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TABLE of CONTENTS

Leadership Styles and Multiple Intelligences as Predictors of Performance of Instructional Leaders of Selected Aeronautical Schools	8 - 13
<i>Francis Michael P. Yambao</i>	
Deciphering the Effect of Social Media to the Academic Performance of Education Students of Western Philippines University Quezon Campus	14 - 19
<i>Jergen Jel C. Labaria</i>	
Impact of Stress among Education Students of Western Philippines University Quezon Campus	20 - 26
<i>Jergen Jel C. Labaria</i>	
Language Characteristics, Errors, and Strategies: Bases for Authentic and Localized Materials in Speaking	27 - 34
<i>Jhordan Tino Cuilan, PhD</i>	
Satisfaction Level of Beneficiaries towards Educational Assistance Program of RTMNC and CBNC at Rio-Tuba, Bataraza, Palawan	35 - 42
<i>Lorilee O. Rafael, Sotico C. Santillan Jinefer F. Butu, Jergen Jel C. Labaria</i>	
Squash Instant Soup	43 - 46
<i>Maria Rellie Balota Kalacas, PhD</i>	
“Kukul-Utek”: Misconceptions and Areas of Difficulties of Senior High School Students in Basic Calculus	47 - 55
<i>Marie Andrea M. Tejada</i>	

TABLE of CONTENTS

Ang Mga Konseptwalisasyon sa Pagsulat ng mga Mag-Aaral sa Sekundarya	56 - 65
<i>Marina W. Dacaca-Acerit, PhD</i>	
Ang Mga Persepsyon sa Pagsulat at Akademikong Performans ng mga Lalake At Babaeng Mag-Aaral sa Sekundarya	66 - 74
<i>Marina W. Dacaca-Acerit, PhD</i> <i>Miriam R. Panduyos</i>	
Strengthening A Local College and Community Partnership Through Sagip-Lawa, Iwas Baha Extension Project	75 - 83
<i>Maryann H. Lanuza, Ronald A. Gonzales, PhD</i> <i>Lielanie O. Barrion, Nicasio A. Lacerna</i>	
Generating the Theory on Research Teaching: A Metasynthesis	84 - 91
<i>Reynaldo V. Moral, PhD</i>	
Herbularyo sa Kulturang Sorsoganon at Panitikan (The Herbalist in the Culture and Literature of Sorsoganon)	92 - 102
<i>Rolly Neo Llaneta</i>	
Rice Coffee Production and Acceptability	103 - 107
<i>Freddie S. Pinuela, EdD</i>	

LEADERSHIP STYLES AND MULTIPLE INTELLIGENCES AS PREDICTORS OF PERFORMANCE OF INSTRUCTIONAL LEADERS OF SELECTED AERONAUTICAL SCHOOLS

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ABSTRACT

The role of an instructional leader, being at the forefront, is a critical aspect of an educational institution. They not only need to ensure the quality of education that the learners receive, but they also manage resources, facilities, materials, solve issues and concerns, develop programs, evaluate faculty members and the list goes on. In the previous years, it has been observed that poor performance, mismatched skills and frequent changes of instructional leadership of some educational institutions have occurred. Schools have always focused on years of experience and educational background as their predictors and basis, but it is about time other aspects are considered. The purpose of this investigation is to study the leadership styles and multiple intelligences of instructional leaders and to use these variables as predictors of performance. Descriptive Quantitative method was utilized for this study. The respondents were the instructional leaders of top performing Aeronautical schools in Luzon, Philippines. A questionnaire on leadership style, multiple intelligence and performance evaluation was distributed among the respondents. The results of this study showed that majority of the instructional leaders exhibited a transformational leadership style and visual intelligence. A significant relationship between performance evaluation, leadership style and multiple intelligence also appeared on the results. The data revealed that the strongest predictors of performance are transformational leadership style and visual intelligence and that these predictors shall also be considered in the process of hiring instructional leader candidates.

Keywords: instructional leader, leadership style, multiple intelligence, performance evaluation, performance predictors

INTRODUCTION

“A leader is one who knows the way, goes the way, and shows the way”. - John C. Maxwell

In every kingdom there is a king that leads and makes the decisions. In every organization, there is a manager or an executive, and in an educational setting, they are in the form of instructional leaders. Each institution whatever field it may be, it is essential to have someone lead and guide its workforce to attain its goals and to put into fruition its mission and vision. Leaders have existed for ages, but we are now in the era where so much needs to be considered when delegating one.

The role of an instructional leader being at the forefront, is a critical aspect of an educational institution. They would need to wear many hats and put on different faces. They not only need to ensure the quality of education that the learners re-

ceive, but they also manage resources, facilities, materials, solve issues and concerns, develop programs, evaluate faculty members and the list goes on and on. With these astronomical duties and responsibilities, an educational institution now faces a challenge on not only what skills and qualifications they must consider in selecting an accurate fit for the position but also the most effective leadership style and multiple intelligences one must possess.

A leadership style is the way and approach of giving guidance, executing plans, and spurring individuals. The primary study conducted on leadership style remained very powerful as it built up the three significant Leadership styles which are authoritarian, participative and delegative (Lewin, 1939). Later on, two additional leadership styles were included, namely, transformational and transactional (Burns, 1978). Until present day,

these five are the most widely known leadership styles.

Employers are seeking leaders who are not just intellectually astute from a general intelligence standpoint, but those who possess strong emotional, executive, cultural and the so called multiple intelligences. In the course of previous decades, researches in the field of learning have prompted the disclosure of the Theory of Multiple Intelligences (MI). To put it simpler, this theory expresses that every individual has various methods for learning and various insights they use in their everyday lives. Gardner (1983) originally came up with seven distinct intelligences. These different MIs can be strengthened and nurtured or disregarded and weakened. His exploration from 1991 distinguished seven insights; in the mediating time, he has come to believe that there are eight: Linguistic intelligence (“word smart”), Logical-mathematical intelligence (“number/reasoning smart”), Spatial intelligence (“picture smart”), Bodily-Kinesthetic intelligence (“body smart”), Musical intelligence (“music smart”), Interpersonal intelligence (“people smart”), Intrapersonal intelligence (“self smart”) and Naturalist intelligence (“nature smart”). The past decades have seen a substantial increase of research in these two areas (leadership styles and multiple intelligences) but little has been done specifically involving instructional leaders and testing of its correlation with one another and with another aspect which is the performance evaluation.

The success of an institution mainly relies on the performance of its leaders and keep this in check, performance appraisal or evaluation are utilized. Performance evaluation have existed since the ancient times and is a widely discussed concept among all industries. Inside this idea, Attorney (2017) said that organizations can hardly control the behavior of their employees. The company however can control their performance of their employees. With the sensational advancements in innovation and worldwide interconnectivity, and the multifaceted nature of progress in organization and society, uncommon change in leadership has gotten fundamental. Where simply being effective at managing the change of existing organizational methods and systems was once sufficient, there is now a demand for more global, inclusive, culturally aware, emotionally resilient and resonant change leadership (Goleman, Boyatzis, and McKee, 2013).

On a report presented by Boatman and Welins (2014) for the Development Dimensions International’s Global Leadership forecast, just thir-

ty-eight percent of the global leader respondents rated that the leadership in their institution is very good or excellent. Interestingly, Philippine leaders and HR experts evaluated leadership quality in the country more positively. Fifty-eight percent of leaders and 51 percent of Human Resource experts appraised the leadership as high. While Filipino respondents' evaluations were more positive contrasted with global partners, they are nearly equivalent to those of the past reports. This demonstrates leaders' and HR experts' assessments of leadership have not improved altogether over the following years.

Indeed, the quality of leadership can make or break any type of institution and it is about time to conduct a study gearing towards the improvement of leadership styles, intelligences and proposing innovations tailored fit for the instructional leaders.

RESEARCH OBJECTIVES

This study aimed to identify the leadership style, multiple intelligence and performance evaluation of the instructional leader respondents. It also aimed to determine the relationship of performance, leadership styles and multiple intelligences and to test if these are predictors of performance.

The study sought to answer the following questions:

1. What is the leadership style of the instructional leader respondents?
2. What multiple intelligence is exhibited by the instructional leader respondents?
3. What is the performance evaluation rating of the instructional leader respondents?
4. How do the leadership styles and multiple intelligences of the instructional leader respondents correlate?
5. How does performance evaluation relate with the leadership styles and multiple intelligences?
6. What is the best performance predictor among the leadership styles and multiple intelligences of the instructional leader?

METHODOLOGY

The method utilized by the researcher is the descriptive correlation method. This was useful to identify the leadership styles, multiple intelligences and performance evaluation of the instructional

leader respondents. To acquire necessary information needed for the study, the researcher made use of three adapted questionnaires (Leadership Style Questionnaire by Donald Clark, Multiple Intelligence Questionnaire by ITC Publications and Performance Evaluation by University of Tennessee Knoxville) and modified it to make it as one questionnaire. The researcher was given permission by all the sources/owners of these questionnaires. The research instrument is in a survey form type and made use of the Likert scale technique. The respondents chose from a 4-point Likert rating scale. The verbal interpretations were 4 for Strongly Agree, 3 for Agree (A), 2 for Disagree (D) and 1 for Strongly Disagree (SD). All data were processed using Statistical Package for the Social Sciences (SPSS). Frequency and Percentage, Weighted Mean, Standard Deviation, Pearson r and Multiple Regression were used to treat the statistical data. The collected data was processed at Centro Escolar University Center for Data Analysis.

FINDINGS

Table 1. Leadership Styles of the Instructional Leader Respondents

Leadership Style	f	%
Authoritative	9	9.38
Participative	46	47.92
Delegative	14	14.58
Transformational	44	45.83
Transactional	11	11.46

*Multiple responses

Table 1 presents the frequency and percentage distribution of the leadership styles of the respondents. This shows that majority of the respondents answered participative as the instructional leaders' leadership style with a percentage of 47.92. Not very far from the top leadership style is Transformational leadership with 45.83 percent. The lowest leadership style is authoritative which has 9.38 percent. This clearly shows that almost half of the instructional leader respondents displayed a participative leadership style and the other half as Transformational leadership styles. The rest of the population had a few leaders that were showing Delegative, Transactional and Authoritative style.

Table 2. Multiple Intelligences of the Instructional Leader Respondents

MI	f	%
Interpersonal	66	68.75
Intrapersonal	9	9.38
Naturalistic	11	11.46
Kinesthetic	13	13.54
Linguistic	2	2.08
Logical	51	53.13
Visual	79	82.29
Musical	37	38.54

*Multiple responses

Table 2 presents the frequency and percentage distribution of the multiple intelligences of the instructional leader respondents. The table shows the respondents evaluated their instructional leaders as having exhibited Visual intelligence with 82.29 percent and Interpersonal Intelligence with 68.75 percent. This is followed by the Logical and Musical Intelligence with 53.13 and 38.54 percent respectively. Fifth and sixth on the ranking are the Kinesthetic with 13.54 percent and Naturalistic intelligence with 11.46 percent. The two lowest multiple intelligence on the ranking are Intrapersonal with a percentage of 9.38 percent and the least is Linguistic with 2.08 percent. This clearly shows that more than half of the instructional leader respondents exhibited visual intelligence which translates to these leaders being good at remembering images and are well aware of the surroundings.

Table 3. Performance Evaluation of the Instructional Leader Respondents

Evaluation	f	%
Excellent	48	50.00
Very Satisfactory	44	45.83
Satisfactory	4	4.17
Total	96	100.00
Mean	3.459	3.459
S.D.	.4464	.4464
V.I.	Very Satisfactory	Very Satisfactory

Table 3 presents the frequency and percentage distribution, mean, and S.D. of the performance evaluation of the instructional leader respondents. The table indicates that half or 50 percent of the population rated the performance of the instructional leader as excellent. 45.83 percent rated the leaders as very satisfactory and the remaining

4.17 percent rated satisfactory. No rating of fair was received. Although fifty percent of the population rated excellent, the mean was computed and based on the rating scale, the mean of 3.459 falls under the verbal interpretation of very satisfactory. So the considered final evaluation of the performance of the instructional leaders is very satisfactory.

Table 4. Relationship between Leadership Styles and Multiple Intelligences

		Transac-tional	Delega-tive	Authori-tative	Transfor-mational	Participa-tive
Linguis-tic	r	.326**	.387**	.235*	.490**	.425**
	V.I.	Low	Low	Low	Substantial	Substantial
	Sig	.001	.000	.021	.000	.000
Logical	r	.367**	.412**	.225*	.499**	.366**
	V.I.	Low	Substantial	Low	Substantial	Low
	Sig	.000	.000	.027	.000	.000
Visual	r	.184	.525**	-.007	.745**	.567**
	V.I.	Negligible	Substantial	Negligible	Marked	Substantial
	Sig	.072	.000	.944	.000	.000
Inter-personal	r	.253*	.537**	.145	.670**	.524**
	V.I.	Low	Substantial	Negligible	Marked	Substantial
	Sig	.013	.000	.160	.000	.000
Musical	r	.318**	.486**	.293**	.407**	.487**
	V.I.	Low	Substantial	Low	Substantial	Substantial
	Sig	.002	.000	.004	.000	.000
Natu-ralistic	r	.243*	.217*	.276**	.200	.278**
	V.I.	Low	Low	Low	Low	Low
	Sig	.017	.033	.007	.051	.006
Kines-thetic	r	.169	.413**	.109	.428**	.472**
	V.I.	Negligible	Substantial	Negligible	Substantial	Substantial
	Sig	.099	.000	.289	.000	.000
In-traperso	r	.312**	.280**	.284**	.236*	.322**
	V.I.	Low	Low	Low	Low	Low
	Sig	.002	.006	.005	.021	.001

Table 4 exhibits the data on the correlation of the leadership styles and multiple intelligences of the instructional leader respondents with the use of Pearson's r formula on correlation. As seen on the table, most of the variables showed negligible and low correlation. Intrapersonal and Naturalistic multiple intelligences had low correlation among all the leadership styles. Linguistic, Logical and Kinesthetic intelligences had mixed correlations with the Leadership style and results being negligible, substantial and low. Only two intelligences exhibited a marked correlation with a .000 p-value (very significant relationship) and these are Visual and Interpersonal Intelligences. The two intelligences showed positive marked correlation with the Transformational leadership style. This would mean that the more visual and interpersonal an instructional leader, the more transformational leader he/she is.

Table 5. Relationship between Performance Evaluation and Leadership Styles

Multiple Intelligence		Performance Evaluation
Linguistic	Pearson Correlation	.446**
	Verbal Interpretation Sig. (2-tailed)	Substantial .000
Logical	Pearson Correlation	.481**
	Verbal Interpretation Sig. (2-tailed)	Substantial .000
Visual	Pearson Correlation	.751**
	Verbal Interpretation Sig. (2-tailed)	Marked .000
Interpersonal	Pearson Correlation	.628**
	Verbal Interpretation Sig. (2-tailed)	Marked .000
Musical	Pearson Correlation	.375**
	Verbal Interpretation Sig. (2-tailed)	Negligible .000
Naturalistic	Pearson Correlation	.147
	Verbal Interpretation Sig. (2-tailed)	Negligible .154
Kinesthetic	Pearson Correlation	.390**
	Verbal Interpretation Sig. (2-tailed)	Negligible .000
Intrapersonal	Pearson Correlation	.222
	Verbal Interpretation Sig. (2-tailed)	Negligible .029

Table 6 presents the data for the relationship of the performance evaluation and the multiple intelligences of the instructional leader respondents. Half of the multiple intelligences showed negligible correlation. It reveals that Intrapersonal, Kinesthetic, Naturalistic and Musical intelligences have no influence or relationship in the performance evaluation of the respondents. Two intelligences showed substantial correlation and these are Linguistic and Logical. The remaining two intelligences resulted to a positive (direct) marked correlation, one being the Interpersonal Intelligence with a Pearson correlation of .628. The highest correlation is the Visual Intelligence with a Pearson correlation of .751. Both intelligences that were marked positively correlated also resulted to a .000 p-value (very significant). In terms of multiple intelligences, in this particular respondents, visual and interpersonal leaders get higher performance evaluation.

Table 7. Predictors of Performance Evaluation among Leadership Styles and Multiple Intelligences of the Instructional Leaders

Independent variable	Predictor/s	R Squared	p-value	Sig
Leadership Style	Transformative	.599	P = 0.000 < 0.01	VS
Multiple Intelligence	Visual	.618	P = 0.000 < 0.01	VS
	Interpersonal		P = 0.000 < 0.01	VS

Table 7 exhibits the data on the predictors of performance evaluation among leadership styles and multiple intelligences of the instructional leader respondents. This table shows that leadership styles and multiple intelligences are in fact very significant predictors of performance. Moreover, it was found that the strongest predictor of performance evaluation among the leadership styles is Transformational leadership style.

DISCUSSION

Majority of the instructional leaders in this study displays the Transformational leadership style which is one of the most widely accepted and successful leadership styles in any industry, which proves why the performance evaluation of the instructional leaders are high. Visual and Interpersonal are the intelligences exhibited by the instructional respondents. This shows that the instructional leaders are very good in building relationships and sees the bigger picture in the many scenarios and challenges. All the instructional leaders are performing their duties and responsibilities well and that their superior and subordinates are very satisfied of their performance, hence over all very satisfactory performance rating. Only two multiple intelligences are correlated with the transformational leadership style. These are Visual and Interpersonal. With this, it can be argued that two of these intelligences have an influence to the leadership styles. Transformational leadership style plus the visual and interpersonal intelligences must be given special attention since it shows the most significant correlation to performance. Leadership styles and multiple intelligences are in fact very significant predictors of performance. Moreover, the strongest predictor of performance evaluation among the leadership styles is Transformational leadership style and Visual and Interpersonal among the multiple intelligences.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. Majority of the instructional leaders in this study displayed the Transformational leadership style which is one of the most widely accepted and successful leadership styles in any industry, which proved why the perfor-

mance evaluation of the instructional leaders were high.

2. Visual and Interpersonal were the intelligences exhibited by the instructional respondents. This showed that the instructional leaders were very good in building relationships and saw the bigger picture in the many scenarios and challenges.
3. All the instructional leaders were performing their duties and responsibilities well and that their superior and subordinates were very satisfied of their performance.
4. Only two multiple intelligences were correlated with the transformational leadership style. These are Visual and Interpersonal. With this, it can be argued that two of these intelligences have an influence to the leadership styles.
5. Transformational leadership style plus the visual and interpersonal intelligences must be given special attention since it showed the most significant correlation to performance.
6. Leadership styles and multiple intelligences are in fact very significant predictors of performance. Moreover, the strongest predictor of performance evaluation among the leadership styles was Transformational leadership style and Visual and Interpersonal among the multiple intelligences.

RECOMMENDATIONS

Based on the findings and conclusions, the researcher recommends the following:

1. To the instructional leaders
 - 1.1 Based on the leadership style assessment, the items that received the lowest rating were pertaining to budgetary and material concerns, it is recommended to the instructional leaders to include or consider the faculty members when making decisions on budgetary needs and concerns including needed materials and facilities.
 - 1.2 They should continuously attend professional development especially the proposed program on leadership style and multiple intelligences or something similar, for the improvement of both their strengths and weaknesses and to keep up with current trends, but for them to perform better their duties and responsibilities which results to a better job performance.
 - 1.3 They should continue to treat the faculty with fairness and respect and strengthen

- further the support for faculty development programs as these are the items that received the highest rating for their performance assessment.
2. To Human Resources, School Owners and Administrators
 - 2.1 They should start considering not only the experience and educational background of possible instructional leader candidates, but also their leadership style and multiple intelligences as it was proven to be a new predictor of performance.
 - 2.2 Continue support to Training and Development programs for the instructional leaders.
 3. To future researchers
 - 3.1 Since the study is delimited to only Aeronautical schools, it is hereby recommended that future studies should consider other programs and educational institutions to further validate the findings of this research.
 - 3.2 They can also test the relationship of leadership styles and multiple intelligences to other variables.
 - 3.3 It is also encouraged for future researchers to study other new possible predictors of performance.
 - 3.4 This study may also be enriched by evaluating other leaders from different industries, to compare if the results will reveal the same findings.

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DECIPHERING THE EFFECT OF SOCIAL MEDIA TO THE ACADEMIC PERFORMANCE OF EDUCATION STUDENTS OF WESTERN PHILIPPINES UNIVERSITY QUEZON CAMPUS

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ABSTRACT

This study employed a correlational research design. The degree to which social media was used for learning was the independent variable. This study also gathered the average grades of the students which served as the academic performance of the students. Significant findings of the study revealed that college education students at WPU Quezon Campus are mesmerized with the power of social media, though their responses are different from one another. They use Google for online researching, read blogs and news items for them to be updated, utilized Facebook to regularly communicate with the friends, families, and classmates, they would sometimes use Viber, Skype, or other web meeting services to reach out to their friends and families. More importantly, college education students regularly use YouTube, Vimeo, or other video services to watch movies for their entertainment. However, the majority of the students attained a very satisfactory academic performance which manifests that they possess an average level of academic performance. But what is very important is to discover that the extent of the use of social media is very significantly correlated ($r = 0.226$, $p < 0.000$) to the academic performance of the college education students. This evidence indicated that the academic performance of college students is due to their use of social media. The study recommends that College of Education of WPU Quezon campus must consider teaching the BEED and BSED students by integrating in their courses the use of social media to better impact the college education students' academic and learning needs, and (2) improve the internet services of the university to better serve the college education students and be connected to the social media for their learning needs.

Keywords: academic performance, correlation, education students, social media use

INTRODUCTION

Engaging in social media activities means agreeing to have personal information collected and made available to those who wish to profit through overt and covert persuasion (McFarland, 2018). Just over half believe that it is impossible to be entirely anonymous online (Lufkin, 2017). Nevertheless, social media use continues to rise despite public concerns.

Despite negativity associated with social media, the connections it affords has made a positive impact on learning and civic involvement. Political ideologies are shared through social media, creating lively discourse and social action. For example, Mishra (2015) proposed that libraries use social media as a way to connect with patrons and facilitate discussions surrounding community

issues and learning needs. Social networking sites (SNS), such as Facebook and Twitter, have considerably influenced engagement in civic and political actions in a positive way (Gil de Zúñiga, 2012).

With the growth of social media use (Seo, et al., 2014), teenagers and elderlies can engage in participatory digital cultures (Forsman, 2018)), thus benefitting from collaborative learning, development of new skills, and better learning. Research suggests that young people are engaging in a variety of digital practices with social media. For example, Ito and colleagues (2013) present case studies of connected learning, defined as learning that is socially-embedded, interest-driven, and oriented toward educational, economic, or political opportunity. These case studies include young people engaged in an online fiction

writing community, creating and developing an online comic, and engaging in an online civil action community. Of course, not all young people participate to the same degree. Participation can be characterized as hanging out (maintaining social connections), messing around (playing with technology), and geeking out (intense, autonomous engagement) (Ito et al. 2008). However, participatory digital cultures illustrate how the lines between self-directed, intentional learning, and spontaneous, incidental, and experiential learning are blurring, certainly in informal contexts.

The educational benefits of appropriating social media into learning contexts are contested. Research on social media in education suggests that integrating social media in learning and teaching environments may yield new forms of inquiry, communication, collaboration, identity work, or have positive cognitive, social, and emotional impacts (Manzira and Tsvara, 2015). For instance, research on learning and social network sites such as FaceBook, in particular, have suggested their affordances for interaction, collaboration, information, and resource sharing (Maxman and Usluel 2010); encouraging participation and critical thinking (Heick, 2019); increased peer support and communication about course content and assessment, intercultural language learning, and their positive effects on the expression of identities and digital literacies, particularly for marginalized groups (Manca and Ranieri 2013).

On the other hand, researchers have warned against leveraging social media for learning. Kirschner and Karpinski (2010) found that time spent on Facebook negatively affected college grades. Similarly, Junco and Cotton (2013) examined how students multitask with Facebook and found that using Facebook while doing schoolwork was negatively associated with their overall grade point average. Students' use of social media in extracurricular activities was found to be distracting to learning, especially among weaker students (Andersson et al. 2014). Finally, students were less willing to appropriate social media as a formal learning tool, preferring it for course-related communication (Prescott, Wilson, and Beckett 2013) or using it largely for socializing and non-academic purposes (Selwyn 2009).

The research study explored the relationship between the extent of the use of social media and the academic success of selected education students of Western Philippines University. This is an opportunity for the researcher to see the impact of social media in the students' academic perfor-

mance which is measured by their general average.

Objectives of the Study

The research study sought to determine the effect of exposure to social media and the academic performance of selected education students of Western Philippines University Quezon Campus for the school year 2019-2020. Also, the purposes of the research study were the following: (1) To determine the average exposure to social media in terms of the number of hours per day among selected education students of Western Philippines University Quezon Campus, (2) To discover the level of academic performance as measured by grades among selected education students of Western Philippines University, and (3) To determine the significant relationship between the average exposure to social media in terms of the number of hours per day and the level of academic performance among selected education students of Western Philippines University Quezon Campus.

METHODOLOGY

The respondents of this study were 80 selected students enrolled in the education program SY 2019-2020 at Western Philippines University Quezon Campus. The study employed a correlational research design. This research design involved the determination of the association between two or more variables. A questionnaire, Social Media Addiction Scale Student Form (SMAS-SF) developed by Sahin (2018) was adopted for the research study to determine the extent of social media exposure among selected education students of Western Philippines University Quezon Campus. The locale of the study provides research convenience in gathering data from the respondents. The respondents were selected through purposive sampling where the inclusion criteria are college students enrolled in the education program for the SY 2019-2020 at the WPUQC. This study also gathered their average grades from their 1st Semester grades which served as the academic performance of the students.

Data Collection Procedure

The survey questionnaire was sent to and retrieved from the respondents with the assistance of the campus administrators and some of the faculty. The respondents were given three days to

complete the questionnaire. After this, the accomplished questionnaires were retrieved by the faculty and advisers of the selected students.

Data Analysis

The data were exported into the Statistical Package for the Social Sciences (SPSS), which was used for data manipulation and analysis. The data were checked for accuracy. Descriptive statistics were used to organize and summarize the data. Specifically, frequency and percentage distribution tables, measures of central tendency, and measures of variability were reported. To examine the relationship between the independent and dependent variables, simple and multiple correlations, as well as hierarchical multiple regression analysis was employed.

RESULTS AND DISCUSSIONS

The extent of Social Media Use among College Students. Table 1 presents the frequency and distribution of social media use among college education students. According to Ospina (2019), the use of social media has gone so high that more than two-thirds of all are internet users. Likewise, social networking websites provide tools by which people can communicate, share information, and create new relationships. With the popularity of social networking websites on the rise, our social interaction is affected in multiple ways as we adapt to our increasingly technological world. The way web users interact and talk to each other has changed and continues to change. These users now socialize through the internet and it takes away from the person socialization that has been around forever. Social networking websites have affected our social interaction by changing the way we interact face-to-face, how we receive information, and the dynamics of our social groups and friendships (Asur and Huberman, 2010).

In the table, it seems that the selected college education students at Western Philippines University Quezon Campus are also mesmerized with the power of social media, though their responses are different from one another. Statement number 4 (Collaborate with a classmate on an online document, using Google docs or something similar) is sometimes utilized by the college education students as evidenced by a frequency of 63 (78.75%) out of 80. The finding signifies that college students find social media to be an acceptable mode of learning. This is also in collaboration with their classmates probably because college students re-

quire teamwork. The present study is supported by the work of Sponcil & Gitimu (2014) that college students have a high usage of social media. Likewise, the same study also figured that social media use to affect the self-concept of college students.

Moreover, statement number 8 (Read a blog or news item about the topic you are studying), is sometimes used by the college education students as evidenced by a frequency of 56 (70%). Blogs or news items is a regularly updated website or webpage that is run by an individual or small group that is written in a conversational style (Skrba, 2020). Its purpose is to connect with people, with a certain audience. The finding denotes that college students are aware of the latest news and updates of the day. The present group of students is categorized as post-millennials of which they are characterized as technological geeks yet very energetic, ambitious, and want to change immediately.

Table 1. Social Media Use Among Education Students (n = 80)

Social Media Use	Regularly		Some-times		Never	
	f	%	f	%	f	%
Use the Facebook chat, messenger or texting to contact a friend to get help in a class assignment	35	43.75	40	50	5	6.25
Use Viber, Skype, or other web meeting services to connect with a friend or a group to work on a class assignment	7	8.75	37	46.25	36	45
Search Google to answer a question for a class-related assignment	33	41.25	42	52.5	5	6.25
Collaborate with a classmate on an online document, using Google docs or something similar.	6	7.5	63	78.75	11	13.75
Create or join a Facebook group with classmates to share homework, links, and to discuss class content	28	35	36	45	16	20
Search YouTube, Vimeo, or other video services for a video to learn about a topic you are studying.	34	42.5	43	53.75	3	3.75
Access Wikipedia to read about a topic you are studying	36	45	36	45	8	1
Read a blog or news item about the topic you are studying.	15	18.75	56	70	9	11.25
Follow course or topic-related hashtags or experts on Twitter	2	2.5	24	30	54	67.5

Post-course or topic-related content on a blog.	4	5	20	25	56	70
Store apps on my smartphone that are useful for academic learning.	51	63.75	24	30	5	6.25
Share and/or post videos on YouTube, Vimeo, or other video services related to my academic learning.	8	1	3	63.75	29	36.25

However, statement number 10 (Post-course or topic-related content on a blog) is never used by college education as evidenced by a frequency of 56 (70%). In other words, college education students have no time posting related education topics, but rather, they are more inclined to read and update themselves. Also, statement 9 (Follow course or topic-related hashtags or experts on Twitter) is never used by the education students which was evidenced by a frequency of 54 (67.5%). This implies that the college students are not into Twitter, but rather, the college education students are more interested in Facebook, where 35 (43.75%) are regularly and 40 (50%) are sometimes using them. Likewise, to communicate with friends, families, and classmates, they sometimes use (37 or 46.25%) Viber, Skype, or other web meeting services. More importantly, the college education students regularly use (33 or 41.25%) Google to conduct research and get acquainted with their subject matters in their class. Part of the college students being visually-oriented is that they regularly use (34 (42.5%) YouTube, Vimeo, or other video services to watch movies for their entertainment, while most of them (43 or 53.75%) sometimes use them.

Undoubtedly, the college education students are using social media sites. According to Acheaw & Larson (2015), most college students visit their social media sites using their phones and spend between thirty minutes to three hours per day. Interestingly, social media has exploded as a category of online discourse where people create content, share it, bookmark it, and network at a prodigious rate. Because of its ease of use, speed and reach, social media is fast changing the public discourse in society and setting trends and agenda in topics that range from the environment and politics to technology and the entertainment industry.

Academic Performance of College Students. Table 2 presents the academic performance of the selected college education students of Western Philippines University Quezon Campus. It can be gleaned from the table that the majority of the students attained a very satisfactory academic performance with a frequency of 32 (40%). This manifests that college students have an aver-

age level of academic performance. Furthermore, the highest grade is 1.00 and the lowest grade is 2.49. These findings manifest the relevance of the college of education establishing standards in students' academic performance. When maintaining a grade of 2.25, college education students exert efforts to achieve such grade requirements. Not meeting the academic grade requirement of 2.25 would mean that students will be removed in the program. Thus, when students meet the academic grade requirement, they went on to proceed with the program and continuously motivated to even exceed the standards which are good for them as well. More significantly, establishing an academic standard is an important policy to reach academic milestones for students who work tirelessly but passionately to pass their courses.

Table 2. Academic Performance of Selected College Education Students

Grades	Frequency	Percentage
Excellent (1.00 – 1.24)	3	3.75
Superior (1.25 – 1.49)	2	2.5
Very Good (1.50 – 1.74)	14	17.5
Good (1.75 – 1.99)	22	27.5
Very Satisfactory (2.00 – 2.24)	32	40
Satisfactory (2.25 – 2.49)	7	8.75

Academic performance is one very important topic among college students. It is a defining moment that encourages them to achieve even higher. Nevertheless, high academic performance is affected by many factors. Gbollie & Keamu (2017) identified motivation and teacher strategies as a factor that influences academic performance.

Significant relationships between social media use and academic performance. Table 3 highlights the relationship between social media use and academic performance of 80 college education students of Western Philippines University Quezon Campus. The extent of the use of social media is very significantly correlated ($r = 0.226$, $p < 0.000$) to the academic performance of college education students. Hence, the null hypothesis that there is no significant relationship between the use of social media and academic performance is rejected. This, therefore, implies that greater use of social media among college education students will result in better academic performance and vice versa.

Table 3. Relationship Between Social Media Use and Academic Performance

Independent Variable	Pearson Correlation	Significance	Decision
Use of Social Media	0.226**	0.000	Reject Null Hypothesis

** p < .01 level

The present study validates the research evidence of Lahiry, et al., (2019), that social networking improved academic performance. Likewise, the findings of the present study are corroborated by the research paper of Celestine & Nonyelum (2018). Moreover, Omachonu & Akanya (2019) recommend that higher education institutions (HEI) must devise ways for college education students to utilize social media for purposes of academic use only.

CONCLUSION

From the findings of the study, the study offered the following conclusions: college education students use Google for online researching, read blogs and news items for them to be updated, utilized Facebook to regularly communicate with the friends, families, and classmates, they would sometimes use Viber, Skype, or other web meeting services to reach out to their friends and families. More importantly, college education students regularly use YouTube, Vimeo, or other video services to watch movies for their entertainment. However, the majority of the students attained a very satisfactory academic performance which manifests that they possess an average level of academic performance. Finally, the extent of the use of social media is very significantly correlated to the academic performance of college education students. This evidence indicated that the academic performance of college students is due to their use of social media

RECOMMENDATIONS

From the conclusions of the study, the following recommendations are proposed: (1) the College of Education of Western Philippines University Quezon Campus must consider teaching the program by integrating with their subjects utilizing the social media for a better impact among college education students, and (2) improve the internet services of the university to better serve

the college education students, (3) continue to follow the academic standard of 2.25 to all college education students for retaining in the program, BEED and BSED, (4) continue to utilize motivation, inspiration, encouragement to all college education students to realize their dreams as a teacher, (5) provide training to faculty members of the college of education to improve their competency in online teaching and learning, (6) conduct research on the use of social media as learning strategy to other colleges of the university, and (7) conduct research to include the effect of use of social media to the health outcome of college education students.

