreted with high quality. 2) The degree of professional resiliency is high. 3) A perfect percentage of contribution was seen on open system as a category of organizational climate and building optimism as a category of professional resiliency. 4) Differences were only shown on professional resiliency of teachers between private and public schools and among the given parameters. 5) Other categories that affect the professional resiliency of novice teachers are interpersonal and intrapersonal factors.

Keywords: Junior High Schools, novice teachers, organizational climate, professional resiliency, public and private school teachers

INTRODUCTION

The need to achieve the best performance in every organization has propelled to the forefront the investigation of possible factors influencing it, one of which is its working environment. More than the ability of the individual employees to carry out what is in their job descriptions, there is an indisputable significance on the ambiance and the overall environment where these employees spend their professional expertise on. The studies along organizational climate gained momentum in the research arena for its usefulness in understanding individual and group phenomenon.

This idea was supported by Ehrhart and Kuenzi (2015) in their journey to understanding work environment in organizations. They believed that employee perception to organizational climate play an important role in employee attitudes and behavior, group processes, and organizational performance. Likewise, Shintri and Bharamanaikar (2017) put forward that the environment at workplace, organizational support and relation with supervisors, peers and subordinates, which are all under the umbrella of organizational climate, contribute to the working of an individual.

It is also through these existing facts that organizational climate is perceived to be a major factor in the professional resiliency of these novice teachers. Resiliency, the ability to recover from problems and challenges, is gravely needed especially by teachers who are confronted with many situations that generate stress and conflict. Moran (2015) said that "the continuously swinging pendulum of education brings with it new initiatives, changes in philosophy and instructional approaches, increased accountability and responsibilities, and a more rapid pace for expected implementation." Difficulties and changes, because of inevitability, has a drastic impact to those in the grassroots of the hierarchy and most especially to those who are only new to this scheme and are undergoing a professional transition—the novice teachers.

Since the adaptation of the K-12 Curriculum in the Philippines, there is an undeniable surge of

young teachers. These young ones, despite lack of experience, have so much potential in the 21st century setting. They have the in-depth knowledge on the necessary prerequisites on the complexities of technologies as well as repertoire of skills to integrate them into teaching; they were educated and trained with contemporary pedagogy; they were built to respond to the needs of the modern and diverse learners; they have the motivation and fire to bring their fresh ideologies and put them into practice. Needless to say, they are assets of institutions.

Henceforth, it is the aim of this study to explore these important factors—organizational climate and professional resiliency—to aid the novice teachers in achieving their full potential and be able to excellently perform in their respective institutions.

STATEMENT OF THE PROBLEM

This study determined the effects of organization climate on the professional resiliency of novice teachers in public and private Junior High School in the 3rd Congressional District of Camarines Sur.

Specifically, this study sought to answer the following questions:

1. What is the quality of organizational climate of Junior High Schools along the following categories:
      a. Human Relations
      b. Open Systems
      c. Rational Goal
      d. Internal Process?

2. What is the degree of professional resiliency of novice teachers in Junior High School in terms of:
      a. Preparation through Hardiness
      b. Navigating Successfully
      c. Bounce Back and Recovery
      d. Being Body Wise
      e. Managing Energy
      f. Building Optimism?

3. Does quality of organizational climate significantly contribute to professional resiliency?

4. Is there a significant difference on the organizational climate and professional resiliency of novice teachers in private and public schools across areas?

5. What other factors contribute to the professional resiliency of novice teachers?

6. What framework can be developed as an output of the study?

METHODOLOGY

Research Design

This study used Sequential Explanatory Mixed Method Research Design. The quantitative phase, or the initial phase, of the study is the data gathering through the distribution and retrieval of adapted questionnaires regarding the quality of organizational climate of Junior High Schools and the degree of professional resiliency of novice teachers. It was then followed by the qualitative phase of the study which was conducted through a focus group discussion to further understand and validate the answers acquired during the quantitative stage as well as to gather more information on other factors that contribute to the professional resiliency of novice teachers.

Respondents of the Study

The respondents of this study were the novice teachers from both private and public Junior High Schools in the Third Congressional District of Camarines Sur. Novice Teachers were defined as teachers who have not exceeded 5 years in service after collegiate graduation. The researcher then selected the top 5 biggest schools in each private and public schools based on the premise that the bigger the school, the more items for new teacher positions are. However, among the 5 biggest private schools, only 4 expressed approval on the conduct of the study, hence 9 schools were included in total. After total enumeration, there were 106 novice teachers. Focus group discussion was done to the top 3 schools that had the greatest number of novice teachers.

Data Gathering Procedure

Organizational Climate Measure (OCM) by Aston Organization Development in 2003 and The Resilience Advantage Questionnaire by Richard Citrin in 2012 were adapted in understanding organizational climate and professional resiliency, respectively. For focus group discussion, the researcher prepared set of questions pertaining to other factors contributory to professional resiliency.

To interpret the results objectively, the following were used: mean, Pearson Product-Moment Correlation Coefficient and Coefficient of Determination, and Two-Way Analysis of Variance (ANOVA). Moreover, Scheffe's Test was used to generate further the test of differences.

FINDINGS

1. Quality of Organizational Climate

Table 1 shows the summary of the quality of organizational climate of Junior High Schools. Evidently, the four categories gained an interpretation of having high quality.

Table 1. Summary of Organizational Climate of Private and Public Junior High Schools

PARAMETERS	Private	Public	Mean	VI
A. Human Relations				
Supervisory Support	3.33	3.54	3.44	Very High
Welfare	3.02	3.20	3.11	High
Training	3.08	3.04	3.06	High
Integration	2.98	3.06	3.02	High
Participation	2.82	3.05	2.93	High
Autonomy	2.28	2.38	2.33	Low
Mean	2.92	3.05	2.98	High
B. Open System				
Innovation and Flexibility	3.13	3.34	3.24	High
Reflexivity	3.20	3.18	3.19	High
Outward Focus	3.15	3.21	3.18	High
Mean	3.16	3.24	3.20	High
C. Rational Goal				
Quality	3.44	3.41	3.42	Very High
Clarity of Organizational Goals	3.35	3.25	3.30	Very High
Efforts	3.13	3.18	3.15	High
Performance Feedback	2.90	2.95	2.93	High
Pressure to Produce	2.72	2.64	2.68	High
Efficiency	1.70	1.85	1.78	Low
Mean	2.87	2.88	2.88	High
D. Internal Process				
Formalization	2.86	2.95	2.91	High
Tradition	2.33	2.40	2.36	Low
Mean	2.60	2.68	2.64	High
Mean	2.89	2.96	2.93	High

Legend: 3.26-4.00-Very High; 2.51-3.25-High;1.76-2.50-Low; 1.00-1.75-Very Low

Specifically, human relations with its subcategories welfare, training, integration, participation, autonomy, and supervisory support attained 2.98; open system with innovation and flexibility, reflexivity and outward focus as subcategories has 3.20; rational goal which comprises of quality, clarity of organizational goals, efforts, performance feedback, pressure to produce, and efficiency reached 2.88; and internal process consisting of formalization and tradition has the rating of 2.64. In a nutshell, organizational climate managed to have 2.93 rating or with the interpretation of having high quality. The result gives a good measure of how the climate in different schools, despite having varied results, is still generally positive because practices that make a good organizational climate are mostly done.

The result on the dimensions of rational goal and internal process are similar to the result of Floyd (2016) wherein rational goal was also perceived highly and internal process was the least rated dimension among the four. However, same study stemmed to a contradicting result on the dimensions of open systems. Floyd's study showed that open system was only moderately perceived yet high quality is seen in this study.

When it comes to comparing the acquired rating between private and public schools, it is evident how public schools (mean=2.96) are generally better in the implementation of organizational climate aspects than the private schools (mean=2.89).

2. Degree of Professional Resiliency of Novice Teachers

Table 2 shows the Degree of Professional Resiliency of Novice Teachers in Junior High School. Its parameters are categorized into six namely preparation through hardiness, navigating successfully, bounce back and recovery, being body wise, managing energy, and building optimism which attained ratings of 4.17, 4.10, 4.41, 4.06, 3.97, and 4.20 correspondingly. In total, the degree of professional resiliency of novice teachers is high with a mean score of 4.15.

Table 2. Degree of Professional Resiliency of Novice Teachers in Private and Public School

PARAMETERS	Private	Public	Mean	VI
A. Preparation Through Hardiness	4.20	4.14	4.17	High
B. Navigating Successfully	4.13	4.07	4.10	High
C. Bounce Back & Recovery	4.44	4.38	4.41	Very High
D. Being Body Wise	4.07	4.05	4.06	High
E. Managing Energy	4.02	3.93	3.97	High
F. Building Optimism	4.22	4.18	4.20	High
Mean	**4.18**	**4.13**	**4.15**	**High**

Note: 5.00-4.21-Very High; 4.20-3.41-High; 3.40-2.61-Average; 2.60-1.81-Low;1-1.80-1.00– Very Low

This high result on resiliency is beneficial to the teachers who are still new in their careers. This is in line with the idea of Malik and Garg (2017) who found a significant relationship between learning organization, employee resilience and work engagement.

Supporting a similar stance are Harker et al (2016) who discovered that higher levels of resilience and mindfulness significantly predicted lower levels of burnout especially that in their study, they also found out that the older one professional becomes, he/she experiences less psychological

distress. This means that because the current study focuses on the novices, these teachers, being young, are more prone to this psychological distress. Hence, resiliency will help them handle stresses successfully.

Interestingly, upon comparing the result between the degree of professional resiliency of novice teachers in the private and public schools, scores were higher in the former (mean=4.18) than the latter (mean=4.13). This means that despite organizational climate being higher in the public schools, professional resiliency is well practiced in the private schools.

3. Contribution of Organizational Climate to Professional Resiliency

Table 3 shows the contribution of the categories of organizational climate to the categories of professional resiliency. Under the first category of organizational climate, the contribution of human relation to the categories of professional resiliency are as follows: 17% for preparation through hardiness, 19% for navigating successfully, 12% for bounce back and recovery, 13% for being body wise, 18% for managing energy, and 57% for building optimism.

For the second category, it shows that open system's percentage of contribution are the following: 21% for preparation through hardiness, 20% for navigating successfully, 18% for bounce back and recovery, 8% for being body wise, 25% for managing energy, and 100% for building optimism. Furthermore, the relationship between open system and building optimism is specifically remarkable. As indicated, there is a 100% perfect correlation between the two factors. This means that novice teachers become optimistic at work when the school they work in is open to new ideas, responds to the needs of their students, and is mindful of the need to update on objectives and methods in operation.

Table 3. Contribution of Organizational Climate to Professional Resiliency.

ORG. CLIMATE	PROFESSIONAL RESILIENCY	r	r²	Sig	Stat Sig
Human Relation	Preparation Through Hardiness	.40**	0.166	0.000	VHS
	Navigating Successfully	.430**	0.185	0.000	VHS
	Bounce Back & Recovery	.340**	0.116	0.000	VHS
	Being Body Wise	.360**	0.130	0.000	VHS
	Managing Energy	.426**	0.181	0.000	VHS
	Building Optimism	.754**	0.569	0.000	VHS
Open System	Preparation Through Hardiness	.459**	0.211	0.000	VHS
	Navigating Successfully	.445**	0.198	0.000	VHS
	Bounce Back & Recovery	.424**	0.180	0.000	VHS

ORG. CLIMATE	PROFESSIONAL RESILIENCY	r	r²	Sig	Stat Sig
Open System	Being Body Wise	.287**	0.082	0.003	HS
	Managing Energy	.501**	0.251	0.000	VHS
	Building Optimism	1.000**	1.000	0.000	VHS
Rational Goal	Preparation Through Hardiness	.266**	0.071	0.006	HS
	Navigating Successfully	.327**	0.107	0.001	VHS
	Bounce Back & Recovery	.313**	0.098	0.001	VHS
	Being Body Wise	0.12	0.014	0.222	NS
	Managing Energy	.406**	0.165	0.000	VHS
	Building Optimism	.571**	0.326	0.000	VHS
Internal Process	Preparation Through Hardiness	0.059	0.003	0.546	NS
	Navigating Successfully	-0.049	0.002	0.619	NS
	Bounce Back & Recovery	-0.074	0.005	0.454	NS
	Being Body Wise	-0.075	0.006	0.444	NS
	Managing Energy	0.036	0.001	0.714	NS
	Building Optimism	0.017	0.000	0.865	NS

Note: >.05- Not Significant (NS); <.05- Significant (S);
<.01- Highly Significant (HS); <.001- Very Highly Significant (VHS)

The third category which is rational goal shows existing contributions for preparation through hardiness (7%), navigating successfully (11%), bounce back and recovery (10%), being body wise (1%), managing energy (17%), and building optimism (33%).

For the last category, it is unforeseen how the result is an extreme opposite of the preceding ones. Internal process has the least percentage of contribution towards professional resiliency as seen on only 0 to .6% contribution. This means that the formalization and tradition of the schools, no matter how strict or lenient they are on rules and procedures and how tradition is being well-kept or not, have no impact on the professional resiliency of the novice teachers. An absence of relationship was also seen on the study of Niculita (2015) which results showed that organizational factors has no significant influence on the general measure of work style.

However, the overall result on the existence of contribution is in line with the result of Polat and Iskender (2018) who discovered the existence of a significant positive relationship between organizational climate and resilience. This means that as organizational climate increases, the resilience also increases.

4. Significant Difference on Organizational Climate and Professional Resiliency of Novice Teachers from Private and Public Schools Across Areas

To find out whether significant differences exist between school types and among parameters of organizational climate, Two-Way ANOVA was

carried out as shown in Table 4A. As indicated by the f-values of .235 and 1.549 as well as the p-values of .632 and .223 for school types and parameters, it could be said that there are no significant differences between school types and among parameters is accepted. Putting it differently, it could be derived from these findings that regardless of whether the type of school is private or public, the atmosphere in the organization remains one and the same whether in human relations, open system, relational goals, and internal process.

Table 4A. Two-Way ANOVA of the Organizational Climate between School Types and across Parameters

Source	Sum of Squares	df	Mean Square	F	Sig.	Stat Sig
School Types	.043	1	.043	.235	.632	NS
Parameters	.852	3	.284	1.549	.223	NS
Error	5.316	29	.183			
Total	300.622	34				

Note: >.05- Not Significant (NS); <.05- Significant (S);
<.01- Highly Significant (HS); <.001- Very Highly Significant (VHS)

This result is contrary to the findings of Fernandes et al (2015) who conducted a comparative study among public and private entities and found out that organizational climate in its various dimensions is perceived more positive by the employees of private companies.

Same statistical procedures were performed to examine whether significant differences exist in the level of professional resiliency of teachers between school types and among parameters as shown in Table 4B. Data revealed that statistical significant differences between school types and among parameters were noted—very highly significant difference across parameters and highly significant difference between school types. This was evidenced by the F-values of 162.455 and 33.000 respectively as well as the p-values which are less than .05.

Table 4B. Two-Way ANOVA of the Professional Resiliency between School Types and across Parameters

Source	Sum of Squares	df	Mean Square	F	Sig.	Stat Sig
Parameters	.223	5	.045	162.455	.000	VHS
School Types	.009	1	.009	33.000	.002	HS
Error	.001	5	.000			
Total	207.153	12				

Note: >.05- Not Significant (NS); <.05- Significant (S);
<.01- Highly Significant (HS); <.001- Very Highly Significant (VHS)

Moreover, to identify which between parameters did the variations reside, post hoc tests known as the Scheffe's Test was carried out. Results of

the analyses are illustrated in Table 4C. Among the 15 pairs, 12 had statistical significant differences. Of which, 7 were very highly significantly different, 2 were highly significant, and 3 were significant.

The very highly significant results were observed between these comparisons: Preparation Through Hardiness and Bounce Back & Recovery (MD=.2400*; Sig.= .000); Preparation Through Hardiness and Managing Energy (MD=.1950*; Sig.= .001); Navigating Successfully and Bounce Back and Recovery (MD=.3100*; Sig.= .000); Bounce Back and Recovery and Being Body Wise (MD=.3500*; Sig.= .000); Bounce Back and Recovery and Managing Energy (MD=.4350*; Sig.= .000); Bounce Back and Recovery and Building Optimism (MD=2100*; Sig.= .001); and Managing Energy and Building Optimism (MD=.2250*; Sig.= .001).

Table 4C. Post Hoc of the Level of Professional Resiliency between across Parameters

Parameters	Parameters	Mean Difference	Sig.	Stat Sig
Preparation Through Hardiness	Navigating Successfully	.0700	.095	NS
	Bounce Back & Recovery	-.2400*	.000	VHS
	Being Body Wise	.1100*	.016	S
	Managing Energy	.1950*	.001	VHS
	Building Optimism	-.0300	.673	NS
Navigating Successfully	Preparation Through Hardiness	-.0700	.095	NS
	Bounce Back & Recovery	-.3100*	.000	VHS
	Being Body Wise	.0400	.436	NS
	Managing Energy	.1250*	.009	HS
	Building Optimism	-.1000*	.024	HS
Bounce Back & Recovery	Preparation Through Hardiness	.2400*	.000	VHS
	Navigating Successfully	.3100*	.000	VHS
	Being Body Wise	.3500*	.000	VHS
	Managing Energy	.4350*	.000	VHS
	Building Optimism	.2100*	.001	VHS
Being Body Wise	Preparation Through Hardiness	-.1100*	.016	S
	Navigating Successfully	-.0400	.436	NS
	Bounce Back & Recovery	-.3500*	.000	VHS
	Managing Energy	.0850*	.046	S
	Building Optimism	-.1400*	.006	HS
Managing Energy	Preparation Through Hardiness	-.1950*	.001	VHS
	Navigating Successfully	-.1250*	.009	HS
	Bounce Back & Recovery	-.4350*	.000	VHS
	Being Body Wise	-.0850*	.046	S
	Building Optimism	-.2250*	.001	VHS
Building Optimism	Preparation Through Hardiness	.0300	.673	NS
	Navigating Successfully	.1000*	.024	S
	Bounce Back & Recovery	-.2100*	.001	VHS
	Being Body Wise	.1400*	.006	HS
	Managing Energy	.2250*	.001	VHS

Note: >.05- Not Significant (NS); <.05- Significant (S);
<.01- Highly Significant (HS); <.001- Very Highly Significant (VHS)

The highly significant differences were found between: Navigating Successfully and Managing Energy (MD=.1250*; Sig.= .009); Being Body Wise and Building Optimism (MD=.1400*; Sig.= .006). Lastly, significant differences occurred between: Preparation Through Hardiness and Being Body Wise (MD=.1100*; Sig.= .016); Navigating Successfully and Building Optimism (MD=.1000*; Sig.= .024); and, Being Body Wise and Managing Energy (MD=.0850*; Sig.= .046).

5. Other Contributory Factors Affecting the Professional Resiliency of Novice Teachers

Based on the focus group discussion, the researcher categorized the answers into two: interpersonal factors and intrapersonal factors. Interpersonal Factors include having mentors who give advice and help on unfamiliar tasks, having colleagues who radiate positive working environment, and having the support and presence of family available outside the school. Intrapersonal Factors include having the motivation to achieve goals, having the ability to become optimistic, being passionate about their job and having knowledge in the profession.

6. Proposed Framework

Based on the results of the study, the researcher was able to generate the Flexibility-Positivity Framework. Specifically, it was drawn out from the perfect percentage of contribution of open system as a category of organizational climate to building optimism as a category of professional resiliency.

Figure 2 shows the effects of the factors namely openness to innovation, responsiveness to people's needs, and willingness to goal improvement affect school's flexibility and how school's flexibility contribute towards teachers' positivity.

Openness to Innovation refers to the ability of the school to be considerate of new process and procedures, to acknowledge the need of the school to adapt innovative ideas, and to respond to changes made in and outside the school. Responsiveness to People's Needs refers to the ability of the school to prioritize the needs of its students, emphasize importance of growth of employees, and continuously find ways to provide better service. Willingness to Goal Improvement refers to the ability of the school to give attention to assessing existing goals and amending or changing it based on experienced reality.
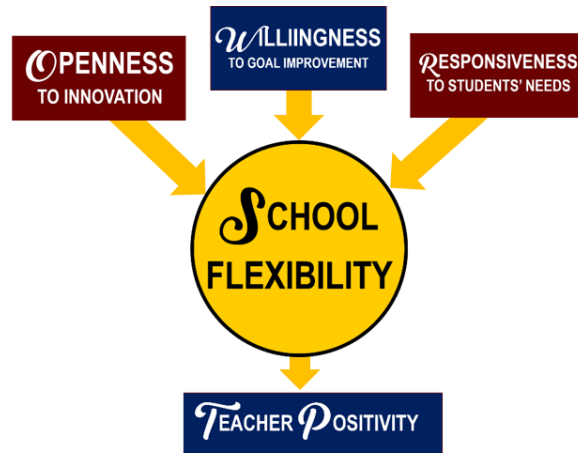

Figure 1. Flexibility-Positivity Framework

These three factors all together can generate a school that is flexible. It also shows that the implication is that if an organization is flexible, it produces optimistic employees. This means that organizations such as schools should equipped themselves with inclination towards possible changes, developing ideas, and innovative programs because not only does it benefit the organizational climate of the organization, it also affects the resiliency of the novice teachers through building optimism in their profession.

CONCLUSIONS

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

1. Organizational climate, as well as specific categories namely human relations, open systems, rational goal, and internal process, has high quality.

2. Novice teachers have a high degree of professional resiliency. Specifically, categories that attained high degree are Preparation through Hardiness, Navigating Successfully, Being Body Wise, Managing Energy and Building Optimism. Moreover, very high degree was found on Bounce Back and Recovery.

3. Among all the presented contributions, the following got the highest percentages in their respective categories: Human relation has a 57% contribution to building optimism, Open system has a 100% contribution to building optimism, and Rational goal has a 33% contribution to building optimism. Internal process has no contribution to any of the categories of professional resiliency.

4. There are no significant differences between school types and among parameters in terms of organizational climate. However, there are very highly significant differences among the parameters of professional resiliency and a highly significant difference between school types.

5. There are interpersonal and intrapersonal factors contributory to the professional resiliency of novice teachers.

6. Flexibility-Positivity Framework is designed to guide administrators in having teachers who are optimistic and resilient at work through school flexibility.

RECOMMENDATIONS

1. As revealed by the ratings, it can be noted that despite the overall positive result in the organizational climate of the schools, there are points on specific subcategories that need to be improved.

    a. Under human relations, the weak points to address the issue on autonomy should be given attention. Administrators should consider giving the teachers a chance of making their own decisions especially on matters concerning them instead of just exclusively giving them orders.

    b. For the low score on Rational Goal, it is also recommended that efficiency be improved by school administrators through creating an environment contributing to productivity. This can be achieved by having departments create avenues for teachers to share thoughts, brainstorm on specific topics relevant to instruction, and share expertise on things that others are lacking.

2. Because the degree of professional resiliency of novice teachers is high, which means that they are optimistic and dedicated with what they do, school administrators should also create platforms where they can express and share their knowledge and skills.

3. Because there is a perfect percentage of contribution from open system to building optimism, school administrators should strive to sustain a high level of quality on their flexibility by constant assessment of innovative programs adapted or implemented in the school. This means that school administrators should follow the proper procedure of program evaluation to identify the strengths and weakness of such innovations. This will be a ground for administrators to identify if they will be stopped, continued, or amended.

4. Due to the existence of differences in the parameters of professional resiliency, school administrators are recommended to consider evaluating the degree of professional resiliency of their teachers in all aspects. Moreover, the significant difference between public and private schools is a call for these two school types to assess their weak points as well as recognize the strengths of other schools. It is recommended for administrators from both sides to do benchmarking to be able to share and adapt existing best practices that will benefit the entire institution in the long run.

5. Based on the frequency on the answer of having mentors as a contributing factor to become resilient, it is recommended for schools to establish a mentoring program for teachers who have difficulties in handling problems and apprenticeship programs to new teachers who will be given unfamiliar special assignments.

ACKNOWLEDGEMENT

REFERENCES

Ehrhart, M.& Kuenzi, M. (2015). Organizational climate in the work setting. *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*. DOI: 10.1016/B978-0-08 -0970868.22016-3.

Fernandes, J.L., Silva, S.M., Costa Beze, P.T., & Matsumoto, A. (2015) *Organizational climate: A comparative study among public and private entities*. http://ssrn.com/abstract= 2672303.

Floyd, S. (2016). Measuring organizational cli-

mate at the Abilene-Taylor county public health district. *Digital Commons.* digitalcommons.acu.edu/etd.

Harker, A., Pidgeon, F.K., & King, S. (2016). Exploring resilience and mindfulness as preventative factors for psychological distress burnout and secondary traumatic stress among human service professionals. *IOS Press, Work* 54 (2016) 631–637. DOI:10.3233/WOR-162311.

Malik, P. & Garg, P. (2017) Learning organization and work engagement: The mediating role of employee resilience. *The International Journal of Human Resource Management, 1–24*. DOI:10.1080/09585192.2017.1396549.

Moran, K. (2015). *Teacher empowerment: School administrators leading teachers to lead* (Doctoral Dissertation)**.** Youngstown State University.

Niculita, Z. (2015). The relationship between work style and organizational climate for Romanian employees. *Elsevier B.V. Procedia Economics and Finance 32 (2015) 1042 – 1049*. www.sciencedirect.com.

Polat, D.D. & İskender, M. (2018). Exploring teachers' resilience in relation to job satisfaction, burnout, organizational commitment and perception of organizational climate. *International Journal of Psychology and Educational Studies, 2018, 5(3), 1-13*. www.ijpes.com.

Shintri, S. & Bharamanaikar, S.R. (2017). A theoretical study on evolution of organisational climate, theories and dimensions. *International Journal of Science Technology and Management, Vol. No. 6, Issue No. 03, March 2017*. www.ijstm.com

EVALUATION OF THE IMPLEMENTATION OF GENDER AND DEVELOPMENT SESSION IN BACHELOR OF SCIENCE IN BUSINESS MANAGEMENT CURRICULUM

JERICO B. TADEO
PhD in Management (Candidate)
Unit Research Coordinator – Department of Management Studies
Cavite State University – CCAT Campus
Tejeros Convention, Rosario, Cavite

ARMAN M. AMBAS
Doctor in Business Administration (Units)
Program Coordinator – Department of Management Studies
Cavite State University – CCAT Campus
Tejeros Convention, Rosario, Cavite

ABSTRACT

The Bachelor of Science in Business Management (BSBM) program, under the Department of Management Studies recognizes the necessity and urgency in transforming its students to become aware and reflective in understanding GAD programs. The researchers used mixed research design in this action research. The study was conducted in the second semester of academic year 2019 to 2020. The business management students were the respondents of the study which were selected randomly with a total of 257 respondents across all year levels of the program through a modified survey questionnaire which was adopted from Philippine Commission on Women (PCW). The researchers found out that there was significant difference in the awareness level of students after the GAD session. Thus, the strategy is effective in increasing the students' awareness level towards GAD concepts and issues. The researchers recommend the provision of updated GAD reference materials, time-allocation efficiency, GAD training and capability enhancement, replication of strategy to other programs and continuous monitoring of the GAD session for innovation, gap identification and continuous development of this intervention.

Keywords: business management, curriculum, gender and development, gender awareness, strategy

INTRODUCTION

The Cavite State University – CCAT Campus embraced gender and development (GAD) as an important facet in molding and producing academically competent and morally upright graduates. The administration and GAD pioneers of the campus pushed the advocacy through streamlining and full implementation of GAD programs from the campus' operations and instructions. GAD pertains to the developmental perspective and process that are participatory and empowering, equitable, sustainable, free from violence, respectful of human rights, supportive of self-determination and actualization of human potentials (www.pcw.gov.ph retrieved February 2020).

The Bachelor of Science in Business Management (BSBM) program, under the Department of Management Studies recognizes the necessity and urgency in transforming its students to become aware and reflective in understanding GAD programs. The GAD session is an hour and a half activity of selected BSBM business, core and professional course syllabi. The session included gender sensitivity, understanding gender roles and pressing issues about violence against women and their children.

Thus, through this action research, the researchers adopted GAD session in business, core and professional syllabi of the BSBM curriculum and evaluated the effectiveness of the intervention. The adoption of GAD session in the business management curriculum may serve as a springboard for curriculum designs and strategies to produce future business professionals who are aware of GAD issues and concepts in workplace and the society-at-large.

RESEARCH OBJECTIVES

Generally, the study aimed to evaluate the effectiveness of the adoption of gender and development session in BSBM curriculum.

Specifically, the researcher aimed to:
1. Describe the process of the adoption and implementation of gender and development session in the BSBM program;
2. Evaluate the effectiveness of the GAD session in terms of the improvement in the respondents' level of awareness of laws relative to GAD concepts after the implementation;
3. Identify challenges in the implementation of GAD session in the BSBM program; and
4. Propose solutions to address challenges encountered in the implementation of GAD session in the BSBM syllabi.

REVIEW OF LITERATURE

Society-at large is dynamic and should address the growing mechanisms in micro-social aspect. Considerably, gender sensitive schools and universities are evidently more progressive. School programs in western countries have open-gender approaches towards education which is geared towards 21st century learning ideals (Birch, 2018). GAD awareness and sensitivity in the curricula is highly essential to equip the students into a progressive and industry ready individuals. In the Philippines, there is a continuous advocacy and programs that promote and implement gender awareness and sensitivity (Lopez, 2019).