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IMPACT OF STRESS AMONG EDUCATION STUDENTS OF WESTERN PHILIPPINES QUEZON CAMPUS

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ABSTRACT

The study sought to determine the impact of stress on the academic performance of the selected education students of Western Philippines University Quezon Campus for the School Year 2019-2020. The study utilized the descriptive correlational design. The participants of the study were selected education students enrolled in Bachelor in Elementary Education and Bachelor in Secondary Education programs at Western Philippines University School Year 2019-2020. The study employed random sampling among education students. A questionnaire was used to gather data on the level of stress experienced by the selected college students of Western Philippines University Quezon Campus. The data on academic performance which is the general average was sourced out at the Campus Registrar's Office. Significant findings of the study revealed that selected education students at Western Philippines University Quezon Campus are stressed with examination, reports, deadlines of assignments and requirements, and the class not of their interest. Family-wise, they are also stressed with financial status, serious illness or injury to family members, sickness or death of a family member, family problems, and arguments, confrontation or difficulties with parents or caregivers. Personally, they are stressed with break-up with boyfriend/girlfriend, increased arguments with parents, unable to balance school work, physical pain, and thinking about physical appearance. Moreover, students have met the academic requirement for promotion to the next level, which is a general average of 2.25. Likewise, sources of stress, family-related source of stress, personal-related source of stress, and effects of stress are all significantly related to the academic performance of the education students. From the conclusions of the study, the following recommendations are hereby offered for consideration: (1.) increase awareness of different career choices during career guidance in Senior High School; (2.) To improve the guidance and counseling services of the university and organize training as part of the students' development programs on healthy ways of coping stress; and (3.) Conduct communication skills training to parents and teachers especially on the issues of adolescent and parenting through extension program of the college.

Keywords: Academic performance, adolescent, correlation, education students, stress management

INTRODUCTION

College students are vulnerable to stress and anxiety. Every semester, every school year brings new experiences and opportunities. Nevertheless, every step of the way, college students face different forms of challenges which can result to stress. Academic pressure among college students are just part of their experience unlike in high school and senior high school, but higher education is a lot different. This is because in college, the stakes are higher, the odds are wider and the efforts to be exerted is much difficult. Among college students, the education students experience different types of stress. Theirs is different from other degree programs. Aside from their daily classroom

works, they have also research papers, term papers as well as practice teaching. As they grow older in their teen age, they not only experience education but also family, financial and love issues that seem to further increase the stress that they are feeling (Thomas, Liu and Umberson, 2017). Moreover, depression is a common health care problem, third-ranked just after cardiac and respiratory diseases as a major reason of health care disability. There is overwhelming evidence suggesting that university students are at very high risk of depression, in spite of being a socially advantaged population (Ibrahim, Kelly, Adams, & Galzebook, 2013). College education students at Western Philippines University Quezon Campus are not exempted from stress because even them

are facing a wide range of ongoing normative stressors, which can be defined as normal day to day hassles such as ongoing academic demands. College students are anxious in almost all aspects of higher education from academic testing, whether they are prepared or not prepared. The impact of this ongoing academic-related stress to student outcomes and well-being has not been comprehensively explored. Therefore, the gap can be reduced through a conduct of this study. To back-up the research study, a study showed that in individuals undertaking higher education, self-reported levels of stress are associated with poorer quality of life and well-being (Pascoe, Hetrick, and Parker, 2020). Ongoing stress on the other hand, also precipitates the development of more serious mental health issues such as anxiety and depression (Singh & Gotlib, 2014). This study explored the impact of the extent stress on the academic performance of the selected education students of Western Philippines University Quezon Campus for the school year 2019-2020. This study is beneficial for the College of Education as it highlights the relevance of research in addressing stress among college education students in the university.

Objectives of the Study

The study sought to determine the impact of stress on the academic performance of the selected education students of Western Philippines University Quezon Campus for the school year 2019-2020. Furthermore, the purposes of the research study are the following: (1) to determine the extent of perceived stress experienced by education students of Western Philippines University Quezon Campus as regards (a) sources of stress; (b) family related sources of stress; (c) personal related sources of stress; (d) ways of behaving towards stress; and (e) the effects of stress; (2) to evaluate the academic performance of the selected education students of Western Philippines University-Quezon Campus; and (3) to determine the significant relationship between the extent of stress experienced by selected education students and the academic performance of selected education students of Western Philippines University Quezon Campus.

METHODOLOGY

The study utilized the descriptive correlational design. This design was used to determine the association between two or more variables. The degree to which the extent of stress experienced

by selected education students was the independent variable. On the other hand, the dependent variable is the academic performance of the college education students which is measured by their grades. The respondents of the study were selected education students enrolled in education programs at Western Philippines University Quezon Campus. The study employed random sampling among education students. Random sampling was used to ensure that every available and qualified respondent had an equal chance of being selected and that draw lots were used as a technique. A questionnaire was adopted and was used to gather data on the level of stress experienced by the selected college students of Western Philippines University Quezon Campus. Furthermore, an informed consent was obtained before data gathering. The data on academic performance is the general average which was sourced out at the Campus Registrar's Office. Descriptive statistics and Pearson's Product-Moment Correlation Coefficient were used to analyze the data. The survey questionnaire was sent to and retrieved from the respondents with the assistance of the faculty.

RESULTS AND KEY FINDINGS

Extent of Stress among College Students.

Table 1 presents the mean results of the extent of the source of stress experience by selected college education students of Western Philippine University Quezon Campus.

Table 1. The Extent of Stress among College Education Students (n=60)

Sources of Stress	Mean	Descriptive Meaning	Rank
1. Starting a new school year	3.28	ME	12
2. There are deadlines in assignments and homework.	3.81	HE	4
3. A class is not in the area of your interest.	3.79	HE	5
4. Competing or performing in front of my classmates in doing our projects.	3.62	HE	6
5. I cannot cope with my classmates	3.48	HE	8
6. When appointed as a leader in a group work project, presentation or clubs	3.38	ME	11
7. Examination week is coming	4.23	VHE	1
8. Talking in front of class.	3.51	HE	7
9. When I am in trouble with my classmates.	4.02	HE	2
10. When my classmates notice my appearance	3.11	ME	13
11. When I confront my teachers.	3.41	HE	10
12. When I get transferred to another school.	3.92	HE	3
13. When thinking about what course I have to pursue after High School	3.42	HE	9
Composite Mean	3.56	High Extent	

LEGEND		
4.21 - 5.00	Very High Extent	VHE
3.41 - 4.20	High Extent	HE
2.61 - 3.40	Moderate Extent	ME
1.81 - 2.60	Low Extent	LE
1.00 - 1.80	Very Low Extent	VLE

In the table, it seems that the college education students at Western Philippines University Quezon Campus are stressed with examination ($x = 4.23$), trouble with classmates ($x = 4.02$), transfer to another school ($x = 3.92$), deadlines in assignments and homework ($x = 3.81$), and the class not of their interest ($x = 3.79$). The mean of the extent of sources of stress is 3.56 with a descriptive meaning of high extent.

The findings reveal that the source of stress is not unexpected because these are the typical sources of stress as all college students can be. These are nothing new that all college students are all experiencing and this would test their determination if they can continue with college or not. In fact, it is more challenging to have many sources of stress than not at all in order for them to prepare for a bigger challenge, which is after college. Reddy et al., (2016) stated that academic stress is a pervasive problem among college students in all countries and management of these with the use of yoga, biofeedback, meditation, psychotherapy is effective in reducing the stress.

Extent of family-related sources of stress. Moreover, table 2 highlights the extent of family-related source of stress among college education students. It can be gleaned from the table that financial status ($x = 4.31$), serious illness or injury to family members ($x = 4.22$), sickness or death of a family member ($x = 4.18$), family problem ($x = 4.16$), and arguments, confrontation or difficulties with parents or caregivers ($x = 4.13$) are the top-five family-related source of stress among the college education student.

Table 2. The Extent of Family-Related Sources of Stress among College Education Students (n=60)

Sources of Stress	Mean	Descriptive Meaning	Rank
1. Arguments, confrontation or difficulties with parents or caregivers.	4.13	ME	5
2. Sickness or death of a family member	4.18	HE	3
3. Change in housing situation	4.10	HE	6
4. When my family face a problem	4.16	HE	4
5. Increased argument between parents.	3.98	HE	7
6. Changing parent's financial status	4.31	ME	1
7. Serious illness or injury of family members.	4.22	VHE	2
Composite Mean	4.15	High Extent	

LEGEND		
4.21 - 5.00	Very High Extent	VHE
3.41 - 4.20	High Extent	HE
2.61 - 3.40	Moderate Extent	ME
1.81 - 2.60	Low Extent	LE
1.00 - 1.80	Very Low Extent	VLE

The findings reveal that the college education students do not only experience personal problems but also family-related source of stress. This is something that selected education students have to get over it. It is part of their growth and development and in the future, they will also become parents. Furthermore, Tired (2020), stress is a normal part of life and all students encounter stress in a variety of different situations, forms and amounts. Likewise, what causes stress for one person may seem like no big deal to someone else. The most important thing to do is to recognize, accept and manage your stress to avoid negative physical and emotional consequences. Stress that is not managed can manifest into chronic stress.

Extent of personal-related sources of stress. Table 3 on the other hand, presents the extent of personal-related sources of stress among college education students of Western Philippine University Quezon Campus. There are eight (8) sources of personal-related sources of stress

Table 3. The Extent of Personal-Related Sources of Stress among College Education Students (n=60)

Sources of Stress	Mean	Descriptive Meaning	Rank
1. When I cannot balance my school work, hobbies and family time	4.01	HE	3
2. When I am thinking about my physical appearance	3.67	HE	5
3. When I am having physical pain.	3.94	HE	4
4. When I am not having a dating relationship like friends	3.51	HE	6
5. When the pressure of expectation from myself.	3.41	HE	7
6. When I break up with my boyfriend/ girlfriend	4.34	VHE	1
7. When I experience increased argument with parents	4.19	HE	2
8. When I have trouble with my brothers or sisters.	3.23	ME	8
Composite Mean	3.79	High Extent	

LEGEND		
4.21 - 5.00	Very High Extent	VHE
3.41 - 4.20	High Extent	HE
2.61 - 3.40	Moderate Extent	ME
1.81 - 2.60	Low Extent	LE
1.00 - 1.80	Very Low Extent	VLE

From the table, it appears that break-up with boyfriend/boyfriend ($x = 4.34$), increased arguments with parents ($x = 4.19$), unable to balance school work ($x = 4.01$), physical pain ($x = 3.94$), and thinking about physical appearance ($x = 3.67$) are the top-five personal-related source of stress among the respondents. According to Pascoe et al., (2020), tertiary education settings face a wide range of ongoing normative stressors, which can

be defined as normal day to day hassles such as ongoing academic demands among college students. In addition, sources of stress include academics, feelings of loneliness, job hunting, family, life goals, social pressure, and physiology. Stress, specifically academic stress, can deplete students' levels of subjective well-being and cause lowered grades and dropped courses. Given the detrimental impact of stress on college students' academic and psychological functioning, examining predictive factors of stress is important (Karaman et al., (2019).

Extent of the ways of behaving towards stress. Table 4 presents the mean results of the ways of behaving towards stress among college education students from Western Philippines University Quezon Campus. It appears that the top-five ways of behaving towards stress among the respondents are going out with friends ($x = 4.53$), share the stress to friends and family ($x = 4.32$), watching movies ($x = 4.23$), engaging in carpentry, baking, gardening and drawing ($x = 4.17$), and engage in taking alcohol drinks ($x = 4.12$). The findings reveal that the college education students have ways to address stress by themselves.

Table 4. The Extent of the Ways of Behaving Towards Stress among College Education Students (n=60)

Sources of Stress	Mean	Descriptive Meaning	Rank
1. Thinking that stress situations are not lifelong (school, family, personal)	3.88	ME	8
2. Sleeping	3.62	HE	10
3. Watching movies	4.23	VHE	3
4. Singing and dancing	3.51	HE	12
5. Shouting and bullying	3.45	HE	13
6. Engage in sports	3.67	ME	9
7. Going out with friends	4.53	VHE	1
8. Play computer games	3.58	HE	11
9. Engaging in taking alcohol drinks	4.12	HE	5
10. Attending religious activities	3.93	ME	6
11. Engage in activities (like carpentry, baking, gardening, drawing, swimming, etc.)	4.17	HE	4
12. Share the source of my stress to my family and friends	4.32	VHE	2
13. Eating so much.	3.90	HE	7
Composite Mean	3.91	High Extent	

LEGEND

4.21 - 5.00	Very High Extent	VHE
3.41 - 4.20	High Extent	HE
2.61 - 3.40	Moderate Extent	ME
1.81 - 2.60	Low Extent	LE
1.00 - 1.80	Very Low Extent	VLE

From the findings, the college education students have ways to address them. Most students experience significant amounts of stress, and this stress can take a significant toll on health, happiness, and grades. For example, a study by the

American Psychological Association (APA) found that teens report stress levels similar to that of adults, meaning that they are experiencing significant levels of chronic stress, that they feel their levels of stress generally exceed their ability to cope effectively (Morin, 2019).

Extent of the effect of stress. Table 5 presents the mean results of the extent of stress among college students of Western Philippines University Quezon Campus. There are eleven (11) effects of stress.

Table 5. The Extent of the Effect Stress among College Education Students (n=60)

Sources of Stress	Mean	Descriptive Meaning	Rank
1. I strive to work more and achieve the best	3.41	HE	11
2. I have no sleeping disorder	3.66	HE	10
3. I have a problem to control my inter-personal conflicts	3.72	HE	9
4. I am very worried during exams	4.33	VHE	1
5. I lack concentration and attention in the class and during exam	3.77	HE	8
6. I feel irritable during class time as well as in the exam.	4.18	HE	2
7. I face difficulty in finishing my test on time	4.15	HE	3
8. I waste time to get away from my studies	3.80	HE	7
9. I have a hard time getting interested in my courses.	4.10	HR	4
10. I remember little of what I have studied	3.97	HR	5
11. I cannot sit and study for so long without the interference of the stress I faced.	3.88	HE	6
Composite Mean	3.91	High Extent	

LEGEND

4.21 - 5.00	Very High Extent	VHE
3.41 - 4.20	High Extent	HE
2.61 - 3.40	Moderate Extent	ME
1.81 - 2.60	Low Extent	LE
1.00 - 1.80	Very Low Extent	VLE

It can be seen in the table that the top-five effect of stress among college education students of WPUQC are being worried during exams ($x = 4.33$), irritable during class time ($x = 4.18$), difficulty in finishing tests (4.15), hard time getting interested in their courses, and not remember little of what they have studies (3.97). The computed composite mean was 3.88 with a descriptive meaning of "High Extent." The findings imply that the college students are affected by the different types of stress that they experienced while studying. According to Devi & Mohan (2015), for many young adults, college is the best time of life and these critical years can also be undermined by depression, anxiety and stress. Likewise, students are very likely to experience some or many stress-

ors which may test their ability to cope: adapting to a new environment, balancing a heavy work load, making new friends, becoming more independent, and dealing with myriad of other issues.

Academic performance of college education students. Academic performance is one very important topic among college students. It is a defining moment which encourages them to achieve even higher. Nevertheless, high academic performance is affected by many factors.

Table 6. Academic Performance of Selected College Education Students

Grades	Frequency	Percentage
Excellent (1.00 - 1.24)	3	3.75
Superior (1.00 - 1.24)	2	2.5
Very Good (1.00 - 1.24)	10	17.5
Good (1.00 - 1.24)	22	27.5
Very Satisfactory (1.00 - 1.24)	18	40
Satisfactory (1.00 - 1.24)	5	8.75
Total	60	100

From the table, it can be seen that all of the students have meet the academic requirement for promotion to the next level. The general average that is required to be promoted is 2.25, and all of them passed. This means that the respondents are responding to the challenge of achieving a certain level of standard.

This finding implies that college education students are exerting efforts to reach the college standard. This is crucial in order for them to be enrolled to the next level. According to Schaller & Nisbet (2020), standards ensures student accountability and that will lead to successful outcomes such as high examination ratings.

Significant relationships between extent of stress and academic performance. Table 7 highlights the relationship between extent of stress and academic performance of 60 college education students of Western Philippines University Quezon Campus.

Table 7. Relationship Between Extent of Stress and Academic Performance

Independent Variable	Pearson Correlation	Significance	Decision
Sources of Stress	0.236**	0.001	Reject Null Hypothesis
Family-Related Source of Stress	0.313**	0.000	Reject Null Hypothesis
Personal-Related Source of Stress	0.212*	0.043	Reject Null Hypothesis
Extent of Ways Behaving Towards Stress	0.019	0.345	Accept Null Hypothesis
Effect of Stress	0.438***	0.000	Reject Null Hypothesis

**p<.01level

*p<.05level

The sources of stress are very significantly correlated ($r = 0.236$, $p < 0.001$) to the academic performance of the college education students. Hence, the null hypothesis that there is no significant relationship between extent of the sources of stress and academic performance is rejected. This therefore implies that greater use of the sources among college education students will result to a better academic performance and vice versa.

In addition, family-related stress is significantly related ($r = 0.313$, $p < 0.000$) and academic performance. This implies that family-related stress affects academic performance of the students. This means that the less family stress the student experience, the higher will be the academic performance of the college education students. Personal-related source of stress is also significantly related ($r = 0.212$, $p < 0.043$) to academic performance of the students. This implies that the more personal stress experienced by the respondent results to a lower academic performance of the students

However, the extent of ways behaving towards stress is not significantly related ($r = 0.019$, $p > 0.345$). This means that regardless of the way they behave towards stress will not affect their academic performance. Finally, the effects of stress are significantly related ($r = 0.438$, $p < 0.000$) to academic performance. This implies that the more stress experienced by the respondents, will result to a low academic performance.

The present study validates the research evidence of Josiah, et al., (2018), that stress can influence improved academic performance.

CONCLUSION

From the findings of the study, the study offered the following conclusions: college education students are stressed with examination, transfer to another school, deadlines in assignments and homework and the class not their interest. Family-wise, they are also stressed with financial status, serious illness or injury to family members, sickness or death of a family member, family problems, and arguments, confrontation or difficulties with parents or caregivers. Personally, they are stressed with break-up with boyfriend/girlfriend, increased arguments with parents, unable to balance school work, physical pain, and thinking about physical appearance. To address stress, the college students go out with friends, share the stress to friends and family, they watch movies, engage in carpentry, baking, gardening and draw-

ing, and engage in taking alcohol drinks. In addition, the college education students are worried during exams, irritable during class time, has difficulty in finishing tests, they have hard time getting interests in their subjects, and not remember little of what they have studies.

Moreover, students have met the academic requirement for promotion to the next level, which is a general average of 2.25. Likewise, sources of stress, family-related source of stress, personal-related source of stress and effects of stress are all significantly related to the academic performance of the college education students.

RECOMMENDATIONS

From the conclusions of the study, the following recommendations are hereby offered for consideration:

To the University Administration, Head of Guidance and testing/ Psychometrician

1. Increase awareness of different career choices during career guidance in Senior High School by incorporating most available printed materials such as books and magazines on occupation career brochures, and leaflets in the library and encourage students to visit their guidance office to get information on different careers and what program to pursue after senior high school to strengthen career guidance to the graduating senior high school students.
2. Improve the guidance and counselling services of the university and organize training as part of the students' development programs on healthy ways of coping stress.
3. Career week can be planned in which speakers from the Department of Education can be invited to speak on their preferred field.
4. Conduct communication skills training to parents and teachers specially on the issues of adolescent and parenting through extension program of the college.
5. Organize welcoming program aside from orientation for newly transferred students.
6. Schools must provide specific suggestions to educate parents how to get involved in their children's education

To the Teachers:

1. Teachers should know the background of every student so that they will fully understand the students' source of stressors.

2. Teachers should integrate in their lessons the value of hard work and love of labor.
3. The teacher should give an ice breaker during class time so that they can relax.

To the Parents:

1. Parents should assist their children during their assignment, projects, and other school activities and help them find their interest.
2. Parents should develop open communication with their adolescent children, moreover, they should have a quality and bonding time with their family.

To students:

1. Continue to meet the academic standard of 2.25 to all college education students.
2. The student should have indulged in certain activities such as, cross stitching, cooking, dancing and joining in different organizations recognize by the university to ease their boredom and to have support group while studying.
3. Student should make a time schedule for every activity in order to have an organized study habit.
4. Students should develop a habit of studying their lessons regularly to avoid stress during examination.
5. Students should practice and develop their logical thinking abilities to face their stressors.

To the researcher:

1. The researchers result of the study can be shared to the teachers and university of Western Philippines University, so that they can plan for the future of their students.
2. Conduct research to include the effect of use of stress to the health outcome of college education students.
3. A similar study may be conducted using other variables not explored in this research.

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LANGUAGE CHARACTERISTICS, ERRORS, AND STRATEGIES: BASES FOR AUTHENTIC AND LOCALIZED MATERIALS IN SPEAKING

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ABSTRACT

Speaking is at the heart of second language learning. It is arguably the most important skill for business and government personnel working in the field, yet it appears particularly vulnerable to attrition. Despite its importance and its fragility, speaking was until recently largely ignored in schools and universities. Educators in fact have long recognized that the Filipino students' total facility in English language is sadly inadequate; this is evident in various features as syntax, vocabulary, stress, and sound system among others. This paper focused on the characteristics, errors, and strategies persistent in the oral performances of Bachelor of Secondary Education students. Said performances were audio recorded, transcribed verbatim, and analyzed repeatedly. Error analysis method specifically revealed the characteristics of language embedded, common phonological errors, and communication strategies shared serving as gateway to materials to address these. Notably, the group's spoken discourse is generally characterized by clustering, redundancy, and reduced forms of language coupled with performance variables which impact speech; transitional competence is attributed to the members' phonological mishaps as vowel reduction, vowel deviation, consonant cluster reduction, phonotactic interference, reinterpretation, and overgeneralization; and, communication strategies as restructuring and avoidance largely invest on the context of use. It is then recommended that: teachers may design communication opportunities to enhance student accuracy and fluency in the spoken discourse; language teachers may develop students' awareness on the correct employment of strategies in spoken discourses; and, authentic and localized materials and activities considering prosodic features of the target language engaging maximum participation may be forwarded.

Keywords: communication strategies, education students, language characteristics, linguistic errors, spoken discourses

INTRODUCTION

English teaching and learning have the goal of focusing students so that they are able to use English for communication and as a tool for furthering their studies (Ministry of Education, 2006). In the process, the four language skills (listening, speaking, reading, and writing) are simultaneously performed. However, learners normally do not use the language in authentic situations, thus possessing the inability to communicate appropriately and correctly. This leads to learners' lack of self-confidence and avoidance when communicating especially with native English speakers (Oradee, 2012).

English now has become a communication medium among many people. The concept then echoes the status quo of the use of English across national boundaries with speakers of different

lingua- cultural backgrounds (Ishikawa, 2016). The same is used all around the world by professionals and academics in international encounters; it is often the official language of international and multinational companies and industries; and, it is the language of the internet; as such, powerful impact is so felt (Kapo, 2011).

To the various professions, good speech is an outstanding advantage. In all kinds of professions particularly teaching, the ability to speak well is an absolute essential to success.

Considerably, the English language keeps on developing; with these developments are difficulties met by the students translated as errors. Error has nearly played a major role in assessing language proficiency. In all stages in a traditional error analysis, the attempt to explain errors, to find their source, is the most speculative. On one hand, since errors are the most obvious character-

istic of learners' language and generally considered to be the product of interim, deviant language system, they can offer important insights into the process of language acquisition (Green & Oxford, 1995).

With this, educational systems all over the world, including that of the Philippines, are after the production of good English.

In the advent of communicative language teaching, English education has been shifted to focusing on improving communicative ability. As a result, learners of English are struggling to improve and develop their English communicative skills. Having to display various errors serves as one of the adverse effects of lack of confidence in oral communication coupled with low English speaking proficiency. It is in pursuit of this endeavor that one may realize the importance of being confident and orally proficient for these skills top the line of being "globally competitive". Results may offer increased awareness on the common flaws in spoken discourses while serving as underpinning to the development and designing of materials to address these.

Conceptual Framework

The study invested on the following concepts and models in addressing the objectives posted. Adaption and modification of these by principle were done to fit the context by which the study was anchored.

Characteristics of Spoken Language

Brown (1994) stated that there are a number of features that interact to make speaking as challenging a language skill as it is. Some of these features are: clustering; redundancy; reduced forms; and, performance variables.

Recent studies on clustering underscore concepts unlike in clustering approaches that rely on lexical context (either linear or grammatical) to group words, resulting in a notion of word similarity that blurs syntactic and semantic characteristics of lexical items (Sagae & Gordon, 2009). As to redundancy, Beck (2009) expounded that this, rephrasing and elaboration included, often occurs in speech unintentionally, although may be deliberately constructed for emphasis, thus avoiding possible misinterpretation of important details.

With reference to reduced forms, Roach (2010) warned that phonologically though, when speakers talk to each other, a number of phonemes or segments are not pronounced, thus similarly accounting for contraction and elision. Meanwhile, performance variables

particularly hesitation phenomena are commonly observed to include silent pauses, filled pauses, repairs, repeats, and lengthening (Rose, 2013).

Error and Error Analysis

Errors are overt manifestations of the learner's systems arising from several possible sources: interlingual errors of interference from the native tongue, interlingual errors within the target language, the sociolinguistic context of communication, psycholinguistic or cognitive strategies, and no doubt countless affective variables (Orillos, 1998).

Clifford Prator as cited by Brown (1998) summarized these phonological systems errors as follows: Level 0: transfer; Level 1: coalescence; Level 2: underdifferentiation; Level 3: reinterpretation; Level 4: overdifferentiation; and Level 5: split. These were modified to include other phonological processes and deviations in speech.

Communication Strategies of Learners

Tarone (1981) and Chesterfield and Chesterfield offered the Classification of Communication Strategies and Second Language Learning Strategies respectively, to wit: repetition; elaboration; appeal for assistance; paraphrasing (approximation, word coinage, circumlocution- description of the characteristics or elements of the object or action instead of using the appropriate target language item or structure); borrowing (literal translation, language mix, substitution, and restructuring); mime (lexical items such as clapping of hands and the like; waiting; and, avoidance/ message abandonment).

REVIEW OF LITERATURE

Spoken language has many characteristics that are different from written language. When an utterance is produced online, the speaker does not have a lot of time to think and plan the entire utterance. On clustering, Brown (2000) expressed that speakers breakdown their speech into smaller groups of words; accordingly, phrases within clauses are easily retained for comprehension. Beck (2009) expounded that spoken language also has a good deal of redundancy; whereas, Fredriksen (2012) accounted that reduced forms of language specifically contraction are widespread features in English, especially in speech. Meanwhile, Lee and Seneff (2006) confirmed the presence of performance variables in speech attributed to

speakers abruptly stopping an utterance only to restart, involving not just corrections of identified words, but also of the associated function words.

With regard to phonological errors, Ganschow and Sparks (1993) indicated that although students have average to above average intelligences, they have difficulty primarily with the phonological (sound and sound symbols) code. Generally, spontaneous speech contains a wide variety of pronunciation reductions because in casual speech, speakers tend to utter sentences in a relaxed way with the least possible amount of articulation effort (Tseng, 2005). Meanwhile, Palasico (2011) substantiated that the common phonological errors committed by the students mostly fall under the reinterpretation category.

Finally, as to communication strategies, Bialystok and Kellerman (1987) concluded that the use of monitoring strategies should be encouraged, but they do not consider this part of teaching them: "it is one thing to encourage their use (and create the conditions in which they can be used) and quite another to actively teach communication strategies in the classroom." In light of such strategies, Postma (2000) noted that self-repairs are self-initiated corrections of one's own speech within the same speaking turn.

OBJECTIVES

This paper generally assessed the oral performances of education students towards the development of authentic and localized materials in speaking. It specifically aimed to identify the characteristics of language, phonological errors, and communication strategies reflected, shared and employed respectively by the secondary education students in their oral performances.

METHODOLOGY

The study used the descriptive research design employing error analysis method. Error analysis involves collecting samples of learner language, identifying the errors in the sample, describing these errors, classifying them according to their hypothesized causes, and evaluating their seriousness (Corder, 1981). It involved 120 Bachelor of Secondary Education (BSE) students from the various major fields. The participants were specifically tested on extemporaneous speaking. Topics were constructed based on articles and items utilized by the Toastmasters International-

Baguio. A modification to the standard mechanics for extemporaneous speaking was done- giving the students 4 minutes- 2 for preparation and the other (2 minutes) for delivery. The oral performances were audio recorded then transcribed verbatim. Guided by the models adopted and repetitive listening to the recording, error analysis identified which of the items have been commonly shared by the speakers as to characteristics of language, phonological errors, and communication strategies. Inter-rater roles were also accounted.

RESULTS

The following highlights the characteristics of spoken language commonly manifested by the participants, the phonological errors they have committed, and their employed communication strategies.

A. Characteristics of Language in Students' Spoken Discourses

1. Clustering of Language

This refers to the consistent grammatical clustering of words, or combining of phrases and clauses in sentences. The following excerpts stand for such characteristic:

1.1 ...as they help each other, encourage each other, or teach each other in order to win, they also build themselves individually... (*successful clustering of phrases in parallel structure*)

1.2 I'm so much blessed to have her. She is humble, she is loving, she is very much responsible...she is my father, my friend, and my great lover. (*clustering of ideas of the same grammatical structure*)

1.3 My mother is the one who taught me first and who is always there for me. (*balanced structure obtained with the consistent use of 'who' clauses*)

1.4 Even if you're beautiful, you're gorgeous, and you're pretty, if what's inside you is not good... (*clustering of words of the same semantic grounds*)

2. Redundancy of Language

2.1 Paraphrasing. In this form, the speaker repeats the idea by using other words. This may be observed in the following statements:

- 2.1.1 Learning occurs on the outside and not mainly on a classroom...a four-wall space. (*“classroom” was paraphrased through description being “a four-wall space”*)
- 2.1.2 If you will change your perception into a more positive or optimistic way...you will change for the better. (*synonym for “more positive” as “optimistic” was given*)
- 2.1.3 Determination is needed to overcome problems that we may face to gain success or to gain our dreams. (*association that achieving one’s dream equates to success*)
- 2.1.4 If my future husband has the edge...is handsome, is good looking, I will be confident. (*defined specific attribute to having an edge as being handsome and good-looking*)
- 2.2 Elaboration. The speaker gives more details about something that has been spoken about.
- 2.2.1 Ill health begins in the mind because what you think is what you are... [when you think that you are ill, then it will happen to your body].
- 2.2.2 ...we would survive the incoming future...as we can see right now, [technology is becoming more and more advancing].
- 2.2.3 Maturity is not about your age, [it’s not just about the number but about how your mind works].
- 2.2.4 Real wealth is never really measured by material possessions so I believe that [it is not about having millions of money or having lots of cars...lots of houses].
3. Reduced Forms of Language
- 3.1 Contraction. This refers to the shortened form of a word or phrase by omitting a letter or letters which are usually marked with an apostrophe.
- 3.1.1 For me summer is the best time because looking at the weather, it’s sunny which affects the mood of a person. (*“it is” was contracted to “it’s”*)
- 3.1.2 Without self-discipline, we can’t be able to discipline ourselves. (*“cannot” was shortened to “can’t”*)
- 3.1.3 ...instead of having leisure time, you’re being stressed and your mind is so much affected by stress. (*“you are” was reduced to “you’re”*)
- 3.1.4 Art is essential to life ‘cause without art, your life is nothing. (*“because” to “‘cause”*)
- 3.2 Elision. This is defined as the omission of one or more words from a sentence, especially when what is omitted can be understood in the context.
- 3.2.1 Communication is used in our everyday life and we use it to communicate ...people...long distance. (*Employing connectors: ... we use it to communicate with people in far/ distant areas*)
- 3.2.2 ...I am dependent on her... I always depend what I shall wear. (*Given the reference: I always depend on her in terms of what I shall wear*)
- 3.2.3 Everyone have standards of how we look the beauty of an individual. (*Given the preposition: Everyone has standards of how he/she looks ‘at’ the beauty...*)
- 3.2.4 Even if you are the intelligent person, they see the personality in you. (*Quantifying the degree of adjective: Even if you are the most intelligent person...*)
4. Performance Variables
- 4.1 Hesitation. This variable is observed when the speaker tends to pause while saying something because of uncertainty or reluctance.
- 4.1.1 ...yeah...so...the junk foods we eat, we just don’t eat it because we like it but because it’s popular right... (*the speaker verified by seeking confirmation exhibited by the use of ‘right’*)
- 4.1.2 My mother...he is the one...ay she is the one who whooo taught me first. She always...alwaaays...

- keep me living. (*corrective strategy was employed yet with lengthened words*)
- 4.1.3 So good morning, as we all know pop song is ...is quite ahm (long pause) pop songs... pop songs are the most popular music today. (*the speaker abandoned his initial point confirming his hesitation*)
- 4.1.4 Yes because without money ahm...wait lang sir...yes because...we don't have any... we don't have anything. (*comprehensibility of thought was rather compromised by the series of pauses*)
- 4.2. Backtracking. In this performance variable, the speaker backtracks or repeats his statement to clarify things or for him to have time to think.
- 4.2.1 I agree that real wealth is not measured in money...if you...if you are sick and you you you (laughter) if you are sick, and you are very very sick and you have all the money, but money is not the one who will heal you. (*backtracking for need of next words*)
- 4.2.2. You are not normal, you are not normal, you are not normal...not because you are abnormal but because you are unique as an individual. (*strategic repetition rather for emphasis*)
- 4.2.3 Anyway, cities is for people because ay cities is ay cities cities is... cities are for people... (*backtracking for grammar consideration*)
- 4.2.4. For me sir, yes because because when junk food is popular, uh... many many many of us young teens will be entertained. (*inappropriate elements of repetition*)
- 4.3 False Start. This occurs when the speaker interrupts the flow of speech to restart his utterance.
- 4.3.1 Uhm for an average person is...wait lang sir...Average person is a person who ahm...average person is a person who is able to understand. (*An average person*

is a person who is able to understand.)

- 4.3.2 Yes, what we ss what we what we see on the out ahm ...what we look does not count. (*How we look does not count.*)
- 4.3.3 Yes, I believe for my in my conviction, I believe that children live what they live with. (*In my conviction, yes, I believe that...*)
- 4.3.4 Discipline is not a dirty word, meaning ...ahm to ahm nowadays ah there is an issue about how teachers discipline the students. (*Discipline is not a dirty word...*)

Generally, the oral performances of the students described through the characteristics of oral speech indicate the interlanguage status of second language speakers of English.

Languages change in all kinds of ways (Wardaugh, 1978). He emphasized that only certain kinds of change take place. In syntax, a certain syntactic device develops, or case endings weaken, or word order patterns change.