Hernandez and Cudiamat (2019) explained that students' learning should include the understanding of gender roles and their respective concepts to enable them to fully grasp the need of the modern society. The authors also elaborated that engaging students in gender sensitive approach in learning improves not only social skills or interpersonal intelligence but also intrapersonal intelligence. Pacqueo and Orbeta (2020) crafted and explained a gender equitable framework in education. The framework includes the increasing of awareness with regard to gender and development among different stakeholders of academic institutions. Moreover, the discussion paper pointed out the importance for a comprehensive integration of gender sensitive topics and concepts on various educational platforms.

The Philippine Commission on Women (PCW) pointed out the importance of mainstreaming of GAD concepts and ideologies not only in workforce but also in academic institutions. The PCW coordinates with various governmental and private institutions to promote gender fair environment (www.pcw.gov.ph retrieved January 2020). Educational institutions play a great role in dissemination and promotion of gender awareness and sensitivity in the society, thus this action research was explored, formulated, crafted and conducted to provide an avenue to different strategies in promoting gender-based awareness and sensitivity in the collegiate level.

METHODOLOGY

The researchers used mixed method in this action research. Specifically, the researchers have used exploratory approach in the ideation, formulation and implementation of GAD session in selected BSBM syllabi. Descriptive approach was utilized to describe and showcase nominal and descriptive profile of the respondents. Finally, inferential research design was utilized to augment descriptive and inferential approaches. Data was tabulated, modeled, analyzed and interpreted. The study was conducted in the second semester of academic year 2019 to 2020. The sample size was drawn from the 720 student population of the program through Slovin's Formula. A total of 257 respondents across all year levels of the program were selected randomly. Considerably, this study utilized mean analysis to evaluate changes on the awareness level of participants and 2 tailed t-test to identify significant differences among observed variables. The effectiveness measure was delimited to the change of level of awareness towards GAD related laws and concepts.

The study primarily used observational and field notes. Moreover, the researchers utilized a modified survey questionnaire which was adopted from Philippine Commission on Women (PCW). The researchers collected the primary data directly from the students through questionnaires. Considerably, the authors utilized modified focus group discussion (FGDs) to augment behavioral analysis. Finally, this study utilized anecdotal notes to strengthen descriptive and time-effects analyses of the study.

FINDINGS AND ACTION RESEARCH NARRATIVE

Adoption and Implementation Process

The Department of Management Studies through its collective ideas and effort crafted strategies to foster gender and development awareness to their students. This action research focused in the adoption of GAD sessions in its core and professional subjects. Syllabi were revised to provide a teaching-learning experience to enforce and stimulate GAD awareness concerning the basic concepts and provisions of Republic Act 7192 (Women in the Development and Nation Building Act), Republic Act 9262 (Anti-Violence Against Women and Children), Republic Act 8353 (Anti-Rape Law), Republic Act 7877 (Anti-Sexual Harassment Act) and Republic Act 9710 (Magna Carta of Women). Syllabi revision included both the old and new curricula of the BSBM program.

Ideation to Evaluation Framework
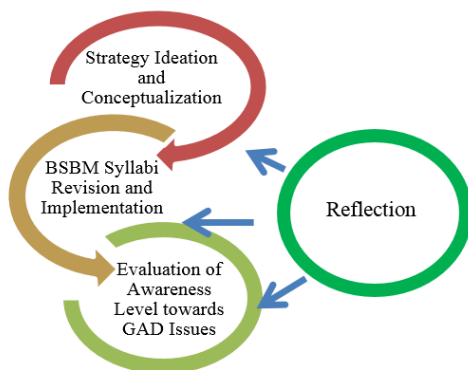
Figure 1. GAD Ideation and Evaluation Paradigm

The researchers through the collaborative efforts of the Department of Management Studies revised their core and professional – based syllabi to incorporate 1.5 hours of GAD session encompassing topics and basic provisions of Republic Act 7192 (Women in the Development and Nation Building Act), Republic Act 9262 (Anti-Violence Against Women and Children), Republic Act 8353 (Anti-Rape Law), Republic Act 7877 (Anti-Sexual Harassment Act) and Republic Act 9710 (Magna Carta of Women) reference materials came from the GAD unit of the Cavite State University – Cavite College of Arts and Trades Campus. After the syllabi were approved by the instruction unit and campus administrator, the faculty members of the business management program implemented the content of the syllabi. Evaluation of the intervention follows and was utilized through the methodology that is adopted

by this action research. Reflection strategy was also used to identify implementation gaps – strategically and technically in order to provide solutions to enhance the curricula-inclusion of GAD in the university.

Intervention Assessment

After the session was conducted by the faculty members, the researchers distributed, facilitated and enumerated assessment tools to evaluate the effectiveness of the intervention.
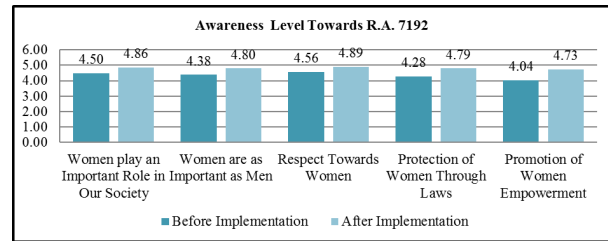

Figure 2. Awareness level towards RA 7192 or Women in the Development and Nation Building

Figure 2 shows the mean values of the level of awareness in RA 7192 or also known as Women in the Development and Nation Building. The discussion of RA 7192 focused in the concept of the promotion of women as full and equal partners of men in development and nation building of the society. The figure shows that the variables take into consideration in this study have increased significantly. Awareness levels on role of women, importance, respect, protection through laws were constant in descriptive values of highly aware and their respective mean values have increased except for the promotion of women empowerment which increased from descriptive value of aware to highly aware.
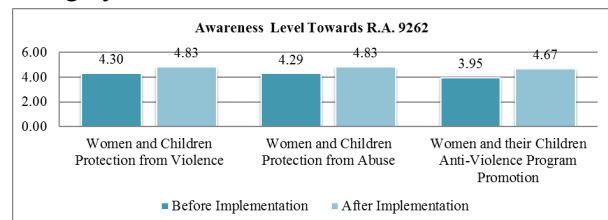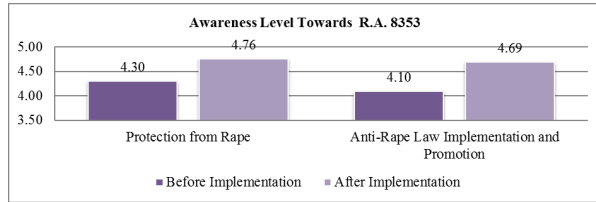

Figure 3. Awareness level towards RA 9262 or Anti-violence Against Women and Children (VAWC) Act
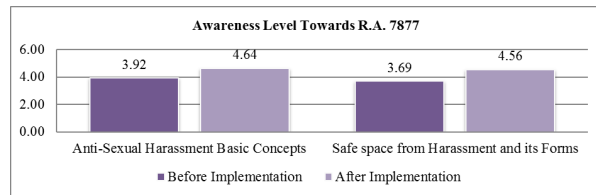
Figure 3 shows the mean values of the level of awareness in RA 9262 or also known as Anti-violence against women and children act. The figure shows that the three variables take into consideration in this study have increased. The awareness level of the protection of women and children from violence and abuse has increased

mean values numerically. However their respective descriptive values remain unchanged with highly aware value. Considerably, the awareness level with regard to the promotion of VAWC program has increased from aware to highly aware descriptive values.
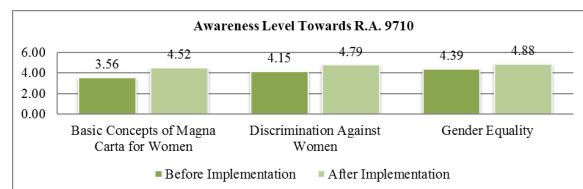

Figure 4. Awareness level towards RA 8353 or Anti-Rape Law

Figure 4 shows the mean values of the level of awareness level towards RA 8353 or Anti-Rape Law. The figure shows that the two variables take into consideration in this study have increased. The awareness level with regard to the emphasis that anyone should be protected from rape has increase in nominal mean value with the same descriptive interpretation of highly aware. On the other hand, respondents have increased their level awareness from aware to highly aware in the implementation and promotion of anti-rape law in school and workplace.

Figure 5. Awareness level towards RA 7877 or Anti-harassment Act

Figure 5 shows the mean values of the level of awareness level towards RA 7877 or Anti-sexual harassment act. The figure shows that the two variables take into consideration in this study have increased significantly. The awareness level with regard to the awareness of anti-sexual basic concepts and provision of safe space from harassment and its forms have increased mean values. Descriptively, the variables increased from aware to highly aware.

Figure 6. Awareness of level towards RA 9710 or Magna Carta of Women

Figure 6 shows the mean values of the level of awareness level towards towards RA 9710 or Magna Carta of Women. The figure shows that the two variables take into consideration in this study have increased. The respondents awareness level have increased from aware to highly aware qualitative values with regard to basic concepts of magna carta and work discrimination against women. Considerably, the awareness level towards gender equality remained constant at highly aware values however, the mean value for the variable observe has increased.

Table 2. t-test results (Awareness level RA 7192)

	Category	t-test value	p-value	Significance at 0.05 critical acceptance level
RA 7192	Women play an Important Role in Our Society	8.09	0.001	Significant
	Women are as Important as Men	7.73	0.001	Significant
	Respect Towards Women	7.03	0.001	Significant
	Protection of Women Through Laws	9.53	0.001	Significant
	Promotion of Women Empowerment	11.10	0.001	Significant

Table 2 shows the result of t-test for the awareness level of BSBM students towards RA 7192. It reveals that all variables under consideration in this study have significant values and are significant at 0.01 critical level. It further explains that, the increased level of aware ness of students' towards RA 7192 can be attributed to the intervention crafted. Moreover, the result shows that, statistically, the GAD session was an effective strategy in increasing awareness level of BSBM students in particular in with RA 7192.

Table 3. t-test results (Awareness level RA 9262)

	Category	t-test value	p-value	Significance at 0.05 critical acceptance level
RA 9262	Women and Children Protection from Violence	10.71	0.001	Significant
	Women and Children Protection from Abuse	9.79	0.001	Significant
	Women and their Children Anti-Violence Program Promotion	12.15	0.001	Significant

Table 3 shows the result of t-test for the awareness level of BSBM students towards RA 9262. It reveals that all variables under consideration in this study have significant values and are significant at 0.01 acceptability level. It further explains that, the increased level of awareness of students' towards RA 9262 can be attributed to the GAD session implemented by the faculty members to the BSBM students. Finally, the result shows that, statistically, the GAD session was a potent strategy in increasing awareness level of BSBM students in particular in with RA 7192.

Table 4. t-test results (Awareness level RA 8353)

	Category	t-test value	p-value	Significance at 0.05 critical acceptance level
RA 8353	Protection from Rape	8.46	0.001	Significant
	Anti-Rape Law Implementation and Promotion	9.85	0.001	Significant

Table 4 reveals the result of t-test for the awareness level of BSBM students towards RA 8353. It reveals that all variables under consideration in this study have significant values and are significant at 0.01 critical level. It further shows that, the increased level of awareness of students' towards RA 8353 can be directed to the GAD session conducted by the Department of Management Studies – CvSU Cavite College of Arts and Trades. Finally, the result shows that, significantly, the GAD session was an effective strategy in increasing awareness level of BSBM students in particular in with RA 8353.

Table 5. t-test results (Awareness level RA 7877)

	Category	t-test value	p-value	Significance at 0.05 critical acceptance level
RA 7877	Anti-Sexual Harassment Basic Concepts	11.17	0.001	Significant
	Safe space from Harassment and its Forms	12.41	0.001	Significant

Table 5 reveals the result of t-test for the awareness level of BSBM students towards RA 7877. It reveals that all variables under consideration in this study have significant values and are significant at 0.01 acceptability level. It further shows that, the increased level of awareness of students' towards RA 7877 can be attributed to the GAD session conducted by the BSBM faculty members. Finally, the result shows that, signifi-

cantly, the GAD session was an effective strategy in increasing awareness level of BSBM students in particular in with RA 7877.

Table 6. t-test results (Awareness level RA 9710)

	Category	t-test value	p-value	Significance at 0.05 critical acceptance level
RA 9710	Basic Concepts of Magna Carta for Women	12.82	0.001	Significant
	Discrimination Against Women	11.33	0.001	Significant
	Gender Equality	9.31	0.001	Significant

Table 6 reveals the result of t-test for the awareness level of BSBM students towards RA 9710. It reveals that all variables under consideration in this study have significant values and are significant at 0.01 critical level. It further explains that, the increased level of awareness of students' towards RA 9710 can be attributed to the GAD session conducted by the BSBM faculty members. Finally, the result reveals that, significantly, the GAD session in the BSBM curriculum was an effective strategy in increasing awareness level of BSBM students in particular in with RA 9710.

Table 7. Challenges Encountered in the Implementation of GAD Session

Challenges Identified (Ranked)
1st Insufficient Reference Materials
2nd Limited time for GAD session
3rd In depth familiarity of GAD concepts
4th No standard topic/discussion outline
5th Limited strategies in GAD session delivery

The researchers through a focus group discussion identified and ranked key challenges in the implementation of GAD session in the BSBM program. The prior concern was the inadequacy of reference materials. The main challenge affects the totality of the delivery mechanism and the novelty of the intervention. Considerably, the time allotted for the GAD discussion was very limited given the broadness and scope of session; the in-depth familiarity of facilitators with regard to core GAD concepts mattered. Additionally, there was no standard topic/outline discussion that facilitators sometimes found it hard to comply because of the broadness of the scope and finally there were limited strategies in GAD session delivery, it was observed during the implementation that students became bored due to traditional approaches in delivery.

CONCLUSION

After the intervention of GAD sessions and analysis of data, the researchers conclude that:

1. The Department of Management Studies crafted the intervention through collaboration and implemented the GAD session in the BSBM curriculum through the syllabus revisions and class-instruction delivery;
2. The strategy is effective in increasing the students' awareness level towards GAD concepts and issues concerning basic concepts and provisions of Republic Act 7192 (Women in the Development and Nation Building Act), Republic Act 9262 (Anti-Violence Against Women and Children), Republic Act 8353 (Anti-Rape Law), Republic Act 7877 (Anti-Sexual Harassment Act) and Republic Act 9710 (Magna Carta of Women); and
3. Key challenges were identified namely: insufficiency of learning materials; in-depth familiarity of GAD concepts; limited time for GAD session; no standard topic/ discussion outline; and limited strategies in GAD session delivery.

RECOMMENDATIONS

The researchers recommend the provision of updated GAD reference materials. Specifically, a teacher-sensitive, student-centered and outcomes based reference materials that would enable a more vibrant discussion-interaction in the class. These reference materials are recommended to be responsive to the instruction design of the program. Facilitators can utilize GAD issues and concepts – in collaboration with the respective subject course and can use situational or scenarios depicting GAD issues in their subjects to maximize time. Additionally, the researchers recommend GAD training and capability enhancement concentrating on key and frequently asked questions compiled by former facilitators to address idea and concept gaps. Moreover, replication of this strategy is highly recommended to other programs in the campus or in any academic institutions. Considerably, strategies and technics in session delivery can be further enhanced through information delivery-training in line with existing responsive pedagogy applicable to the BSBM program. Continuous monitoring of the GAD session is also recommended for innovation, gap identifi-cation and continuous development of this intervention.

REFERENCES

Birch, Andrew K. (2019), Remodeling the Academe into Industry Based System. Journal of Education. Vol 2.

Gustafon, Sarah., In the Philippines, a school program shows diverging results for male and female students. IFPRI. Last accessed https://www.ifpri.org/blog/philippines-school-program-shows-diverging-results-male-and-female-students, January 2020

Hernandez, Theresa and Cudiamat, Mario. Integrating Gender and Development (GAD) in the Classroom: The Case of Lucsuhin National High School, Department of Education-Philippines. Last access https://knepublishing.com/index.php/KnE-Social/article/view/2430/5338, January 2020 DOI 10.18502/kss.v3i6.2430

Lopez, Antonino D.(2018) Towards a Gender Sensitive Academe. Unpublished Thesis. University of San Carlos.

Pacqueo, Vicente and Orbeta, Aniceto .(2019). Gender Equity in Education. PIDS Discussion Paper Series 2019-01. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1901.pdf last accessed on January 2020.

GAD Policies and Mandates. (2017). Cavite State University – Rosario Campus. Research, Extension, Continuing Education and Training Services

Quezada, Reyes,. An Agenda For Gender Fair Education last accessed https://www.hurights.or.jp/archives/pdf/asia-s-ed/v03/11reyes.pdf, last accessed on January 2020

www.pcw.gov.ph/home last accessed February 2020.

ORGANIZATIONAL CLIMATE AND FACULTY ENGAGEMENT OF CAVITE STATE UNIVERSITY - CAVITE COLLEGE OF ARTS AND TRADES CAMPUS, ROSARIO, CAVITE

JERICO B. TADEO
PhD in Management (Candidate)
Unit Research Coordinator – Department of Management Studies
Cavite State University – CCAT Campus
Tejeros Convention, Rosario, Cavite

LAARNIE R. MANUEL
PhD in Management (Candidate)
Extension Coordinator – Department of Management Studies
Cavite State University – CCAT Campus
Tejeros Convention, Rosario, Cavite

ABSTRACT

Cavite State University (CvSU) – Cavite College of Arts and Trades (CCAT) Campus is one of the satellite campuses of Cavite State University System and is mandated with the core functions of instruction, research, and extension services. Generally, understanding the organizational climate as well as level of engagement among employees gives a springboard towards better organizational development strategies. Thus, this study focused on organizational climate of CvSU-CCAT Campus, and the engagement level of faculty members in core functions identified through descriptive and inferential designs. A modified questionnaire was adapted and distributed to the 80 faculty members of the campus randomly. The data revealed that both research and extension engagements have agreeing responses; age and sex have insignificant relationship with organizational climate; and there is significant relationship between organizational climate and faculty engagement in instruction, research and extension of CvSU - CCAT Campus when taken collectively. The researchers recommend the strengthening communication, recognition and awards system of the campus as a focal in organizational development strategies.

Keywords: engagements, extension services, instruction, organizational climate

INTRODUCTION

Understanding the organizational climate plays a key role in the organizational development and growth because it creates pathways in making sound strategies that enable the different facets of external and internal dimensions productivity (Schulz, 2013). Moreover, it creates a leveled platform to grasp the organizational culture and a mechanism to check whether the organization is aligned with their institutional core values, mission and vision (Yang, 2016). Considerably, having a perspective of employee engagement provides a springboard to formulate specific strategies in improving organizational climate and the whole organization at-large. Today, organizations and institutions use organizational climate as baseline in crafting staff development plans and programs to have a level-based and scientific ap- proach in planning and executing human resources and management strategies and policies.

Cavite State University-CCAT Campus is one of the satellite campuses of Cavite State University System, and as one of the state universities and colleges (SUCs) in the Philippines, complies with its mandated core functions and strives to strike a fine balance in instruction, research, extension services and production. Academic institutions must understand and have a bird's eye perspective of its organizational climate to address its internal stakeholders, foster conducive environment for its organization and provide the expected services to its clienteles. Thus, this study mainly focused on the status quo determination of the organizational climate and employee engagement of Cavite State University – Cavite College of Arts and Trades Campus with an emphasis in the three key functions of the state universities and colleges namely;

instruction, research and extension services. This study may serve as a springboard of key organizational development policies and strategies of the university that will nurture career growth, development and motivational aspect of strengthening faculty workforce.

RESEARCH OBJECTIVES

The main objective of this study is to determine the organizational climate and the faculty engagement behaviour of Cavite State University - CCAT Campus.

Specifically the study aimed to;
1. Determine the demographic profile of the participants in terms of :
    1.1 age;
    1.2 sex;
    1.3 status of appointment; and
    1.4 length of service;
2. Determine the level of organizational climate in terms of:
    2.1 role clarity
    2.2 respect
    2.3 communication
    2.4 reward system
    2.5 career development
    2.6 planning and decision making
    2.7 innovation
    2.8 relationship
    2.9 teamwork and support
    2.10 quality of service
    2.11 conflict management
    2.12 commitment and morale
3. Determine the level of employee engagement in terms of
    3.1 instruction
    3.2 research; and
    3.3 extension
4. Determine the significant relationship of the organizational climate vis a vis participants' demographic profile
5. Propose determine strategies to improve the organizational climate and employee engagement.

REVIEW OF LITERATURE

Schulz (2013) focused on academics in research-intensive universities in the UK and examined their insights of organizational climate, role conflict, role ambiguity and job satisfaction. The judgment imitated that the clan, the hierarchy and the adhocracy was associated with subordinate degree of job tension. At the same time, market climate were indicated through the higher role conflict. Except the clan-type climate where in it is due connected to high levels of job satisfaction. It showed that regardless of the manner of management on universities, the collegial/clan climate is quietly significant distributor to the contentment of academic staff.

Hassan and Rohrbaugh (2012) investigated the shared perceptions of 739 professionals and technical employees regardless to the organizational climate and the power of affective commitment in fifty-one geographically disassembled offices of an agency of state government. The outcome denoted that the level of affective commitment in the offices was reliable and significant with three of the eight dimensions of organizational climate contained in the study: goal ambiguity, social cohesion, and fairness and equity.

According to Paula C. Morrow (2011) the affective side of organizational commitment was determined through a review of 58 studies by longitudinal research design. The review coincided with six broad categories of antecedents that are empirically demonstrated effects on AOC such as socialization practices, organizational changes, human resource practices, interpersonal relations employee- organizational relations, and a residual category.

Alfandi and Alkahsawneh (2014) determined the role of incentives to the workers performance for the Jordanian Tourism and Travel Institution workers. The SPPS or the statistical packages for social sciences program was used to the descriptive analysis. The researcher choose the population randomly and have a total of twenty eight institutions In Amman and forty four workers that received questionnaires but the researchers get only 41 feedback among the respondent which is equivalent to 93% of the population. The study showed that rewards, incentives, efficiency of the reward system and the promotion are the factors that have an important effect to the workers performance of the company.

Zacher and Yang (2016) explored that the aging staff at the job has not given a proper attention and resources as part of the organizational climate. The data were based from 649 workers that working in 120 companies. It contextual supply for a great aging at the work is a common situation in organizational especially in academe. The focus of organizational climate can truly lift up the organization to a better one with the conflict management that may increase the opportuni-

ty level of the employees as well as the teamwork that will unite the ideas of an individual will lead the organization to have a quality product and services can increase revenue of the company. Based on the literature review presented the rewards and incentives can encourage the employees to work as the best as they can, it may become the strength of the organization if their employees work hard given that they are seeking for reward and incentives from their industriousness.

METHODOLOGY

The proponents used descriptive-inferential approach to determine the organizational climate and the faculty engagement level in CvSU - CCAT Campus. Specifically, this research included descriptive research design to characterize the attempt to determine, describe and identify profile, different aspects of organizational climate and engagement. The researchers also used inferential approach in assessing the significant relationship of profile, organizational climate and engagement. Finally, field notes were utilized to document observation of the study area to augment interpretation and analysis. The primary data used came from the modified survey questionnaires from Adrian Furnham and Leonard D. Goldstein and were distributed, gathered and tabulated. Secondary data came from various researches augmenting related literature such as books, newspapers and other related studies with regard to organizational climate and faculty engagement. The proponents used purposive and non-parametric sampling. Each member of the population has an equal and known chance of being selected. The proponents identified, distributed the survey questionnaires to the faculty members of CvSU - CCAT Campus randomly. Initially, the researchers tried total enumeration however due to several constraints; purposive sampling was the utilized, consisting of 80 faculty members as participants, representing the 91% of the population. The study was conducted in the first semester of the academic year 2019-2020.

After the data were gathered, they were processed, interpreted and analyzed. Tables were used in interpreting data. Questionnaires, Microsoft excel and Statistical Package for Social Sciences (SPSS) was used in organizing the data. Data were tabulated and interpreted using the mean, and rho values to determine the organizational climate and faculty engagement of CvSU - CCAT Campus in Rosario, Cavite.

FINDINGS
Profile of the Respondents

Table 1. Age of the respondents

Age	Frequency	Percentage
20 to 30 years old	26	32.50
31 to 40 years old	16	20.00
41 to 50 years old	26	32.50
51 to 60 years old	11	13.75
61 years old and above	1	1.25
Total	80	100.00

Table 1 presents the age group composition of the faculty members of CvSU CCAT Campus. The table reveals that most of the faculty age group have 20 to 30 years old and 41 to 50 years old considerably the lowest faculty composition is the age group of 61 years old and above having 1 percent of the faculty respondents. CvSU - CCAT Campus has a young to middle age work group composition.

Table 2. Sex of the respondents

Sex	Frequency	Percentage
Male	27	34.00
Female	53	66.00
Total	80	100.00

Table 2 presents the sex of the respondents. CvSU - CCAT Campus were mostly female faculty members having 66 percent composing of 53 faculty respondents.

Table 3. Nature of Appointment

Nature of Appointment	Frequency	Percentage
Permanent	17	21.25
Temporary	10	12.50
Job Order	53	66.25
Total	80	100.00

Table 3 reveals the nature of appointment of the faculty respondents of this study. Majority of the faculty members in CvSU - CCAT are Job Orders having 66% of the total respondents while 12.50% were in temporary status.

Table 4. Length of service

Length of Service	Frequency	Percentage
less than 1 year	22	27.50
1 to 3 years	27	33.75
4 to 5 years	14	17.50
More than 5 years	17	21.25
Total	80	100.00

Table 4 shows the length of service of the faculty respondents of the study. It shows that 33.70% have rendered one to three years in service and 21.25 percent have rendered more than 5 years in service.

Table 5 : Summary of Organization Climate of CvSU-CCAT Campus

Organizational Climate	Grand Mean	Description
Role Clarity	4.73	Strongly Agree
Respect	4.65	Strongly Agree
Communication	4.13	Agree
Reward System	3.79	Agree
Career Development	3.85	Agree
Planning and Decision Making	4.21	Strongly Agree
Innovation	4.17	Agree
Relationship	4.11	Agree
Teamwork and Support	4.38	Strongly Agree
Quality of Service	4.42	Strongly Agree
Conflict Management	4.14	Agree
Commitment and Morale	4.33	Strongly Agree

Table 5 shows the summary of the organizational climate of the university. In general, most of the determinants of the campus' organizational have strong agreement responses from the participants. It implies that among the factors, respondents strongly agree with the role clarity identification in the campus which encompasses job references and augmenting duties as well as responsibilities as a faculty member of the university, in the sense that there are evident situations where they noticed or experienced such. Considerably reward system which has the least value of grand mean connotes that they agree on the reward system policies but there are some circumstances that inhibits their higher agreeing responses such as environment and policy-related conditions.

Table 6: Summary of Faculty Engagement of CvSU-CCAT Campus

Faculty Engagement	Grand Mean	Description
Instruction	4.53	Strongly Agree
Research	3.63	Agree
Extension	3.71	Agree

Table 6 showcases the summary of faculty engagement of the campus. Instruction alone has the strong agreement in faculty engagement. It means that faculty members, in terms of the degree of agreement, were least engage in research and extension activities compared to engagement in instructions. Considerably, it conforms with the field notes utilized that faculty members are more engaged in instruction due to unfamiliarity of work-around, capability to perform activities and availability of enabling mechanisms to perform research and extension activities.

Table 7 Correlation of Profile and Organizational Climate (Age)

Variables	Rho Value	P-Value	Significance
Age and Role Clarity	0.195	0.082	Insignificant
Age and Respect	-0.108	0.341	Insignificant
Age and Communication	0.103	0.361	Insignificant
Age and Career Development	-0.136	0.228	Insignificant
Age and Planning and Decision Making	-0.121	0.286	Insignificant
Age and Innovation	-0.057	0.616	Insignificant
Age and Relationship	-0.072	0.528	Insignificant
Age and Teamwork and Support	-0.167	0.138	Insignificant
Age and Quality of Service	-0.027	0.810	Insignificant
Age and Conflict Management	0.064	0.575	Insignificant
Age and Commitment and Morale	-0.025	0.828	Insignificant
Age and Reward System	-0.117	0.300	Insignificant

Table 7 shows the correlation of age vis a vis organizational climate of CvSU-CCAT Campus. It shows that age is not significantly related to any aspects of the organizational climate in the campus. The result of correlation validates the study conducted by Howzer (2017) that age is not a concrete factor that defines organizational climate and behavior. The study argued that age is not a precursor to maturity which can inherently be related to organizational climate. Thus, the null hypothesis that age has no significant relationship with variables of organizational climate is hereby **accepted**.

Table 8 Correlation of Profile and Organizational Climate (Sex)

Variables	Rho Value	P-Value	Significance
Sex and Role Clarity	-0.003	0.982	Insignificant
Sex and Respect	0.009	0.937	Insignificant
Sex and Communication	-0.33	0.774	Insignificant
Sex and Career Development	-0.035	0.760	Insignificant
Sex and Planning and Decision Making	-0.029	0.797	Insignificant
Sex and Innovation	-0.02	0.859	Insignificant
Sex and Relationship	-0.086	0.448	Insignificant
Sex and Teamwork and Support	-0.008	0.947	Insignificant
Sex and Quality of Service	-0.146	0.195	Insignificant
Sex and Conflict Management	-0.062	0.584	Insignificant
Sex and Commitment and Morale	-0.118	0.298	Insignificant
Sex and Reward System	0.037	0.746	Insignificant

Table 8 reveals the correlation of age against organizational climate of CvSU-CCAT Campus. It shows that sex and the organizational climate of CvSU - CCAT Campus is not significantly related. The result of correlation conforms the study conducted by Puntz (2017), Crone (2018) and Leibnitz (2018) that in the modern society, men and women play important roles in organizational settings, arguing that the type of organizational culture or climate is irrelevant to the sex or gender of its member because they focus more on a policy based and neutral approaches in organizational management and development. It was argued that behavioral classification may theoretically influence the organizational climate such as sex/gender, preference and social preferences. Thus,

the null hypothesis that sex has no significant relationship with variables of organizational climate is hereby **accepted**.