B. Common Linguistic Errors of Students in their Spoken Discourses

1. Phonological Errors

1.1 Vowel Reduction. This refers to the centralization and weakening of a stressed vowel, such as the characteristic change of many vowels to schwa sound. Below are lists of words extracted from the oral performances of students specifically appealing to following pairs [i] – [ɪ], [u] – [ʊ], and [ow] – [ɔ] respectively:

Word	English Pronunciation	Student Pronunciation
dream	[drɪm]	[drɪm]
feeling	[fi:liŋ]	[fi:liŋ]
afternoon	[aftə'nun]	[aftə'mʊn]
food	[fu:d]	[fu:d]
control	[kənt'rɒl]	[kənt'rɒl]
goal	[gəʊl]	[gɔ:l]

1.2 Vowel Deviation. This was found along [ɔ] to [ow] shift.

Word	English Pronunciation	Student Pronunciation
all	[ɔ:l]	[ɔ:l]
because	[bi:kəz]	[bi:kowz]

1.3 Consonant Cluster Reduction. This refers to consonant weakening which may result to consonant deletion. In the following words quoted, the students deleted the final [l] sound which resulted to the production of [r] alone instead of the consonant cluster [rl].

Word	English Pronunciation	Student Pronunciation
girl	[gɜrl]	[gɜr]
world	[wɜrld]	[wɜrd]

1.4 Phonotactic Interference. This generally appeals to the norms in the native language being carried in the production of the target language. In pronouncing words like “strengthen” and “store”, students add the sound [ɪ] to the initial [s] sound. That is when a word in English starts with the consonant cluster: ‘st’ in start; ‘sp’ in special; and ‘sk’ in skill, they add a vowel sound [ɪ] to [s].

Word	English Pronunciation	Student Pronunciation
school	[skul]	[ɪskul]
small	[smɔl]	[ɪsmɔl]

1.5 Reinterpretation. An item that exists in the native language is given a new shape or distribution in the target language. In light of the study, reinterpretation of the features of phonological production was observed. The errors commonly committed by the students in this category include [ɛ] becoming [ɪ] and vice versa.

1.5.1 [ɛ] to [ɪ]

Word	English Pronunciation	Student Pronunciation
anyway	[ɛnɪweɪ]	[ɪnɪweɪ]
intelligence	[ɪntelɪdʒənt]	[ɪntɪlɪdʒənt]

1.5.2 [ɪ] to [ɛ]

Word	English Pronunciation	Student Pronunciation
children	[tʃɪldrən]	[tʃɛldrən]
influence	[ɪnflʊwəns]	[ɛnflʊwəns]

1.6 Overgeneralization. Here, a new item is entirely, bearing little if any similarity to the native language item, associated. From the speeches, two sounds bore a little similarity to the native language items of the students;

to wit: [ð] as in there [ðɜr]; and, [θ] as in thin [θɪn].

1.6.1 [ð] to [d]

Word	English Pronunciation	Student Pronunciation
other	[ɔðər]	[ɔdər]
weather	[weðər]	[wedər]

1.6.2 [θ] to [t]

Word	English Pronunciation	Student Pronunciation
thinking	[θɪŋkɪŋ]	[tɪŋkɪŋ]
thought	[θɔt]	[tɔt]

The above, among others, account for the various phonemic representations in the target language which are not common or not found in the participants’ native language.

The sound system of English is rather complex; it takes one to exert an amount of effort to understand these basic features and to have these applied in contexts familiar to them.

C. Communication Strategies in Students’ Spoken Discourses

1. Waiting and Restructuring. In this strategy, as the speaker employs a waiting strategy, he/she develops an alternative construction plan.

1.1 Lying becomes a good idea when it’s a white lie so everybody is familiar with the white lie right...it’s something...it it’s some...it’s... you lie because it’s needed.

In the speaker’s attempt to expound on what a white lie is, he began to offer a definition associating such to ‘something’ which was not furthered anyway. Instead, he related this to a broad instance which goes “it’s...you lie because it’s needed”.

1.2 Conservation is survival ‘cause if you learn to conserve, you ahm if you learn to conserve ah you... conservation is survival...yes, if you learn to earn money, you will survive in the future.

The speaker changed the verb phrase “learn to conserve” into “learn to earn” after having incurred series of pauses in the use of the previous.

1. Avoidance and Message Abandonment

- 2.1 Plants are living things okay
ahm an example would be if you...oh
my God...

Apart from the series of silent pauses, the speaker failed to expound on his arguments; rather, he concluded with an interjection “oh my God” indicating his lack of words to say and totally abandoned his speech.

- 2.2 An average person also knows how to ahm mingle mingle with the people on the lower in the people who are lower than him and those who are above him and then he...ano ba nan...ano...yun lang...

The sentence does not just pose message abandonment but code mixing as well. The speaker issued a tag question supposedly to aid her with some time to think, but failed and abandoned her message.

In the phase of executing a plan, learners may encounter difficulties in recalling specific language items and may adopt achievement strategies to get at a problematic item. Faerch and Kasper (1983) identified the following retrieval strategies: waiting for the term to appear, appealing to formal similarity, retrieval via semantic field, and searching via other languages.

Generally, the results present the language characteristics, phonological errors of various nature, and communication strategies shared by the respondents in their spoken discourses. With the above data, awareness may be raised as appropriate and relevant materials may be developed/ designed.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. The students’ spoken discourses are generally characterized by clustering, redundancy, and reduced forms of language coupled with performance variables which impact speech.
2. Interference between the students’ first or native language (L1) and the target language’s (L2) phonological system contributed to their shared phonological errors.
3. Communication strategies largely account for self- correction/ monitoring but may turn a disadvantage depending on the context of use.

RECOMMENDATIONS

It is recommended that teachers design communication opportunities to enhance student accuracy and fluency in the spoken discourse; language teachers may develop students’ awareness on the correct employment of strategies in spoken discourses; and, authentic and localized materials and activities considering prosodic features of the target language engaging maximum participation may be forwarded.

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SATISFACTION LEVEL OF BENEFICIARIES TOWARDS EDUCATIONAL ASSISTANCE PROGRAM OF RTMNC AND CBNC AT RIO-TUBA, BATARAZA, PALAWAN

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ABSTRACT

This study was conducted to determine the recipient's level of satisfaction towards the social services provided by Rio Tuba Nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) to the target barangay beneficiaries, determine the socio-demographic and economic status of the respondents and their level of satisfaction towards educational assistance using descriptive research study. The study was conducted among eleven (11) partner barangays of Rio Tuba Nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) wherein a total of 363 respondents were interviewed using survey method. Purposive sampling was employed in the study. The response of the respondents serves as the basis of discussion. Result reveals that respondents were Moderately Satisfied on the educational assistance provided by Rio Tuba Nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) in terms of educational assistance. It is recommended that the Rio Tuba Nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) should maintain a collaborative effort with the target barangay beneficiaries for a strong relationship and successful program implementation. Meanwhile, the target beneficiaries should give importance to the programs and projects being implemented by the companies. Furthermore, Local Government Unit should continuously assist the companies in the delivery of programs and projects particularly on community consultation regarding the priority needs of the people. Lastly, community should be concerned to the programs and projects being implemented by the concerned agencies.

Keywords: beneficiary, coral bay nickel corporation, educational services, programs, rio tuba nickel, mining corporation and satisfaction level,

INTRODUCTION

Poverty means something different in different countries, regions and societies in the world depending on their way of concept. Most commonly, people is considered poor or living beneath the poverty line if he earns or consume less than the amount considered to meet minimum amount of levels of nutrition, education, health needs and other basic services. This common scenario usually resulted to low standard of living that becomes the face of one society to the fact that it leaves a bold impression to the world.

Smith (2011) pointed out that "the concept of corporate social responsibility (CSR) has been advocated for decades and is commonly employed by corporations globally; agreement on how CSR should be defined and implemented remains a contentious debate amongst academia, businesses and society. This gap is problematic for corporations because they are increasingly being required

to align with societal norms while generating financial returns. In order to remedy this problem, the following definition is presented: corporate social responsibility is a business system that enables the production and distribution of wealth for the betterment of its stakeholders through the implementation and integration of ethical systems and sustainable management practices".

According to Bhardwaj (2016) education is an essential human virtue, a necessity of society, a basis of good life and a sign of freedom. It is a vehicle of knowledge, self-preservation, and success. It does not give only a platform of to succeed but also the knowledge of social conduct, strength, character and self-respect.

He further stressed that the greatest gift an education could give is knowledge of unconditional love and a set values. These values include the difference between right and wrong, a belief in God, the importance of hard work and self-respect. Education is a continuous learning experience.

rience, learning from people, learning from success and failures, learning from leaders and followers and then growing up to a person we are meant to be.

Objectives of the Study

The Rio Tuba Nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) funded and provides social services assistance to the target barangays in the locality in terms educational assistance. In view thereof, the general objective of this study is to determine the satisfaction level of the recipients on the educational assistance of the companies, specifically, it aims to: (1) determine the socio-demographic and economic characteristics of the respondents in terms of: age; sex; civil status; number of children; educational attainment; religion; monthly income; source of income and (2) find out level of satisfaction of the respondents towards educational programs of the companies.

Review of Literatures

As stated in RA 7942 known as Mining Act of 1995, Chapter X Section 57 states that a contractor shall assist in the development of its mining community, the promotion of the general welfare of its inhabitants, and the development of science and mining technology.

Corporate social responsibility (CSR) is in the company's long term strategic interest, whether due to explicit stakeholders pressure, implicit benefits from particular stakeholder groups, creation of a stronger social fabric which to run a business and other impacts. It could reduce risks to the firm of negative impacts to reputation from other quadrants of the firms' activities, legal liabilities of diminished stock value from negative publicity. CSR reflects corporations' social contract-based obligation to "offer or give something back" to the community in which it does business (Hartman et.al, 2007).

According to Manual Operation of Social Development Management Programs (SDMP) released by Mines and Geosciences Bureau (2018) that programs, projects, activities should be geared towards providing educational opportunities to members of the community, including scholarships from primary to tertiary/ vocational education, provision of apprenticeship programs, construction, repair and improvement of school buildings and related facilities, provision of school furniture and fixtures and subsidy to teachers and among others.

Every business organizations' business depends on the satisfaction of the customers. One of the important aspects to ensure the attention of the customers' satisfaction is to provide the best and the most favourable products and services (Khadka and Maharjan, 2017)

Methodology

The study utilized descriptive design using survey method and interview schedule as a study guide. All barangay officials and tribal chieftains of the respective target beneficiary barangays were included in the study. On the other hand, the research also used purposive sampling in the selection of the direct recipients of the program in convenient sampling. Results of the study was analyzed through descriptive measures such as frequency counts, means and percentages to describe the extent and magnitude of the respondents' assessment. To interpret the respondents' perception on social services provided by the companies towards their respective barangay, a Likert's five (5) point rating scale was used in the data analysis in describing the respondents satisfaction and perception level towards the social services provided by the companies as criterion variables for its statistical validity and assessment. The area was confined to partner barangays of the companies particularly Culandanum, Igang-Igang, Iwahig, Ocayan, Rio Tuba, Sandoval, Sapa, Sarong, Sumbiling, Taratak and Tarusan. The study was conducted from June 2016 to March 2017.

RESULTS AND DISCUSSIONS

Socio-Demographic and Economic Characteristics of the Respondents

Table 1a presents socio-demographic and economic characteristics of the LGU Officials as to their age; the youngest of the respondents is 27 years old while the oldest is 71 years old. The sex distribution shows that majority (79.55%) are males; while only 18 (20.35%) of them are females.

With regards to the civil status, majority (84.09%) were married; eight (9.09%) were single; five (5.68%) were separated; and only one (1.14%) was widower. The number of children of LGU Officials reveals that majority (78.41%) had children ranging from 0-4 per family; 17 (19.32%) had 5-8 children; while only two (2.97%) had children ranging from 9-12 per family. The number of children of respondents ranged from 0-12 with a mean of 3 children.

On the ethnicity of the respondents, 34 (38.64%) were Muslim; 20 (22.73%) were Palaw'an; 13 (14.77%) were Ilonggo; seven (7.95%) were Ilocano; five (5.68%) were Cebuano; four (4.55%) were Antiqueño; two (2.27%) were Waray; while one (1.14%) each were Bicolano, Cagayanen and Cuyuno. As to their educational attainment, 28 (31.82%) of the LGU Officials were high school graduate; 26 (29.55%) were high school level; 13 (14.77%) were college level; 11 (12.50%) were college graduate; both four (4.55%) were vocational graduate and elementary graduate respectively; while only two (2.27%) were elementary level.

With regards to their religion, 39 (44.32%) of the LGU Officials were catholic; 33 (37.50%) were Islam; nine (10.23%) were Assemblies of God; four (4.55%) belongs to Alliance religion; two (2.27%) were Iglesia ni Cristo; and only one (1.14%) is Seventh Day Adventist. Their monthly income shows that majority (75%) of the LGU Officials had an income ranging from Php10,000.00 and above per month; while 22 (25%) of them had an income of below Php10,000.00 per month. The income of LGU Officials ranged from Php5,000.00 to Php50,400.00 with a mean of Php 9, 140.91. Further shows that farming was the source of income as reported by 58 (65.90%) of the LGU Officials; 19 (21.59%) answered that source of their income was derived from business; six (6.83%) answered that their source of income was derived from fishing; four (4.54%) answered that income were derived from their salary as company employee; while only one (1.14%) reported that his source of income is derived from honorarium as a Local Government Official. As to the honoraria received as LGU Officials, majority (89.77%) received an amount of Php10,000.00 and above; while only nine (10.23%) of them received an amount of Php10,000.00 and below.

Table 1a. Socio-demographic and economic characteristics of LGU Officials

Characteristics	(n=88)	%
Age		
63-71	2	2.27
54-62	15	17.05
45-55	31	35.23
36-44	27	30.68
27-35	13	14.77
Range=27-71		
Mean = 45.32		
Sex		
Male	70	79.55
Female	18	20.45

Civil Status		
Single	8	9.09
Married	74	84.09
Separated	5	5.68
Widower	1	1.14
Number of Children		
9-12	2	2.27
5-8	17	19.32
0-4	69	78.41
Range= 0-12		
Mean = 3 children		
Ethnic Affiliation		
Waray	2	2.27
Muslim	34	38.64
Bicolano	1	1.14
Cagayanen	1	1.14
Cuyuno	1	1.14
Ilonggo	13	14.77
Cebuano	5	5.68
Palaw'an	20	22.73
Ilocano	7	7.95
Educational Attainment		
Vocational Graduate	4	4.55
College Graduate	11	12.50
College Level	13	14.77
High School Graduate	28	31.82
High School Level	26	29.35
Elementary Graduate	4	4.55
Elementary Level	2	2.27
Religion		
Iglesia ni Cristo	2	2.27
Alliance	4	10.23
Assemblies of God	9	10.23
Seventh Day Adventist	1	1.14
Catholic	38	43.18
Income		
Php10,000.00 and above	66	75.00
Below Php10,000.00	22	25.00
Range=Php4,000.00-Php50,400.00		
Mean = Php9,140.91		
Source of Income		
Government Employee	1	1.14
Company Employee	4	4.54
Fishing	6	6.82
Business	19	21.59
Farming	58	65.90
Honorarium		
Php10,000.00 and above	9	10.23
Below Php10,000.00	79	89.77
Range= Php3,500.00-18,000.00		
Mean = Php9,509.09		

Table 1b presents socio-demographic and economic characteristics of the Tribal Chieftain in terms of their age that range from 43-63 years old with a mean of 63 years old. Majority (56.52%) of the tribal chieftains were 50-56 years old; six (26.09%) belong to the age bracket of 43-49 years; while four (17.39%) falls under the age bracket range from 57-63 years old, all (100%) are males; and married.

On the other hand, the number of children of the tribal chieftain was range from one to nine with a mean of four children. Majority (73.91%) had a number of children ranging from 1- 5 per

family; while six (26.09%) had children ranging from 6-9. As to Ethnic Affiliation, majority (95.65%) of the tribal chieftains were Palaw'an; while only one (4.35%) is Muslim.

With regards to educational attainment, nine (39.13%) were High School Level; six (26.09%) were Elementary Graduate; five (21.74%) were High School Graduate; and only three (4.35%) of them were Elementary Level.

The tribal chieftains belong to the different sect or religion. Majority (52.17%) of them were catholic; both three (13.04%) were Alliance and Assemblies of God respectively; two (8.70%) each were Islam and no religion; and only one (4.35%) was Seventh Day Adventist.

As to their monthly income, majority (73.91%) reported that they earned a monthly income ranging from PhP3,000.00-PhP5,999.00; four (17.39%) earned a monthly income ranging from PhP6,000.00-PhP8,999.00; while only two (8.70%) reported that they earned a monthly income of PhP9,000.00-PhP11,999.00 per month with farming as the source of income as affirmed by majority (73.91%) of the respondents; four (17.39%) derived their income from driving; while only two (8.70%) of them were company employee.

In terms of their honorarium, the tribal chieftain received an amount ranging from PhP4,000.00-PhP11,999.00 with a mean of PhP5,978.26. Majority (60.86%) received an amount ranging from PhP4,000.00-PhP5,999.00; six (26.09%) has an honorarium received ranging from PhP8,000.00-PhP9,999.00; two (8.70%) has an amount of honorarium received that range from PhP6,000.00-PhP7,999.00; while only one (4.35%) of them has an of honorarium received that range from PhP10,000.00 PhP11,999.00 per month. The amount honorarium received by the tribal chieftains was PhP5,978.26.

Table 1b. Socio-demographic and economic characteristics of the tribal chieftains

Characteristics	(n=23)	%
Age		
57-63	4	17.39
50-56	13	56.32
35-49	6	26.09
Range= 43-63		
Mean = 53		
Sex		
Male	23	100.00
Civil Status		
Married	23	100.00
Number of Children		
6-9	6	26.09
1-5	17	73.91

Range= 1-9		
Mean = 4 children		
Civil Status		
Married	23	100.00
Number of Children		
6-9	6	26.09
1-5	17	73.91
Range= 1-9		
Mean = 4 children		
Ethnic Affiliation		
Muslim	1	4.35
Palaw'an	22	95.65
Educational Attainment		
High School Graduate	5	21.74
High School Level	9	39.13
Elementary Graduate	6	26.09
Elementary Level	3	4.35
Religion		
Alliance	3	13.04
Assemblies of God	3	13.04
Seventh Day Adventist	1	4.35
Catholic	12	52.17
Islam	2	8.70
No Religion	2	8.70
Monthly Income		
PhP9,000.00-PhP11,999.00	2	8.70
PhP6,000.00-PhP8,999.00	4	17.39
Php3,000.00-PhP5,999.00	17	73.91
Range= PhP3,000.00-PhP11,999.00		
Mean = Php4,913.04		
Source of Income		
Company Employee	2	8.70
Farming	17	73.91
Driving	4	17.39
Honorarium		
PhP10,000.00-PhP11,999.00	1	4.35
PhP8,000.00-PhP9,999.00	6	26.09
Php6,000.00-PhP7,999.00	2	8.70
Php4,000.00-PhP5,999.00	14	60.86
Range=PhP4,000.00-PhP11,999.00		
Mean = Php5,978.26		

As presented in Table 1c, the age of the direct recipients range from 20-74 years old with a mean of 41.03. 67 (26.59%) each belong to the age bracket of 20-30 years old and 42-52 years old; 64 (25.40%) fall under the age bracket of 31-41 years old; 46 (18.25%) were in the age bracket of 53-63 years old; while only eight (3.17%) belong to the age bracket of 64-74 years old.

As to sex distribution, majority (67.46%) are females; and only 80 (31.75%) are males.

With regards to civil status, majority (74.60%) are married; 34 (13.49%) were single; 19 (7.54%) were separated; while 11 (4.37%) were widow/er. Majority (59.92%) of the direct recipients had a number of children ranging from 0-3 children per family; 87 (34.52%) had children ranging from 4-6 children per family; and 14 (5.56%) of them had 7-10 children per family. The number of children of the direct recipients range from 0-10 with a mean of 3 children. The ethnicity of the respondents reveal that majority

(54.76%) were Palaw'an; 36 (14.29%) were Muslim; 24 (9.52%) were Ilonggo; 14 (5.56%) were Antiqueño; 13 (5.16%) were Cuyuno; nine (3.57%) were Cebuano; seven (2.78%) were Ilocano; five (1.98%) were Tagbanua; two (0.79%) each were Bicolano and Igorot; and both one (0.40%) were Cagayanen and Waray respectively. Further, 69 (27.38%) of the direct recipients were high school level; 58 (23.02%) were high school graduate; 39 (15.48%) were elementary graduate; 36 (14.29%) were college graduate; 25 (9.92%) were elementary level; 12 (4.76%) were college graduate; seven (2.78%) has no formal schooling; and six (2.38%) graduated their vocational courses. As to their religion, 91 (36.11%) were Catholic; 51 (20.23%) were Assemblies of God; 50 (19.84%) were Islam; 13 (5.15%) were Seventh Day Adventist; 12 (4.78%) were Alliance; nine (3.58%) were Iglesia ni Cristo; both eight (3.17%) were Baptist and Methodist respectively; seven (2.78%) were Door of Faith; and only three (1.19%) of them did not belong to any religion.

The monthly income of the direct recipients ranges from Php3,500.00- Php28,200.00 with a mean of Php6,259.52. Majority (70.24%) had an income bracket of below Php7,000.00; 70 (27.78%) had an income bracket of Php7,000.00-Php14,999.00; while only five (1.98) had an income bracket of Php15,000.00 and above wherein 79 (31.35%) of the respondents reported that

their income was from farming; 34 (13.49%) had their source as barangay employee; 33 (13.10%) each had their source of income from fishing and as company employee; 19 (7.54%) acquire their source of income from business; 18 (7.14%) acquire their of income from their salary as construction laborer; 14 (5.56%) get their source of income from working in palm production companies; 11 (4.37) reported that their source of income are mainly derived from their occupation as driver; five (1.98%) were GK workers; four (1.59%) acquire their income from carpentry; and only two (0.79%) of the direct recipients acquire their source of income in teaching in the Alternative Learning System.

Table 1c. Socio-demographic and economic characteristics of the direct recipients.

Characteristics	(n=252)	%
Age		
64-74	8	3.17
53-63	46	18.25
42-52	67	26.59
31-41	64	25.40
20-30	67	26.59

Range= 20-74		
Mean = 41.03		
Sex		
Male	82	32.54
Female	170	67.46
Civil Status		
Single	34	13.49
Married	188	74.60
Separated	19	7.54
Widow/er	11	4.37
Number of Children		
7-10	14	5.56
4-6	87	34.52
0-3	151	59.92
Range= 0-12		
Mean = 3 children		
Ethnic Affiliation		
Waray	1	0.40
Muslim	36	14.29
Bicolano	2	0.79
Cagayanen	1	1.14
Cuyuno	1	0.40
Ilonggo	24	9.52
Cebuano	9	3.57
Palaw'an	138	54.76
Antiqueño	14	5.56
Ilocano	7	2.78
Educational Attainment		
Vocational Graduate	6	2.38
College Graduate	12	4.76
College Level	36	14.29
High School Graduate	58	23.02
High School Level	69	27.38
Elementary Graduate	39	14.48
Elementary Level	25	9.92
No Formal Schooling	7	2.78
Religion		
Iglesia ni Cristo	9	3.58
Alliance	12	4.78
Assemblies of God	51	20.23
Seventh Day Adventist	13	5.15
Catholic	91	36.11
Islam	50	19.84
Baptist	8	3.17
Methodist	8	3.17
Door of Faith	7	5.15
No Religion	3	1.17
Monthly Income		
Php15,000.00 and above	5	1.98
Php7,000.00-Php14,999.00	70	27.78
Below Php7,000.00	177	70.24
Range=Php3,000.00-Php28,200.00		
Mean = Php6,259.52		
Source of Income		
Construction Worker	18	7.14
Company Employee	33	13.10
Fishing	33	13.10
Business	19	7.54
Farming	79	31.35
Palm Production Laborer	14	5.56
Barangay Employee	34	13.49
ALS Teacher	2	0.79
Carpentry	4	1.59
GK Worker	5	1.98
Driving	11	4.37

Level of Satisfaction of the Respondents towards educational programs provided by RTNMC and CBNC

As presented in Table 2, that respondents had their own level of satisfaction towards the educational assistance provided by the company. It was shown that, an overall rating of (3.42) was given by the LGU Officials. It was observed that the existence of educational assistance programs obtain a mean rating of (4.16) which is describe as followed by prioritization of educational of assistance programs (4.09); and a mean rating of (3.70) was revealed by the respondents in the provision of scholarship programs to the benefactor; and the establishment of school facility has a mean rating of (3.51). Further, populations of scholars in the barangay are appreciated thus, it obtain a mean rating of (3.48) which was describe as *Moderately Satisfied*; The moderate satisfaction of the LGU Officials towards the distribution of school supplies among the recipients obtain a mean rating of (3.43) followed by establishment of ILS Learning System; measures on the resolution and conflict among the scholars and organization (3.36); while a mean rating of (3.33) was both obtain by the employment of additional PARA Teachers and budgetary assistance for PARA Teachers' salary. Meanwhile, the provision of salary for ILS teacher got a mean rating of (3.28) which also describe as *Moderately Satisfied*; distribution of school materials such as chairs, boards and other needs by the school obtain a mean rating of (3.24) followed by construction of comfort rooms gave a mean rating of (3.22); construction of Day Care Center (2.86); and provision of library materials (2.84). Thus level of satisfaction of LGU Officials reveal trhat the existence of educational assistance programs (4.16) obtain a highest rating; while provision of library materials (2.84) got the least mean rating.

On the other hand, the Tribal Chieftains' level of satisfaction towards the educational assistance revealed an overall mean rating of (3.63) with a descriptive rating of *Very Satisfied*. Result reveals that the following got the highest mean rating such as establishment of ILS Learning System (4.35); existence of educational assistance programs (4.26); followed by the provision of salary for ILS Teachers (3.83); both provision of scholarship programs to the target benefactor and establishment of Day Care Center obtain a mean rating of (3.78); distribution of school materials such chairs, tables and others (3.65); establishment of school facility (3.43); prioritization of educational assistance programs (3.30); while

both programs budgetary assistance for PARA Teachers' salary and employment of additional PARA teachers' obtain a mean rating of (3.26); measures on the resolution and conflict among the scholars and organization (3.22); construction of comfort rooms (3.13); and provision of library materials and supplies (2.87).

However, it was evident that the Tribal chieftains are also *Extremely Satisfied* (4.61) for having the populations of scholars in their barangay; while provision of library materials and supplies (2.87) got the lowest mean rating.

As to the direct recipients' perceived level of satisfaction, it obtained a mean rating of (3.36) which is describe as *Moderately Satisfied* in most educational assistance programs provided by the company. Yet, there are educational assistance programs that has been observe as *Very Satisfied* such as; existence of educational assistance programs (4.20); prioritization of educational assistance programs (3.80) and provision of scholarship programs to the target benefactor (3.75).

The establishment of ILS Learning system was perceived as *Moderately Satisfied* among the direct recipients in the locality that obtain a mean rating of (3.48) followed by Measures on the resolution and conflict among the scholars and organization (3.44); establishment of school facility (3.41); distribution of school materials and supplies such as chairs, tables and others and construction of comfort rooms (3.37); employment of additional PARA Teachers (3.28); while the construction of Day Care Center and distribution of school supplies among the recipients both obtain a mean rating of (3.27); the budgetary assistance for PARA Teachers' salary obtained a mean rating of (3.21) and population of scholars in the barangay (3.12); however, provision of library materials and supplies obtain only a mean rating of (2.15) which translate to a *Slightly Satisfied* rating.

It was observed that the existence of educational assistance programs got the highest mean rating of (4.20) with a descriptive rating of *Very Satisfied*; while provision of library materials and supplies obtained only a mean rating of (2.15) which describes as *Slightly Satisfied* by the respondents.

This only implies that the tribal chieftains and direct recipients were a little bit satisfied on the educational assistance programs extended to them. On the other hand, the expectations of the LGU officials in educational assistance programs were being met by the companies.

Table 2. Level of Satisfaction of the Respondents towards educational programs provided by RTNMC and CBNC

Aspects	LGU Officials (f= 88)		Tribal Chief- tains (f=23)		Direct Chief- tains (f=252)	
	MR	DR	MR	DR	MR	DR
<i>Educational Assistance</i>						
Existence of educational assistance programs	4.16	VS	4.26	VS	4.20	VS
Prioritization of educational assistance programs	4.09	VS	3.30	MS	3.80	VS
Provision of scholarship program to the target benefactor	3.70	VS	3.78	VS	3.75	VS
Measures on the resolution and conflict among the scholars and organization	3.36	MS	3.22	MS	3.44	MS
Prioritization of educational assistance programs	4.09	VS	3.30	MS	3.80	VS
Measures on the resolution and conflict among the scholars and organization	3.36	MS	3.22	MS	3.44	MS
Establishment of school facility	3.51	VS	3.43	MS	3.41	MS
Employment of Additional PARA Teacher	3.33	MS	3.26	MS	3.28	MS
Budgetary assistance for PARA Teachers' salary	3.33	MS	3.26	MS	3.21	MS
Distribution of school supplies among the recipients	3.43	MS	3.70	VS	3.27	MS
Distribution of school materials such as chairs and others	3.24	MS	3.65	VS	3.37	MS
Construction of comfort rooms	3.22	MS	3.13	MS	3.37	MS
Population of scholars in the barangay	3.48	MS	4.61	ES	3.12	MS
Construction of Day Care Center in the community	2.86	MS	3.78	VS	3.27	MS
Provision of Library materials and supplies	2.84	MS	2.87	MS	2.15	MS
Establishment of ILS Learning System	3.42	MS	4.35	VS	3.42	MS
Provision of salary for ILS Teachers	3.28	MS	3.83	MS	3.28	MS
Grand Mean	3.63	VS	3.42	MS	3.36	MS

Legend:
 4.50 - 5.00 - Extremely Satisfied
 3.50 - 4.49 - Very Satisfied
 2.50 - 3.49 - Moderately Satisfied
 1.50 - 2.49 - Slightly Satisfied
 1.00 - 1.49 - Not at all Satisfied

CONCLUSIONS

Based on the significant findings of the study, the following conclusions were drawn: most of the respondents earned a low income capacity that could sustain all their needs; the Rio Tuba nickel Mining Corporation (RTNMC) and Coral Bay Nickel Corporation (CBNC) programs focuses

most on the provision of tangible support to the beneficiaries rather than providing intangible things that would help benefactors to uplift their living.

RECOMMENDATIONS

After a comprehensive assessment of the findings and conclusion of the study poor status of life specifically the target beneficiaries whose living and existence rely mainly on a little wage they earned and spend much for the needs, thus needed an assistance and support, the researchers would like to recommend the following:

To the Companies

1. Continuously support the community needs through programs and projects of social services especially in terms of educational development;
2. Maintain a collaborative effort with the target barangay beneficiaries for a strong relationship and successful program implementation.

To the LGU Officials

1. Maintain collaborative efforts with the constituents for successful implementation of the project.
2. Established a strong linkage between the companies, community folks and local stake holders.

To the Direct Recipients

1. Maintain the good relationship between the Local Government Unit and the companies for the success of programs and projects.
2. Should have their alternative sources of income to provide their other needs.
3. Pursue and finish their studies to support the program of the companies.
4. Encourage the out of school youth to give importance on the educational development.
5. Recognized and give importance to the programs and projects being implemented by the concerned agencies.

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SQUASH INSTANT SOUP

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ABSTRACT

Working men and women are too busy and always in a hurry. They always want an easy way to cook and prefer to eat instant food that is why convenience is a concept and often listed as the most important factors that determine the food of choice apart from the cost, health, sensory acceptability and related concerns of men and women. As a consequence, the demand of ready to eat or ready to cook minimally processed products has noticeably increased during the recent years. In order to answer the demand of convenience and healthy eating habit, Squash Instant Soup is one of the products of powdered squash developed by the researcher. Squash Instant Soup is a product made from powdered squash and other natural ingredients that is healthy and safe to eat. It is a type of soup designed for fast and simple preparation. This product development produced squash instant soup, it includes drying of squash vegetable meat, onion, garlic, and celery, portioning/ratio of powdered squash and other ingredients, mixing of powdered squash and other ingredients for making instant soup, taste test/ evaluation of the product, laboratory testing of nutritive value and packaging of the finished product. The squash instant soup underwent quantitative measurement using random sampling technique and through tasting among selected faculty, staff and students of Laguna State Polytechnic University, Sta Cruz, Campus guided with survey questionnaires. They were tasked to taste the squash instant soup and rate based on sensory qualities (color, taste, aroma and solubility). Descriptive statistics was used in this study (weighted mean). Result of the study showed that squash can be made into powder and squash powder can be utilized into instant soup. In terms of sensory qualities of Squash Instant Soup, it was highly acceptable as rated by the three groups of respondents. Nutritive value and shelf life of the developed product must be tested to know the benefits the consumer will get from the utilized product. It was also recommended to blanch the sliced squash fruit before oven drying to attain desired solubility.

Keywords: squash instant soup, color, taste, aroma, solubility

INTRODUCTION

Convenience is a multifaceted concept and often listed as the most important factors that determine the food of choice apart from the cost, health, sensory acceptability and related concerns. Convenience also decides to a greater extent when, where, what and how to eat foods. As a consequence, the demand of ready to eat or ready to cook minimally processed products has noticeably increased during the recent years. High consumption of vegetables, contributes to an increased intake of key nutrients, such as vitamins, minerals, antioxidant compounds and dietary fiber, with subsequent beneficial effects on health. Squash is one of the most versatile and delicious

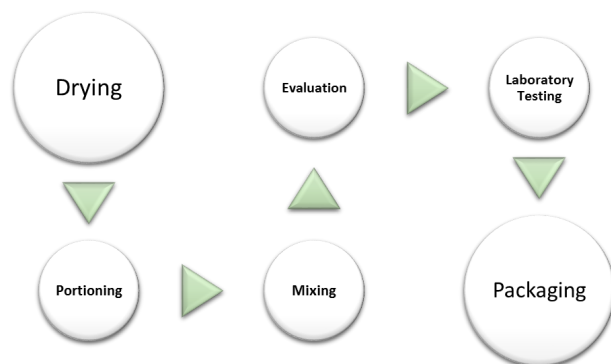
vegetables available throughout the world, and it also packs a serious punch in terms of healthy, medicinal benefits. Different varieties of squash have the ability to improve the quality of your sight, boost skin health, strengthen the immune system, prevent cancer, manage symptoms of diabetes, build strong bones, protect heart health, reduce symptoms of insomnia, prevent inflammatory conditions, treat arthritis, eliminate ulcers, eliminate parasites and infections, increase prostate health, protects against birth defects, boosts respiratory health, and reduces blood pressure. In order to adapt to the fast changing phase of technology, utilization of squash vegetable into instant soup is the answer to the demand of convenience and healthy eating habit.