Table 9 Correlation of Profile and Organizational Climate (Nature of Appointment)

Variables	Rho Value	P-Value	Significance
Nature of Appointment and Role Clarity	0.244	0.030	Significant
Nature of Appointment and Respect	0.039	0.007	Significant
Nature of Appointment and Communication	-0.052	0.006	Significant
Nature of Appointment and Career Development	0.084	0.005	Significant
Nature of Appointment and Planning and Decision Making	0.094	0.004	Significant
Nature of Appointment and Innovation	0.300	0.008	Significant
Nature of Appointment and Relationship	0.064	0.006	Significant
Nature of Appointment and Teamwork and Support	0.110	0.003	Significant
Nature of Appointment and Quality of Service	0.090	0.004	Significant
Nature of Appointment and Conflict Management	0.098	0.004	Significant
Nature of Appointment and Commitment and Morale	0.113	0.003	Significant
Nature of Appointment and Reward System	0.084	0.005	Significant

Table 9 shows the correlation result of nature of appointment with the organizational climate of CvSU- CCAT Campus. It initially reveals series of significant relationship in all aspects of organizational climate that are concerned with this study. It can be generally observed that there are positive and low to negligible relationship that exists between nature of appointment and organizational climate except for communication. This situation can be attributed to the nature of appointment of faculty members are more likely to manifest but not consistent with regard to the organizational climate in particular to communication aspect within the campus. Thus, the null hypothesis that nature of appointment has no significant relationship with variables of organizational climate is hereby **rejected**.

Table 10 Correlation of Profile and Organizational Climate (length of service)

Variables	Rho Value	P-Value	Significance
Length of Service and Role Clarity	0.017	0.009	Significant
Length of Service and Respect	0.020	0.009	Significant
Length of Service and Communication	-0.305	0.010	Significant
Length of Service and Career Development	-0.830	0.005	Significant
Length of Service and Planning and Decision Making	-0.098	0.004	Significant
Length of Service and Innovation	-0.118	0.003	Significant
Length of Service and Relationship	0.188	0.001	Significant
Length of Service and Teamwork and Support	0.216	0.001	Significant
Length of Service and Quality of Service	0.071	0.005	Significant
Length of Service and Conflict Management	0.066	0.006	Significant
Length of Service and Commitment and Morale	-0.123	0.003	Significant
Length of Service and Reward System	0.127	0.003	Significant

Table 10 showcases the correlation set results of length of service with the organizational climate of the campus. All of the aspects of the organizational climate of the campus has a significant relationship with the tenure or length of service of the faculty members in CvSU- CCAT Campus. As faculty members become tenured, more likely they will have clear understanding of their role, have respect to co-workers and develop rapport to their co faculty members as provided by the positive and low significant relationship except for communication, career development, planning and decision making, innovation and commitment and morale. The table explains that as faculty members became tenured they have significant understanding on what their roles in the organization, respect for co-faculty, relationship with different academic personnel, teamwork, quality service, conflict management and reward system. Considerably, the longer the respondents' length of service, communication, career development, planning and decision making, innovation and commitment and morale diminishes, all other things held constant. Thus, the null hypothesis that length of service has no significant relationship with variables of organizational climate is hereby **rejected**.

CONCLUSION

After the data facilitation, processing, interpretation and analysis, the researchers conclude the following:

1. The faculty members in CvSU CCAT belongs to middle age work group; females dominate the faculty number composition in CvSU - CCAT Campus; and most of the faculty members in CvSU-CCAT Campus have job order status;

2. Half of the variables of organizational climate have strong level of agreeing and experienced the presence of variables in the organizational climate of the campus

namely: role clarity, respect, decision making participation, teamwork and participation and quality of service. On the other hand, the other half falls in the agreeing side with reservations, these are: communication, reward system, career development, innovation, relationship and conflict management;

3. Among the three core functions of the campus undertaken in this study, faculty members are more engaged in instruction than research and extension activities; and

4. Age and sex have insignificant relationship with organizational climate. Considerably, length of service and nature of appointment have significant relationship with organizational climate.

RECOMMENDATIONS

Given the results, analyses and conclusion of this study, the researchers recommend the following:

1. Inclusion and formulation of detailed career path development of faculty members, support mechanisms and enabling activities in the faculty orientation and assembly;

2. Streamline communication channels and availability of information and direction;

3. Determining and crafting mechanism that promote conducive research and extension atmosphere in the campus; and

4. Formulation of inclusive monetary and/or non-monetary incentives in extension services and research activity among all faculty members regardless of their appointment status.

ACKNOWLEDGEMENT

REFERENCES

Alfandi, A., Dr. Alkahsawneh, M. S., (2014). "The Role of the Incentives and Reward System in Enhancing Employee's Performance: A Case of Jordanian Travel and Tourism Institutions" Retrieved from: https://www.researchgate.net/publication/314836426_The_Role_of_the_Incentives_and_Reward_System_in_Enhancing_Employee's_Performance_aA_Case_of_Jordanian_Travel_and_Tourism_Institutions

Claiborne et.al(2015) "Organizational Climate Factors Of Successful And Not Successful Implementations Of Workforce Innovations In Voluntary Child Welfare Agencies"Retrieved from:https://www.tandfonline.com/doi/abs/10.1080/23303131.2014.984096

Das, A (2014) "Conflict Management and Its Impact on Organizational Performance: A Study on Some Industrial Enterprises in Bangladesh" Retrieved from: https://www.researchgate.net/publication/286884054_Conflict_Management_and_Its_Impact_on_Organizational_Performance_A_Study_on_Some_Industrial_Enterprises_in_Bangladesh

Dialoke, Nkechi., (2017) "Effects Of Career Growth On Employees Performance: "A Study Of Non-Academic Staff Of Michael Okpara University Of Agriculture Umudike Abia State, Nigeria "Retrieved from: https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.singaporeanjbem.com/pdfs/SG_VOL_5_(7)/2.pdf&ved=2ahUKEwjitcS70a3mAhVTFogKHcikDQoQFjAJegQIAhAB&usg=AOvVaw0wAB3MsC4VNHnZI2q7Kppk

Hassan, Kahn and Rohrbaugh, Donald S., (2012) "Impact Variability in Theorganizational Climate of Government Offices and Effective Orgamizational Commitment." Retrieved from :https:///doi.org/10.1080/14719037.2011.642568

Huang et.al., (2012) "A Multidimensional Analysis of Ethical Climate Job Satisfaction, Organizational Commitment and Organizational Citizenship Behaviors" Retrieved from https://journals.sagepub.com/doi/abs/10.117710969733011433923

Morrow, Paula C., (2011)Managing Organizational Commitment: Insights from Longitudinal Research Retrieved from www.scholink.org./ojs/index.php/jbtp.

Muduli, K., (2015) High Performance Work System HRD Climate and Organisation Performance: An Empirical Study Retrieved from: emerald.com/insight/content/doi/10.1108/EJTD-02-2014-0022/full/html

Peralta et al. (2014) "Innovation Processes and Team Effectiveness: The Role of Goal Clarity and Commitment and Team Affective Tone"Retrieved from: https://onlinelibrary.wiley.com/doi/abs/10.111/joop.12079?
fbclid=IwAR0YprH22Wc6lnh89vjlxKPqTFYxbKiwIb3035sClaVZVzXKACfnR4zzpsw

Saeed et. al., (2010) organizational climate as a predictor of innovative work behavior African Journal of Business Management Vol. 4(15), pp. 3337-3343, 4 November, 2010Available online Retrieved fom: http://www.academicjournals.org/AJBMISSN 1993 -8233 ©2010 Academic Journals

Schulz, Robert D, (2013) "The Impact of Role Conflict, Role Ambiguity And Organizational Climate on the Job Satisfaction Of Academic Staff In Research-Intensive Universities in the UK" Retrieved from: https://doi.org/10.1080/07294360.2012.680209

Weng, Q. D., & Mcelroy, J. December 2010 "The relationship between career growth and organizational commitment" Retrieved from: https://www.researchgate.net/publication/244992929_The_relationship_between_career_growth_and_organizational_commitment

Yang, Zacherand (2016)"Organizational Climate for Successful Aging" Retrieved from"https://www.frontiersin.org/articles/10.3389/fpsyg.2016.01007/full

Yildirim, B. I. and Centinkaya, N. (2015) "A Study On Conflict Management And Conflict Resolution In Hospitality Organizations"Retrieved from: https://www.sciencedirect.com/science/article/abs/pii/S0001879110002095?
fbclid=IwAR3oODap-2b8EwCt-Aa8usHEilK5BOklY32QtTje9rSGUvHgFdVAB2YcD9I

IMPACT OF GABAY PANGKABUHAYAN SKILLS AND TRAINING PROGRAM OF THE DEPARTMENT OF MANAGEMENT STUDIES, CAVITE STATE UNIVERSITY – CCAT CAMPUS

LAARNIE R. MANUEL
PhD in Management (Candidate)
Campus Extension Coordinator - Department of Management Studies
Cavite State Univeristy –CCAT Campus
Tejeros Convention, Rosario, Cavite

JERICO B. TADEO
PhD in Management (Candidate)
Unit Research Coordinator - Department of Management Studies
Cavite State Univeristy –CCAT Campus
Tejeros Convention, Rosario, Cavite

ELIZABETH R. DUMLAO
Doctor in Business Administration
Chairperson - Department of Management Studies
Cavite State Univeristy –CCAT Campus
Tejeros Convention, Rosario, Cavite

ABSTRACT

Extension programs and activities provide avenues for various communities to benefit from the different activities, researches, and outputs of the university. Extension programs ranges from knowledge and technology transfers to tangible and intangible adaption of skills and processes in the pursuit of community development The Gabay Pangkabuhayan Skills Training Program was conducted through the collaborative efforts of faculty and students of the Department of Management Studies of Cavite State University – CCAT Campus. The extension program was implemented in Gawad Kalinga of Rosario Cavite from July 2013 to February 2017. Various activities and trainings, ranging from cooking, food and beverage service and entrepreneurial skills were taught to the male and female out-of-school youth and unemployed residents of Gawad Kalinga. This study used mixed methods to showcase impacts of the extension activity consisting of economic and social dimensions of the clienteles. This study utilized the nine adopters of the extension program purposively. The authors found out that the extension program has a positive economic and social impact to its clienteles mainly characterized by the improvement of income, savings and enhanced community interaction. Moreover, the researchers identified gaps which paved way for a more collaborative effort in executing the extension project to increase project efficiency and effectiveness. The extension facilitators and extension researches recommend in improving the enabling mechanisms in funds, paper trails, project allocation and continuous monitoring of extension activities.

Keywords: community, extension adopters, extension services, impact assessment, replication

INTRODUCTION

Extension programs and activities provide avenues for various communities to benefit from the different activities, researches, and outputs of the university. Extension programs ranges from knowledge and technology transfers, to tangible and intangible adaption of skills and processes in the pursuit of community development (Cruz 2019). The creation of linkage towards higher learning institutions' academic and organizational growth and addressing community's development is one of the many important features of extension programs. Hence, extension programs are necessary and a potent tool for community development (Duarto et al., 2019).

Today, extension programs of various institutions are now geared and anchored on the national commitment to address the sustainable development goals (SDGs) of the United Nations (UN)

(www.academia.org/journalopenaccess retrieved June 2019) Moreover, extension programs are expected to produce and provide evident positive impacts to its community – transformational change. It provides ways, means and opportunities for the lives of beneficiary to improve and at the same time, being responsive, effective and creating meaningful changes to their respective clients.

The Cavite State University (CvSU) extension programs aims to extend the learning from the classroom to the public to foster sustainable community development. Therefore, the Department of Management Studies of Cavite State University – CCAT Campus, by virtue of its social obligation to its community crafted and executed an extension project that was goal to introduce entrepreneurship through livelihood skills in Rosario, Cavite.

The *Gabay Pangkabuhayan* Skills Training Program was conducted through the collaborative efforts of faculty and students of the Department of Management Studies of Cavite State University – CCAT Campus. The extension program was implemented in Gawad Kalinga of Rosario Cavite from July 2012 to February 2017. Various activities and trainings, ranging from cooking, food and beverage service and entrepreneurial skills were taught to the male and female out-of-school youth and unemployed residents of Rosario Cavite. Thus, the authors, through mixed method aimed to collect evidences of community impacts of the *Gabay Pangkabuhayan* Skills Training Program in Rosario, Cavite.

OBJECTIVES

The researchers generally, aimed to showcase evidences of positive impacts of the Gabay Pangkabuhayan Skills Training Program in Gawad Kalinga of Ligtong Rosario, Cavite.

Specifically, the authors aimed to:
1. Describe the process on how the extension activity was conducted;
2. Identify the community impacts of the Gabay Pangkabuhayan Skills Training Program in terms of:
   a. economic; and
   b. social;
3. Identify challenges of the extension program; and
4. Formulate solutions to address gaps and challenges of the extension program.

REVIEW OF LITERATURE

The university's extension project plays a vital role in developing and improving foster communities. An extension program is one effective way of actualizing the research result through technology transfer, and adoption of new technologies and innovations. The role of extension program involves capacity building information dissemination, and capacity building through trainings, workshops, demonstration, and return demonstration of the extension beneficiaries. An extension project must begin with knowing the needs of the community in order it to become successful and sustainable (Duarto et al., 2019).

However, there were several extension projects that were initially planned and formulated without the intervention of the target beneficiary during the planning phase of the project. In fact, one researcher commented in his study that in a "closer look at the different extension approaches reveals that they have been planned and implemented without the participation of the very people for whom they have been designed" (Belay, 2003). Implementing extension project without the conduct of technology needs assessment and intervention among extension beneficiaries may be biased, and may only capture those individuals interested with the project being launch. Therefore, careful analysis of extension program is essential to create impacts not only to the lives of the extension beneficiaries, but to the entire society as a whole. Aside from conducting a technology needs assessment, knowing the target extension beneficiaries and knowing their basic profile would play a key role in order to come-up with sound extension program.

Ali and Ebraheem (2012) argued that extension programs must be scientific in approach in order to become effective. The author expounded that activities that are extension related should match the needs of the community may it be technological, skill or machinery transfer to increase the capacity of the community to produce economic opportunity to prosper or at least put leverage in their sources of income. Patrocino (2018), Felix (2012) and Tamayo (2015) explained that aside from the end goal of extension activities to improve the living conditions of the adopted community, extension activities should highlight the best practices and replication to other applicable communities. They agree that entrepreneurship is one of the effective extension activities because it has a direct influence to income and can influence expenditure in households.