OBJECTIVES

The primary objective of this study was to develop and evaluate the Squash Instant soup. Specifically, it sought to answer the following:

1. What are the production procedures of Squash Instant Soup?
2. What is the level of acceptability of Squash Instant Soup in terms of its sensory qualities:
 - a. Color
 - b. Taste
 - c. Aroma
 - d. Solubility?
3. Is there a significant difference between the ratings given by the group of respondents on the level of acceptability of Squash Instant Soup?

METHODOLOGY



The researcher used questionnaire and asked the respondents to fill out the permission form before the evaluation or taste testing of the product.

This product development produced squash instant soup, it includes drying of squash vegetable meat, onion, garlic, and celery, portioning/ ratio of powdered squash and other ingredients, mixing of powdered squash and other ingredients for making instant soup, taste test/ evaluation of the product, laboratory testing of nutritive value and packaging of the finished product.

The squash instant soup go through quantitative measurement using random sampling technique and through tasting among selected faculty, staff and students of Laguna State Polytechnic University guided with survey questionnaires. They were tasked to taste the squash instant soup and rate based on sensory qualities (color, taste,

aroma and solubility). Descriptive statistics was used in this study (weighted mean).

RESULTS/DISCUSSION

This product development produced squash instant soup, it includes drying of squash vegetable meat, onion, garlic, and celery, portioning/ ratio of powdered squash and other ingredients, mixing of powdered squash and other ingredients for making instant soup, taste test/ evaluation of the product, laboratory testing of nutritive value and packaging of the finished product.

MEAN SCORE FOR SENSORY QUALITIES

Sensory Qualities	FACULTY		
	Mean	SD	Verbal Description
Color	4.82	0.36	Highly Acceptable Color
Taste	4.86	0.33	Highly Acceptable Flavor
Aroma	4.79	0.41	Highly Acceptable Aroma
Solubility	4.74	0.41	Highly Acceptable Solubility
Overall Mean	4.80	0.38	Highly Acceptable

Sensory Qualities	STAFF		
	Mean	SD	Verbal Description
Color	4.70	0.50	Highly Acceptable Color
Taste	4.58	0.45	Highly Acceptable Flavor
Aroma	4.48	0.61	Highly Acceptable Aroma
Solubility	4.55	0.51	Highly Acceptable Solubility
Overall Mean	4.58	0.52	Highly Acceptable

Sensory Qualities	STUDENTS		
	Mean	SD	Verbal Description
Color	4.68	0.48	Highly Acceptable Color
Taste	4.56	0.46	Highly Acceptable Flavor
Aroma	4.53	0.47	Highly Acceptable Aroma
Solubility	4.35	0.49	Highly Acceptable Solubility
Overall Mean	4.53	0.48	Highly Acceptable

Legend:
 4.21-5.00 Highly Acceptable
 3.41-4.20 Acceptable
 2.61-3.40 Moderately Acceptable
 1.81-2.60 Fairly Acceptable
 1.00-1.80 Not Acceptable

The computed mean of 4.86 for taste, 4.74 for solubility, 4.82 for color and 4.79 for aroma with the standard deviations of 0.33, 0.41, 0.36 and 0.41 revealed highly acceptable evaluation made by the faculty regarding the sensory qualities of Squash Instant Soup. This is supported by the

overall mean of 4.80 indicating highly acceptable evaluation.

Similar with the ratings of faculty, the staff also rated the product highly acceptable. However, they gave a little lower level of acceptability. This is clearly illustrated in the following means: 4.58 for taste, 4.55 for solubility, 4.70 for color and 4.48 for aroma respectively. The overall mean of 4.58 indicates high level of acceptability of Squash Instant Soup.

As for students evaluation, the computed mean of 4.56 for taste, 4.35 for solubility, 4.68 for color and 4.53 for aroma with standard deviations of 0.46, 0.49, 0.48 and 0.47 respectively revealed high acceptability of Squash Instant Soup as presented in table 7. This is also evident by the overall mean of 4.53 which is interpreted as highly acceptable.

Similarly improving the sensory quality of the soup is necessary to develop innovative products (Cayot, 2007). Nevertheless, Monaco et al. (2006), also discussed that when consumers decide to buy certain food, their choice are also driven by other information, such as nutritional properties, safety, origin, product image, packaging, brand, and price.

CONCLUSION

Based on the foregoing findings the following conclusions were drawn:

1. Squash can be made into powder and squash powder can be utilized into instant soup that includes drying of squash vegetable meat, onion, garlic, and celery, portioning/ratio of powdered squash and other ingredients, mixing of powdered squash and other ingredients.
2. In terms of sensory qualities of Squash Instant Soup, it was highly acceptable as rated by the three groups of respondents.
3. It is concluded that generally, the evaluations made by the faculty, staff and students regarding the acceptability of squash instant soup in terms of color, aroma taste and solubility do not differ from one another. They have similar evaluation for the product produced by the researcher.

RECOMMENDATION

Based on the findings and conclusions the following are recommended:

1. To achieve desired solubility of the product blanching of sliced squash fruit before oven drying is recommended.
2. To produce good quality of this product maxima variety of squash is recommended.
3. The packaging of the products can be improved by using a more appropriate packaging.
4. Result of this study can be utilized by those who wants to have an additional income.
5. BFAD approval should be considered in the continuous production of these product.
6. Nutritive Value of the developed product must be tested to know the benefits the consumer will get from the utilized product.
7. Shelf life must be tested.

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“KULKUL-UTEK”: MISCONCEPTIONS AND AREAS OF DIFFICULTIES OF SENIOR HIGH SCHOOL STUDENTS IN BASIC CALCULUS

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ABSTRACT

Mathematics is divided into many disciplines such as but not limited to Arithmetic, Algebra, Geometry, Trigonometry, Statistics, Probability and Calculus. By experience, Calculus is perceived to be the most difficult among these disciplines. Poor performance in Mathematics nowadays had already reached the highest level of education which is the college level. As perceived by the researcher, the poor performance may have been the result of the misconceptions of the students about the subject. This study ventured on the analysis of the misconceptions of the Senior High School students in Basic Calculus as well as their areas of difficulties. It employed descriptive-correlational method and content analysis which involved 120 SHS student-respondents. Findings of the study revealed the competencies in Basic Calculus that are considered as areas of difficulties and pointed out misconceptions extracted from their errors in Basic Calculus test. Age and areas of difficulties are significantly related to the misconceptions of the students. It is recommended that teachers must focus on identifying and correcting immediately the errors of the students. Furthermore, this study provided apriori categories of students' misconceptions in Basic Calculus in which they could use to detect it from the students' errors.

Keywords: areas of difficulties, Basic Calculus, Mathematics, misconceptions, Senior High School

INTRODUCTION

The paradigm of the basic education curriculum had shifted and the creation of the Senior High School department as part of Philippine basic education curriculum was already implemented. One of the major changes brought about by the K to 12 reforms is on the education structure (SEAMEO, 2012). There will be the same six years of elementary education, but students entering secondary level will begin their junior high school as Grade 7 (RA 10533). Junior High School is for four years (Grades 7 to 10) and Senior High School (SHS) is for two years (Grades 11 to 12).

Another significant shift in the Philippine basic education is its curriculum, particularly in its senior high school. The contents of the various learning areas are based on the College Readiness Standards of the Commission on Higher Education (CHED); they will be equivalent to the courses offered under the General Education Curriculum of higher education. The core subjects are

The Title: “Kulkul” (Iloco) means entangled or messed up while “utek” (Iloco) means brain or more appropriate, means mind. Hence, when translated, the title means entangled mind. The phrase is usually heard among students when facing difficulty on the subject Calculus.

English, Filipino, Mathematics, and Science. Contents of the Mathematics and Language curriculum will depend on the specialization of the student.

Mathematics is divided into many disciplines such as but not limited to Arithmetic, Algebra, Geometry, Trigonometry, Statistics, Probability and Calculus. By experience, Calculus is perceived to be the most difficult among these disciplines. Calculus is a branch of mathematics which started to develop in the 17th century. Sir Isaac Newton (English, 1642-1727) and Wilhelm Leibniz (German, 1646-1716) created Calculus independently of each other at about the same time (Feliciano & Uy, 1983).

With its wide coverage, other branches of Mathematics seem to be dependent to it. The dependence of other mathematical disciplines on Calculus shows that students can construct knowledge from other mathematical disciplines using it. And Mathematics curriculum is a collection of activities from which students may construct mathematical knowledge and that it is a sequence of activities, situational context from which students construct a particular way of thinking (Thompson, 1985). Therefore, a superficial knowledge of Calculus concepts will affect

the understanding of a vast number of Mathematics and Science disciplines. This will possibly result to poor performance.

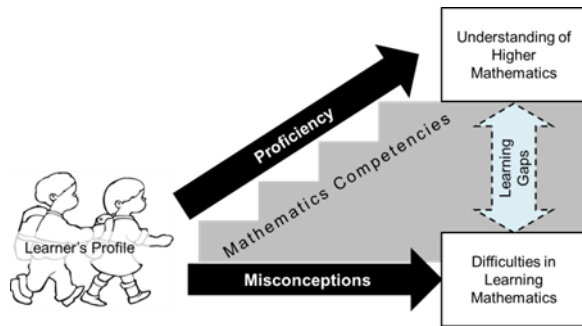


Fig. 1. Theoretical Framework of the Study

Mathematics Learning

The learning of Mathematics is a constructive process. Dewey and Piaget have researched on this idea. Dewey (1945) pointed out that new objects and events should be related intellectually to those of earlier experiences. Mathematical knowledge therefore should be constructed from related knowledge which the learner already has. It is therefore the role of the Mathematics educator to provide links between existing knowledge of mathematics and new knowledge.

The cognitivists seem to point out that the learning of mathematical concepts is from the known to the unknown and when the application of a theorem or definition is needed then we are being required to recall a known result and then apply it to a new situation. The basic themes in a Calculus course are functions and limits of functions. Most key concepts may require the learner to represent a function or a relation by a graph (Kyvatinsky & Even, 2004).

Therefore, if there are misconceptions among the students, they could not actually build better higher conceptual knowledge. That means that it is presumed that if a learner have weak schema and too many misconceptions in Basic Calculus, then learning higher level Calculus may be impossible.

Misconceptions as the Culprit

Poor performance in Mathematics nowadays had already reached the highest level of education which is the college level. As perceived by the researcher, the poor performance may have been the result of the misconceptions of the students about the subject. Students tend to be emotionally and intellectually attached to their misconceptions, partly because they have actively construct-

ed them and partly because they give ready methodologies for solving various problems. (Makonye, 2011; Muzangwa & Chifamba, 2012).

A misconception happens when a person believes in a concept that is objectively false (www.Dictionary/Thesaurus, 2011). Due to the subjective nature of being human, it can be assumed that everyone has some kind of misconception. Misrepresentation of a concept is not a misconception but may produce a misconception.

Generally, misconceptions are manifested through errors. An error can be a mistake, blunder, miscalculation or misjudge. The challenging issue concerning misconceptions is that many people have difficulty in relinquishing misconceptions because the false concepts may be deeply ingrained in the mental map of an individual. According to Li (2006), student errors are the symptoms of misunderstanding.

Hence, it is very important to recognize student misconceptions and to re-educate students to correct mathematical thinking. Although the results apply more to children younger than high school age, Ginsburg (1997) offers a number of observations about errors: a) errors result from organized strategies and rules; b) faulty rules underlying errors have sensible origins; c) too often children see arithmetic as an activity isolated from their ordinary concerns; and, d) children often demonstrate a gap between formal and informal knowledge.

The identification of misconceptions in students' work is a vital part of the process of moving towards a focus on learning rather than teaching. Teachers need to predict the misconceptions which are likely to occur with particular pieces of work. They should plan questions and approaches which would expose such misconceptions if they occurred. "Why?", "How?" and "What would happen if...?" questions enable the teacher to probe their pupils' understanding of a topic. Due to the nature of Mathematics it may relatively easy to predict where and how misconceptions may occur and hence they may be addressed during the 'whole class input'.

Calculus has already been tackled in the Senior High School, specifically for students who are under the Science, Technology, Engineering and Mathematics Track. Considering these theories and concepts, the researcher is motivated to expand the coverage of the identification of the misconceptions about Mathematics particularly in Basic Calculus. By identifying these misconceptions, there is a better chance to provide more proper and more appropriate remediation, inter-

vention and improvement in the senior high school instruction.

STATEMENT OF THE PROBLEM

This study aimed to identify the misconceptions of students in Basic Calculus as well as their areas of difficulty. Specifically, this study sought to answer the following queries:

1. What is the profile of the SHS students (age, sex, performance in General Mathematics)?
2. What are the areas of difficulty of the SHS students in Basic Calculus?
3. What are the misconceptions of the students in Basic Calculus?
4. Is there a relationship between the misconceptions of the students and their profile and areas of difficulty?

METHODOLOGY

Research Design. This study utilized mixed methods of research. The quantitative part was descriptive statistics dealing with the description of the profile of the students. The qualitative part is the identification of the students' areas of difficulties and misconception in Basic Calculus through content analysis. Content analysis refers to a family of procedures for the systematic, replicable analysis of text (Creswell, 2012). For the purpose of this study, manifest content analysis which refers to the visible, countable components of the message will be used. Furthermore, inferential statistics was applied by testing significant relationship among the variables.

Research Participants. Senior High School students who took Basic Calculus subject were the respondents of this study. There were only 120 students thus total enumeration was used. This enabled the researcher to extract more information and identify more misconceptions of students in Basic Calculus.

Data Collection. A written permission was secured from the offices of the School Principal where this study was conducted in order to obtain full cooperation from students. The researcher then arranged appointments with the SHS advisers of the students who were covered in the study. The researcher personally administered the questionnaires and acted as proctor of the test to elicit reliable data and additional information. Two instruments were used to obtain data to materialize the aim of this study. The first instrument was a

survey questionnaire for the profile of the respondents. The second was a teacher-made test that was crafted based on a Table of Specifications. Topics with their corresponding learning competencies covered by the test are based on the curriculum guide provided by the Department of Education. It consisted of 30 supply type items which represented each competency. Students were required to show their solutions in coming up with their respective answers. The test was conducted within two to three hours which focused on the misconceptions of the students and not merely on the speed of the students.

Statistical Tools. For the descriptive part of the study, frequency counts, means, standard deviations. The areas of difficulties of the students were identified through item analysis. It focused on the difficulty index of each item. Since each item corresponds to a competency, it was easy to identify the areas to which the students find difficult. Item difficulty index (D) is given by the formula:

$$D = \frac{U_g + L_g}{N}$$

It was interpreted as Difficult (0 to 0.25), Average (0.26 to 0.75) and Easy (0.76 to 1). The misconceptions of the students in Basic Calculus were identified through content analysis. The incorrect answers and solutions of the students were scrutinized thoroughly by identifying the reasons, sources and types of errors committed that made them lead to a wrong answer. It was presented through a categorized list of errors and analyzed by frequencies and ranks. Furthermore, the inferential statistics part of this study used correlation analysis to identify any correlations between the variables contained in this study tested at 0.05 level of significance.

RESULTS AND DISCUSSION

Profile of the Senior High School Students

Table 1 presents the profile of the Senior High School (SHS) students. It is apparent that there are more males with a frequency of 67 or 56 percent as compared to females with frequency of 53 or 44 percent. This is attributed from the fact that the student-respondents of this study are those who are enrolled in SHS tracks that lead to male-dominated courses like engineering courses. It is also apparent in terms of age, the students are on the ideal age of a SHS students as affirmed by the reckoned mean age of 17.36 with a standard deviation of 0.81. The low standard deviation also

implies that they are on the same stage of development.

Table 1. Profile of the Senior High School students

	F (n=120)	%
Sex		
Male	67	56
Female	53	44
Age		
19 to 20	6	5
17 to 18	97	81
16	17	14
<i>Mean: 17.36</i>		<i>S.D.=0.81</i>
Grade in General Mathematics		
Outstanding (90 – 100)	32	26
Very satisf. (85 – 89)	46	38
Satisfactory (80 – 84)	33	28
Fairly satisf. (75 – 79)	9	8
<i>Mean: 86.36 (VS)</i>		<i>S.D.=5.16</i>

In terms of grade in the subject General Mathematics, most of the students, with a frequency of 46 or 38 percent have very satisfactory grades of 85 to 89. The mean grade of 86.36 with a standard deviation of 5.16 implies that the students have very satisfactory performance in the subject General Mathematics. This can be attributed from the notion that the students must maintain good grades in Mathematics as it is important in their chosen strands.

Areas of Difficulties of Senior High School Students in Basic Calculus

Tables 2 through 5 present the areas of difficulties of the SHS students in Basic Calculus. Each of the competencies was measured by each item in the test and the results are used to quantify the said variable by determining its difficulty index. Two more categories are added to further show gaps in the instruction in the subject Basic Calculus: NT which means the competency is not tackled and PR which means no answer apparently due to poor retention as reasoned out by the respondents.

Limits of a Function. In table 2, it is good to note that the students know the most basic concept about the topic which is recognizing the notation of a limit (DI=0.83). Competencies involving identification of the limit of a function using table (DI=0.45) and computational techniques (DI=0.30) have average difficulty index but increasing the complexity of the functions such as giving indeterminate forms specifically limit at infinity (DI=0.22) tend to put more difficulty among the students. But what is more interesting is the incidence of the poor retention as reasons that the students could not answer the items. It is

apparent that for difficult competencies, poor retention accounted to nearly 50 percent of the errors among the students which is almost equal to errors due to misconceptions. This can be attributed to superficial teaching on such difficult subjects. By observation, teachers tend to teach only at the surface level those topics which are also found difficult for them. This results to poor retention among the students as they are not extensively exposed to more activities that provides more practice and greater retention of the learned concept.

Continuity of a function. Table 3 shows the areas of difficulties under “Continuity of a Function”. The competencies under this topic have average difficulty index. This may not be considered as an area of difficulty of the students. This is because this topic only utilizes basic concepts in the previous topic which is limits. The competencies are only considered to be in conceptual level and demands non-complex computational techniques. However, the instruction for the competency involving determination of a continuity of a function on a given interval (DI=0.27) must be strengthened. Data reveals that in this competency, poor retention accounts to 40 percent of the errors which is again almost equal to errors due to misconceptions (33 percent).

Differentiation of functions. Presented in table 4 are the areas of difficulties on “Differentiation of Functions”. Application of differentiation rules on simple algebraic functions (DI=0.74, almost easy) including their higher order derivatives (DI=0.80) tend to have a low level of difficulty for students, however, as a trend seen also on the limits of a function, upgrading the given function to something that demands more complex rule such as product rule (DI=0.01), quotient rule (DI=0.20), chain rule (DI=0.07) and radicals (DI=0.05) will put more difficulty to the students. Poor retention and misconceptions are again the dominating reasons that students cannot attain the said competencies which accounts to 40 to 50 percent each.

It is also apparent that differentiations of trigonometric functions are not given much attention where 56 percent of the errors are accounted to poor retention and 43 percent to misconceptions. This situation gets more severe when the concept of trigonometric identities is integrated to the concept because no one got the correct answer. Further, the applications of derivatives such as finding the slope of tangent lines (DI=0.06) and solving optimization problems involving numbers (0.19) and geometry (0.03) are also difficult for

the students. Poor retention again dominated the reason for this area of difficulty. This can be attributed to the lack of provision for more examples and practice exercises to students and teaching superficially on the said competencies.

Integration of functions. Table 5 reveals the data for the areas of difficulties on “Integration of Functions”. The same trend can be deduced from the data: evaluating indefinite integral of simple elementary functions (0.43) is of average difficulty for students but when presented with functions that demand more complex process, they already considered it to be difficult. Ideally, the solutions of the given functions in the test (even though how complex they seem) only range from simplification of functions to simple application of rules for integration. The only problem that must be addressed is what rule applies to the problem. Lack of practice as implied by high incidence of errors due to poor retention is the apparent reason for these phenomena. It is also sad to note that the incidence of “not tackled” competencies increased as these topics are towards the end of the semester and some topics are scrapped due to lack of time to finish the content of the curriculum guide. In an informal interview with the teachers, they asserted that the subject is too congested with topics coupled with its perceived difficulty makes it impossible for them to finish it.

Table 2. Areas of difficulties of the Senior High School students in Basic Calculus on the topic “Limits of a Function”

Competencies/Item Description	No. of Students who answered... (Percentage)				Difficulty	
	NT	PR	Incor-rect	Cor-rect	Index	Interpre-tation
Recognize basic concepts in limits of a function						
Notation	-	9 (8%)	11(9%)	100 (83%)	0.83	Easy
Right-hand limit	-	51 (43%)	58 (48%)	11(9%)	0.09	Difficult
Left-hand limit	-	58 (48%)	51 (43%)	11(9%)	0.09	Difficult
Identify the limit of a function given its graph	-	59 (49%)	50 (42%)	11(9%)	0.09	Difficult
Illustrate the limit if a function using table of values	-	21 (18%)	45 (37%)	54 (45%)	0.45	Average
Apply the limit laws in evaluating the limit of algebraic functions	-	47 (39%)	37 (31%)	36 (30%)	0.30	Average
Identify limit of function with indeterminate forms						
Needs factoring		32 (27%)	54 (45%)	34 (28%)	0.28	Average
Limit at infinity	6 (5%)	53 (44%)	35 (29%)	26 (22%)	0.22	Difficult

*NT- not tackled PR-no answer due to poor retention

Table 3. Areas of difficulties of the Senior High School students in Basic Calculus on the topic “Continuity of a Function”

Competencies/Item Description	No. of Students who answered... (Percentage)				Difficulty	
	NT	PR	Incor-rect	Cor-rect	In-dex	Interpre-tation
Determine whether a function is continuous or not						
By applying limit of a function	-	21 (18%)	14 (11%)	85 (71%)	0.71	Average
On a given interval	-	48 (40%)	40 (33%)	32 (27%)	0.27	Average
Classify a discontinuous function (hole/removable, jump/essential, asymptotic/infinite)	3 (3%)	20 (17%)	48 (39%)	49 (41%)	0.41	Average

*NT- not tackled PR-no answer due to poor retention

Table 4. Areas of difficulties of the Senior High School students in Basic Calculus on the topic “Differentiation of Functions”

Competencies/Item Description	No. of Students who answered... (Percentage)				Difficulty	
	NT	PR	Incor-rect	Cor-rect	Index	Interpre-tation
Apply differentiation rules in computing the derivative of:						
Algebraic function (simple rules)	-	14 (12%)	17 (14%)	89 (74%)	0.74	Average
Algebraic function (product rule)	-	34 (28%)	85 (71%)	1(1%)	0.01	Difficult
Algebraic function (quotient rule)	-	44 (37%)	52 (43%)	24 (20%)	0.20	Difficult
Algebraic function (simple chain rule)	-	53 (44%)	59 (49%)	8(7%)	0.07	Difficult
Algebraic function (chain rule for radicals)	2 (2%)	59 (49%)	53 (44%)	6(5%)	0.05	Difficult
Trigonometric function (simple)	1 (1%)	42 (35%)	53 (44%)	24 (20%)	0.20	Difficult
Trigonometric function (applying trigonometric identities)	1 (1%)	68 (56%)	51 (43%)	-	0	Difficult
Evaluate higher order derivatives	-	13 (11%)	11 (9%)	96 (80%)	0.80	Easy
Relate the derivative of a function to the slope of the tangent line	2 (2%)	73 (60%)	38 (32%)	7(6%)	0.06	Difficult
Solve optimization problems (maxima-minima)						
Number problems	2 (2%)	59 (49%)	36 (30%)	23 (19%)	0.19	Difficult
Geometric	5 (4%)	100 (83%)	12 (10%)	3(3%)	0.03	Difficult

*NT- not tackled PR-no answer due to poor retention

Table 5. Areas of difficulties of the Senior High School students in Basic Calculus on the topic “Integration of Functions”

Competencies/Item Description	No. of Students who answered... (Percentage)				Difficulty	
	NT	PR	Incor-rect	Cor-rect	In-dex	Interpre-tation
Evaluate the indefinite integral of						
Elementary function (simple)	-	30 (25%)	39 (32%)	51 (43%)	0.43	Average

Elementary function (factored form)	1 (1%)	51 (43%)	40 (33%)	28 (23%)	0.23	Difficult
Elementary function (with 1/u or application of logarithmic function)	1 (1%)	56 (47%)	63 (52%)	-	0	Difficult
Trigonometric function (simple)	24 (20%)	44 (37%)	35 (29%)	17 (14%)	0.14	Difficult
Trigonometric function (applying trigonometric identities)	26 (22%)	70 (58%)	22 (18%)	2 (2%)	0.02	Difficult
Exponential function	28 (23%)	58 (48%)	33 (28%)	1 (1%)	0.01	Difficult
Compute the definite integral of a function	9 (8%)	64 (53%)	47 (39%)	-	0	Difficult
Approximate the area of a region under a curve	6 (5%)	76 (63%)	30 (25%)	8 (7%)	0.07	Difficult

*NT- not tackled PR-no answer due to poor retention

Misconceptions of Senior High School Students in Basic Calculus

Table 6 presents the different categories of misconceptions of the Senior High School students in the subject Basic Calculus. It augments the findings about the areas of difficulties of the students in the subject. It pinpoints the specific reasons of error of the students. However, it must be emphasized that poor retention is still the most dominant reason.

Systematic. Overuse of computational techniques in getting limits rank as the most frequent misconception with a frequency of 141 and followed shortly by erroneous application of integration with a frequency of 58. On the other hand, the rarest misconception is interchanging the meaning of left hand and right hand limit where 10 students have misconception of it. Systematic misconception occurs due to incompetency. The students are not aware that the thinking is faulty.

- Erroneous application of slope- intercept form.** Students were expected to find the slope of the line tangent to the curve $y = 3x^2 - 2x + 1$ at point (2, 9). Students differentiate the given function which results to $y = 6x - 2$ then using their knowledge in slope - intercept form of linear equations they answer 6 as the slope.
- Erroneous application of integration.** In the function $\int (2x-1)(3x+4)dx$, students integrate immediately $(2x - 1)$ and $(3x + 4)$ separately which is a misconception. To integrate the given functions, multiply the two given binomial then integrate.
- Erroneous application of $\int \frac{1}{x} dx = \ln|x| + c$.** The specific misconception committed by the students they use $\int dx \frac{1}{x} \ln|x| + c$ in integrating $\frac{-3}{x^2}$ which results to $3 \ln x$. The rule $\int \frac{1}{x} dx = \ln|x| + c$ only use to integrate functions.

- Overuse of computational techniques in getting limits.** Students exhibited the overuse of computational techniques in getting limits. The students mistakenly answer 2 instead of 1. When students are exposed to computations that require long solutions, the occurrence of being confused becomes higher.
- Interchanging the meaning of left hand and right hand limit.** Students are not secure in correct concept of left hand and right limit. They are confused to which is the left limit or the right limit. They answer -1 instead of 1 and vice versa.

Table 6. Misconceptions of the Senior High School Students in Basic Calculus

Misconceptions	Frequency
Systematic	
Erroneous application of slope- intercept form	30
Erroneous application of integration	58
Erroneous application of $\int \frac{1}{x} dx = \ln x + c$	54
Overuse of computational techniques in getting limits	141
Interchanging the meaning of left hand and right hand limits	10
Executive	
Misuse of power rule	75
Misuse of quotient rule	40
Structural	
Incorrect evaluation using PEMDAS	32
Incorrect interpretation of power/roots	48
Incorrect evaluation of operations	89
Over simplification	29
Application	
Lack of $\frac{du}{dx}$	36
Lack of neutralizing factor	58
Guessing without reasoning	43

Executive. The most frequent executive misconception is the misuse of power rule with the frequency of 75 followed by the misuse of quotient rule with a frequency of 40. Executive misconception is due to lack of understanding of how to use the procedure needed.

- Misuse of power rule.** Students are confused when to use the different differentiation rules. In $y = x^2 (x-1)^4$ use power rule instead of product rule. Students are confused with the exponents so they differentiate it using power rule instead of product rule wherein there are two functions the x^2 and $(x-1)^4$.
- Misuse of quotient rule.** Students are not sure in correct mathematical meaning of various notations. The function is in fraction form

which leads them to use quotient rule due to lack of understanding in treating fractions and lack of knowledge in trigonometric identities.

Structural. As manifested, incorrect evaluation with a frequency of 89 ranked 1st, in the same way, incorrect interpretation of power/roots with a frequency of 48 ranked 2nd, incorrect evaluation using PEMDAS ranked 3rd with a frequency of 32, while over simplification ranked last with a frequency of 29. Students who regard Calculus as extended Algebra have a structural misconception.

- a. *Incorrect evaluation using PEMDAS.* The usage of PEMDAS varies on the position of the operations. For example: $8 - 4 + 2$, students use addition first instead of subtraction. The rule is addition then subtraction must be performed simultaneously from left to right. In the example case, subtraction must come first.
- b. *Incorrect interpretation of power/roots.* This is partly a fault there being multiple representations of the same thing. It is partly the misconceptions of not fully understanding and being functionally fluent in making computations. Example: $\sqrt[3]{3x + 2} = 3x + 2^{2/3}$
- c. *Incorrect evaluation of operations* When multiplying the rule is if a negative number multiplied to a negative number the product is positive. Students misjudged the operations. Example: $(8x^2 + 8x) - (4x^2 - 5)$. Students compute it which results to $4x^2 + 8x - 5$.
- d. *Over simplification.* This is another common error which occurs when simplifying algebraic expressions. In this group of errors, students' conjoin, connect, or even put together the terms against the accepted algebraic manipulations. Students oversimplify algebraic expressions by illegal cancellations and divisions of terms. They often tend to misuse factorization and cancellation procedures.

Application. Lack of neutralizing factor ranks 1st with a frequency of 58 followed shortly by guessing without reasoning ($f=43$). Lack of $\frac{du}{dx}$ was the least with frequency of 36. Application misconceptions occur when a student understands concepts and procedures that are needed to solve a mathematics problem but fail to apply it to effect solution to the problem.

- a. Lack of $\frac{du}{dx}$. Students tend not to include the $\frac{du}{dx}$ in their computations in solving the derivatives of trigonometric functions. Example: $\tan 4x = \sec^2 4x$.

- b. Lack of neutralizing factor. Students also tend not to include the neutralizing factor in their computations in solving the antiderivatives of trigonometric functions. Example: $\sin 4x \, dx = -\cos 4x + c$
- c. Guessing without reasoning. Errors that resulted when students apparently solved a problem by guessing-that is, when there was no overt evidence that the stated information was the result of a mathematical operation. Guessing is a common phenomenon when students answer mathematical problems that are out of their stored knowledge. The most apparent underlying reason is inability to recall information about the word problems.

Correlation Analysis between Misconceptions in Basic Calculus and the Selected Variables

Evident in table 7 are the results of the correlation analysis between misconceptions in Basic Calculus and the selected variables. Findings of the study reveal that there is a significant relationship between the students' misconceptions in Basic Calculus and their age which reckoned a correlation coefficient of 0.334 ($p=0.000$). This finding means that older students have more misconceptions as compared to younger students. This is due to the fact that older students have strongly held misconceptions that cannot be corrected by repeating a lesson or making it clearer (Utanes, 2014). This is also because they have actively constructed them for a long time and tend to have already intellectually attached to it. This finding implies that correcting misconceptions should be done while the students are still young.

Students' areas of difficulties with respect to the topics limits of a function, continuity of a function, differentiation of functions and integrations of functions is significantly related to their misconceptions in Mathematics as reckoned by the correlation coefficients of -0.662, -0.560, -0.750 and -0.638 respectively. The students' areas of difficulty per topic are quantified by computing the difficulty index (DI) of the student which ranges from 0 (difficult) to 1(easy). Generally, these negative correlations from the findings imply that students who found the topics easier (with DI approaching 1) have lesser misconceptions as compared to those who found it more difficult (with DI approaching 0). This is pretty obvious since the students who have already established deeper understanding with the concepts in Mathematics, particularly in Basic Calculus, find the lessons and topics easier. Consequently, they have lesser misconceptions since they have already

corrected them as a result of acquiring deeper understanding.

Table 7. Results of correlation analysis between misconceptions in Basic Calculus and the selected variables

DV: Misconceptions in Basic Calculus	Correlation Coefficient	Prob.
<i>Profile variables</i>		
Sex	-0.012	0.895
Age	0.334**	0.000
Grade in General Mathematics	-0.156	0.089
<i>Students' areas of difficulties</i>		
Limits of a function	-0.662**	0.000
Continuity of a function	-0.560**	0.000
Differentiation of functions	-0.750**	0.000
Integration of functions	-0.638**	0.000

**tested at 0.05 level of significance

CONCLUSIONS

The SHS student-respondents who were enrolled in STEM and GAS are dominated by male students. Their mean age of 17.36 years old suggested that they were in the ideal age of a SHS student. The students received a very satisfactory mean grade of 86.36 in the subject General Mathematics.

Findings of the study also revealed that the students have found the competencies under the topic "Continuity of a Function" as having an average difficulty levels while most of the competencies under the topic "Limits of a Function" were found by the students as a topic having a more difficult difficulty level. The difficulty level was already apparently higher when it comes to the more complex topics in Basic Calculus "Differentiation and Integration of Functions", where the students performed the lowest. Most of these difficulties were accounted to poor retention while not tackled competencies congregated towards the topics taught towards the end of the semester or those that are perceived as advanced topics by the teachers.

The emerging misconceptions of the students in Basic Calculus can be categorized as Systematic, Executive, Structural and Application. Under Systematic, the most frequent misconception was the overuse of computational techniques in getting limits while in Executive was the misuse of power rule, incorrect evaluation of operations for Structural and lack of neutralizing factor for Application.