METHODOLOGY

The study focused in showcasing the impacts of the *Gabay Pangkabuhayan* Skills Training Program of the Department of Management Studies of CvSU- CCAT campus. Generally, the authors used mixed method in this study which aimed to justify and provide evidences of an effective extension program. Specifically, the authors performed gap analysis to identify key challenges in the ideation, conducting and monitoring the extension program of the department. Moreover, this study used descriptive approach to showcase impacts of the extension activity consisting of economic and social dimensions of the extension beneficiaries. Considerably, inferential approach was used to determine significant different among economic factors considered in this study. Purposive sampling was used in identifying nine participants of this study using the extension monitoring sheets and self-made questionnaires which was deliberated, validated and accepted by the extension unit of the campus. Various constraints and unavailability of other participants inhibits the attempt for total enumeration of 21 extension clienteles. The sample size represents the 42.85 percent of the total population size.
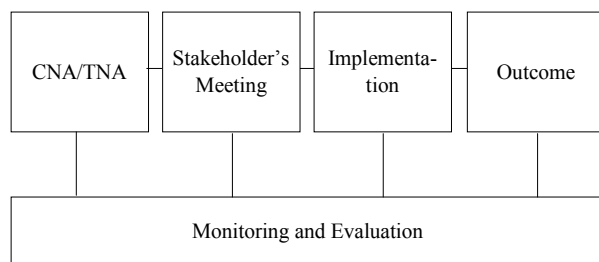
FINDINGS

Figure 1. Campus' Process for Extension Projects

Figure 1 shows the actual procedure for implementing the extension projects to the community. The conduct of needs assessment (CNA) and technology needs assessment (TNA) play a vital role in conducting extension programs, as it reveals, the real interest of the extension beneficiaries. However, during the actual processes, the local government of Rosario intervenes and identified the key communities that the department's extension activity will be conducted. Generally, linear in process for need assessment, parties involve will meet and agree through memorandum of agreement to implement the program and later

yield outcome, throughout the process, monitoring and evaluation are present to check whether the process conforms to standard extension activities of the university.

Figure 2. Extension Proceedings of Gabay-Pangkabuhayan Skills Training Program

Figure 2 shows the actual implementation of the extension, which consists of photo documentation of the actual conduct of technology needs assessment, meeting with the stakeholders, actual extension activities such as seminars, cooking demonstration, return demonstration of the participants, and entrepreneurial skills, and the outcome of the extension project, where one of the previous extension beneficiaries who became one of the most sought trainers and cooking demonstrators various livelihood training programs in the nearby communities, due to her success that served as a living proof of her expertise in the field.

Economic Impact of the Gabay Pangkabuhayan Training Program

Table 1 Impact on Income and Savings

Determinant	t-test value	p-value	Significance
Income	3.23	0.001	Significant
Savings	2.19	0.012	Significant

Table 1 shows the impact of the extension program conducted by DMS in Rosario, Cavite. According to the study it was found out that there is a significant change of income and savings among the collective responses of the clienteles of the Gabay-Pangkabuhayan Skills and Training Program. These changes are characterized by in-

crease on income and savings. The result of the changes in income and savings were supported by the changes in the ability in key spending areas: ability to buy or purchase needs, wants and luxury goods, send children to school, address medical needs, house renovation and contingency spending.

Table 2 presents the changes of means in the ability to spend or buy on selected key areas; ability to buy or purchase needs, wants and luxury goods, send children to school, address medical needs, house renovation and contingency spending. The table generally shows that there were improvements in the clienteles' ability to buy needs and wants, send children to school, spend for medical needs and spend for contingencies.

Table 2 Spending on Key Areas

Determinant	Pre-evaluation mean value	Qualitative Value	Post-evaluation mean value	Qualitative Value
Ability to buy needs	3.33	Some-how able	3.67	able
Ability to buy wants	3.25	Some-how able	3.43	able
Ability to buy luxury goods	2.48	Some-how not able	2.50	Some-how not able
Ability to send child/children to school	3.25	Some-how able	4.10	able
Ability to address medical needs	3.12	Some-how able	3.82	able
Ability to spend for house renovation	2.21	Some-how not able	2.30	Some-how not able
Ability to spend for contingencies	2.09	Some-how not able	2.92	Some-how able

Other Economic Benefits

Based on fields notes, the following economic benefits were cited by the respondents
- "From the learnings we've gained from the extension trainings we were able to establish a small-scale enterprise"
- "From our established small-scale enterprise we were able to provide small cash assistance to our family and relatives"

Based on the study conducted by the researchers, the extension projects enable the beneficiaries of the project to establish not only just a community-based business, but as well as personal small enterprise. Moreover, they were able to utilize the learnings that they have gained from the extension project in managing, and sustaining such small business. Some of the adopters of the extension

project were also now invited to speak in some of barangay livelihood projects and testified how extension projects helped their lives to augment a living. Through extension projects, the adopters were able to provide small assistance to their relatives that encourage them to replicate their business.

Social Impact

Table 3. Social Impact of the Extension Program of DMS

Outcome
1. "I became more confident in putting-up a business, and manage it on my own"
2. "I learned to become more sociable with other people for my business"
3. "I became more creative in business planning"
4. "I was able to gain meaningful business strategies, that would benefit my business"
5. "I have gained self-value from the trainings that I have attended from extension projects"

The series of seminars, activities and workshops, built connection and strengthened the network among beneficiaries, and enabled the community adopters to grasp new ideas, business strategies that are applicable to their small-scale enterprise. Through these trainings, it boosts self-confidence and self-value/worth of the extension adopters.

Challenges Encountered by the Extension Program

a. Challenges encountered by the extensionists / faculty members
- Number of faculty members who will served as trainers
- High number of teaching load of faculty members that at times hinders them from joining extension activities and conduct adequate extension project monitoring
- Conflict on schedule between academic activities and the availability of the beneficiaries to attend extension project
- insufficient budget to strengthen and sustain extension projects

b. Challenges encountered by the beneficiaries
- Inability to have budget to put up a small-scale enterprise in order to put all the learnings from extension project in actual or implementation as their additional source of income.
- Lack of capital to sustain the established small-scale enterprise of beneficiaries from one location to another

- Some beneficiaries who have been a recipient of extension project, tends to become employed in some private companies, than become entrepreneur
- Conflicts among members of adopted community in running and sustaining, established business.

CONCLUSION

The extension program was implemented in Gawad Kalinga of Rosario Cavite from July 2013 to February 2017. Various activities and trainings, ranging from cooking, food and beverage service and entrepreneurial skills were taught to the male and female out-of-school youth and unemployed residents of Gawad Kalinga. The Gabay *Pangkabuhayan* Skills Training Program was conducted by the collaborative efforts of faculty and students of the Department of Management Studies of Cavite State University – CCAT Campus.

The authors conclude the following:

1. The Department of Management Studies of Cavite State University CCAT Campus has completed its extension activity which started in July 2012 and ended in February 2017. The department successfully conducted clientele needs' assessment as well as training needs' assessment that leads to the identification of entrepreneurial and livelihood activities conducted in various parts. Impact assessment study was also conducted to evaluate the impact of the extension activity

2. There are visible positive impacts of the extension activity: there were positive changes in income and savings, and the ability or buy and spend on key areas of economic aspects including establishing of enterprise as an effect of the *Gabay Pangkabuhayan* Skills and Training Program. Moreover, there were also positive social effects among the clienteles of the extension program including positive attributes of social domains of the clienteles.

3. The authors found out that there are gaps and challenges in faculty participation in the extension activities and enabling mechanisms in the part of extension beneficiaries.

4. To address the gaps and challenges of the extension program, the authors propose to consider the actualization of standard minimum workload for faculty members by the school administration, and consider allocating specific work schedule for community involvement to avoid conflict with other core functions of the faculty members. Furthermore to address the challenges encountered by the beneficiaries of the extension program, campus extension coordinator must build a linkage with the livelihood projects of the local government unit for possible adequate funding.

RECOMMENDATIONS

The researchers would like to recommend for the campus to on recruiting additional manpower to strengthen the monitoring and evaluation scheme of the campus extension projects. Moreover, there should be a concrete and definitive process and mechanism in the extension service that will be utilized for information retrieval and process. The researchers also recommend the designating of a more specific project or unit extension coordinators who will work hand in hand with the campus extension coordinators of the state universities. The researchers also recommend the limiting of the number of beneficiaries of the extension project into more manageable number of beneficiaries within specific period to attain and sustain the goal of the community extension project to have more positive impact.

ACKNOWLEDGEMENT

The researchers want to give appreciation to the whole department and the school administration in making this study feasible. The authors, would like also to extend the appreciation of fruit of this work the clienteles and other stakeholders of the extension program of Department of Management Studies. To BSBM and BSHRM Faculty and Students, Let us always move forward!

God is with us!

REFERENCES

Ali AL-Sharafat, Mohammad Altarawneh and Ebraheem Altahat. Shara (2012). Effectiveness of Agricultural Extension Activities

American Journal of Agricultural and Biological Sciences 7 (2): 194-200, 2012

Cruz, Anecito B., (2019).Philippines Extension Studies. 2019. Modernizing and Documenting Extension Programs and Activities of CLSU. last accessed August 2019 retrieved from www.researchgate.net/extensionstudiesph last accessed June 2019.

Duarto, Ricardo P., Estacio, Bernard T., Onsula, Corazon F. (2019)., Tabang ngag Balay 2019: The Extension Program of College of Education, University of the Philippines – Ilo-ilo. retrieved from www.researchgate.net/ extensionstudiesph last accessed June 2019.

Dumlao, Elizabeth R., Manuel, Laarnie R. and Tadeo, Jerico B (Unpublished Material 2018). Impact Assessment of the Gabay Pangkabuhayan Skills and Training of the Department of Management Studies.

Felix Jefferson F., (2016). The Capability Empowerment of the Women of Oton: The University of the Philippines-Visayas. Unpublished Thesis. University of the Philippines

Journal of Extension Services. n/a, retrieved from www.academia.org/communityresearch

Patrocinio Fedeliza D., (2017). The University of San Carlos Community Outreach and Extension Services Report. University of San Carlos. Unpublished Thesis

WOMEN FARMERS' WORK ENGAGEMENT AND AWARENESS OF HEALTH RISKS RESULTING FROM TOBACCO FARMING INDUSTRY IN CLAVERIA, MISAMIS ORIENTAL

DENNIS A. MUGOT
Associate Professor 2

NUEVA D. SALAAN,PhD
Associate Professor 5

RAMIL C. PAGON
Assistant Professor 4

University of Science and Technology of Southern Philippines- Claveria,
Claveria, Misamis Oriental Mindanao, Philippines

ABSTRACT

This study is aimed to determine the role of women in tobacco farms of Claveria, Misamis Oriental Philippines and their awareness of perceived health risks resulting from Tobacco Farming. Using purposive sampling, Forty-three women engaged in said farming industry were selected and interviewed using pre-tested interview schedule. Data analysis was descriptive statistics. It was found out that these workers reached high school level and majority of these workers were involved in planting and harvesting activities. Sixty-four percent of the women were aware of the health concerns in working with tobacco and few had experienced Green Tobacco sickness. All of the women did not feel deprived towards the opposite sex. Majority of the women workers were aware on the methods of staying safe in the workplace. In fact, 88% of them used Personal Protective Equipment (PPE). Meanwhile, there were no child laborers in the farms. The company strictly prohibited children's involvement in the farm as affirmed by the women. It is recommended that monitoring of farm workers by the company be continuously conducted to protect their basic rights. Furthermore, education through lectures by technicians be done regularly to ensure that every worker knows the proper way of working in the tobacco farms. Additional PPE be provided and worn-out Personal Protective Equipment (PPE) should be provided. Finally, considering the health hazards brought about by tobacco farming industry, it is highly recommended that concerned authorities from the Local Government Unit specifically the Rural Health Unit may conduct regular health monitoring of women directly engaged in tobacco farming as well as monitoring of implementation of wearing PPE in workplace.

Keywords: women tobacco farmers' engagement, health risks awareness, PPE

INTRODUCTION

Women make essential contributions to the agricultural and rural economies in all developing countries. Cultivation of Tobacco is high-labor intensive, hence family labor, including child labor, is used in Southeast Asian Countries. Women play a crucial role starting from the selection of seeds to nursery bed raising, transplanting, harvesting, curing, stringing, grading, packing, etc. The long hours of productive physical labor, feelings of exhaustion may sometimes-cause drudgery among farm women.

Children and adults (mainly women) working with tobacco are at high risk for green tobacco sickness, caused by dermal absorption of nicotine from contact with wet tobacco leaves (Espino et. al/ 2013).

Northern Mindanao is the top tobacco producing region of the country recorded production of 1.13 thousand mt in 2015. Claveria, Misamis Oriental has the presence of tobacco company that encourages the farmers to cultivate the crop as

contract growers while providing them implements and fertilizer subsidy. Furthermore, a corn-support program was devised, which aimed to give financial assistance to farmer tobacco who will plant corn. (Philippine Statistics Authority, 2016 & Padin, 2015).

There was only minimal information on the likely disproportionate and harmful impact tobacco family has on women farmers. A deeper understanding of the female role in the tobacco farming landscape will broaden the evidence based on gender dynamics in tobacco and strengthen tools available to tobacco control advocates, policymakers, and funders in developing gender-aware programs (Hu & Lee 2016). No study had been made on the role and perceived health effects of women in tobacco farms of Claveria, Misamis Oriental. Thus, this study is conducted.

Objectives of the study

The study generally aimed to determine the role of women in tobacco farms of Claveria, Misamis Oriental.

Specifically, it aimed to:
   a. Determine the profile of women involved in tobacco farms in terms of age, marital status, educational attainment, no of years engaged in farming.
   b. Determine the participation of women in tobacco farms (planning, planting, weeding, fertilizing, harvesting and classifying)
   c. Enumerate the tobacco farming health related concerns affecting women.

REVIEW OF RELATED LITERATURE

China is by far the top producer of tobacco leaf in the world with an output of 3.2 million tonnes in 2012. It has about 5 million farm households engaged in growing tobacco. The area devoted to tobacco farming has been stable at around 1.4 million hectares in the last ten years. Tanzania ranks 8th among tobacco leaf producers according to FAO Statistics for 2012, producing 120,000 tonnes, and is second only to Malawi among African countries. With agriculture accounting for a quarter of the country's GDP, 85 percent of its exports and employing 80 percent of the country's workforce, tobacco farming is an important part of the country's economy, and is the country's second most important export among food and agricultural products in 2011. Kenya is as yet not an important producer of to-

bacco leaf, producing 15,000 tonnes in 2012. (Hu & Lee, 2016).

In the Philippines, Philip Morris International Fortune Tobacco Corp. (PMFTC) Inc. divulge its target to reach 4,000 metric tons (MT) of tobacco production annually through its $50-million facility in Claveria, Misamis Oriental (Padin, 2015). The country's production of Virginia variety increased to 865.0 mt. in 2015 from 80.0 mt in 2014. These could be attributed to the expansion in contract growing areas, provision of farm implements and fertilizer subsidy to farmers in Claveria, Misamis Oriental by Philip Morris-Fortune Tobacco Corp. (PMFTC) (Philippine Statistics Authority, 2015).