Older students have more misconceptions in Basic Calculus. Students have higher prevalence

of misconceptions along areas in Basic Calculus in which they have more difficulty.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following are highly recommended:

1. Teachers must focus on identifying and correcting immediately the errors of the students. This study provided apriori categories of students' misconceptions in Basic Calculus in which they could use in detecting from the students' errors.
2. Instruction along the areas of the difficulties in Basic Calculus found by the study must be strengthened. Competencies must be built up starting from the most basic (limits) to the most complex competencies (integration). Superficial teaching of the topics must be avoided and teachers of Basic Calculus must attend retraining for the said subject.
3. Teachers must provide experiences and scaffolds for the students to build up more positive mathematical self-concept, specifically by showing the importance of the mathematical concepts in real life situations.
4. Future and parallel researches must be conducted focusing on specific areas of Basic Calculus to gauge extensively the misconceptions of the students.

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ANG MGA KONSEPTWALISASYON SA PAGSULAT NG MGA MAG-AARAL SA SEKUNDARYA

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ABSTRACT

This survey –descriptive study examined the conceptualizations in writing by the students in a secondary school in Isabela, Philippines. It aimed to identify the degree of agreement of the respondents in the various concepts and ideas about writing; determine the reasons why people are writing based on the respondents' context; and identify the group of writers and the characteristics of good writers known by the secondary students. Using a modified questionnaire, the data were collected from 276 secondary student-respondents. The mixed-method was used in the analysis of the data. The conclusions derived from the findings were: 1) the respondents most agreed with the idea that having the knowledge of how to write well is important; 2) the students write because of their desire to learn and their aspiration to achieve their dream; to hone their talent in writing, to express their thoughts, feelings, and attitudes, to create and simply to record the important knowledge and information; 3) writers recognized by the respondents are the authors of the masterpieces and pieces of literature that are part of their curriculum; their schoolmates who won in the school writing contests; the writers in the online social network site Wattpad; and their teachers who are teaching them about the writing process; 4) for the respondents, the prominent characteristic of a good writer is his/her ability to use his/her writing to bring social awareness to the readers. It is recommended for the teachers to enrich the exposure of the students with various literature pieces and articles for the students to find more models in writing.

Keywords: conceptualizations in writing, good writer, models in writing, writing purposes

ABSTRAK

Ang surbey-deskriptibong pag-aaral na ito ay naglayong masuri ang mga koseptwalisasyon sa pagsulat ng mga mag-aaral sa isang paaralang sekundarya sa Isabela. Nilayon nitong matukoy ang antas ng pagsang-ayon ng mga tagatugon sa mga konsepto at ideya tungkol sa pagsulat; makilala ang mga dahilan kung bakit nagsusulat ang tao sa konteksto ng mga tagatugon; at matukoy ang mga pangkat ng manunulat at ang mga katangian ng mahusay na manunulat sa perspektiba ng mga tagatugon. Gamit ang isang minodipikang talatanungan, kinalap ang mga datos sa 276 na mga mag-aaral sa sekundarya. Ginamit ang mixed-method sa pagsusuri ng mga datos. Ang mga kongklusyong nabuo sa resulta ng pag-aaral ay: 1) ang ideya na ang kaalaman kung paano magsulat mabuti ay mahalaga ang pinakasinang-ayunan ng mga tagatugon; 2) nagsusulat ang mga tagatugon sa mga dahilang gusto nilang matuto at maabot ang kanilang pangarap, mahasa ang kanilang talento sa pagsulat, maipahayag ang kanilang kaisipan, damdamin at saloobin, lumikha at maitala ang mga mga mahalagang kaalaman at impormasyon; 3) ang kinikilala nilang mga manunulat ay ang mga awtor ng mga obra maestra at mga akdang bahagi ng kanilang kurikulum; ang mga kaeskwela nilang nanalo sa mga timpalak sa pagsulat; ang mga manunulat sa social network site na Wattpad; at ang mga guro nilang nagtuturo ng proseso ng pagsulat; 4) ang nangungunang katangian ng isang mahusay na manunulat para sa mga tagatugon ay ang kakayahang makapukaw ng kamalayang panlipunan sa mga mambabasa. Iminumungkahi sa mga gurong palawakin ang pagkakahantad ng mga mag-aaral sa iba-ibang mga akda at mga sulatin upang magkaroon sila ng marami pang modelo sa pagsulat .

Mga susing salita: konseptwalisasyon sa pagsulat, layunin sa pagsulat, mahusay na manunulat, modelo sa pagsulat

PANIMULA

Ang pagsulat ay isa sa mga makrong kasanayang patuloy na nililina sa kurikulum pangwika sa Batayang Edukasyon. Higit ang pangangailangan sa patuloy na pagpapaunlad ng kasanayang ito sa kolehyo at sa mga panda-lubhasaang antas upang makatugon sa mga pangangailangan sa akademikong pagsusulat. Ang paglinang nito sa mga mag-aaral ay pareparehong tungkuling nakaatas sa mga guro sa lahat ng antas (Defazio, Jones, Tennant, & Hook, 2010). Hindi na nakapagtataakang pinagtutuunan ito ng pansin sa edukasyon sapagkat ang kakayahang sa pagsulat ng isang tao ay napakahalaga sa halos lahat ng uri ng trabaho o propesyon o larangan at maging sa araw-araw na buhay

Mahalagang magkaroon at mabuo muna sa isipan ng mga mag-aaral ang mga konsepto o ideya kung ano ang pagsulat at ano kahalagahan ng kasanayang ito sa kanilang buhay at kailan masasabi na ang isang tao ay mahusay na manunulat. Ang mga positibong konseptwalisasyon nila hinggil sa pagsulat ay maaaring paghuhugutan ng likas na motibasyon ng mga mag-aaral upang sumubok at magsanay na magsulat.

Ang mga konseptwalisasyon sa pagsulat ng mga mag-aaral ay tumutukoy sa mga pananaw nila sa pagsulat- kung ano ito, bakit ito isinasagawa, sino ang mga kinikilala nilang manunulat at kailan masasabing mahusay magsulat ang isang manunulat. Magagawa lamang ng guro na magabayan nang maayos ang kanyang mga mag-aaral na mahasa ang kanilang kasanayan sa pagsulat kapag mayroon siyang malinaw na kaalaman sa mga konseptwalisasyon sa pagsulat ng mga ito batay mismo sa kani-kanilang mga konteksto.

MGA LAYUNIN NG PAG-AARAL

Ang pangunahing layunin ng pag-aaral na ito ay mailarawan ang mga konseptwalisasyon sa pagsulat ng mag-aaral sa sekondarya. Sinagot ang mga sumusunod na tiyak na katanungan:

1. Ano ang antas ng pagsang-ayon ng mga mag-aaral sa sekondarya sa mga ideya o konsepto hinggil sa pagsulat?
2. Bakit nagsusulat ang tao sa konteksto ng mga mag-aaral sa sekondarya?
3. Anong pangkat ng mga manunulat at mga katangian ng mga ito ang kinikilala ng mga mag-aaral sa sekondarya?

MGA KAUGNAY NA PAG-AARAL

Sinuri nina Levin at Wagner (2006) ang mga tema ng mga pananaw ng mga mag-aaral sa pagsulat bilang bahagi ng kanilang mga gawain sa pagkatuto sa pamamagitan ng mga metapora ibinigay ng mga mag-aaral sa ikawalong grado hinggil sa mga teorya ng pagsulat sa pagkatuto. Lumabas sa pagsusuri na ang pagtukoy sa mga matapora at pagkukumpol sa magkakatulad na tema ay nakakatulong sa pagtukoy sa papapakahulugan sa pagsulat ng mga mag-aaral batay sa kanilang karanasang kognitibo, sosyal, emosyonal at metakognitibo. Ang mga pananaw ng mga mag-aaral sa pagsulat ay nahahawig sa mga teorya ng mga modelo sa pagsulat subalit hindi naman eksaktong katulad ng mga ito. Ang mga ginamit na metapora ng mga mag-aaral ay naiimluwensyahan nang malaki ng kanilang mga karanasan sa pagsulat at ang mga gawaing pasulat sa pagkatuto, fdbak at replektibong pagsulat. Gayundin na ang mga gawaing pasulat sa pagkatuto, fdbak at replektibong pagsulat ay may malaking impluwensya sa mga pananaw ng mga mag-aaral sa pagsulat. May dalawang multidimensyunal na mga konseptwalisasyon sa pagsulat na nakita sa mga metapora ng mga mag-aaral- ang paglikha o pagbuo ng mga ideya na batay sa teorya ng konstraktibismo at ang palitan ng mga ideya sa proseso ng pagtuturo at pagkatuto.

Sa pag-aaral na isinagawa nina Werderich & Armstrong (2013) may magkakaibang konseptwalisasyon sa pagsulat ang mga mag-aaral sa sekondarya depende sa kani-kanilang konteksto. Magkakaiba rin ang tingin ng mga mag-aaral sa ideya ng mabuting sulatin. Ang ikinagaganda ng isang sulatin ay depende sa pagtanggap ng mambabasa at depende sa kabuuang katangian nito bilang madaling basahin at unawain. Sa ideya ng mga mag-aaral, mabuti ang kanilang sulatin batay sa mga salitang ginamit sa pagsulat at batay sa tamang pagbabaybay.

Samantala, inilarawan ni Bazerman (2018) ang ideya ng modelo sa pagsulat. Ang pagsulat ayon sa kanya ay isang walang katapusang malikhaing kasanayan, na napapalawak sa iba-ibang pamamaraan at nagagamit sa para sa iba-ibang layunin sa iba-ibang mga sitwasyon. Lumilina ang mga manunulat ng mga natatangi nilang mga pamamaraan sa paglutas ng mga paulit-ulit na mga suliranin sa kanilang pagkabata hanggang sa pagtanda. Walang tiyak na mga modelo ng pagsulat ang ginagamit ng mga manunulat at ang mga ito ay natatangi sa mga pangkalahatang modelong hinihingi ng mga

sikolohista. Ang mga *standardized* at ang pagbuo ng *standardized* na mga modelo sa pagtukoy sa performans sa pagsulat bagamat may mga kahala-gahang edukasyunal ay hindi nito nasusukat ang iba-ibang mga pamamaraan ng pagsulat ng mga mag-aaral at nalilimitahan pa ng mga ito ang paglinang ng pagsulat sa labas ng paaralan.

METODOLOHIYA

Ang pag-aaral na ito ay isang surbey-diskreptibo na naglayong mailarawan ang mga konseptwalisasyon sa pagsulat ng mga 276 mag-aaral sa sekundarya na pasumalang (*randomly*) pinili mula sa San Jose National High School-Mallig, Isabela sa Taong Panuruan 2019-2020. *Mixed-method* ang ginamit sa pagsusuri ng mga nakalap na datos. Naging gabay ang tematikong pagsusuri o thematic analysis nina Braun at Clarke (2019) sa pagsusuri ng mga kwalitatibong mga datos. Ginamit ang pamaraang ito bilang makabuluhan at realistikong hakbang na mag-uulat ng mga karanasan, mga pagpapakahulugan at reyalidad hinggil sa konseptwalisasyon, sa pagsulat ng mga mag-aaral sa sekudarya. Napatunayan itong mabisa at pinakaangkop sa mga pananaliksik panlipunan (Maguire & De-lahunt, 2017) at sa mga pananaliksik na may mga kwalitatibong datos katulad ng pag-aaral na ito.

Instrumento sa Pangangalap ng datos

Naging batayan ng instrumentong ginamit sa pag-aaral na ito ang *Cross-Level Motivation to Write Profile* (CLMWP) na ginamit sa pag-aaral nina Werderich at Armstrong (2013) mula sa orihinal na instrumentong *Motivation to Write Profile* (MWP) na ginawa nina Codling at Gambrell (Codling & Gambrell, 1997) at ang *Adolescent Motivation to Read Profile* (AMRP) na binuo nina Pitcher (Pitcher et al., 2007). Pinili lamang ang mga bahagi ng instrumento na nagpapalabas sa konseptwalisasyon sa pagsulat upang matugunan ang mga layunin ng pag-aaral na ito.

Naging gabay ang mga sumusunod na iskala at deskripsyon sa pagsusuri ng mga kwantitati-bong datos

Iskala	Deskripsyon
3.51- 4:00	lubos na sumasang-ayon
2.51- 3:50	sumasang-ayon
1.51-2.50	di-sumasang-ayon
1.00- 1.50	lubos na di-sumasang-ayon

Kinuha ang *Mean* ng mga tugon ng mga mag-aaral gayundin ang bahagdan at *frequency count*

upang mailarawan ang mga kwantitatibong datos ng mga konseptwalisasyon sa pagsulat ng mga mag-aaral.

RESULTA NG PAG-AARAL

Antas ng pagsang-ayon ng mga tagatugon sa mga Konseptwalisasyon sa Pagsulat

Makikita sa Talahanayan 1 ang antas ng pagsang-ayon sa mga pahayag hinggil sa konseptwalisasyon sa pagsulat ng mga mag-aaral na tagatugon. Ang unang pahayag na *ang mga manunulat ay nakakapukaw ng interes* ay may natuos na mean na 2.84 na nagpapakitang sila ay sumasang-ayon dito. Sumasang-ayon din ang mga mag-aaral na ang pagkakaroon ng kaalaman sa kung paano magsulat nang mabuti ay napakahalaga. Ito ay nakakuha ng pinakamataas na mean na 3.81 kay masasabing ito ang kanilang pinakasinang-ayunang konsepto hinggil sa pagsulat. Nagpapahiwatig ito na kanilang mapapahalagahan ang mga gawaing pampagkatutong tuwirang nakalilalang sa kanilang kaalaman at kasanayan sa pagsulat. Sa natuos na mean na 3.15, ang mga tagatugon ay sumasang-ayon ding ang pagsulat ay isang gawaing nakakapukaw ng interes upang paglaanan nila ng oras. Kasama rin nilang sinasang-ayunan ang aytem na *Bilang isang mag-aaral, gumugugol ako ng oras sa Pagsusulat*.

Talahanayan 1. Konseptwalisasyon sa Pagsulat ng mga Tagatugon

Mga aytem	Mean	Deskripsyon
1. Ang mga taong palaging nagsusulat ay nakakapukaw ng interes	2.84	Sumasang-ayon
2. Ang kaalaman sa kung paano magsulat nang mabuti ay mahalaga	3.81	Lubos na sumasang-ayon
3. Ang pagsulat ay isang gawaing pinaglalaanan ng oras	3.15	Sumasang-ayon
4. Bilang isang mag-aaral, gumugugol ako ng oras sa Pagsusulat	2.90	Sumasang-ayon

Kahalagahan ng Pagsulat sa Pananaw ng mga Mag-aaral

Nakabuo ang mananaliksik ng pitong (7) tema ng dahilan ng mga mag-aaral kung bakit nagsusulat ang tao. Sinusuportahan ng mga dahilang ito kung bakit ang ang kaalaman kung paano magsulat nang mabuti ay mahalaga sa unang bahagi

ng talatanungan ay pinakasinang-ayunan ng mga tagatugon.

Narito ang mga nabuong pitong (7) tema ng konsepto ng mga tagatugon kasama ang ilan sa kanilang mga eksaktong tugon.

Bakit sa tingin mo nagsusulat ang mga tao?

- a. Dahil sa pangarap na makapagtapos at upang makapagtrabaho balang araw

Nagpapahiwatig ito ng kanilang pagkilala sa kahalagahan ng pagkakaroon ng kasanayan at kaalaman sa pagsulat bilang paghahanda sa kanilang pinapangarap na trabaho o karera balang araw. Nakikita ng mga tagatugon na ang pagkatuto at kaalaman nila sa pagsulat ay integratibong bahagi ng kanilang pag-aaral at mahalagang matutunan nila ito para sa kanilang pangarap.

Ilan sa mga partikular na sagot na pinagbatayan ng konseptong ito ay ang mga sumusunod:

Tugon: *Nagsusulat ang tao dahil sa kanilang mga pangarap* (Tagatugon blg. 187-Baitang 10)

Tugon: *Sa tingin ko, nagsusulat ang mga tao upang maipakilala ang kanilang pagkatao, magkaroon ng maayos na trabaho. Hindi maging mangmang at iba pa*

- b. Upang maibahagi at mahasa ang talento at kasanayan sa pagsulat

Kinikilala ng mga tagatugon na ang kahusayan sa pagsulat ay isang talentong dapat maibahagi sa kapwa at isang kasanayang kailangang patuloy na pinagbubuti. Makikita ito sa mga halimbawang tugon ng mga mag-aaral:

Tugon: *Para sa akin, nagsusulat ang mga tao dahil kailangan nilang linangin ang kanilang talento sa pagsulat. Isa pa, maaari itong makatulong sa ibang tao kung sakaling kailangan nila ng tulong sa pagsulat.* (Tagatugon blg. 95 - Baitang 8)

Tugon: *Para mahasa ang kanilang writing skill* (Tagatugon blg. 172 -Baitang 10)

- c. Maipahayag ang kaalaman. kaisipan, damdamin at saloobin

Ang dahilang ito ng mga mag-aaral kung bakit nagsusulat ang tao ay isang indikasyon ng pagpapahalaga nila sa pangangailangan sa pagpapahayag ng sarili ng isang tao. Narito ang

ilan sa mga kasagutan ng mga mag-aaral na nagpapakita nito:

Tugon: *Dahil yung iba hindi nila maipaliwanag ang kanilang punto sa pamamagitan lang ng pagsasalita katulad na lang ng mga pipe.-dahil mas nai-papakita nila ang kanilang husay sa pamamagitan ng pagsusulat* (Tagatugon blg. 87 -Baitang 8)

Tugon: *Para mas madali nilang ipaalam ang kanilang saloobin o sabihin sa ibang tao sa pamamagitan ng pagsulat lalo na kung nahihiya silang sabihin ito sa personal.*

- d. Upang matuto at kailangan sa pag-aaral

Ito ang nangingibabaw sa mga dahilan ng mga tagatugon kung bakit nagsusulat ang tao. Sa konteksto nila bilang mag-aaral, hindi na nakakagulat na ito ang lilitaw na pangunahing tugon sa tanong. Nakabatay sa lawak at saklaw ng kanilang perspektiba at pang-araw-araw na karanasan bilang mag-aaral sa sekundarya ang dahilang ito. Ang pagsulat ay isa sa mga makrong kasanayang nililintang sa mga mag-aaral sa kanilang mga asignatura sa wika bilang bahagi ng patuloy na paglinang ng kanilang kakayahang komunikatibo. Natural lamang na binibigyan sila ng kanilang mga guro ng mga gawain at takda na kailangan nilang magsulat. May mga pasulat din na mga gawain at proyekto kung saan kailangan nilang magsulat sa iba pang mga asignatura. Ang mga ito ang maaaring paliwanag kung bakit halos kaugnay sa kanilang pag-aaral at buhay bilang mag-aaral ang kanilang mga tugon kung bakit nagsusulat ang tao. Ito ay sumusuporta sa natuklasan nina Levin at Wagner (2006) na ang konseptwalisasyon sa pagsulat ng mga mag-aaral ay batay sa kanilang karanasang kognitibo, sosyal, emosyonal at metakognitibo

Bilang mga mag-aaral, kailangan nilang malinang ang mga kasanayan sa pag-aaral na nagsasangkot sa paglinang ng kasanayan nila sa pagsulat. Ilan sa mga kasanayang ito ay ang pagtatala o note taking, pagbubuod, paggawa ng ulat. Marami rin ang sumagot na nagsusulat sila sa praktikal at simpleng dahilang may pagrerebyuhan sila sa pagsusulat na ibibigay ng kanilang mga guro. Mababanaag sa uri ng sagot na ito na tinitignan nila ang pagsulat bilang tungkulin nilang kailangang gawin bilang mag-aaral upang makapasa o magtagumpay sa pag-aaral. May mga sumagot din na nagsusulat ang tao upang masabing siya ay literate at hindi mangmang. Tinitignan nila

ang pagsulat bilang indikasyon ng literasi ng isang tao. Narito ang mga halimbawang mga sagot na sumasalamin sa temang ito.

Tugon: *Para pag may quiz or test magreview sila* (Tagatugon blg. 11 -Baitang 7)

Tugon: *Para hindi rin tayo mabansagan ng kapwa mo ay isang mangmang. Para matuto tayong magsulat para alam natin kung paano isulat ang pangalan natin at a e i o u* (Tagatugon blg. 110 (Baitang 10)

Tugon: *Una sa lahat kaya nagsusulat ang tao dahil sa requirements ito at dahil ito rin ay daan upang mas maunawaan ng mabuti ang sinasabi ng teacher* (Tagatugon blg. 174 -Baitang 10)

- e. Lumikha at maibahagi sa iba ang sariling kuwento, karanasan, ideya at magbigay inspirasyon sa iba.

Ang temang ito ay nagpapakita ng pagkilala ng mga tagatugon sa katotohanang bawat tao ay may kuwento at karanasang mahalagang maibahagi sa iba upang makapagbigay ng inspirasyon sa kapwa. Naniniwala rin ang mga tagatugon na ang tao ay may kakayahang lumikha hindi lamang ng mga kuwentong nakapagbibigay-aliw kundi ng mga ideyang magiging tulong sa iba. Narito ang mga tugong naging basehan ng temang ito:

Tugon: *Nagsusulat ang mga tao dahil para narin siguro ikwento ang kanilang buhay* (Tagatugon blg. 146 -Baitang 9)

Tugon: *Nagsusulat ang mga tao para doon nila ipahayag ang kanilang mga Karanasan* (Tagatugon blg. 156 -Baitang 9)

- f. Nakakagiliw at masayang pampalipas-oras ang pagsulat

Pinapatunayan nito na sa kabila ng lakas ng hatak ng mga makabagong gadgets at ng social media na humihila ng malayang oras ng mga kabataang mag-aaral ay may mga tagatugon pa ring naniniwalang nagsusulat ang tao bilang pampalipas ng oras. Ang mga tugon nilang ito ay maaaring mula sa kanilang sarili o di kaya ay mula sa nakikita nilang pampalipas-oras ng kanilang kapwa kabataang mag-aaral. Narito ang ilan sa mga eksaktong tugon ng mga mag-aaral:

Tugon: *Dahil isa itong masayang gawain kapag walang ginagawa...* (Tagatugon blg. 33 -Baitang 7)

Tugon: *sa tingin ko kaya nagsusulat ang ibang tao ay dahil ito ay kanilang libangan o di kaya ay kanilang kagustuhan lamang* (Tagatugon blg. 103 -Baitang 8)

- g. Upang matandaan ang mahahalagang kaalaman at impormasyon.

Ang temang ito ng mga kadahilanan kung bakit nagsusulat ang tao ay masasabing pinakapraktikal na tugon ng mga mag-aaral. Tinatanggap ng mga tagatugon na may limitasyon ang memorya ng tao at hindi sa lahat ng pagkakataon ay kaya nitong tandaan ang mga kaalaman at mahahalagang impormasyon. Narito ang mga kasagutan ng mga tagatugong. Karamihan sa mga ito ay batay pa rin sa kanilang konteksto bilang mga mag-aaral:

Tugon: *Para may marecord na mga listahan para alam kung sino ang mga absent at cutting* (Tagatugon blg. 41 -Baitang 7)

Tugon: *Nagsusulat ang mga tao para ilista ang mga mahahalagang bagay at hindi ito makalimutan* (Tagatugon blg.111 -Baitang 8)

Mga Kilalang Manunulat ng mga Mag-aaral na Tagatugon

Sa layuning higit na maunawaan ang konseptwalisasyon ng mga mag-aaral na tagatugon hinggil sa pagsulat, tinanong din sila kung sino ang kanilang kilalang magaling na manunulat at kung ano ang katangian ng magaling na manunulat. Ang tanong na ito ay batay sa Social learning theory ni Bandura batay sa pagkakatalakay sa aklat nina Lucas at Corpuz (2014). Ang teoryang ito sa pagkatuto ay naniniwalang natututo ang mga tao sa kanyang kontekstong panlipunan. Ibig sabihin nito, natututo ang isang mag-aaral sa simpleng pagmamasid o obserbasyon, panggagad at sa mga modelo. Ang mga mag-aaral na tagatugon ay maaaring may mga kilalang manunulat na nagsisilbi nilang modelong nakakaimpluwensya sa kanila upang makapagsulat o magsulat.

Sa kabuuang 276 na mga tagatugon, 261 o 94.56% ang tumugon at nagsulat ng kanilang mga kilalang manunulat. Bumuo ng apat na pangkat ng manunulat na kilala ng mga tagatugon mula sa mga indibidwal na mga kasagutan. Ito ay makikita sa Talahanayan 2. Ang unang pangkat ay kinabibilangan ng mga bayani at manunulat ng mga akdang pinag-aaralan sa kanilang mga asignatura. Nangunguna sa pangkat na ito si Dr. Jose Rizal na sinundan nina Francisco Batazar, Pedro Bucaneg,

Andres Bonifacio at ng Pilipinong manunulat sa wikang Ingles at Pambansang Alagad ng Sining sa Literatura na sina Nick Juaquin at Edith Tiempo. Ang pangalawang pangkat ng mga manunulat ay kinabibilangan ng mga mga kaklase at kaeskwela ng mga tagatugon. Ang mga mag-aaral na manunulat na mga ito ay nangunguna sa klase dahil sa taglay na kahusayan sa pagsulat at pangunguna sa kabuuang performans nila sa paaralan. Ang pangatlong pangkat ng mga manunulat ay ang mga dayuhang manunulat na kinabibilangan nina William Shakespeare at J. K. Rowling. Ang pang-apat na pangkat ng mga manunulat na hinahangaan ng mga tagatugon ay ang mga makabagong manunulat na naglilimbag ng kanilang mga akda sa internet partikular sa online social media site na wattpad. Ang panghuling pangkat ng manunulat ay ang mga guro ng mga mag-aaral na tagatugon. Iisa lamang na mag-aaral ang nagsulat ng guro bilang hinahangaan niyang manunulat subalit isinama pa rin ito bilang panlimang pangkat sa paniniwala ng mananaliksik na kinakatawan na ng isang tugong ito ang kabuuang impluwensya ng mga guro sa pagkatuto ng mga mag-aaral sa pagsulat.

Lumabas na 114 o 43.67% sa kabuuang mga mag-aaral na tumugon sa tanong ang nagsabing si Dr. Jose Rizal ang kanilang kilalang manunulat. Ang resultang ito ay maaaring maipaliwanag ng pagkakahantad ng mga tagatugon sa buhay ni Rizal bilang pambansang bayani at sa kanyang mga akda na laging kasama sa kanilang mga aralin sa panitikan at sa mga aralin sa Agham Panlipunan o Araling Panlipunan noong sila pa ay nasa antas ng elementarya. Ang lawak ng impluwensya ni Rizal bilang bayani at manunulat sa pagbuo ng konseptwalisasyon ng mga mag-aaral na tagatugon hinggil sa pagsulat ay pinapatunayan ng mga mag-aaral na pumili sa kanya hindi lamang mula sa mga mag-aaral sa ika-9 at ika-10 baitang kung saan inaaral ang mga kilalang nobela niyang Noli me Tangere at El Felibusterismo kundi maging sa mga mag-aaral sa mga baitang 7, 8, 9, 11, at 12.

Narito ang mga sagot ng mga mag-aaral na nagpapahayag ng personal nilang pagkakakilala kay Rizal bilang bayani at bilang hinahangaan nilang manunulat:

Tugon: *Si Dr. Jose Rizal, dahil siya ay nagsulat sa libro na pinamagatang Noli Me Tangere, siya din ay isang bayani at siya ay nagsulat nang kalayaan.* (Tagatugon blg. 1 -Baitang 7)

Tugon: *Si Jose Rizal dahil sya ay magaling at siya ang nagsulat ng El Filibusterismo*

at Noli Me Tangere ng dahil sa mga sinulat niya ginamit niya ang pagsusulat para sa paglalaban at makamit ang kapayapaan (Tagatugon blg. 63 -Baitang 8)

Tugon: Jose Rizal siya ay alam kong magaling na manunulat kasi nagustuhan ko ang kanyang isinulat na Noli Me Tangere (Tagatugon blg. 168 -Baitang 9)

Tugon: Dr. Jose Rizal ay isang magaling na manunulat dahil sinulat niya ang El filibusterismo at Noli Me Tangere na sa kasalukuyan ay pinag-aaralan ng mga estudyante (Tagatugon blg. 182 -Baitang 10)

Tugon: Jose Rizal. Mapagmahal dahil nagsulat siya ng mga liham para mabasa ng mga Filipino (Tagatugon blg. 233 -Baitang 11)

Tugon: Jose Rizal dahil magaling na manunulat. Dahil isa siyang bayani na sinulat ang Noli Me Tangere at El Filibusterismo (Tagatugon blg. 266 -Baitang 12)

Isa pang bantog na Pilipinong manunulat na kilala ng pito (7) o 2.68% na mag-aaral na tumugon sa tanong ay si Francisco Baltazar. Katulad ni Rizal, kilala rin si Baltazar dahil sa yaman ng mga talinhaga at karunungan hinahalaw sa kanyang obra maestrang Florante at Laura na lagi na lamang nababangit sa mga aralin ng mga mag-aaral mula pa noong sila'y nasa elementarya. Maliban pa sa kanyang obrang Florante at Laura na buo at tuwirang itinuturo sa mga mag-aaral pagsapit nila sa ika-8 baitang. Karamihan sa mga nakakakilala sa kanya ay nasa nasabing baitang.

Narito ang pagkakalahad mismo ng mga tagatugon sa pagkakakilala nila kay Francisco Baltazar bilang bantog na manunulat:

Tugon: *Francisco Balagtas Baltazar dahil siya magaling na manunulat at siya rin ang sumulat ng "Florante at Laura" na tatalakayin namin ng 4th Quarter* (Tagatugon blg. 64 -Baitang 8)

Tugon: *Francisco Balagtas (Florante at Laura) masasabi kong isa siyang magaling na manunula sapagkat makikita sa kanyang mga sulat ang tunay na kahulugan ng buhay,masasalamon din sa kanyang mga sulat ang mga reyalidad tungkol sa ating buhay* (Tagatugon blg. 187 -Baitang 10)

May lima (5) o 1.91% ang tumugong mag-aaral ang nagsabing si Pedro Bucaneg ang kanilang hinahangaang manunulat. Mahihiwatigan sa kanilang mga kasagutan ang pagkaantig sa buhay ng Ilokong manunulat at tinignan ito bilang inspirasyon.

Tunghayan ang sumusunod na pahayag ng mga tagatugon:

Tugon: *Pedro Bucaneg kasi kahit bulag siya hindi siya pinansin ang kanyang kapansanan upang makapagsulat ng mga tula* (Tagatugon blg. 177 -Baitang 10)

Tugon: *Si Pedro Bucaneg, isang ama ng ilokanong literature, siya ay isang bulag na manunulat* (Tagatugon blg. 179 -Baitang 10)

May mga tagatugon ding kumilala kay Andres Bonifacio bilang manunulat at bilang bayani. Marahil ito ay pagkilala sa nagawa niya hindi lamang bilang isang manunulat kundi higit dahil sa kanyang ipinakitang pagmamahal at katapangan sa pakikipaglaban para sa kalayaan ng bansa. Narito ang isang halimbawa ng tugon ng mag-aaral.

Tugon: *Si Andres Bonifacio siya ang nagsulat sa kalayaan ng mga Pilipino* (Tagatugon blg. 34 -Baitang 7)

May mga Pilipino ring manunulat sa Ingles ang kilala ng mga tagatugon. Kasama dito ang parehong Pambansang Alagad ng Sining sa Literatura na sina Nick Juquin at Edith Tiempo. Isang magandang patunay ito na may mga mag-aaral talagang masasabing nagbabasa at nakakakita sa kagandahan ng mga akda ng mga manunulat na hindi kilala ng mga kabataan ngayon. Sila ay nakikilala pa rin ng mga tagatugon bagamat hindi sila kasingsikat ng mga bayaning pinag-aaralan sa kasaysayan at lalong hindi naman sila popular na manunulat sa Wattpad na naaabot ng mga mag-aaral na tagatugong kabilang sa sinasabing Generation Z. Ito ang henerasyon ng mga tagatugon na kilalang mga digital-native o naipanganak at nabubuhay sa mabilis na pag-unlad at pagbabago ng teknolohiya.

Tunghayan ang nasiping tugon ng mga mag-aaral:

Tugon: *Nick Jouquin ang ganda ng kanyang sinulat na "May Day Eve" misteryoso* (Tagatugon blg. 192 -Baitang 10)

Tugon: *Edith k. Tiempo, malikot ang isip (bonsai)* (Tagatugon blg. 192 -Baitang 10)

May 117 o 44.82% naman ng mga tagatugon ang nagsabing ang kilala nilang manunulat ay walang iba kundi ang kanilang kaeskwela at kaklase. Ito ang tugon ng pinakamalaking dami ng mag-aaral. Maituturing na mga baguhan o nag-uumpisang magsulat ang mga kaeskwela nilang ito subalit sila ang nagpapakita ng kahusayan sa pagsulat kayat sila ang isinasali sa mga paligsahan sa paaralan at maging sa labas ng paaralan. Ang nangungunang dahilan kung bakit ang mga kamag-aral o kaeskwela ang napiling kilalang manunulat ng mga tagatugon ay dahil ang mga ito ay nakikilala sa kanilang paaralan dahil isinasali at nagwagi sila sa mga paligsahan sa pagsulat. Nagpapakita ito ng kahalagahan ng pagbibigay ng naaangkop na pagkilala at gantimpala sa mga mag-aaral na nagpapakita pagsisikap na maibigay ang lahat ng kanilang makakaya upang mapagbuti ang kanilang pagsulat. Ang pagkilalang ito ay hindi lamang nakakaganyak pa lalo sa mga nagtagumpay sa pagsulat ng mga mag-aaral kundi nakakapagbigay din ng inspirasyon sa iba pang mga mag-aaral na magsumikap din at magkainteres na hasain ang kanilang kasayan sa pagsulat.

Narito ang ilan sa mga eksaktong tugon ng mga mag-aaral na nagpapakita sa resultang ito:

Tanong: *Sino ang kilala mong magaling na manunulat? Anong katangian ng taong iyan upang masabi mong magaling siyang manunulat?*

Tugon: *Janelle Balagan, magaling syang magsulat ng mga balita at iba pang pahayag. Madami na rin syang napanalunang kompetisyon sa pakikipagtunggali sa ibang paaralan* (Tagatugon blg. 157 -Baitang 9)

Tugon: *Grace Zepeda siya ay napakahusay na manunulat dito sa aming classroom* (Tagatugon blg. 184 -Baitang 10)

Tugon: *Nisha Aizzelle Dolor, dahil kapag may pinagagawa ang aming guro ay alam niya ang kanyang sinasagot/ ginagawa* (Tagatugon blg. 272 -Baitang 12)

May mga dayuhang manunulat na kinikilala ng mga tagatugon. Kasama dito ang bantog na manunulat ng mga klasikong akda na si William Shakespeare at ang sikat na manunulat na si J.K Rowling ng kuwentong naisapelikula na Harry Potter.

Tugon: *Para sa akin, si William Shakespeare ang magaling na manunulat dahil marami na siyang nagawang*

“masterpiece “ gaya ng *Romeo and Juliet* at marami pang iba kaya ko siya lubos na hinahangaan. (Tagatugon blg. 95 -Baitang 8)

Tugon: *J.K Rowling (nagsulat ng Harry Potter) isa syang magaling na manunulat at milyong-milyong mga tao ang humanga sa kanya* (Tagatugon blg. 188 -Baitang 10)

Ang iba pang mga manunulat na kilala ng mga mag-aaral na tagatugon ay mga manunulat na naglilimbag ng kanilang mga sulatin sa internet partikular sa wattpad. May siyam (9) o 3.44% ng mga mag-aaral na tumugon ang pumili ng mga manunulat sa wattpad. Ang wattpad ay isang online na social network site kung saan nagsusulat at nagbabahagi ng akda sa iba't ibang genre ang mga nangangarap maging manunulat. Sa online site na ito nababasa ng mga mag-aaral na tagatugon ang akda ng mga hinahangaan nilang manunulat.

Makikita ang mga ito sa mga sumusunod na tugon ng mga mag-aaral:

Tugon: *Jona, dahil sa kanyang mga sinulat sa wattpad madami ang nainspired sa kanya* (Tagatugon blg. 137 -Baitang 9)

Tugon: *Josh Gonzalez, lagi akong nagbabasa ng mga kwentong pinopost nya online* (Tagatugon blg. 214 -Baitang 10)

Ang guro bilang kinikilalang manunulat ng isang tagatugon ay kumakatawan sa mga guro na nakikita ng mga mag-aaral na maaari nilang mag-ing huwaran sa pagsulat. Sa pagpapaliwanag nga ni Vygotsky (1978) sa kanyang Social Learning Theory, maaabot ng isang mag-aaral ang kanyang Zone of proximal development o kanyang ganap na pagkatuto sa pamamagitan ng tinawag niyang More Knowledgeable Other o taong higit na nakakaalam. Ang mga guro ay itinuturing ng mga mag-aaral at inaasahang higit na nakakaalam sa proseso o estilo sa pagsulat dahil sila ang nagtuturo sa mga ito. Tunghayan ang mismong sagot ng tagatugon:

Tugon: *Guro, dahil sila ang nagtuturo sa amin para mapaganda ang aming sulat* (Tagatugon blg. 4 -Baitang 7)

Talahanayan 2.
Pangkat ng mga Kilalang Manunulat ng mga Tagatugon

Kilalang manunulat ng mga Tagatugon	Bilang ng Mag-aaral na Pumili	%
Pangkat I- Mga Bayani at Pilipinong Manunulat	114	43.68
Jose Rizal	2.682	
Francisco Balagtas	7	1.916
Pedro Bucaneg	5	0.766
Andres Bonifacio	2	0.383
Nick Juaquin	1	0.383
Edith Tiempo	1	
Pangkat II- Mga kaklase at Kaeskwe-lang Manunulat	117	44.83
Pangkat III- Mga Dayuhang Manunulat		
William Shakespeare	2	0.766
J.K. Rowling	2	0.766
Pangkat IV- Mga manunulat sa wattpad	9	3.448
Pangkat V- Ang mga Guro	1	0.383
Kabuuan	261	100

Sinuri din ang mga tugon ng mga mag-aaral hingil sa katangian ng mga hinahangaan nilang manunulat. Masasalamain sa kanilang mga kasagutan na magaling ang isang manunulat na ginamit ang kakayahan sa pagsulat para sa dakila at makalipunang layunin tulad ng pagpapamulat o paggising sa kamalayan ng mga tao para maunawaan ang tunay na nangyayari sa kanilang lipunan. Ito ang nangungunang dahilan ng maraming tagatugong pumili kay Rizal. Ang kanyang dalawang nobelang panlipunang Noli Me Tangere at El Felibusterismo na pinag-aralan ng mga mag-aaral ay sumasalamin noon sa kalagayan ng mga Pilipino sa ilalim ng pananakop ng mga Espanyol.

Magaling din ang isang manunulat sa konsepto ng mga mag-aaral na tagatugon kapag nakilala ang manunulat na ito dahil sa pagsali sa paligsahan sa pagsulat, nagwagi at nagdala ng karangalan sa kanilang paaralan.

May mga tagatugon ding kumilala sa galing ng mga manunulat dahil sa kahusayan ng mga itong maipahayag sa pamamagitan ng malikhaing pamamaraan ang mga katotohanan ng buhay.

Ang mga iba pang mga katangian ng magaling na manunulat na binanggit at hinalaw mismo mula sa mga tugon ng mga mag-aaral ay kinabibilangan ng: malawak ang kanyang isip, malinaw ang pagkakalahad ng mga ideya, nakakaaliw at nakakatawa ang pagsulat, nakagawa ng obra o ‘masterpiece’, nakakayang makagawa ng sulatin sa kahit na anong konsepto, malikhain o nakabubuo ng mga bagong ideya, determinadong ipahayag sa iba ang kanyang kaisipan, matiyagang mag-ensayo sa pagsulat, magaling nitong

nakuha ang atensyon ng mambabasa at magaling itong maglaro ng mabubulaklak na salita, matalino, nagtataglay ng talas ng isip.

KONGKLUSYON

Mula sa nasuring resulta ng pag-aaral, nabuo ang mga sumusunod na kongklusyon:

1. Sinang-ayunan ng mga mag-aaral ang lahat ng mga konseptwalisasyon sa pagsulat. Ang kanilang pinakasinang-ayunan ay ang ideyang ang kaalaman sa kung paano magsulat nang mabuti ay mahalaga.
2. Nagsusulat ang mga mag-aaral dahil sa kagustuhang matuto at maabot ang kanilang mga pangarap. Kinikilala din nila ang pagsulat na isang talento at kasanayang hinahasa at pinagbubuti. Sa pagsulat, naipapahayag nila ang kanilang mga kaalaman, damdamin at saloobin., nakakalikha at nakapagtatala ng mga mahahalagang kaalaman at impormasyon.
3. Kilala ng mga tagatugon ang mga may akda ng mga pinag-aaralan nilang mga obra maestra at mga akdang kasama sa kurikulum. Kinikilala din nilang mga manunulat ang mga kaklase o kaeskwelang popular sa kanilang paaralan at mga manunulat sa online site na wattpad na kanilang labis na tinatangkilik. Ang mga guro bilang kinikilala ng mga mag-aaral na higit na nakakaalam sa proseso ng pagsulat ay kinikilala din bilang manunulat ng mga tagatugon.
4. Ang mga katangian ng mga kilalang manunulat ng mga tagatugon ay may kakayahang makapagpamulat ng kamalayang panlipunan; nagwagi at nagdala ng karangalan sa kanilang paaralan; malikhaing naipahahayag ang katoohan ng buhay.

REKOMENDASYON

Ang mga sumusunod ay ang mga rekomendasyon batay sa mga konklusyon na nabuo mula sa mga natuklasan ng mga mananaliksik.

1. Iminumungkahi sa mga gurong magbigay ng mga gawain (tasks) sa klase, pang-isahan man o pangkatan na mabibigyan ng pagkakataon ang mga mag-aaral na masanay magsulat.
2. Iminumungkahi sa mga guro na magdisenyo ng mga pamamaraan sa pagtuturo ng pagsulat na kawili-wili at tumutugon sa mga pangangailangan at interes ng mga mag-aaral. Naka-

katulong din kung isasangkot ang mga mag-aaral sa pagpapalano o pagpili ng mga pama-raang ipatutupad nila sa klase

3. Palawakin ang pagkakahantad ng mga mag-aaral sa iba pang mga mahuhusay na manunulat na magsisilbi nilang mga modelo o huwaran sa istilo at wika sa pagsulat. Magagawa ito kung mapalakas at mapatindi ang kultura ng pagbabasa sa loob at labas ng paaralan.

PASASALAMAT

Isang taos-pusong pasasalamat sa mga guro at mag-aaral ng San Jose National High School-Mallig, Isabela. Isang espesyal ding pasasalamat kay Bb. Miriam Panduyos na naging katuwang ng mananaliksik upang makakalap ng mga datos sa mga mag-aaral.

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ANG MGA PERSEPSYON SA PAGSULAT AT AKADEMIKONG PERFORMANS NG MGA LALAKE AT BABAENG MAG-AARAL SA SEKUNDARYA

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ABSTRACT

This is a survey –comparative with mixed-method study which examined the perceptions in writing and academic performance of secondary male and female students. It aimed to find out how the secondary students differ in their perceptions in writing when grouped according to their academic performance and gender. A modified questionnaire was used to collect data from 276 secondary students who were selected randomly from San Jose National High School Mallig, Isabela, Philippines. The following conclusions were derived from the findings: 1) most of the respondents are male; majority have outstanding academic performance; 2) generally, the respondents have low perceptions in their writing ability and most of them believe that they are not good writers because of lack of interest in writing; 3) there are perceptions in writing that the students were found to be significantly different when grouped according to their gender and grade level no significant difference in most of the perceptions in writing of the students when grouped according to their gender except that males have higher perception of being better writers than their friends. When grouped according to their academic performance, the students have no significant difference in their perceptions in writing. It is recommended for the teachers to use the controlled and guided writing approaches to help the majority of the students who have a lack of interest in writing because they are lacking of vocabulary and of knowledge in the process of writing. Enrich also the exposure of the students with more interesting readings of the various genre for them to be inspired to start writing their own genre that hooked their interest.

Keywords: academic performance, good writer, interest in writing, perceptions in writing, writing process

ABSTRAK

Ang surbey-komparatibo na may mixed-method na pag-aaral na ito ay nagsuri sa mga persepsyon sa pagsulat at akademikong performans mag-aaral sa sekundarya. Nilayon nitong mapaghambing ang mga persepsyon sa pagsulat ng mga mag-aaral batay sa kanilang akademikong performans at kasarian. Isang minodipikang talatanungan ang ginamit sa pangangalap ng datos mula sa mga mag-aaral na sekundarya sa San Jose National High School Mallig, Isabela, Philippines. Nabuo ang mga sumusunod na kongklusyon mula sa resulta ng pag-aaral: 1) karamihan sa mga tagatugon ay mga lalake at may napakahusay na akademikong performans; 2) sa pangkalahatan, mababa ang mga persepsyon ng mga mag-aaral sa kanilang kahusayan sa pagsulat at karamihan sa kanila ay naniniwalang hindi sila magaling magsulat sapagkat kulang sila ng interes sa pagsulat; 3) walang mahalagang pagkakaiba sa halos lahat ng mga persepsyon sa pagsulat ang mga lalake at babaeng tagatugon maliban sa persepsyong higit silang mahusay na manunulat kaysa sa kanilang mga kaibigan. Higit itong sinang-ayunan ng mga lalake kaysa sa mga babae. Wala naman silang mahalagang pagkakaiba kung mapapangkat sila sa kanilang akademikong performans. Iminumungkahi sa mga guro na gumamit ng kontrolado at pinatnubayang pagdulog upang magabayan ang mga mag-aaral na kulang ang interes sa pagsulat dahil sa kakulangan sa bokabularyo at sa kaalaman sa proseso ng pagsulat. Palawakin din ang pagkakahantad ng mga mag-aaral sa iba-ibang mga kawili-wiling babasahin upang maganyak silang sumubok sumulat ng genre ng sulating nakapukaw sa kanila ng interes. Iminumungkahi sa mga gurong palawakin ang pagkakahantad ng mga mag-aaral sa iba-ibang mga akda at mga sulatin upang magkaroon sila ng marami pang modelo sa pagsulat .

Mga susing salita: akademikong performans, interes sa pagsulat, mahusay na manunulat, persepsyon sa pagsulat, proseso ng pagsulat

PANIMULA

Ang pagsulat ay hindi lamang simpleng gawaing pisikal kundi isang gawaing mental. Nangangailangan ito ng buong kamalayang paggamit ng isip upang makabuo ng ideya na ilalahad sa talata na isinasaalang-alang ang mga tuntunin ng teksto tulad ng gramatika, bokabularyo, mekaniks at iba pa. Isa ito sa mga dahilan kung bakit may mga mag-aaral na tinitignan ang pagsulat bilang mahirap na gawain. Palagay nila, hindi nila kayang makabuo ng sulatin. Ang negatibong persepsyon sa sariling kahusayan sa pagsulat ay isang sikolohikal na salik kung bakit may mga mag-aaral ang nawawalan ng interes sa pagsulat. Pinapatunayan ito ng mga pag-aaral na nag-uugnay sa tiwala sa sarili at sa pagkatuto (Bauman, 2012) at sa kakayahan sa pagsulat ng mga mag-aaral (Fahim & Rad, 2012) (Barone, Sinatra, Eschenauer, & Brasco, 2014). Iniugnay din ang ilang baryabol katulad ng kasarian (Reilly, Neumann, & Andrews, 2019) at akademikong performans sa kahusayan sa pagsulat (Maher, 2011). Napakahalaga sa mga guro na magkaroon ng malinaw na kaalaman sa persepsyon sa kahusayan sa pagsulat at sa mga salik na sinasabing nakakaimpluwensya sa paglinang nito sa mga mag-aaral. Ito ay batay sa pagdulog ng pagtuturo na nakatuon sa mga mag-aaral. Makakatulong ang kaalamang ito upang higit nilang maunawaan at nang sa gayon ay matugunan ang mga pangangailangan ng mga mag-aaral na mapataas ang kanilang persepsyon sa kanilang kahusayan sa pagsulat.

PAGLALAHAD NG SULIRANIN

Ang pangunahing naging layunin ng pag-aaral na ito ay matukoy at mapaghambing ang mga persepsyon sa pagsulat ng mga mag-aaral sa sekundarya batay sa kanilang akademikong performans at kasarian. Nilayon din nitong masagot ang mga sumusunod na mga tiyak na tanong:

1. Ano ang kasarian at akademikong performans ng mga mag-aaral na tagatugon?
2. Ano ang antas ng pagsang-ayon sa mga persepsyon sa pagsulat ng mga mag-aaral?
3. Ano ang pagkakaiba sa persepsyon sa pagsulat ng mga tagatugon kung mapapangkat sila sa kanilang kasarian at akademikong performans?

4. Sa konteksto ng mga mag-aaral, ano kanilang mga kailangang matutunan upang maging magaling na manunulat?

MGA KAUGNAY NA PAG-AARAL

Ang tiwala sa sariling kakayahan sa pagsulat ay napatunayan sa mga pag-aaral na isa sa mga nakakaimpluwensya sa pagkakaroon ng motibasyon sa pagsulat (Pajares, 2003; Pajares, Johnson, & Usher, 2007). Sa surbey sa persepsyon sa sariling kahusayan sa pagsulat ng mga mag-aaral sa sekundarya na isinagawa nina D.E. Werderich at S.L. Armstrong (2013), lumitaw na may mataas na tiwala sa sariling kahusayan sa pagsulat ang mga mag-aaral. Tinitignan nila ang kanilang sarili bilang mahusay na manunulat. Napatunayan din na ang fdbak at opinyon ng mga mambabasa sa kanilang sulatin ang may pinakamalaking epekto sa kanilang positibong persepsyon sa sariling kahusayan sa pagsulat.

Ipinakita sa pag-aaral nina Fahim at Rad (2012) na ang kahalagahan ng layunin kung bakit magsusulat ang isang tao at ang pagtingin nila sa sarili ay napakahalagang mga salik sa motibasyon sa pagsulat. Iminungkahi nila sa mga guro na bigyang diin ang layunin at dahilan kapag nagbibigay sila ng mga takdang pasulat sa mga mag-aaral. Makakatulong ito upang makita ng mga mag-aaral ang personal na kahalagahan ng kanilang isinusulat sa kanilang buhay. Makakatulong din kung hahayaan ang mga mag-aaral na pumili ng paksang sulatin ayon sa kanilang personal na kawilihan. Maging komportable sa pagbabahagi ng kanilang personal na sulatin ang pagtataguyod ng isang kapaligiran sa silid-aralan na malaya ang mga mag-aaral na nakapagbabahagi sa isa't isa ng kanilang mga sulatin sa iba-ibang mga pamamaraan.

Samantala, ang mga babae ay higit na mahusay na manunulat kaysa sa mga lalake subalit wala naman silang pagkakaiba sa kanilang persepsyon sa kahusayan sa pagsulat (Pajares & Valiante, 1999). Gayunpaman, nagpahayag ang mga babae na sila ay higit na mahusay na manunulat kumpara sa kanilang mga kaeskwelang babae at lalake, mas mababa ang tingin ng mga lalakeng mag-aaral sa kanilang kahusayan sa pagsulat kumpara sa kanilang mga kaklase. Natuklasan din sa pag-aaral nina Reilly (2019) na magkaiba ang kakayahan sa pagbasa at pagsulat ng mga mag-aaral na babae at lalake sa lahat ng baitang. Lalong tumataas ang kakayahan sa pagbasa at pagsulat ng mga babae kaysa sa mga lalakeng

mag-aaral habang sila ay umaakyat sa mas mataas na baitang ng pag-aaral. Ayon sa kanila ang mga pagkakaiba ng dalawang kasarian ay bayolohikal o sosyo-kultural na mga paliwanag o kombinasyon ng dalawa. Ang mga pagkakaibang ito ay dulot ng (a) pagkakaiba sa bilis ng paggulang o maturation (b) pagkakaiba sa lateralisasyon ng gamit ng utak (c) pagkakaiba ng mga babae at lalake sa variability, (d) pagkakaiba sa pagpapakita ng ugali at kakayahan sa paggamit ng wika, at (e) pagkakahon o gender-stereotyping ng pagbasa at wikbilang mga katangiang pambabae.

METODOLOHIYA

Ginamit ang pamaraang palarawang pahambing na surbey upang matukoy at mapaghambing ang mga persepsyon sa pagsulat at akademikong performans ng mga 276 na mga babae at lalakeng mag-aaral sa sekundarya. *Mixed-method* ang ginamit sa pagsusuri ng mga nakalap na kwantitatibo at kwalitatibong mga datos. Ang tematikong pagsusuri o thematic analysis nina Braun at Clarke (2019) ang naging modelo sa pagsusuri sa mga kwalitatibong datos.

Instrumento sa Pangangalap ng datos

Natuklasan sa pag-aaral na magkaiba ang kakayahan sa pagbasa at pagsulat ng mga mag-aaral na babae at lalake sa lahat ng baitang. Taliwas din ang resulta sa kanilang hinuha na ang pagkakaiba sa kakayahan ng mga babae at lalake ay bababa habang ang mga mag-aaral ay umaakyat sa mas mataas na baitang sapagkat lalong tumataas ang kakayahan sa pagbasa at pagsulat ng mga babae kaysa sa mga lalakeng mag-aaral habang sila ay umaakyat sa mas mataas na baitang ng pag-aaral. Ayon sa kanila ang mga pagkakaiba ng dalawang kasarian ay bayolohikal o sosyo-kultural na mga paliwanag o kombinasyon ng dalawa. Ang mga pagkakaibang ito ay dulot ng (a) pagkakaiba sa bilis ng paggulang o maturation (b) pagkakaiba sa lateralisasyon ng gamit ng utak (c) pagkakaiba ng mga babae at lalake sa variability, (d) pagkakaiba sa pagpapakita ng ugali at kakayahan sa paggamit ng wika, at (e) pagkakahon o gender-stereotyping ng pagbasa at wika bilang mga katangiang pambabae. Minodipika ng mananaliksik ang *Cross-Level Motivation to Write Profile (CLMWP)* na ginamit sa pag-aaral nina Werderich at Armstrong (2013) upang magamit sa pagkalap ng mga persepsyon sa pagsulat ng mga mag-aaral. Pinili lamang ang mga bahagi ng instrumento na nagpapalabas sa persepsyon sa pagsulat

upang matugunan ang mga layunin ng pag-aaral na ito.

Naging gabay ang mga sumusunod na iskala at deskripsyon sa pagsusuri ng mga kwantitatibong datos

Iskala	Deskripsyon
3.51- 4:00	lubos na sumasang-ayon
2.51- 3:50	sumasang-ayon
1.51-2.50	di-sumasang-ayon
1.00- 1.50	lubos na di-sumasang-ayon

Ginamit ang deskriptibong istatistikang *mean, frequency counts*, at bahagdan sa pagtukoy sa antas ng persepsyon ng mga mag-aaral at ang kanilang akademikong performans at kasarian. Ang *t-test at one-way analysis of variance* and mga kagamitang istatistika sa paghahambing sa mga persepsyon sa pagsulat ng mga mag-aaral batay sa kanilang kasarian at akademikong performans.

MGA RESULTA NG PAG-AARAL

Ang kasarian at Akademikong performans ng mga mag-aaral

Makikita sa Talahanayan 1 ang kasarian at akademikong performans ng mga mag-aaral na tagatugon. Karamihan sa mga tagatugon ay mga lalaki na may bilang na 160 o 58.0%. May kabuuang 116 o 42.0% naman ang mga babaeng tagatugon. Ang akademikong performans ng mga tagatugon na tumutukoy sa kanilang *General Weighted Average (GWA)* ng kanilang mga grado sa una at pangalawang markahan bago nangalap ng datos para sa pananaliksik. Ang mga ito ay mula kasiya-siya hanggang napakahusay. May 47 o 17.0% ang may akademikong performans na kasiya-siya o may GWA na 80-84; may 89 na sobrang kasiya-siya o may GWA na 85-89; at ang karamihan sa mga tagatugong binubuo ng 140 o 50.7% ay may napakahusay na akademikong performans o may GWA na 90-100.

Talahanayan 1. Kasarian at Akademikong performans ng mga Tagatugon

	Bilang N=276	%
Kasarian		
Lalake	160	58.0
Babae	116	42.0
Akademikong Performans		
80-84 Kasiya-siya (satisfactory)	47	17.0
85-89 Sobrang kasiya-siya (very satisfactory)	89	32.2
90-100 Napakahusay (outstanding)	140	50.7

Persepsyon sa pagsulat ng mga mag-aaral

Sa pag-aaral na ito, ang persepsyon sa pagsulat ng mga mag-aaral ay tumutukoy sa kahusayan ng mga mag-aaral bilang manunulat ayon sa tingin nila sa kanilang sarili at sa tingin nila'y pagtingin sa kanilang kahusayan bilang manunulat ng iba.

Ipinakikita ng Talahanayan 2 na may mababang persepsyon ang mga mag-aaral sa kanilang sarili bilang manunulat. Taliwas ang resultang ito sa pag-aaral nina D.E. Werderich at S.L. Armstrong (2013). Ang natuos na mean na 2.23 na nangangahulugang hindi sumasang-ayon ang mga tagatugon na sila ay mahusay na manunulat. Hindi rin sila sumasang-ayon na sila ay higit na mahusay na manunulat sa kanilang mga kaibigan na siyang isinasaad ng natuos na mean ng kanilang mga tugon na 2.22. Hindi rin sila sumasang-ayon na sila ay mahusay sa pagsulat ng mga sanaysay sa asignaturang Filipino na may mean na 2.44. Gayunpaman, sumasang-ayon naman sila na mahusay silang manunulat kapag sila ay nagsusulat ng report o sulating pananaliksik sa ibang asignatura. Ang mas mababang resulta ng persepsyon ng mga mag-aaral sa kanilang kahusayan sa pagsulat sa asignaturang Filipino kung ihahambing sa kanilang persepsyon sa kanilang kahusayan sa pagsulat ng mga report sa ibang asignatura ay umaayon sa obserbasyon at naririnig mismo ng mananaliksik at iba pang mga guro sa Filipino kapag nagbibigay sila ng mga gawaing pasulat sa mga mag-aaral. Kasama sa mga naririnig na mga dahilan ng mga mag-aaral ay kakulangan nila ng kasanayan sa pagbuo ng mga pangungusap sa pagsulat at kakulangan ng malawak na talasalitaan sa Filipino.

Mas mataas ang pagsang-ayon nila na sila ay mahusay na manunulat sa tingin ng kanilang mga kaibigan ($M=2.55$) at kapamilya ($M=2.55$). Ito ay positibong indikasyon ng tiwala nila sa suporta ng mga taong malapit sa kanila sa kanilang kakayahang makapagsulat.

Talahanayan 2. Persepsyon sa sariling kahusayan sa Pagsulat ng mga Tagatugon

Mga aytem	Mean	Deskripsyon
1. Ako ay mahusay na manunulat	2.23	Hindi sumasang-ayon
2. Sa tingin ng aking mga kaibigan ako ay mahusay na manunulat	2.55	Sumasang-ayon
3. Ang tingin ng aking pamilya sa akin ay mahusay na manunulat	2.52	Sumasang-ayon
4. Ako ay higit na mahusay magsulat kumpara sa karamihan sa aking mga kaibigan	2.22	Hindi sumasang-ayon
5. Ang pagsusulat ng mga sanaysay sa klase namin sa asignaturang Filipino ay madali para sa akin	2.44	Hindi sumasang-ayon

6. Ang pagsusulat ng (i.e. balita, pananaliksik at iba pang report) sa iba ko pang asignatura ay madali	2.58	Sumasang-ayon
7. Kung ako ay nagsusulat para ipasa sa klase, pakiramdam ko'y maganda ang maisusulat ko	2.57	Sumasang-ayon

Sa layuning matukoy ang pangkalahatang antas ng persepsyon sa pagsulat ng mga tagatugon, tinanong sila ng *open-ended* na tanong na *Sa tingin mo isa kang magaling na manunulat? Bakit?* May 269 o 97.46% mula sa kabuuang 276 na mga mag-aaral ang tumugon. Nangangahulugang walo sa kanila ang hindi tumugon sa tanong na ito. Mula sa sinuring mga sagot ng mga mag-aaral, may tatlong (3) antas ng persepsyon sa pagsulat ang lumitaw: ang sumagot ng (1) Oo-magaling akong manunulat na binubuo ng 62 o 23.05 % ng mga mag-aaral na tagatugon; (2) Hindi ako magaling na manunulat na sagot ng nakararaming 104 o 38.66% na mag-aaral; at (3) medyo o Katamtaman/sakto lang ang galing ko sa pagsulat na sagot ng 103 o 38.29% na mga mag-aaral. Tunghayan ang Talahanayan 3.

Talahanayan 3. Distribusyon ng Pangkalahatang Antas ng Persepsyon sa Pagsulat ng mga Tagatugon

Antas ng Persepsyon sa pagsulat	Bilang ng mag-aaral 269/276	%
Oo-magaling akong manunulat	62	23.05
Hindi ako magaling na manunulat	104	38.66
Medyo o Katamtaman/sakto lang ang galing ko sa pagsulat	103	38.29

Mula sa mga sumagot ng Oo-magaling akong manunulat, nakabuo ang mananaliksik ng tatlong (3) tema ng dahilan bakit nila sinabing magaling silang manunulat. Tunghayan ang mga ito kasama ang mga eksaktong tugon ng mga mag-aaral:

Tanong: *Sa tingin mo isa kang magaling na manunulat? Bakit?*

Una, magaling silang manunulat sapagkat sila ay nag-aaral mabuti. Ang dahilang ito ay nagpapahiwatig sa paniniwala ng mga mag-aaral na kapag sila ay nag-aaral mabuti ay magaling na rin silang manunulat. Marahil ito ay dahil sa kanilang pag-aaral sa kanilang mga asignatura, isa sa mga inaasahan sa kanila ay ang pagtupad sa mga naibibigay sa kanilang mga gawaing pasulat. Para sa mga mag-aaral na ito, kapag ginagalingan nila ang kanilang pag-aaral at sila ay natututo, gumagaling naman sila sa pagsulat. Maiuugnay

din ito sa mga pangangailangang magpasa o magsulat ng mga sulatin. Kinikilala ng mga tagatugon na ang tiwala sa sariling kahusayan o kagalangan sa pagsusulat ay natatamo kasabay ng pagiging matiyaga sa pag-aaral. Makikita ito sa mga halimbawang tugon ng mga mag-aaral:

Tagatugon blg. 39 (Baitang 7): *Oo, kasi ako ay nag-aaral ng mabuti ang tinuruan ako ng magulang at teacher*

Tagatugon blg. 40 (Baitang 7): *isa akong magaling na manunulat dahil ako ay nag-aaral ng mabuti*

Tagatugon blg. 92 (Baitang 9): *sa tingin ko magaling akong manunulat, dahil naisusulat ko ang aking talambuhay ng maayos at pinursege ko ang aking at pag-aaral at may tiwala ako sa aking sarili.*

Tagatugon blg. 201 (Baitang 11): *oo, dahil sa kadahilanang nairepresenta ko ang aking paaralan sa patimpalak sa pagsusulat.*

Panglawla, magaling silang magsulat sapagkat may tiwala sila sa taglay nilang kakayahan/kaalaman sa pagsulat. Ang positibong pagtinging ito ang nangingibabaw sa sagot ng mga mag-aaral na naniniwalang sila ay magaling na manunulat. Ang tiwala sa sarili na magaling silang manunulat ay kailangang mag-uugat sa taglay na kakayahang makabuo ng isang maayos na talataan na maglalahad nang malinaw na kaisipan, at damdamin gayundin ang mga pansuportang kaisipan kaugnay sa paksa ng sulatin. Kailangan itong taglayin ng isang mag-aaral sapagkat ito ang magsisilbing sandata niya upang makapagsulat. Ito ang naging dahilan ng mga mag-aaral na sumasali at nananalo sa mga timpalak sa pagsulat.

Ang paniniwalang nilang ito ay nakadaragdag sa kanilang tiwala sa sarili bilang isang magaling na manunulat nakapagbibigay ito ng lakas ng loob na magsulat ng isang mabuting sulatin. Narito ang ilan sa mga halimbawa ng kanilang mga kasagutan;

Tagatugon blg. 6 (Baitang 7): *oo, dahil bilang isang mag-aaral naniniwala ako na ang isang tao ay may taglay na kakayahan*

Tagatugon blg. 176 (Baitang 11): *oo, dahil kaya kong ibahagi ang aking saloobin at kaya kong magsaayos ng mga sulatin.*

Tagatugon blg. 147 (Baitang 10): *oo, sapagkat nararamdaman kong kaya kong ibahagi ang aking mga sinusulat at inirerepresenta ko ang aming paaralan sa pagsulat ng mga sanaysay.*

Pangatlo, magaling silang magsulat sapagkat naiintindihan ng iba ang kanilang sulat. Iniuugnay ng mga mag-aaral ang kanilang paniniwala bilang mahusay na manunulat sa kaayusan ng kanilang sulat-kamay. Ipinapahiwatig ng mga eksaktong sagot ng mga mag-aaral na naiintindihan ang kanilang sulat sapagkat nagiging sanggunian ang kanilang mga kwaderno ng ibang mga mag-aaral. Ang maaayos na pagkakasulat ng isang sulatin o ng kanilang mga lektur sa kanilang mga asignatura ay isang dahilan para magtiwala sila sa kanilang galing sa pagsulat. Kasama sa maayos na sulatin o pagsulat nila ang wastong pagkakabaybay ng mga salita, at tamang pagbabantas na makatutulong upang maipahayag nang maayos ang kaisipan at damdamin. Sa kanilang pananaw, ang pagkakaroon ng isang sulating naiintindihan ng iba ay nagpapaangat ng kanilang persepsyong sila ay magaling na manunulat. Narito ang ilan sa mga halimbawa ng mga tugon ng mga mag-aaral:

Tagatugon blg. 2 (Baitang 7): *para sa akin oo dahil naiintindihan ko ang aking sulat.*

Tagatugon blg. 70 (Baitang 8): *oo dahil minsan hinihiram nila ang aking kwaderno para tingnan ang mga salitang hindi nila naintindihan.*

Tagatugon blg. 146 (Baitang 10): *Oo, sapagkat naipararating ko naman ng maayos at madaling intindihin ang aking sulat.*

Sa mga mag-aaral na naniniwalang katamtamang o saktong lamang ang kanilang kagalangan sa pagsulat, sinabi nilang kulang sila ng panahon upang makapag-ensayong magsulat. Isa itong pagkilala ng mga tagatugon na ang pagsulat ay isang kasanayan na maaaring matutunan at mapaghusay. Ang pagsulat ay hindi lamang isang karaniwang gawaing ginagawa ng mga tao, mag-ing ng mag-aaral sa loob o labas man ng paralan. Isa itong pagsasanay tungo sa maayos, mahusay at matalinong pagpapahayag. Naniniwala ang mga mag-aaral sa antas na ito na ang kahusayan sa pagsulat ay natatamo sa patuloy na pag-eensayo sa pagsulat. Makikita ito sa mga halimbawang tugon ng mga mag-aaral:

Tagatugon blg. 26 (Baitang 7): *medyo kasi hindi naman masyadong nagsusulat*

Tagatugon blg. 68 (Baitang 8): *Hindi masyado, dahil hindi ako masyadong nagsusulat*

Tagatugon blg. 85 (Baitang 9): *medyo dahil hindi naman ako gaano nagsusulat at medyo may alam ako sa pagsusulat*

Tagatugon blg. 149 (Baitang 10): *katamtaman lang kasi tataas rin tayo kulang lang tayo ng ensayo upang maging magaling na manunulat*
Tagatugon blg. 185 (Baitang 11) Tugon: *medyo dahil minsan lang ako nagsusulat*
Tagatugon blg. 202 (Baitang 12) : *medyo dahil minsan lang naman ako nagsusulat nasa 3-5 kung gusto kong magsulat sa isang lingo.*

Naniniwala rin ang mga mag-aaral na may sakto at katamtamang kagalingan sa pagsulat na ang interes ay may malaking epekto sa kanilang sulatin. Ang interes o likas na hilig sa pagsulat ang nag-uudyok sa kanilang gumugugol ng oras para magsulat. Narito ang ilang kasagutan ng mga mag-aaral:

Tagatugon blg. 121 (Baitang 9): *medyo dahil mahilig akong sumusulat ng kung ano-ano at gumawa ng mg tula paminsan minsan*
Tagatugon blg. 152 (Baitang 10): *medyo sapagkat hilig ko talagang magsulat at ginugugol ko ang aking oras sa pagsusulat*
Tagatugon blg. 153 (Baitang 10): *medyo sapagkat hilig ko talagang magsulat at ginugugol ko ang aking oras*

Samantala, sa mga mag-aaral na naniniwalang hindi sila magaling magsulat, tinatanggap nila ang kawalan nila ng interes o hilig sa gawaing pagsulat kaya hindi sila kusang nagsusulat. Pansinin ang ilang mga tugon ng mga mag-aaral:

Tagatugon blg. 10 (Baitang 7): *dahil hindi ako nagsusulat*
Tagatugon blg. 59 (Baitang 8) : *hindi kasi hindi ako masyadong nagsusulat*
Tagatugon blg. 113(Baitang 9): *hindi dahil hindi ko hilig ang pagsusulat*
Tagatugon blg. 163 (Baitang 10) : *sa tingin ko ay hindi sapagkat hindi ako masyadong interesado at hindi pa ako masyadong nahasa sa pagsusulat ngunit alam ko naming gumawa ng mga tula at sanaysay at iba pa.*
Tagatugon blg.179 (Baitang 11): *hindi kasi wala akong hilig sa pagsusulat*
Tagatugon blg. 205 (Baitang 12): *hindi dahil wala akong hilig sa pagsusulat*

Naniniwala rin ang maraming mga mag-aaral na hindi sila magaling magsulat sapagkat kulang sila sa kaalaman sa pagsulat. Ang kaalaman sa pagsulat ay sumasaklaw sa kaalaman sa paksa maaari nilang isulat at sa mga proseso ng pagsulat. Ipinapahiwatig ng kanilang mga kasagutan

ang pagtanggap na limitado ang kaalaman nila sa mga bagay-bagay na maaaring maging paksa sana ng sulatin. Tunghayan ang mga sumusunod na kasagutan ng mga mag-aaral:

Tagatugon blg. 91 (Baitang 9): hindi, kase kukonteng kwento lamang ang alam ko
Tagatugon blg. 156 (Baitang 10): hindi, sapagkat kulang pa ang aking kaalaman
Tagatugon blg.207 (Baitang 12): hindi, sapagkat may medyo hindi nakakapag-isip agad ng mga bagay na dapat kong isulat.
Tagatugon blg. 236 (Baitang 8): hindi, Mahina ako at konti lamang ang aking kaalaman

Pagkakaiba sa persepsyon sa Pagsulat ng mga tagatugon kung mapapangkat sila sa kanilang Kasarian, Baitang at Akademikong Performans

Ipinakikita ng Talahanayan 4 ang pagkakaiba sa persepsyon sa pagsulat ng mga mag-aaral kung mapapangkat sila sa kanilang kasarian, baitang na kinabibilangan at akademikong performans.