Tobacco farming is widely considered the most labor-intensive crop, often 10 or more times as labor-intensive as other common-cultivated crops (Chaves et.al., 2016) The Mindoro and Santa Cruz regions, the largest part of the country with contracted farmers, consist of relatively small farms. 79% were found to be dependent on family labor. In the local culture, children traditionally help on the farm. Farmers reported that they helped their parents on the farm when they were young and nothing dangerous happened to them. Also, farmers with large families and limited financial resources rely on their children's contribution because they are unable to hire workers. In other cases, children simply wanted to work to earn some pocket money. With no other place to leave them, many parents had no option but to bring their children with them to work in the tobacco fields (Control Union, 2012).

In the study f Hu & Lee (2016), it was mentioned that Tobacco farming activities including planting, chemical spraying and curing which make women farmers vulnerable to poisoning and nicotine absorption. These exposures may lead to symptoms of headaches, nausea, muscle weakness and dizziness. Out of 408 women, 110 of them (27 percent) reported suffering from tobacco related illnesses, 57 percent of all interviewed women were not aware of the negative health consequences of chemical sprays or curing. The same study of Hu & Lee (2016) mentioned that preparing seedbeds, sowing, transplanting, weeding, fertilizing, harvesting, curing the leaf, etc. are all essentially back-bending manual labor. It is believed that a significant portion of the labor is undertaken by women, particularly in developing countries. There is however little empirical evidence to show the plight of these women and the challenges they face. Studies have shown that farm workers suffer from increased rates of res-

piratory diseases, skin disorder, certain cancers, chemical toxicity, and heat-related illnesses (Suman et.al. 2008).

Workers who handle wet tobacco leaves suffer from Green Tobacco Sickness (GTS). GTS symptoms which includes nausea, vomiting, weakness, headache, dizziness, abdominal cramps, breathing, difficulties and fluctuations in heart rates and blood pressure. Tobacco growers in the Philippines are relatively young. 80% or more are between 21 and 60 years old. These farmers' exposure to tobacco leaves places them at high risk health problems. Reported amongst, tobacco farming households include dizziness, weakness, headache, fever, nausea, cough, flue, suffocation, hypertension and fatigue. This translates to higher medical expenditures for current tobacco farmers more than non-tobacco farmers, for tobacco-related illnesses. Tobacco cultivation also places farmers at high exposure to strong pesticides and fertilizers, often handled without protective gear. This, on the hand causes poisoning, skin and eye irritation as well as nervous and respiratory disorders and damage to the kidneys (SEATCA, 2008 & Suman et.al. 2008).

METHODOLOGY

A sample of 43 farmwomen were interviewed based on purposive opportunistic sampling among the Tobacco farms of Claveria, Misamis Oriental from March –August 2018.A pre-tested interview schedule was used for collection of data. The said interview was in coordination with concerned authorities of existing tobacco farm industry based in Claveria. Women were interviewed in their respective households during their spare time.

The researchers used descriptive statistics to compute the frequency and percentages of the data gathered on Marital Status of women , Educational Attainment of tobacco women workers, Use of Personal Protective Equipment by women tobacco farmers and Provider of Personal Protective Equipment (PPE).

Findings/ Analysis of Data

The data analysis for this study was descriptive statistics. The data were tabulated and analyzed using frequency counts, percentages weight values.

RESULT AND DISCUSSION

The women in Tobacco farms of Claveria, Misamis Oriental largely consisted of married individuals; followed by a very low percentage of singles and widows respectively as shown in Figure1. These women have an average age of 43 years old having 19 as the youngest and 43 as the oldest age, with 4.5 years as the average length of involvement in Tobacco farming. These workers belonged to the highly productive age bracket and are of legal ages. This is because the company closely monitors the workers and strictly prohibits the involvement of children in the farm activities. The company strictly prohibits the employment of child laborers.
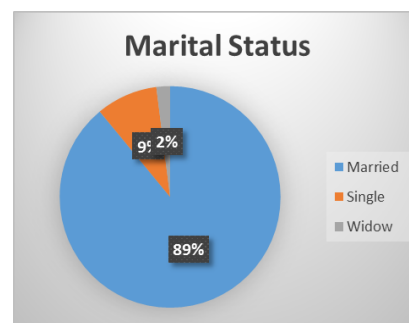

Figure 1. Marital Status of women in Tobacco farms of Claveria, Misamis Oriental

Majority of these women workers reached high school level and high school graduate; few percentage reached college level as well as elementary undergraduate (figure 2). This implies that these workers were highly literate. Moreover, the level of educational attainment of the respondents is relatively high as 53% of the respondents have less than 6 years of education as compared to China's 83% (Hu & Lee 2018). This is in line with the high literacy rate of women in the Philippines and Northern Mindanao which is 96.1 and 95.3 percent respectively (NSO, 2011).
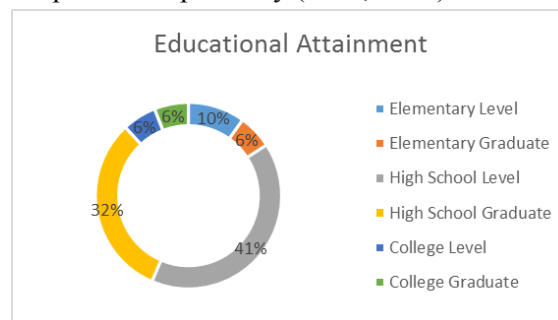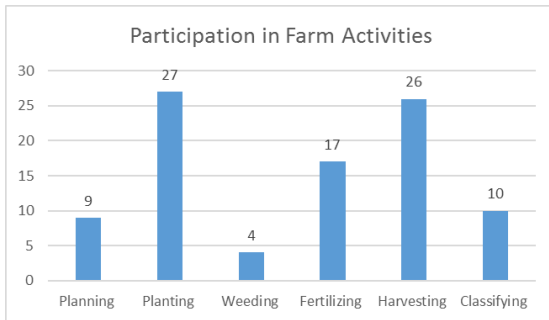

Figure2. Educational Attainment of tobacco women workers in Claveria, Misamis Oriental

Figure 3. Participation of women in tobacco farm activities

Most of the women worker respondents were involved in more than one farm activity. Planting was the most participated task which was closely followed by harvesting. These tasks were less laborious and fit to be given to women. Planning activities were done by farm owners and foreman that need lesser number of workforces. While weeding was most often done mechanically by ploughing thereby oftentimes did not employ labourers.

Most of the women worker respondents went to tobacco fields weekly. This was because of the nature of work, most of the women were engaged in needs lesser attention. Moreover, Espina et.al. (2013) mentioned that in the Philippines, farmers are not full-time tobacco growers; tobacco is only one of the many crops they plant as part of their cropping scheme. Thus, women tend to do other non-tobacco related task most of the time.
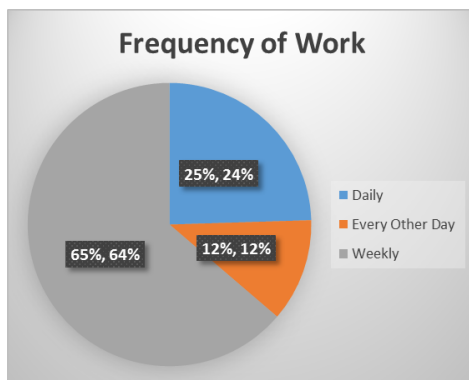
**Figure 4. Frequency of work rendered by women in tobacco farms**.

The level of awareness on the negative effects of Tobacco farming was very high at 90%, having the Green Tobacco Sickness (GTS) as the highest; followed by respiratory ailments and skin allergies which were still associated with the GTS (Figure 5) The results of Hu & Lee's (2016)

study were much lower which showed that tobacco workers in China, Tanzania and Kenya were 60, 40 and 80 percent aware of negative effects of tobacco farming in the same study. 31 percent of the women did not think there is any effect; 28 percent and 36 percent respectively said there are minor effects or some effects, while 5 percent of the respondents did not know.
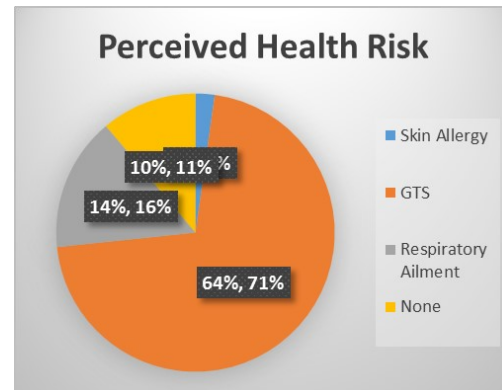

Figure 5. Awareness of health-risk resulting from tobacco farming

In response to the question of whether they have illness associated with the work in tobacco plantation, only 33% answered affirmatively with varying percentage of symptoms which were all associated with the Green Tobacco Sickness (GTS). The rest of the women workers (67%) did not have illness/es arising from their work (figure 6). Hu & Lee (2016) revealed similar percentage of their respondents from China also experienced various discomforts, half experienced dizziness, and 33% have experienced headaches. This is because tobacco farming activities make women farmers vulnerable to poisoning and nicotine absorption. These exposures may lead to symptoms of headaches, nausea, muscle weakness and dizziness.
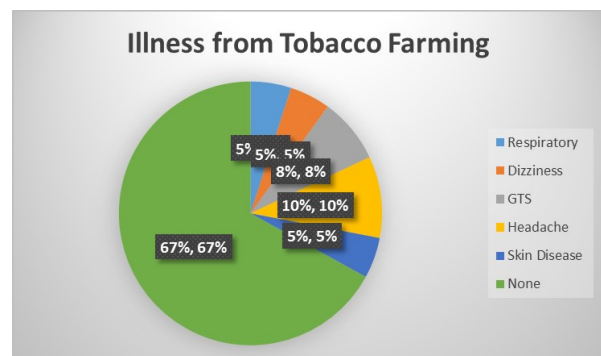

Figure 6. Illness derived from tobacco farming

Majority of the women workers use Personal Protective Equipment which include mostly hand gloves which they believed were provided mostly by the farm owner, closely followed by personal safety equipment such as long sleeved jackets and the company which provides rubber boots (Figure 7& 8). Further discussion with the farm owners revealed that the PPE distributed to their farm workers were also given by the company.
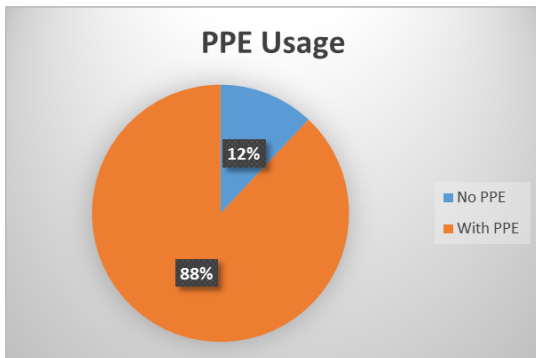
Figure 7, Use of Personal Protective Equipment (PPE) by women tobacco farmers.
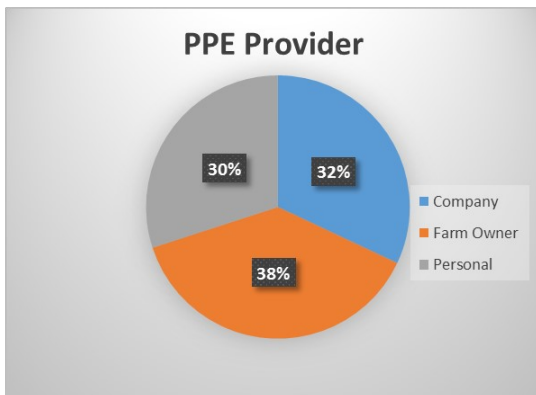
Figure 8. Provider of Personal Protective Equipment (PPE)

When asked whether they feel deprived against the opposite sex, 100% answered negatively. Further interview showed that this is because fair treatment is given to them in terms of wages and most of them are even privileged to be assigned as pickers of leaves and not with the heavier task of hauling of the harvest or loading it to the vehicle.

In order to improve their working condition, some mentioned the need of better quality PPE, as some could be worn out easily. Provisions of rain-coats were also mentioned to prevent them from getting wet when harvesting after the rain.

CONCLUSION

The women tobacco farm workers were aware of the dangers in working with tobacco plantations as well as on the methods of staying safe in the workplace. There were no child labourers employed in the farm. These women did not feel deprived towards the opposite sex. The women's awareness of the danger in working with tobacco plantation may have been one of the reasons why fewer farmers were no longer involved in tobacco production.

RECOMMENDATIONS

Considering the women farmers' high level of awareness on health hazard as a result of tobacco farming, farm owners may empower more women farmers in educating other women particularly on the health risks in tobacco farm industry, as well as in monitoring women on the proper use of Personal Protective Equipment;

Iit is suggested that farmers should continue to uphold their basic rights in whatever farm industry they may be in. Child labor should be strictly prohibited at it curtails the basic rights of children.

The education through lectures by technicians must be done regularly to ensure that every worker knows the proper way of working in farms. Wearing of PPE needs to be observed at all times; worn-out PPE should be immediately replaced.

Finally, considering the health hazards brought about by tobacco farming industry, it is highly recommended that concerned authorities from the Local Government Unit specifically the Rural Health Unit may require women directly engaged in tobacco farming for a regular health check-up and farm owners' strict implementation and monitoring of wearing PPE in workplace.

Even with the eventual closure of Philip Morris in Claveria, it is still highly recommended that the PPE protocols be observed in all farm work engagements considering the health hazards brought about by the use of pesticides, insecticides and other harmful farm sprays.

LITERATURE CITED

Chavez JJ, Drope J. Li.Q, Aloria MJ. 2016. The Ec nomics of Tobacco Farming in the Philippines. Quezon City: Action for Economic Reforms and Atlanta: American Cancer Society.

Control Union. (2012) Third Party Assessment PMFTC Inc. Sta Cruz and Mindoro Regions

Agricultural Practices Program. Control Union Certifications Netherland

Espino, R.M. Assunta & F. Kin (2013) Tobacco Farming in the ASEAN Region. Southeast Asia Tobacco Control Alliance.

HU, T. & l. Lee (2016) Women in Tobacco Farming: Health, Equality, and Empowerment. A study conducted in China, Tanzanai and Kenya. Center for International Tobacco Control Public Health Institute Oakland CA.

Nguyen Thanhong, Huong, Hoang Van Minh and Kim Bao Giang. 2008 Impact of Tobacco Growing on the Livelihood and Health of Tobacco Farmers and the Environment: A Preliminary Study in Vietnam Bangkok 2008, p. 13.

NSO. 2011. Gender Fact Sheet. National Statistics Office Gender and Development Committee N. 11-1. https:// psa.gov.ph/sites/ default/ files/ attachments/aodao/article/Gender%20 factsh Date Acessed Sept.29, 2018

Padin, M.G (2015) PMFTC to produce 4,000 MT of tobacco in Misamis Oriental facility. https://businessmirror.com.ph/ pmftc-4000- m,t-of -tobacco-in-misamis oriental-facility/. Accessed September 29, 20018.