Walang pagkakaiba sa halos lahat ng mga persepsyon sa pagsulat ang mga mag-aaral kung mapapangkat sila sa kanilang kasarian maliban sa aytem bilang 4- *Ako ay higit na mahusay magsulat kumpara sa karamihan sa aking mga kaibigan.* Lumabas na may mahalagang pagkakaiba sa persepsyon ang mga lalake at babaeng tagatugon dito sapagkat ang natuos na p value nito na .034 ay mas mababa sa .05 na level of significance. Higit na sumasang-ayon ang mga lalakeng mag-aaral na sila ay higit na mahusay magsulat kumpara sa karamihan sa kanilang mga kaibigan. Taliwas ang resultang ito sa pag-aaral na isinagawa nina Pajares at Valiante (1999) na kung saan lumabas na sa tingin ng mga babae'y mas mahusay silang manunulat kaysa sa mga lalake. Sumasalungat din ang resulta ng pag-aaral na ito sa pag-aaral nina (Pajares et al., 2007) na nagsabing ang mga babaeng mag-aaral ay may mas matibay na tiwala sa sariling bisa bilang manunulat at nakakuha ng mas mataas marka bilang manunulat mula sa kanilang mga guro.

Ang mga persepsyon sa pagsulat ng mga mag-aaral ay walang mahalagang pagkakaiba kung mapapangkat sila sa kanilang akademikong performans. Ito ay batay sa mga natuos na F ratios ng mga mean ng mga tugon ng mga tagatugon na pare-parehong may p value na mas mataas sa .05 na level of significance. Nangangahulugan itong hindi naapektuhan ng akademikong performans ng mga tagatugon ang kanilang persepsyon sa pagsulat. Sa bahaging ito, tinatanggap ang hinuha

sa pag-aaral na ito na walang mahalagang pagkakaiba sa persepsyon sa pagsulat ng mga mag-aaral kung mapapangkat sila batay sa kanilang akademikong performans.

Talahanayan 4. Pagkakaiba sa persepsyon sa pagsulat ng mga mag-aaral kung mapapangkat sila sa kanilang Kasarian at akademikong performans

Persepsyon sa Pagsulat	Kasarian		Akademikong Performans	
	T	Sig	F	Sig.
1. Ako ay mahusay na manunulat	-1.204	.230 ^{ns}	.380	.684 ^{ns}
2. Sa tingin ng aking mga kaibigan ako ay mahusay na manunulat	.155	.877 ^{ns}	2.682	.070 ^{ns}
3. Ang tingin ng aking pamilya sa akin ay mahusay na manunulat	-1.106	.916 ^{ns}	1.573	.209 ^{ns}
4. Ako ay higit na mahusay magsulat kumpara sa karamihan sa aking mga kaibigan	-2.134	.034*	.369	.692 ^{ns}
5. Ang pagsusulat ng mga sa-naysay sa klase namin sa asignaturang Filipino ay madali para sa akin	.629	.530 ^{ns}	1.262	.285 ^{ns}
6. Ang pagsusulat ng (i.e. balita, pananaliksik at iba pang report) sa iba ko pang asignatura ay madali	.872	.384 ^{ns}	1.741	.177 ^{ns}
7. Kung ako ay nagsusulat para ipasa sa klase, pakiramdam ko'y maganda ang aking maisusulat	-.325	.746 ^{ns}	.165	.848 ^{ns}

* may mahalagang pagkakaiba (significant)
ns- walang mahalagang pagkakaiba (not significant)

Mga Dapat na matutunan ng mga Tagatugon upang maging magaling na manunulat

Sa *open-ended* na tanong na *Ano sa tingin mo ang iyong dapat na matutuhan upang maging isang magaling na manunulat?*, bumuo ng mga tema ng kanilang mga kasagutan kasama ang ilang eksakto nilang mga tugon.

Una, ang proseso o paraan ng pagsusulat. Nakikita ng mga mag-aaral na ang pagsulat ay isang gawaing may proseso. Bagamat mag-aaral pa lamang sa sekundarya ang mga tagatugon, nakikilala nila na ang pagsulat ay hindi basta-basta nagaganap at ginagawa. Ayon nga kay Baddos (2016) ang pagsulat ay isang kontinuum (continuum) ng mga gawain sa pagitan ng mekanikal o pormal na aspekto ng pagsulat sa isang banda at nang mas kompleks na gawain ng paglikha sa kabilang banda. Sa pagkakatatakay ni Rivers (1978) ang pagkatutong magsulat ay nag-uugat mula sa pagtatamo ng kasanayan (skill-getting) hanggang sa ang mga kasanayang ito ay aktwal na magagamit (skill-using). Bilang isang kompleks na kasanayan, ang mga mag-aaral ay kailangang may sapat na kaalaman sa mga salik

na mahalaga sa pagbuo ng isang sulatin. Kasama na dito ang kaalaman sa paksang susulatin, sa layunin ng pagsulat, sa wikang magiging midyum sa pagsulat, sa konbensyon sa pagsulat, kasanayan sa pagbubuo ng mga ideya, kaalaman sa mekaniks at sa kabuuang proseso ng pagsulat. Dahil isang proseso, batid ng mga mag-aaral na kailangan nilang pormal ding pag-aralan ang pagsulat upang matutunan ang mga nabanggit na mga kasanayan at kaalamang upang maging magaling na manunulat. Tunghayan ang mga sumusunod na kasagutan ng mga tagatugon:

Tagatugon blg.96 (Baitang 9): *Sa tingin ko ang dapat na matutuhan upang maging isang magaling na manunulat ay kung ano ang tamang proseso nito.*

Tagatugon blg. 164(Baitang 10): *Kailangang kong matutunan ang mga basics sa pagsulat*

Tagatugon blg. 179 (Baitang 11): *Tugon: Ang sa tingin ko na dapat matutunan ay kung paano bumuo ng sulatin*

Tagatugon blg.224 (Baitang 12) : *Yung mga rules sa pagsusulat o Do's at don't nito. Yung purpose bakit tayo nagsusulat*

Tagatugon blg. 226 (Baitang 12) : *kailangan ko pang mas matutunan ang tamang pagkakasunod-sunod ng mga ideya at paraan ng pagsulat na kung saan madaling maengganyo ang mga mambabasa.*

Pangalawa, kailangang matuto sa pagsasanay magsulat Kinikilala ng mga tagatugon ang pangangailangan ng pagkakaroon ng pagsasanay upang maging magaling na manunulat. Sa lahat ng mga kasanayan hindi lamang sa gawaing pagsulat ay nakakabit na dito ang pagkakaroon ng pagsasanay upang maging maganda ang kala-labasan ng isang gawain. Ang pagsulat ay isang gawaing mental na kinasasangkutan ng pag-iisip ng paksa ng sulatin, pagpapasya ng kung alin sa mga nakalap o o alam na impormasyon ang dapat isama sa binubuong sulatin, pagpili ng mga makabuluhang mga datos at marami pang ibang mga kinakailangang kaalaman at kasanayan katulad ng kaalaman sa wastong gramatika at mga mekaniks sa pagsulat. Naniniwala ang mga tagatugon na kapag nagsanay nang nagsanay ay magiging magagawa lahat ito ng isang taong nagnanais maging magaling na manunulat. Makikita ito sa mga halimbawang tugon ng mga mag-aaral:

Tagatugon blg.10 (Baitang 7) : *Magsulat araw-araw*

Tagatugon blg. 16 (Baitang7): *ang dapat na matutuhan ko upang mas lalo pa akong humusay ay magsanay araw-araw at dagdagan ang kaalaman*

Tagatugon blg. 90 (Baitang 9): *dapat kong matutunan upang maging magaling na manunulat ay bigyan ko ng oras ang pagsusulat upang sa gayon ay maging magaling akong manunulat*

Tagatugon blg. 145 (Baitang 10): *minsan nagkakamali ako sa grammar, siguro dapat magsanay pa ako pagdating sa grammar.*

Tagatugon blg. 159 (Baitang 10): *kailangan ko muna sigurong mag-ensayong mag-isip ng mga magagandang maisulat ko at kailangan ko pang mag-ensayong magsulat ng maganda.*

Tagatugon blg. 198 (Baitang 11): *sanayin ang sarili at mas mangalap pa ng impormasyon*

Pangatlo, kailangang matutong magkaroon ng malawak na bokabularyo o talasalitaan. Ang isang manunulat ay kailangang magtaglay ng kaban ng wikang gagamitin ayon sa pangangailangan at hinihingi ng pagkakataon. Dapat alam niya ang mga salitang angkop na gamitin sa lahat ng pagkakataon. Nakatutulong ito ng malaki upang makapagsulat ng isang malikhaing sulatin. Ang wika ang nagsisilbing kasangkapan ng isang tao upang maipahayag niya ang kanyang kaisipan at damdamin maging pasalita man o pasulat. Ang pagkakaroon ng malawak na talasalitaan o bokabularyo at kaisipan tungkol sa isang paksang susulatin ay nakatutulong upang makalikha ang isang tao ng isang mahusay na sulatin. Makikita ito sa mga halimbawang tugon ng mga mag-aaral na magkakaiba ang paraan ng pagkakalahad ngunit pareho ang kaisipang nais iparating:

Tagatugon blg. 2 (Baitang 7): *malawak na bokabularyo*

Tagatugon blg. 129 (Baitang10): *Mga matatalinhagang mga salita na maaaring gamitin sa pagsusulat ng mga akda, sanaysay, tula at iba pa at mga agaw atensyong salita upang masiyahan ang mga mambabasa*

Tagatugon blg. 199 (Baitang 11): *mga iba pang salita(bokabularyo)*

Pang-apat, kailangang matutong magbasa ng mga sulatin at pananaliksik at iba't ibang anyo ng panitikan upang makakalap ng impormasyon. Ang pagbabasa ay nakatutulong nang malaki sa paglinang ng pagsusulat ng isang tao. Isa ito sa mga gawaing makatutulong upang mapalawak

ang kaalaman sa pagsulat. Mula sa pagbabasa ay hahango ng isang ideya na magiging sarili sulatin. Ang persepsyong ito ng mga mag-aaral ay nagpapakita na sa ngayon batid na nila na sa pamamagitan ng pagbabasa, nadaragdagan ang kaalaman ng isang tao na nagiging lunsaran upang makalikha ng isang sulatin. Kasama rin sa pagbasa ang pagkilala ng mga tagatugon na dapat din silang matuto sa mga kasanayan sa pangangalap ng impormasyon katulad ng pakikinig sa guro at pagmamasid. Narito ang ilan sa kasagutan ng mga mag-aaral na nagpapakita nito:

Tagatugon blg. 59 (Baitang 8): *laging magbasa ng libro at iba pa*

Tagatugon blg. 91 (Baitang 9): *palaging magbasa ng kwento makinig lagi sa guro*

Tagatugon blg. 130 (Baitang 10): *mangalap ng impormasyon*

Tagatugon blg. 196 (Baitang 11): *magbasa ng magbasa/magpaturo, magpatulong*

Tagatugon blg. 234 (Baitang 12): *magbasa, magsulat, magmasid*

KONGKLUSYON

1. Higit na nakararami ang mga lalakeng tagatugon kaysa sa mga babae.
2. May kasiya-siya hanggang napakahusay na akademikong performans ang mga mag-aaral. Higit na nakararami ang may napakahusay na akademikong perfromans.
3. Mababa ang persepsyon ng mga mag-aaral sa kanilang kahusayan sa pagsulat. Bagamat, positibo sila na sinusupportahan sila ng kanilang mga kaibigan at kapamilya sa kanilang pagsusulat.
4. Nakararami sa mga mag-aaral ang naniniwalang hindi sila magaling magsulat. Ang kawalan ng interes sa pagsulat at kakulangan ng panahon para makapag-ensayo ay lumabas na mga dahilan ng mababang pagtingin nila sa sariling kahusayan sa pagsulat. Ang mga kinikilala ng mga mag-aaral na dapat nilang matutunan upang maging magaling na manunulat ay kinabibilangan ng proseso sa pagsulat, malawak na bokabularyo at pagbasa at iba pang paraang ng pangangalap ng mga impormasyon.
5. May mga persepsyon sa pagsulat na walang mahalagang pagkakaiba ang mga babae at lalakeng mag-aaral subalit mahalaga ang kanilang pagakakiba sa pesepsyong mas magaling silang magsulat kaysa sa kanilang mga

kaibigan. Higit itong sinang-ayunan ng mga lalake. Gayunpaman, sa kanilang akademikong performans, walang mahalagang pagkakaiba ang mga persepsyon ng mga mag-aaral, Anuman ang akademikong performans ng mga mag-aaral, pare-pareho ang antas ng tingin nila sa antas ng kanilang kahusayan sa pagsulat.

REKOMENDASYON

1. Makakatulong upang maiangat ang mababng persepsyon ng mga mag-aaral na hindi nagsusulat sapagkat kulang o wala silang interes kung gumamit ang mga guro ng pinatnubayan at kontroladong pamaraan ng pagtuturo ng pagsulat. Sa mga pamamaraang ito, higit na nagagabayan ang mga mag-aaral at unti-unti silang magkakaroon ng kumpiyansa sa sarili na magsulat.
2. Makakatulong din ang pamaraang malayang pagsulat kung saan gagamit ng mga interaktibo at kawili-wiling mga gawain bago ang pagsulat (pre-writing activities) upang maganyak at matutunan nila ang proseso ng pagsulat na ayon sa kanila ay dapat nilang matutunan upang maging mahusay na manunulat.
3. Iminumungkahi rin ang paghahantad sa mga mag-aaral ng mga kawili-wiling mga akda at mga genre ng sulatin na makakaganyak sa kanilang magkaroon ng interes na sumubok at magsanay magpagsulat.

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STRENGTHENING A LOCAL COLLEGE AND COMMUNITY PARTNERSHIP THROUGH SAGIP-LAWA, IWAS BAHA EXTENSION PROJECT

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ABSTRACT

The study dealt with Sagip-Lawa, Iwas-Baha, a CCC's Adopt-a-Barangay Extension Program and its impact to their respondents with reference to their general reaction, impact changes and aspirations. The study ends with a proposed sustainability program for the benefit of the residents of Barangay Lingga, Calamba City where the program was implemented and monitored for a year. It is observed that this barangay has been affected by typhoon and heavy rainfall so City College of Calamba deemed it necessary to sponsor their first extension program somehow this will help the respondents prevent flood in their place. Descriptive research design was applied on the study. Data gathering was made possible to 87 locals by quota-convenience nonrandom sampling through a survey questionnaire where the profile and information of the respondents were identified; likewise their reactions pertaining to the program and the perceived changes on their knowledge and opinion, skills and values as well as their aspirations were taken into considerations. Descriptive analyses where used like percentage and weighted mean with 4-point likert scale. Inferential analyses of correlation and t-test for independent sample and one-way analysis of variance (ANOVA) were used to determine if significant correlation and difference exist in the defined variables under consideration. It was found out that the community is very much positive in receiving this kind of extension project of the college it was reflected in the perceived changes and gave them great aspirations. Reactions, knowledge and skill changes, and aspirations were significantly different when grouped according to ages, civil status and length of stay in the barangay implied that the college need to modify and apply a little classification in when orienting and implementing the program, however, in terms of attitude change it is not significant in age, sex and civil status implied that the values that the program wanted to give really reached them somehow significant in the length of stay since one factor is that the more lengthy they stayed in the place the more compassion and concern they established the values they had to their barangay.

Keywords: Community Extension, Sagip-Lawa: Iwas Baha, adopt-a-barangay, impact, reactions, knowledge change, skill change, attitude change, aspiration, descriptive design, Calamba

INTRODUCTION

Imagine a world where a liter of water costs two or three times as much as a liter of gasoline because the water supply has become so poisoned that there are very few sources of freshwater left.

The pollution of the world's freshwater supply is already happening at an alarming rate, and if mankind does not take measures to stop what's happening, they could be facing a water scarcity crisis very soon. (Greenpeace Philippines Report, 2017). Also, a data from the Environmental Management Bureau (EMB) of the Philippines showed that out of the 127 freshwater bodies that they sampled, 47% percent were found to have good water quality. However, 40% of those sampled were found to have only fair water quality, while

13% showed poor water quality. Additionally, a data from the Philippine Environment Monitor (PEM) and the EMB 2017, four regions had unsatisfactory ratings for their water quality criteria. These include the National Capital Region or Metro Manila (NCR), Southern Tagalog Region (Region IV), Central Luzon (Region III), and Central Vizayas (Region VII).

Sadly, the Laguna de Bay, one of the largest freshwater lakes in Southeast Asia and located in Region IV where the City College of Calamba is also located, this bay has always been historically, economically, and ecologically significant to the people living along its shoreline and environs. As of 2007, there are a total of 8.3 million persons living around Laguna Lake Basin who are directly

affected by any changes, good or bad, to the lake and its natural ecological balance.

From these occurring problems, the City College of Calamba submitted a concept paper about the possible help the college can give in the Barangay's usual problem when heavy rain or typhoon falls. It is a fact that the location of the barangay is beside the lake but it was observed that flood can be minimized if the drainages and canals, as well as the surrounded area of the lake, is clean. The college's extent to really help the community conducted their first attempt to adopt-a-barangay wherein it initiates a not so big program that they think can help the community in little ways. One of which is the "Sagip-Lawa, Iwas Baha": City College of Calamba Adopt-a-Barangay Extension Program. Although, it is an effort of the college and the barangay officials to solve the existing problem, although cannot be solved in a quarterly-based cleaning schedule, the college wanted to give an enlightenment through their actions about the impact on how to sustain the communities appreciation and actions on how to take good care of their own surroundings and environment.

Framework

This study is anchored on Social Learning Theory by Albert Bandura which is defined as "an individual's judgement of their capacity to organize the activities required for a certain performance, and to achieve it" (Bandura, 1986, p. 391). In relation to the study, an individual's perceptions and judgments let them to do certain performances and eventually achieve it like achieving their future aspirations to the community once they were engaged a wider community with common goals and objectives. Why is it suited to the study is because, this theory is fed on four (4) main sources; direct experiences, observation (others' experiences), verbal persuasion and physical and emotional state (Schunk, 2009). The most effective source is direct experiences; in the study the college encouraged the locals to participate in the clean-up drive to have a strong relational aspiration to their community. Another is that the college allowed the locals to obviously see them cleaning the surroundings and that they can observe its impact. Another source is verbal persuasion, when individuals encounter persuasive encouragement or suggestions, they pay more effort to achieve the assigned task and if they achieve, this will contribute to development (Bandura, 1980) as what the administrators, faculty, staff and students did in the community extension

which is to persuade the locals to its positive effect to them. Physical and emotional state is another source of perceiving development, their capacity to perform the clean-up drive and their voluntary emotional state in joining with it. How well an individual feels psychologically and physically has an effect on their performing an assigned task or an expected behaviour. (Schunk, 2009; Hazır-Bıkmaz, 2006).

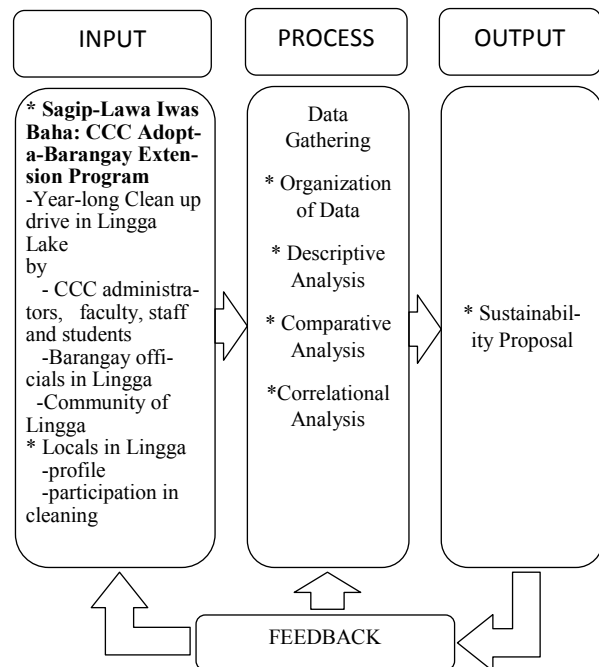


Figure 1. Research Paradigm

The paradigm as illustrated in Figure 1 shows the *Input*, *Process* and *Output* scheme in the conduct of the research. The *Input* includes first, year-long community extension of the college participated by the administrators, faculty, staff, students, barangay officials in Lingga, and the volunteer residents, the profile of the participants, the impact in three areas emphasizing the general reactions, changes about the knowledge, skills and attitude, and last key area is the aspirations. The *Process* of the research involved the conducting of the survey questionnaires, gathering, retrieving the data organization of the data and its analyses. Evidently, it also determined the difference of such impact when the participants were grouped according to profile. Also, the relationship between the impact changes will determine the future extent of aspirations by the respondents. Finally, the *Output* of the study is to derive an implication and to propose a Sustainability Program of the *Sagip-Lawa, Iwas-Baha*.

OBJECTIVES

The study wanted to (1) determine the demographic profile of the respondents in terms of age, sex, civil status, and number of years living in the barangay, (2) Examine the perceived impact of the CCC year-long community extension program in terms of three areas namely: (i) general reactions (ii) impact changes (iii) aspirations and (3) determine the significant difference on the impact about the three areas when grouped according to the demographic profile (4) determine the significant relationship on the perceived changes about the three areas and community's aspirations. Lastly, to come up with a proposal for Sagip-Lawa Iwas Baha Sustainability based from the findings.

RESEARCH DESIGN

The design used in this study is the descriptive research design. This design as described by Shuttleworth (2018) is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way. Many scientific disciplines, especially social science and psychology, use this method to obtain a general overview of the subject. The results from a descriptive research can in no way be used as a definitive answer or to disprove a hypothesis but, if the limitations are understood, they can still be a useful tool in many areas of scientific research. So, this design is more appropriate in this study since it only aims to discuss the comprehensive perception of the City College of Calamba's community extension recipients in its Sagip-Lawa Iwas Baha: Adopt-a-barangay program. Also, the design's main characteristic is to gather data at present using structured research instrument, hence used as well by the college in its assessment.

PARTICIPANTS OF THE STUDY

The recipient barangay of the college in their first extension program is Lingga, Calamba City, Laguna. The observation that this barangay happened to always be affected if typhoon and heavy rain fall, the City College of Calamba (CCC) decided to contribute a little effort on how to prevent flood in the barangay. In connection, the population of the study was the locals in the community of Lingga since they were the ones who directly received the program of the college and

they were the ones participated in the cleaning drive of the Lingga Lake.

The recipient barangay of the college in their first extension program is Lingga, Calamba City, Laguna. The college's extension committee decided to get a quota sample of 100 respondents, but unfortunately, only 87 actual responses were retrieved.

DATA GATHERING PROCEDURE

The instruments were distributed three times to complete the desired number of samples, first happened in a general assembly in the barangay hall covert court, second, the instruments were left in the barangay office so that whoever local participated in the Sagip-Lawa Iwas Baha can have a feedback when they were consulting something in their barangay. Last, the remaining instruments were distributed through convenient sampling wherein the locals who are most available in a door-to-door gathering were selected.

INSTRUMENTS USED

The college used a questionnaire with four important sections. The first section dealt with the profile and information of the participants. The second section dealt with the indicators pertaining to the reactions of the recipients in receiving Sagip-Lawa Iwas Baha: Adopt-a-barangay program. The third section of the questionnaire was about the perceived changes the program gave the respondents in terms of knowledge and opinion, skill and values. Furthermore, the last section contains the perceived change in their aspirations after receiving and participating in the college extension's year-long program.

The instrument was first drafted by the community extension coordinator and then presented and discussed in the committee. The members then collaboratively revised and improved the questionnaire. Although members of the extension committee were vice presidents in academic affairs, research, and development and administration, as well the directors in different departments, internal validation was already observed since all the members in the committee are experts and professionals, they still decided to validate the draft by an external Extension Director in one college in Calamba. After the final draft, the extension liaison officer was tasked to pilot test the validated instruments to ten (10) nonactual participants in the community. After the recommenda-

tions by the locals, the instrument was finalized and reproduced for data floating.

The committee and the researchers used a 4-point Likert scale (4=*Strongly Agree*, 3=*Agree*, 2=*Disagree*, 1=*Strongly Disagree*) to assess respondents' agreement or disagreement with the statements by putting a check mark on the appropriate number or rating.

STATISTICAL TREATMENT

The statistical treatments used for descriptive analyses were percentage formula and weighted mean. In comparative analyses, one-way analysis of variance was used while Pearson Product Moment Correlation Coefficient was used to test the significant relationship among the defined variables. Data collected from the survey instruments were tallied, tabulated, and analyzed using statistics generated by the Statistical Package for Social Sciences (SPSS). Interpretations and Implications were then drafted after analyzing the results.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of the Respondents in terms of their Ages

Age	Frequency	%
11-20 years old	35	40.2
21-30 years old	7	8
31-40 years old	9	10.3
41-50 years old	15	17.2
51-60 years old	9	10.3
61 years old and above	12	13.8
Total	87	100

It is noted to know that the most percentage participated on the study were teens from 11 to 20 years old at 40.2% followed by mid-ages from 41 to 50 years old at 17.2% and by the senior citizens which is 13.8% of the respondents. Also, the researchers opportunely described that it was participated by a distributed ages coming from both 31 to 40 years old and 51 – 60 years old at 10.3% and least participated by 21 to 30 years old at 8%.

It is understood to say that the least participation from this ranging ages at 21 to 30 years old are the fact that they were the working group and family providers of the community. While the teens and senior citizens had their ample time during Saturdays to participate in the college quarterly-based cleanup drive in the lake.

Chee (2001) acknowledges that 11-20 years old belongs to a senior high school and college students who were more engage in community services through the affiliations they have in their respective educational institutions. Hence, schools and campuses need to maximize the volunteering urge of these youths.

Table 2. Frequency Distribution of the Respondents in terms of their Sex

Sex	Frequency	%
Male	37	42.5
Female	50	57.5
Total	87	100.0

The majority responses came from the female respondents at 57.5% while 42.5% of the respondents were completed by the male. Aside from the proportion of sex distribution of the community that they were occupied mostly by female, it was recorded in the barangay that male respondents were at work during Saturdays like fishing and fixing things at home, also the number one source of income in the family is tricycle driving by the head of the family: the father, which gave a reason why they were sending their wife and children or their sisters to participate in the cleaning activity in their behalf.

In the same paper of Chee (2001), he believed that these community activities were more interesting to women since the nature of services are much related to household chores where women are stereotyped to do so.

Table 3. Frequency Distribution of the Respondents in terms of their Civil Status

Civil Status	Frequency	%
Single	49	56.3
Married	36	41.4
Widowed	2	2.3
Total	87	100

Most of the respondents were single at 56.3 %, followed by married men and women at 41.4% while 2.3% of the respondents were widowed. It is shown above that the locals in the community are participating regardless of their civil status. The belief that whether single, married, or widowed person can have a contribution in the barangay by giving their feedback to the projects coordinated in their barangay.

As interrelated with the age group, most of the volunteers came from senior high school and

college students who are mostly single in status. These youths were able to give time in doing the community services as hosted by the school institutions, (Kiss, 2017)

Table 4. Frequency Distribution of the Respondents in terms of the Number of Years the Respondents Reside in the Recipient Barangay

Number of Years Residing in Lingga	Frequency	%
1-5 years	4	4.6
6-10 years	47	54.0
11-20 years	1	1.1
21-30 years	1	1.1
22-40 years	6	6.9
41 years and above	28	32.2
Total	87	100.0

From the 87 respondents, 54% of them are residing 6 to 10 years in the recipient location, while 32.2% lives there for 41 years and above. The rest of the 13.8% came from a distributed number of years living and staying in Lingga, the 6.9%, 4.6%, and two 1.1% said that they stayed for 22 to 40 years, 1 to 5 years, 11 to 20 years and 21 to 30 years respectively. Since these locals are living in Barangay Lingga for more than a decade of their lives, they feel that it is their responsibility to be involved in the projects which basically for their own sake.

In the handbook presented by U.S. Department of Health and Human Services (Center for Substance Abuse Treatment (U.S.), 2005), in the recruiting chapter, volunteers need to perceived worthwhile reasons why they will participate in a community service. Now, this worthwhile purpose lies in the residence feeling the value of staying in a clean and safe environment. As they lived longer and staying longer in a place with good ambience, hence the length of stay in the community is a factor in volunteering.

Table 5 Distribution of Means of Reactions, to Sagip-Lawa Iwas Baha Program as perceived by the respondents when grouped according to Profile.

Profile	Indicators	Mean	Standard deviation (Sd)	Verbal Interpretation (VI)
Age	11-20 years old	3.40	0.48	Strongly Agree
	21-30 years old	3.66	0.44	Strongly Agree
	31-40 years old	3.87	0.28	Strongly Agree
	41-50 years old	3.83	0.39	Strongly Agree
	51-60 years old	4.00	0.00	Strongly Agree
	61 years old and above	3.83	0.28	Strongly Agree

Sex	Male	3.66	0.46	Strongly Agree
	Female	3.66	0.44	Strongly Agree
Civil Status	Single	3.53	0.46	Strongly Agree
	Married	3.83	0.37	Strongly Agree
	Widowed	3.53	0.46	Strongly Agree
Years Residing in Lingga	1-5 years	3.75	0.50	Strongly Agree
	6-10 years	3.47	0.47	Strongly Agree
	11-20 years	4.00	0.00	Strongly Agree
	21-30 years	4.00	0.00	Strongly Agree
	22-40 years	3.80	0.22	Strongly Agree
	41 years and above	3.92	0.27	Strongly Agree
Mean		3.66	0.45	Strongly Agree

A general weighted mean of 3.66 which was interpreted as strongly agree, gave a notion that the community is very much positive in terms of receiving and participating in this kind of program coordinated by an educational institution as perceived by all range of ages, by both male and female, by all different civil status, and by all participants whether living in a long period of time in the village or whether new to that barangay. It means that “Sagip-Lawa Iwas Baha” program strongly provided a good background on keeping the surrounding clean, giving useful information in monitoring the lake cleanliness, and accepting that they were very much pleased that their barangay is the recipient of this program.

However, it was manifested in the survey instrument referring to responses on major issues on the cleanliness of the lake vicinity such as proper waste disposal and segregation were not implemented fully as perceived by 4.6% of the respondents. Although these responses were below 5% of the total sample, it is still an appreciation of the college to arrive at an honest response based from what the community actually received and hence should be given focus on the planning of the sustainability aspect of the program.

The skills and personal development of the respondents who were also the volunteers of the community service gave a strong positive reaction in the CCC’s extension project. This is congruent to the study of Locke, Rowe, Oliver, & Plaza (2004) engaging in a community service like this participants developed many qualities like interpersonal as they communicate to other volunteers, leadership, helpfulness and kindness to the colleague whether an acquaintance or not.

Table 6 Distribution of Means on the Knowledge/Opinion Change, Skill Change and Attitude Change to *Sagip-Lawa Iwas Baha* Program as perceived by the respondents when grouped according to Profile.