Philippine Statistics Authority (2016) Major Non-food and Industrial Crops Quarterly Bulletin. Philippine Statistics Authority, Republic of the Philippines Vol. 9 No. 4

Reyes C Tabuga A.,Asis R. Datu M 2012. Poverty and Agriculture in the Philippines; Trends in Income Poverty and Distribution. Discussion Paper Series No. 2012-09 Makati Philippines Institute of Development Studies.

SEATCA 2008 Cycle of Poverty in Tobacco Farming-Tobacco Cultivation in Southeast Asia. Southeast Asia Tobacco Control Alliance.

Suman, Kalyani K.K. Deo Singh, and S. K Naidu (2008) Occupational Health Hazards of Farm Women in Tobacco Cultivation. Indian Res.J. Ext. E

AN EVALUATION ON THE PERFORMANCE AND FUNCTIONALITY OF THE DIGITAL LOGIC TRAINER DEVICE FOR ELECTRONICS TECHNOLOGY INSTRUCTION

JAMES M. DUMAGUIT, Ph.D-TM, RME
Faculty, College of Technology
Surigao State College of Technology, Surigao City

ABSTRACT

The purpose of this study is to assess the performance and functionality of a digital logic trainer for Electronics Technology instruction that focus on the aspects of functionality, durability, economy and workability in order to test the significance of the device. Descriptive research design was utilized in this study involving group respondents of 86 electronics technology students of Surigao State College of Technology, Surigao City. This study used the mean and ordinal rank statistical tools in analyzing the data. The data revealed that the characteristics of the Digital Logic Trainer Device for Electronics Technology Instruction rated by the student respondents in general, in all aspects as "Satisfactory "in terms of functionality, durability, economy and workability. The results indicated that the highest rated aspect is on "Functionality" with a 3.34 mean, followed by "durability", and "Economy", both of the same mean of 3.24 and lowest ranked is "Workability", got the mean of 3.22. All aspects are rated "Satisfactory". Thus, the device is recommend for utilization in Electronics Instruction and the students are heartily encouraged to understand the significance of developing the digital logic trainer device toward acquisitions of the better technical skills in Electronics Technology.

Keywords: Digital logic Trainer, Instruction, Characteristics, Perceptions

INTRODUCTION

Digital Electronics is no longer a specialized field in electronics. Digital circuits were first used in computing devices, but they are now commonly found in almost all more sophisticated electronics products. Digital circuits are found in automobiles, communication gear, toys, audio systems, computers and calculators. They are also found in television receivers, home appliances, and test equipment.

Electronics Trainer is a most comprehensive and self-contained training system, that provides a complete test lab in a single gadgets. It is equally suitable for individuals, IT institution, Engineering Colleges, Universities and Technical Colleges.

According to Gottfried Wilhelm Leibniz, who proposed a binary computing system that Digital Technology was based on mathematical concept. Digital Technology is a base two process. Digitized information is recorded in binary code of combinations of the digits 0 and 1, also called bits, which represent words and images.

Digital electronics is the world of calculator, the computer, the integrated circuit, and the bina-

ry numbers 0 and 1. This is an exciting field within electronics because the uses for digital circuits are expanding so rapidly. One small integrated circuit can perform the task of thousands of transistors, diodes, and resistors. The various digital circuits in operation every day, at stores the cash registers read out digital displays, also like tiny pocket calculators verge on becoming personal computers. All sizes of computers perform complicated tasks with fantastic speed and accuracy. Factory machines are controlled by digital circuits. Digital clocks and watches flash the time. Some automobiles use microprocessors to control several engine functions, (Tokheim, 1985).

The digital trainer board is a very useful tool in testing and evaluating digital circuits. The digital trainer board is equipped with eight data outputs, and eight data monitors, a clock pulse output, a clock signal generator, a 3-LED indicator logic probe, and a 5-volt power supply. Interconnections between circuit nodes are accomplished by using solid wire (AWG 22) and these jumpers should be insulated for safety and should be of various lengths with the exposed tip of about 1 cm to allow secure connections. It is advisable to

have jumper wires of different lengths to facilitate connections at different tie points. (Tirol, 2003)

Designing and developing a digital logic trainer during project making and as doing experiments are being engaged by all electronics major students as one among the various technical skills that they have to develop. Likewise, they are also made to understand what Electronics Technology is in the digital logic trainer in terms of management, technical, financial and efficiency requirements. As they progresses in studying the course, designing and developing this digital logic trainer device are assigned to them, where they are to perform different application of circuit connections to find the effectiveness of the device to their work thru demonstration and experiments.

To determine the significance of these device among electronics students based on aspects of its functionality, aesthetics, durability, economical and workability, the researcher being the instructor of this course have a felt need to study and further investigate how these electronics digital logic trainer device influence or affect students technical skills formation before and after using it in their circuits connection application.

OBJECTIVES OF THE STUDY

The general objective of this study is to assess the performance and functionality of a digital logic trainer for Electronics Technology instruction that focus on the aspects of functionality, durability, economy and workability in order to test the significance of the device.
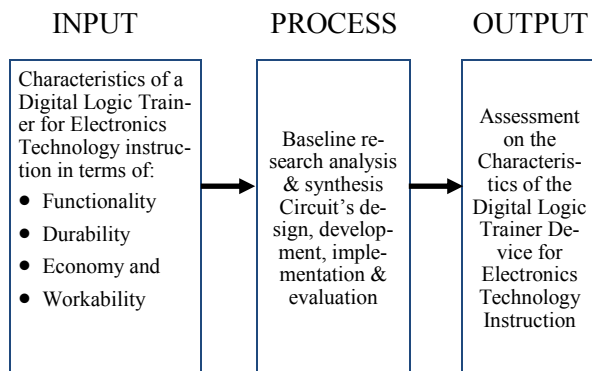
FRAMEWORK OF THE STUDY

INPUT	PROCESS	OUTPUT
Characteristics of a Digital Logic Trainer for Electronics Technology instruction in terms of: • Functionality • Durability • Economy and • Workability	Baseline research analysis & synthesis Circuit's design, development, implementation & evaluation	Assessment on the Characteristics of the Digital Logic Trainer Device for Electronics Technology Instruction

Fig. 1. Flow of the Study

RESEARCH METHODOLOGY

Research Design

Descriptive research design was utilized in this study employing the survey technique. Descriptive was used to determine the significance of the innovative digital trainer board to be used for electronics engineering instructors. Differential and correlation design will be used to ascertain the significant difference in the ratings of the students in the electronic circuit connections before and after the using the digital trainer board and the significant relationship between the ratings of respondents on the digital trainer board based on problem 2 and the ratings based on problem 3.

Research Environment

This study was conducted at the Surigao State College of Technology, Surigao City Campus.

Surigao State College of Technology has four campuses: the Del Carmen Campus, Magpayang Campus, Malimono Campus and Surigao City Campus.

Respondents

The respondents of this study were 86 Electronics students in the Bachelor of Electronics Engineering Technology course of Surigao State College of Technology, Surigao City.

Research Instrument

The instrument to be used in the study is the researcher- made questionnaire which was anchored and used on the previous related studies. The questionnaire contains pertinent questions to be checked and supplied answers by the respondents.

Data Analysis

This study used the following statistical tools in analyzing the data.

Mean and Ordinal Rank. These tools were used to measures the technology of electronics digital trainer device in problem 1 the extent the student rate the device as stated in problem 2 and the level of students rating before and after using the device in electronic circuit connections in problem 1.

Weighted mean. This is used to analyze the data pertaining to the evaluation of the significance of the develop digital logic trainer as assessed by the respondents.

Pearson r and t-test. These tools were used to determine the significant relationship between the

respondents rating of the device based on problem 2 and the ratings on the problem 3.

RESULTS AND DISCUSSIONS

Functionality

Table 1. Performance and Functionality of the Digital Trainer Device for Electronics Technology Instruction in terms of Functionality

Item No.	As a student in Electronics Engineering Technology I encountered the following characteristics:	M	R	Verbal Interpretation
1	Ease of operation.	3.21	4.5	Satisfactory
2	Provision of comfort and convenience.	3.21	4.5	Satisfactory
3	Effective use of the board.	3.42	2.5	Satisfactory
4	Measurement using analog or digital multi-tester.	3.45	1	Satisfactory
5	Safety in using the device.	3.42	2.5	Satisfactory
	Average	**3.34**		**Satisfactory**

Table 1.shows that the rating of student-respondents on digital trainer device on aspect of functionality is Satisfactory and got the mean of 3.34.

Among the five items the highest item is "measurement using analog or digital multi-tester" which obtained the mean of 3.45. Follows are two items which got the same mean of 3.42, these are; "effective use of the board", and "safety in using the device". The lowest items having the same mean of 3.21 are "ease of operation", and "provision of comfort and convenience". All items are rated satisfactory.

The result implies that aspect on functionality of the digital trainer device is high. Specifically, in the measurement using analog or digital multi-tester, effective use of the board and safety in using the device. Hence, the device is use to test the usefulness in Integrated Circuit connections, being functional and purposeful in electronic gadgets is essentially needed.

Durability

Table 2.Performance and Functionality of the Digital Trainer Device for Electronics Technology Instruction in terms of Durability

Item No.	As a student in Electronics Engineering Technology I encountered the following characteristics:	M	R	Verbal Interpretation
1	Prevent from breaking or damage.	3.24	3	Satisfactory
2	Quality of use	3.29	1	Satisfactory
3	Strong effect on the circuit connections.	3.21	4	Satisfactory
4	Long lasting use of the board.	3.18	5	Satisfactory
5	Monitoring normal load in the circuits.	3.26	2	Satisfactory
	Average	**3.24**		**Satisfactory**

It was reflected in Table 2 that student-respondents rated Satisfactory on digital trainer device for electronics technology instruction on aspect of durability, with an average mean of 3.24.

Rated highest with a mean of 3.29 is "quality of use", followed by "monitoring normal load in the circuits", and got the mean of 3.26. The lowest item is "long lasting use of the board" with a 3.18 mean. All items are rated Satisfactory including items on "prevent from breaking or damage", and "strong effect on the circuit connections", garnered the mean of 3.24 and 3.21 respectively.

Economy

Table 3. Performance and Functionality of the Digital Trainer Device for Electronics Technology Instruction in terms of Economy

Item No.	As a student in Electronics Engineering Technology I encountered the following characteristics:	M	R	Verbal Interpretation
1	Economize the cost of materials.	3.11	5	Satisfactory
2	Minimize the effort exerted and time consumed.	3.21	4	Satisfactory
3	Control wastage of materials	3.26	2	Satisfactory
4	Promote efficiency and productivity.	3.37	1	Satisfactory
5	Less expensive design.	3.24	3	Satisfactory
	Average	**3.24**		**Satisfactory**

Revealed in Table 3 the result of ratings of student-respondents on digital trainer device for electronics technology instruction on aspect of economy and obtained the average mean of 3.24 which is evaluated Satisfactory.

Of the five items the highest is "promote efficiency and productivity", got the mean of 3.37. This is followed by items "control wastage of materials", "less expensive design" and "minimize the effort exerted and time consumed", garnered the mean of 3.26, 3.24 and 3.21 respectively. The lowest item is "economize the cost of materials" with a mean of 3.11. All the items are rated Satisfactory.

Workability

Table 4. Performance and Functionality of the Digital Trainer Device for Electronics Technology Instruction in terms of Workability

Item No.	As a student in Electronics Engineering Technology I encountered the following characteristics:	M	R	Verbal Interpretation
1	Easy to perform by doing experiments.	3.16	4	Satisfactory
2	Nature of assembly work is achievable.	3.21	3	Satisfactory
3	Process involved is simple and operational.	3.37	1	Satisfactory
4	Output of the experiment can be recognized immediately.	3.11	5	Satisfactory
5	The work can be done individually.	3.24	2	Satisfactory
	Average	**3.22**		**Satisfactory**

The results showed that student-respondents rated the aspect on Workability of the digital trainer device as Satisfactory with an average mean of 3.22. The highest item is "process involved is simple and operational" got the mean of 3.37. This is followed by items; "the work can be done individually", "nature of assembly work is achievable", "easy to perform by doing experiments", garnered the mean of 3.24, 3.21 and 3.16 respectively. The lowest is "output of the experiment can be recognized immediately", with a 3.11 mean. All the items are rated Satisfactory.

Summary

Table 5. Summary on Performance and Functionality of the Digital Trainer Device for Electronics Technology Instruction

Aspect	M	R	Description
Functionality	3.34	1	Satisfactory
Durability	3.24	2.5	Satisfactory
Economy	3.24	2.5	Satisfactory
Workability	3.22	4	Satisfactory

Presented in Table 5 the summary of ratings of student-respondents of the digital trainer device on aspects of functionality, durability, economy, workability which the results indicated that the highest rated aspect is on "Functionality" with a 3.34 mean, followed by "durability", and "Economy", both of the same mean of 3.24 and lowest ranked is "Workability", got the mean of 3.22. All aspects are rated Satisfactory.

RECOMMENDATIONS

1. The Administration are requested to extend the necessary supervision and support to the electronics engineering technology instructor in doing the acquires of various tools, equipment, raw materials and other resources essential to the making of innovative digital logic trainer device.
2. The administration may provide assistance for patenting of this developed digital logic trainer for IP protection.
3. The electronics technology faculty members are encouraged to teach and demonstrate appropriately the process and latest engineering technology in developing the digital logic trainer device.
4. The electronics technology students are heartily encouraged to understand the significance of developing the digital logic trainer device toward acquisitions of the better technical skills in electronics engineering technology.
5. The future researchers are encouraged to conduct other future researchers on other problems and concern on electronics engineering technology with valuable taken from this study.

ACKNOWLEDGEMENT

REFERENCES

Arcon, Cecilia E.(2009).Electronics Phase Splitter (EPSS) for SSCT: A Utility Model.

Alvarez, Alex E. (2012). Techno-guide for a Remote Controlled Submersible camera as Fish Finder.

Enriquez, Michael Q., Fred T. Gantalao., Romel M. Lasala. (2004). Simple Electronics. Andes Mountain Printers#251.Francisco St., Malinta, Valenzuela City. 311pp

Oakes, J. (2008). Access to textbooks, instructional materials, equipment and technology: inadequacy and inequality in California Public School. UC Los Angeles: William Watch Series.

Pagarigan, Marconi S. and Sharif A. Bandi. (1986).Practical Electronics Solid State Servicing, Electrolab, 649 M & A Bldg., Quezon Blvd., Quiapo, Manila.207pp.

Pagarigan, Marconi S.(1995). Practical Electronics, Transformer rewinding and AM/FM Servicing Book 111.Electrolab,3393 Ramon Magsaysay Boulevard, Sta. Mesa, Manila,115pp.