Profile	Indicators	Knowledge/Opinion Change Mean	Sd	VI	Skill Change Mean	Sd	VI	Attitude Change Mean	Sd	VI
Age	11-20 years old	3.37	0.46	SA	3.23	0.49	SA	3.71	0.42	SA
	21-30 years old	3.63	0.45	SA	3.68	0.37	SA	3.79	0.39	SA
	31-40 years old	3.68	0.59	SA	3.67	0.56	SA	3.75	0.53	SA
	41-50 years old	3.87	0.35	SA	3.82	0.38	SA	3.92	0.26	SA
	51-60 years old	3.98	0.07	SA	4.00	0.00	SA	4.00	0.00	SA
	61 years old and above	3.88	0.30	SA	3.88	0.31	SA	3.75	0.62	SA
Sex	Male	3.67	0.48	SA	3.59	0.51	SA	3.82	0.38	SA
	Female	3.62	0.47	SA	3.57	0.52	SA	3.77	0.45	SA
Civil Status	Single	3.55	0.43	SA	3.45	0.49	SA	3.81	0.35	SA
	Married	3.75	0.51	SA	3.73	0.52	SA	3.76	0.51	SA
	Widowed	3.55	0.43	SA	3.45	0.49	SA	4.00	0.00	SA
Years Residing in Lingga	1-5 years	3.75	0.50	SA	3.75	0.50	SA	3.75	0.50	SA
	6-10 years	3.43	0.46	SA	3.31	0.49	SA	3.73	0.40	SA
	11-20 years	4.00	0.00	SA	4.00	0.0	SA	4.00	0.0	SA
	21-30 years	4.00	0.00	SA	4.00	0.0	SA	4.00	0.0	SA
	22-40 years	3.52	0.71	SA	3.58	0.66	SA	3.25	0.88	SA
	41 years and above	3.99	0.08	SA	3.98	0.09	SA	4.00	0.00	SA
Mean		3.64	0.47	SA	3.58	0.51	SA	3.79	0.42	SA

A mean weight of 3.64, 3.58, and 3.79 all gave a verbal interpretation of strongly agree in the perceived changes of the community in terms of knowledge, skills and attitude after receiving the *Sagip-Lawa: Iwas Baha* Program of the City College of Calamba. It is observable that on the three aspects of changes, greatest impact was reflected among 41 to 50 years old, male, and residents living in the village for about 11-30 years, while greatest knowledge or opinion and skills change lied in married persons but when it comes to the greatest perceived change in attitude most reflected in widowed ones.

In spite of the fact that the project has been implemented and monitored for a year it can be observed that still 10.3% of the respondents fail to understand the program which disabled them to teach their respective families. This is evidently reflected in indicators one (1) and two (2) with the least percentages of respondents agreeing strongly

on their increase of knowledge on safe and sound surrounding and on prevention of flood.

Since it was perceived that some of the respondents least understood the program, it is expected that their motivation to participate and lead the community in the cleanliness drive is low, this reflected of agreeing strongly which is 59.8%.

Among the three (3) areas of changes brought about by the program, it can be stated the area on attitude has the best result since the biggest percentages of agreeing strongly were given by the respondents on the cited indicators. They might have realized the importance of keeping the cleanliness of the community which is supposed to start at home. Keeping their environment clean and observing proper waste disposal somehow help them prevent flood which have been their problem for quite some time.

Furthermore, the three aspects of changes gave a strong impact in knowledge, skills and attitudes of the recipients which needed to plan it's sustainability on how to keep these changes in their lives because at some point in the community's perspective, it is a great help to maintain what the college's endeavor's started.

Table 7 Distribution of Means on the Aspirations to *Sagip-Lawa Iwas Baha* Program as perceived by the respondents when grouped according to Profile

Profile	Indicators	Mean	Standard deviation (Sd)	Verbal Interpretation (VI)
Age	11-20 years old	3.47	0.50	Strongly Agree
	21-30 years old	3.57	0.47	Strongly Agree
	31-40 years old	3.64	0.63	Strongly Agree
	41-50 years old	3.78	0.41	Strongly Agree
	51-60 years old	4.00	0.00	Strongly Agree
	61 years old and above	3.88	0.31	Strongly Agree
Sex	Male	3.65	0.52	Strongly Agree
	Female	3.67	0.45	Strongly Agree
Civil Status	Single	3.61	0.43	Strongly Agree
	Married	3.72	0.54	Strongly Agree
	Widowed	4.00	0.00	Strongly Agree
Years Residing in Lingga	1-5 years	3.75	0.50	Strongly Agree
	6-10 years	3.48	0.48	Strongly Agree
	11-20 years	4.00	0.0	Strongly Agree
	21-30 years	4.00	0.0	Strongly Agree
	22-40 years	3.54	0.75	Strongly Agree
	41 years and above	3.95	0.21	Strongly Agree
Mean		3.66	0.48	Strongly Agree

Table 7 presented a mean score of 3.66 which was interpreted as strongly agree. It implied that community's aspirations after receiving the program became strong, especially in the locals ages ranging from 51 to 60 years old, female, widowed and residents in the village from 11 to 30 years as

reflected in their mean scores of 4.0, 3.67, 4.0 and 4.0 respectively. It was interesting to mention that the very first aspiration formed in their minds after receiving the program is to make one's self an agent of change in promoting a clean and safe environment. Secondly, they wanted to find ways in involving the greater community in keeping a clean and green environment. Last, they wanted to spend more time in collaboratively cleaning lake's vicinity for them have a broadened knowledge in cleaning the surrounding using other equipment or resources.

Table 8 Comparison of Means on the Reactions, Changes and Aspirations when grouped according to Profile

Variables	Age	Sex	Civil Status	No. of years Residing in Lingga
Reaction	0.000**	0.993	0.004**	0.001**
Knowledge and Opinion	0.000**	0.639	0.075*	0.000**
Skill Change	0.000**	0.827	0.024*	0.000**
Attitude Change	0.410	0.607	0.680	0.001**
Aspiration Change	0.013*	0.838	0.353	0.002**

**significant at 0.01 level of significance
 *significance at 0.05 level of significance

Table 8 reflected that there is a strong significant difference on the perceived reactions when grouped according to ages as seen in the p-value at 0.000 which is less than the significant level at 0.01. Although mean perceptions interpreted in the same degree of agreement which was all strongly agree, it implied that reactions brought by the college was received differently by different age brackets, that is, most positive in 51-60 years old followed by 31-40 years old, next was 41-50 and 61 years old and above, and last by 11-20 years old. More so, a p-value of 0.000 in both knowledge and skill changes gave a decision of rejecting the null hypotheses and hence, the alternative hypotheses were accepted. It means that 51-60 age brackets had a great knowledge and skill changes, followed by 61 years old and above, third who perceived a strong positive knowledge and skill changes were 41-50 age brackets. Surprisingly, both 21-30 years old and 31-40 years perceived equally that knowledge and skill changes were strongly manifested in them. Lastly, by 11-20 years old although in the least rank who perceived a knowledge and skill change, still they

strongly perceived it. In addition, the null hypothesis was also rejected in terms of the difference the perception it had when it comes to aspirations in age brackets. Left a highest aspiration again in 51-60 years old, second by 61 years old and above, third by 41-50 years old, fourth by 31-40 years old, fifth by 21-30 years old and last by 11-20 years old means that the younger the respondents are, the lower their aspirations become.

Table 9 Correlation of Aspirations to Changes in terms of Knowledge, Skills, and Attitudes

Aspiration Change		Knowledge Change	Skill Change	Attitude Change
3.66	Mean	3.64	3.58	3.79
	Pearson's value	0.84	0.639	0.639
	Degree of correlation	High positive correlation	Moderately positive correlation	Moderately positive correlation
	p-value	0.000**	0.000*	0.000*

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

Based from table 9, all aspects of changes namely knowledge, skill and attitude had a significant relationship to the future aspirations of the community after receiving an extension program from City College of Calamba. Specifically the knowledge change which had a high positive correlation which implied that the more knowledgeable the community will be, the higher positivity their aspirations will have. Therefore, the college needs to plan for an improved way of giving knowledge and awareness about how the lake should be took care as well as the prevention system of the flood. Also, a moderate correlations were derived from the other two (2) aspects of changes, implied that if the community improved in terms of their skills and values, it will be instruments of positive aspirations on how to keep a safe and sound environment.

Community services strengthen the connections among the community members. The aspirations of the members became more correlated with the knowledge, skills and attitudes they have when it comes to community engagement in which the study conglomerate this fact. Implied that a continuous community engagement not only achieve the purpose of cleaning but also the aspirations it impact to the community, (Boru, 2017).

CONCLUSIONS

This study gave the result that the year-long community extension of the college was mostly participated by persons ranging from 11 to 20 years of age. Also, a majority were female and single while more than half of the respondents are living in barangay Lingga 6 to 10 years. It was interesting to know that the respondents had a strong positive reaction in receiving this kind of Sagip-Lawa, Iwas-Baha Program. Indeed, the three aspects of changes gave a strong impact in knowledge, skills and attitudes of the recipients which needed to plan its sustainability on how to keep and sustain these changes in their lives because at some point in the community's perspective, it is a great help to maintain what the college's endeavor's started.

It upturned some weak points about the impact the year-long extension gave, although mean perceptions interpreted in the same degree of agreement which was all strongly agree, it implied that reactions, changes and aspirations the college wanted to bring were received differently by different profile categories. Nevertheless, the knowledge change had a high positive correlation which implied that the more knowledgeable the community will be, the higher positivity their aspirations will become. A moderate correlations were derived from the other two (2) aspects of changes, implied that if the community improved in terms of their skills and values, it will be instruments of positive aspirations on how to keep a safe and sound environment.

As the college first attempt to conduct an extension program, it is a success in their part that the recipient enlightened how to be an agent of change in promoting a safe and sound environment. Recipients that are advocate of cleanliness in little ways which will lead eventually to a green mother earth.

RECOMMENDATIONS

In the nimble of the findings, conclusions, and implications drawn from the study, the researchers recommend that major issues on the cleanliness of the lake vicinity such as proper waste disposal and segregation should be strengthen in its proposed sustainability program. They may sponsor a wide orientation and monitoring to understand the program further so that respondents' motivations to participate and lead the community in the cleanliness drive will be higher. The college

may continue to let the respondents realize the importance of keeping the cleanliness of the community which is supposed to start at home by sponsoring quarterly seminars. Keeping their environment clean and observing proper waste disposal somehow help them prevent flood which have been their problem for quite some time. Notwithstanding, the college may differentiate the processes of their way in orienting, implementing and evaluating the program according to ages, civil status and length of stay since they have unequal perceptions. Finally, it is strongly recommended to implement the proposed sustainability program emphasizing the improved impact changes in three areas so that higher aspirations will be achieved which includes the activities like cleanliness contest, etc.

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GENERATING THE THEORY ON RESEARCH TEACHING: A METASYNTHESIS

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ABSTRACT

This study aims to generate a theory using the thematic analysis that would explain the phenomenon of teaching research in Senior High School in the Philippines. The researcher used the metasynthesis approach through a seventeen (17) review of researches related to the arts of teaching research. The steps include: framing of questions for a review, identifying relevant work, assessing the quality of studies, summarizing the evidence, and interpreting the findings. For the qualitative papers, a checklist from Critical Appraisal Skills Program (CASP) was used to assess the quality of each paper and the overall strength of evidence. From the conducted thematic analysis, three (3) themes surfaced: (1) Involve me and I learn by doing; (2) I may not like research, but I can learn; and (3) I come, I like, and I inspire. From the analysis of themes, three propositions were formulated: (1) Teaching practices are related to the students' research productivity; (2) Students' research productivity is influenced by their attitudes and teachers' attributes; and (3) Teaching research requires creativity, and aspiration of the teacher. The generated theory from analyzing the propositions stated that: *Teachers' attributes and their creative teaching practices lead to students' positive attitudes towards research and research productivity.* The creativity of the research teacher is seen as the major determinant of students' development of research skills.

Keywords: creativity, pedagogy in research, proposition, qualitative research, systematic review, thematic synthesis, theory generation

INTRODUCTION

Man's progress over the years to a large extent, has depended on research. Through research, the quality of man's life has improved from traditional to modern. Hence, life becomes not only more meaningful but enriching as well. Educators and educational administrators continue to conduct research to improve the quality of education especially on instruction. Studies on the different methods or strategies in teaching various subject areas and grade levels have been conducted to determine the best practices or approaches which are more appropriate (Calmorin & Calmorin, 2007).

Indeed, research activity is considered as one of the high-impact educational practices for it offers the opportunity to develop vital skills and attitude for lifelong learners (Imafuku et al., 2015). In addition, many research teachers agree that research is an important function in society, global economy and in various disciplines. Since a research methods class normally requires students to think critically, detail oriented, curious, and adept in finding new ways of writing and re-

writing (Sirakaya- Turk, et al., 2011; Inocian, Pañares, & Ysatam, 2013). Likewise, Vizcarra (2003) had seen that it is vital for development. Practically, everything that is now enjoyed by man emanated from simple theories that were developed through research.

However, some teachers handling research subjects are uncertain and reluctant in facilitating research activities. According to Saleem, Saeed, & Waheed (2014), if only postgraduate students have positive attitude towards research, they will complete the research pleasantly and the output will be of good quality.

At present, the Department of Education of the Philippines has just started with the new K to 12 curriculum in 2010 with the birth pangs which go with it. Based on its curriculum guides, this course develops critical thinking and problem solving skills through quantitative and qualitative researches (K to 12 SHS, Applied Track Subject, 2013). However, missing in the literature are researches on the best practices related to teaching research in the Philippines' Senior High Schools. There have been studies linking the teachers' attitudes and attributes and students' research

productivity but they have little bearing with basic educational outcomes. Nonetheless, it is assumed that there is an underlying link between teachers' quality and students' research productivity. That is, the more effective teachers are more likely to teach practical research more effectively than other teachers. The researcher deemed it necessary to know more the best practices in teaching research to improve learning in other context to make an impact on the students.

General Objective

To address this gap of knowledge, this research is conducted to generate a theory by investigating some practices which gave good results in terms of students' learning outcomes and desirable attitudes and attributes that are most influential in the teaching learning process in the basic education. This systematic review of studies sets out to identify and evaluate relevant practices in local, national, and international research initiatives related to the effectiveness of teaching research to senior high school students.

Specific Objectives

The usual manner of theory generation is to use ideas in order to develop interpretations that go beyond the limits of our own data and that go beyond how previous scholars have used those ideas. In this regard, this study was conducted with the following purposes:

Appraise the reliability and validity of previously published researches; and

Synthesize the research practices to innovate the pedagogy and investigate if it was able reinforce the teachers' creativity in practical research subjects.

Review of Literature

The systematic review process employs literature review methods to select only those studies that meet specific criteria which reasonably confirm the rigor of the evidence produced by a previously published study. Qualitative systematic reviews aim to increase understanding on a wide range of issues that are not best measured quantitatively. A systematic review refers to a literature review associated with a clearly formulated research question that uses systematic explicit methods to identify, select, and critically appraise relevant research from previously published studies related to the question at hand (The Cochrane Collaboration, 2005). In addition, uncovering assumptions and processes within the teaching of research practices require a careful selection of

studies by using the following steps: 1) Search strategy; 2) Identification of studies; 3) Inclusion criteria; 4) Selection of papers; 5) Data extraction; 6) Quality appraisal; and 7) Sources of data (Anderson, 2011). Notably, bringing together and integrate the findings of multiple qualitative studies employ thematic synthesis into three stages as indicated by Thomas & Hurden (2008), coding of text line-by-line; development of descriptive themes; and the generation of analytical themes.

METHODOLOGY

The researcher utilized the metasynthesis approach applying a systematic review of 17 studies relating to an applied subject: Practical Research in senior high schools. As with quantitative studies, the results from a single qualitative study should rarely be used to guide practice. A systematic review of all relevant studies is required. The following steps are derived from the article of Khan, Kunz, & Antes (2003). Table 1 shows the number of studies, particular research title, best practices, and research samples.

Table 1: Title of the study, author/s, and year of publication, best practices, and research samples.

Study	Title of the Study	Best Practices	Research Samples
1	Researching the Research Culture in English Language Education in Vietnam (Hiep, 2006)	Conducting and writing research output with the following formats: Introduction, Conclusion, and Recommendations.	N= 7 teachers
2	Promoting Action Research in Singapore Schools (Soh, 2006)	Conducting series of workshops through: Symposium and reflections	N= 13 teachers
3	Research Experiences of Undergraduate Students at a Comprehensive University (Tan, 2007)	Narrating inquiry for gathering information through story telling: Semi-structured interview, organized transcripts, and data sorting to categories and themes	N= 35 students
4	Teaching Research Methods: Learning by Doing (Aguado, 2009)	Writing questions, developing propositions, determining the case, binding the case and a discussion and triangulation.	N= 13 students
5	The Research Teaching Nexus: A Case Study of Students' Awareness and Experiences (Healy et., 2010)	Surveying systematically, analyzes passive and active experiences, exploring the impact on their teaching and learning.	N= 200 students
6	An Emerging Role of Teacher-Researches in Hong Kong through a School-University Collaborative Research Project (Chow et. al, 2010)	Engaging from induction to graduation, inquiry into disciplinary, professional and community-based problems and issues.	N= 32 teachers

7	Developing Capacity for Research and Teaching in Higher Education (Mugimu & Nakabugo, 2013)	Training faculty and teaching outputs, publications, consultancy, supports and competencies	N= 123 teachers
8	English Teachers' Research Engagement: Level of Engagement and Motivation (Merani, 2015)	Interviewing through preferred language, flexibility of interaction, transcribed and fully content analyzed.	N= 24 teachers
9	Teaching Research Writing to Female Undergraduates in Saudi Arabia (Alshery, 2014)	Interviewing semi-structured: local-ethical considerations, framed questions, note taking, data analysis concentrated on the subjective meanings.	N= 20 students
10	How do Students' Perceptions of Research and Approaches to Learning Change in Undergraduate Research? (Imafuku et. al, 2015)	Examining the perceptions: familiarization of transcripts, compilation of significant elements, condensation, preliminary grouping, comparison of categories, and labeling, contrastive comparison of categories.	N=14 students
11	Strengthening the Link between Research and Teaching: Cultivating Student Expectations of Research-Informed Teaching Approaches (McLinden et. al, 2015)	Teaching can be: research-led, research-oriented, research-based, and research-informed.	Teachers and students
12	From Research to Praxis: Empowering Trinidadian Primary School Teachers via Action Research (Bissesar, 2015)	Introducing quantitative and qualitative methodologies, expecting of problem to resolve, working on the research purpose, methodology, background, population, definition of terms, literature review, data collection, discussion of findings and recommendations.	N=83 student-teachers
13	Ecuador's Efforts to Raise its Research Profile: The Prometeo Program Case Study (Hoof, 2015)	Granting study program abroad with the following qualifications: PhD degree, extensive research publication record, coordinator of scientific research.	N= 32 professors
14	Teaching Research: A Programme to Develop Research Capacity in Undergraduate Medical Students at the University of KwaZulu-Natal, South Africa (Wyk & Mahomed, 2016)	Developing research capacity through data collection, assessing its impact, documentary analysis, ethical approval for the ongoing evaluation.	N= 212 students
15	The Challenges of Practitioner Research: A Comparative Study of Singapore and NSW (Ellis & Loughland, 2016)	Employing Schatzki's practice theory: pre-figuration and modeling, interrogating reconceptualizing, and transforming traditional forms,	N= 50 teachers
16	Philippine Classroom Teachers as Researchers: Teachers' Perceptions, Motivations, and Challenges (Barrera & Acompañado, 2017)	Exploring research through: reflective practice, motivations of master teachers, and reflecting some challenges.	N= 108 students
17	Somali Undergraduate Students' Attitudes towards Research (Nor, 2017)	Assessing attitudes toward research: data analysis using Statistical Package for Social Sciences (SPSS), summarizing the text, describing and interpreting, drawing conclusions and recommendations.	N=42 teachers

Moreover, the explanations from the data collected have challenged the researcher to discover the essence of these qualitative studies that are important in the place studied. Eventually, the context of the research teacher in the senior high school may follow these practices in order for them to cope up with a good quality students' research output.

Figure 1.1 shows the flow of the selection of studies from the 66 identified journals, titles and abstracts were screened. Nineteen (19) studies were excluded since the topics do not match with the focus of inquiry, thus narrowing to forty seven (47).

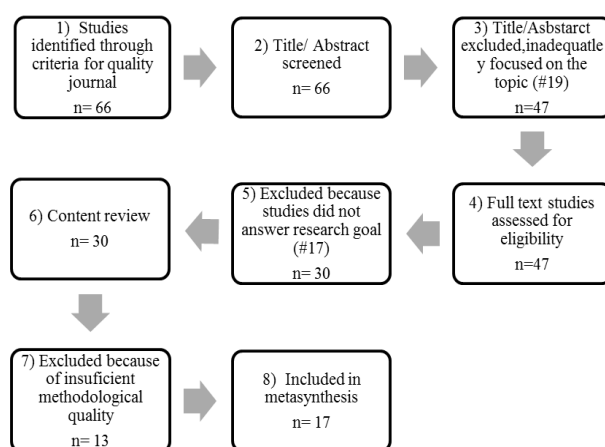


Figure 1: Flow Chart of the Selection of the Studies

These full text studies were assessed again for eligibility. However, seventeen (17) of the studies did not answer the research goal. Hence, the researcher further narrowed the list to thirty (30). Their contents were continuously reviewed. But thirteen (13) articles of methodological quality did not pass the criteria of systematic review. Finally, only seventeen (17) studies are qualified to be included in meta-synthesis.

The literature revealed common challenges around teaching research methods for both students and teachers. From the outsourced literature review, the researcher has eliminated first those studies that have no relationship based on the title, abstracts, and content that did not fit the criteria. The researcher used set a criteria set called Critical Appraisal Skills Program (CASP), a qualitative research checklist with 10 questions to help make sense of qualitative research (Anderson, 2011).

DATA ANALYSIS

The researcher then analyzed the data thematically. The following steps were done: 1) coding of text 'line-by-line'; 2) development of 'descriptive themes'; and 3) the generation of 'analytical themes'. While the development of descriptive themes remains 'close' to the primary studies, the analytical themes represent a stage of interpretation whereby the reviewers 'go beyond' the primary studies and generate new interpretive constructs, explanations or hypotheses (Thomas & Hurden, 2008). The following themes were extracted:

Theme 1: Involve me and I learn by doing

The studies revealed that learners' involvement to the whole process is crucial to their learning on how to conduct research. The students perceived clear benefits to their learning from staff research, enthusiastic staff, and reflected glory of being taught by well-known researchers (as stated in Study 5). According to Kilburn et al. (2014), making research visible is about using active student-centered learning to ground students on abstract principles of research methods. Active learning is broadly defined as any teaching method which gets students actively involved as opposed to transmissive modes of teaching through lecture (Keyser, 2000 as cited in Kilburn 2014). As what pointed out in Study 4, that students gain an appreciation of the fruits and frustrations involved in the research process, and learn to be more critical consumers of research projects.

Theme 2: I may not like research, but I can learn

This pertains to encouraging students and teachers to reflect upon their attitudes towards research process to enable them to position themselves in the bigger picture or reflective learning. Most of the time, research work is found to be tedious and tiring to do; however, teachers and students cannot get away from this task because often this is an academic requirement. They may not like research, but initially they can learn.

A number of researches have been conducted to explore the attitude towards research and the results showed that are generally not positive. Students think that it is tough and dry to study research. They lack basic research skills ranging from searching and evaluating literature sources to paraphrasing and giving citations (Stated in Study 16).

Theme 3: I come, I like, and I inspire

As the new batch of teachers handling Practical Research in the senior high school students, they tend to like and inspire their teaching experience since they have a strong foundation and a thorough grasp of the teaching learning theories and principles even if they have been teaching for several years from their area of specialization. This meaningful improvement of their competency and update on current trends, techniques, and approaches in the teaching profession is a description from several studies (Stated in Studies 4, 6, 11, & 15).

It becomes evident in Theme 3 that learning how to teach research offers a great of help to teachers in their attempt to understand senior high school students and how they learn effectively. To be effective, teaching research must be based on the capacity of students' learning. Overall, the findings of the last theme concerned with how the research teachers acquired learning and change their patterns of behavior, how this process takes place most effectively and appropriately in different classroom situations.

Since teaching was considered as a form of imparting knowledge and skills to the students, it is therefore important to know mastery of subject matter in research methods need to be acquired by the research teachers. The succeeding propositions were enumerated based from the themes mentioned. These are statements that affirm something that is capable of being true or false (Breslin, Gilmour, & Weber, 2011).

Proposition 1. Teaching practices are related to students' research productivity.

Based on Themes 1 and 2, both teachers and students would not, and should not take the matter of research writing lightly. It is too serious a responsibility to belittle with. An important thing to say with justified sense of righteousness that in the conduct of research in whatever form, teachers' and students' integrity among other things are at stake. Towards the completion of the research projects, some students had exciting and fulfilling experiences, whereas others had frustrating yet fulfilling experiences (Tan, 2007). Then one participant in Study 3 said in part:

"We gained recognition for our work. Other experts would like to try our results or findings. Some of us had penetrated refereed journals. Our works were accepted for publication by international journals. Some of us had the chance to present our outputs in a public forum."

John Dewey in Higgins, Baumfield, & Leat (2001) advocated this section claiming that certain materials and methods are not enough in proving the effectiveness of individuals at other times. There must be reason for thinking that they will function in generating an experience that has educative quality with particular individuals at a particular time. This indicates the amount of learning time devoted to an applied subject like practical research. It is related to teacher's task orientation and content coverage, thereby providing students with the greatest opportunity to learn the material to be assessed.

In general, research as a practice encompasses many different traditions, movements, and methodologies and includes, as Cochran-Smith & Lytle (2009) in Study 17 have identified, teacher-research, practitioner inquiry, problem-based inquiry, action research, and action learning. Therefore, students' research productivity may be measured with the interest of research practitioner. All variants of practitioner share the following characteristics:

They view the practitioner as a researcher; professional contexts are the sites of the study; they are blurred boundaries between inquiry and practice; community and collaboration are important; and they act to make new knowledge public and have this new knowledge lead to improved practice (Letts, 2013, p.478 as cited in Study 17)

Proposition 2: Students' research productivity is influenced by their attitudes towards research and by their teachers' attributes.

Based on Themes 2 and 3, Proposition 2 relates the offering of applied research subjects in a particular semester. Since the main goal of practical research in the senior high school level is to develop the critical thinking skills of the students, any enrichment activity to use between the research teachers and the students must be evaluated to what extent the choice was successful in that context and whether any alternatives offer the possibility of great success considering that the students' focus in developing their research projects focused on their specific area of tracks. Dewey's learning by doing can be successful when there is a focus on teaching thinking serving as a catalyst for professional development and allows many of the effective teaching behaviors through the research teachers' direct attention on students' learning and their developing understanding of particular content standards.

The future exploration of the relationships between attitudes and student achievement in research is an important area that still needs to be examined by collecting data at various points (Papanastasiou, 2005). However, this is still basically hypothesized that the concept of attitudes is multidimensional in nature. In addition, by using information teacher-researchers may be able to identify specific modifications to attitudes, skills and behaviors to facilitate the learning of research and foster a deeper appreciation of this subject. For example, the study of Krefting in Baxter & Jack (2008) indicated that novice researchers should also plan for opportunities to have either a prolonged or intense exposure to the phenomenon under study within its context so that rapport with participants can be established and so that multiple perspectives can be collected and understood and to reduce potential for social desirability in interviews. Some of the students' qualitative comments: (Study 14)

"I improved presentation skills; it was great publishing our research in journal; I felt like we made a difference during the health promotion intervention; and I valued the constructive feedback from peers and lecturers on our health promotion and intervention."

In the same vein, the findings in Study 5 showed that many of the students perceived benefits to their learning from staff research, including being taught by enthusiastic staff, enhanced staff credibility, and the reflected glory of being taught by well-known researchers. They also perceived benefits for future employment from their participation in research activities. As narrated by one of the group participants from Study 3:

"Our outside consultant was very much interested in the result of our work. He was approachable as our mentor. We got tips from him; hence, we could get the data easily."

"In our case, we realized not only at the end that some data are missing, and so we had to set new appointments with our interviews. We had to convince them that the interview was very necessary and urgent. This experience though difficult to handle, was resolved through the advice of our advisor."

Good attributes of the research advisor and students and the quality of the mentoring relationship enhanced the completion of the students' research. Katz & Coleman in Study 3 mentioned that effective mentoring relationships were char-

acterized by attributes such as mutual respect, caring, accessibility, compatibility, and support.

Proposition 3. Teaching research requires creativity, and aspiration of the teacher.

The effectiveness of the teacher is the major determinant of student academic progress which has been derived from Theme 3. Aspiration in teaching refers to the desire of research teachers to carry out the instructional objectives. This could be evident in series of activities for every lesson in practical research subjects. According to Sanders & Horn (1998), teacher effects on student achievement have been found to be both additive and cumulative with little evidence that subsequent effective teachers can offset the effects of ineffective ones.

Co-learning between staff and students and may both enhance student lead to a greater synergies between research and teaching (Stated in Study 5). One group from the inquiry in Study 3 narrated:

“We could follow the procedure well and understand what we are doing because our advisors and other consultants were approachable, meticulous, patient, supportive, competent, goal oriented, good critics, and empowering. They love to do research very much and are very skillful.”

However, there were also a number of teacher training institutions which were neither committed to research nor resourced to carry out research (Thwala, 2014). This signifies that the best curriculum is worthless without proper pedagogy. This is somewhat true from the findings of Kapenda & Kasanda (2008) that most teachers are mere consumers of research findings and not producers of research knowledge.

In broad-spectrum, the last proposition may hold correct since aspiration in teaching research can be of good effect when the method used is supplemented by another method. Therefore, the best learning takes place when greater number of intelligences are stimulated and utilized in the research process. In other words, senior high school students are endowed with creative ability to some degree, and this potential is capable of development with the aspired practical research teacher.

Theory Generated:

Based on the above propositions, the researcher generated the following theory: Teachers’ attributes and their creative teaching practices

lead to students’ positive attitudes and research productivity. The constructs involved are: Creativity in teaching research is measured through a teaching effectiveness tool and the research outputs of the students. Teachers become more initiators of pedagogical changes and improvements rather than recipients of ready-made proposals. Their attributes are the combined characteristics of being practical research teachers as to their personal and professional aspects.

CONCLUSION AND RECOMMENDATION

In this study, creative teaching practices are seen to involve in making learning more interesting and effective by using creative approaches in the classroom. Furthermore, students’ attitudes may be nurtured when they deal with research procedures and activities to content which is relevant to their real needs. Moreover, the researcher hope that future endeavors will continue to explore best practices among research teachers in the basic education. Finally, based on the theory generated, the following hypotheses may be validated by the succeeding researchers as to: students’ research output is influenced by their teachers’ attributes and attitudes; research outputs create meanings from a passionate and committed teacher; and the lived experiences and qualities of research teachers have some influence to their students’ research outputs.

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HERBULARYO SA KULTURANG SORSOGANON AT PANITIKAN (THE HERBALIST IN THE CULTURE AND LITERATURE OF SORSOGANON)

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ABSTRAK

Natiyak sa pag-aaral na ito na malaman ang mga pamamaraan ng herbularyo sa panggagamot sa kulturang Sorsoganon at sa panitikan. 1. Malaman ang iba't ibang pamamaraang isinasagawa ng mga herbularyo sa panggagamot 2. at kung paano isinasagawa ang panggagamot. 3. Matukoy ang impak sa rural at urban na barangay. 4. Malaman ang ambag sa kulturang Sorsoganon at panitikan. 5. Makapagmungkahi ng gawain batay sa resulta ng pag-aaral. Deskriptib analisis ang disenyo ng pag-aaral na ginamit ng mananaliksik, ang mga nalikom na datos ay inanalisa, sinuri at binigyan ng interpretasyon sa estatistika tulad ng frequency count at pagaranggo. Ang naging kalahok ay ang mga herbularyo at mga nakaranas ng panggagamot. Mga natuklasan: 1. May iba't ibang pamamaraan ng herbularyo sa panggagamot. 2. May mga paraang na isinasagawa ng gamit ang halamang-gamot. 3. May impak sa mga taong nakatira sa rural at urban na barangay 4. May ambag sa kultura at panitikan. 5. Nakabuo ng isang aklat tungkol sa panggagamot gamit ang halamang-gamot. Kongklusyon ay: 1. Ang mga herbularyo ng bawat bayan ay may iba't ibang pamamaraan ng pagsasagawa ng panggagamot. 2. May iba't ibang kaparaanan sa panggagamot. 3. Magkaiba ang impak ng panggagamot sa rural at urban na barangay. 4. Magkaiba ang ambag ng mga bayan sa panggagamot ng herbularyo sa kultura at panitikang Sorsoganon 5. Ang awtput na nagawa ay isang aklat. Rekomendasyon: 1. Hikayatin ang mga mag-aaral at komunidad na magbasa. 2. Tangkilikin ang mga panitikan na magpapayaman at lilinang sa kultura. 3. Ang lokal na pamahalaan ay maglaan ng programa na pupukaw sa interes sa kultura.

Susing-salita: Herbularyo, Kulturang Sorsoganon, Panitikan

ABSTRACT

This study aims to know the methods used by the herbalist as part of the culture and literature of Sorsoganon. 1. To know the different methods the herbalist use in treating his patient. 2. and on how the treatment of patient is done. 3. To determine the impact of herbalist treatment in rural and urban barangays. 4. To know the contribution of the herbalist treatment in culture and literature of the Sorsoganon. 5. To suggest any activity based from the result of the study. The descriptive analysis method was used by the researcher, the data gathered were analysed, checked and given statistical interpretation such as ranking and frequency count. The respondents were herbalists and patients. Findings: 1. There were different kinds of methods the herbalist used in treatment of his patient. 2. There were different kinds of methods in treating the patient using the herbal plants. 3. There is an impact to the people living in the rural and urban barangays. 4. There were contributions in culture and literature. 5. A book was created about treatment using herbal plants. Conclusion: 1. The herbalists of every town has different methods in treating their patients. 2. There were different ways in treatment. 3. There were different impacts of the treatment of herbalist in the rural and urban barangays. 4. There were different contributions of the herbalist of every town in the culture and literature of Sorsoganons. 5. The output of this study is a book. Recommendation: 1. Encourage the students and community to read. 2. Patronize the literature that will enrich and develop culture. 3. The local government should plan a program to awaken the interest about culture.

Keywords: Herbalist, Literature, Sorsoganon's Culture

INTRODUKSYON

Ang tradisyunal na panggagamot bilang bahagi ng ating kultura ay kaalinsabay na ng pagusbong ng sibilisasyon. Ito ay bahagi ng kasaysayan na may layuning, hindi lang makapagpaginhawa sa karamdaman ng isang tao, bagkus ito rin ang kasangkapan sa pagpasalin-salin ng tradisyon at kultura ng isang bansa. Ang kultura ay gintong pamana sa atin ng ating mga ninuno na kailangang panatilihin at pagyamanin. Ito rin ang nagdudugtong ng pamumuhay ng mga tao mula sa nakaraan patungo sa kasalukuyan at nagsisilbing pagkakakilanlan ng ating lahi. Ang tradisyunal na panggagamot at kultura ay may kaugnayan sa isa't isa sapagkat lumipas man ang panahon ito ay hindi maitatatawa ng isang lahing naging kasangkapan upang mas mapaunlad at malinang upang magamit pa ng mga susunod na salinlahi ng tao.

Sa tradisyunal na panggagamot na naisatitik sa panitikan hindi lang kagalingan ng karamdaman ang maaaring adbentahe nito sa isang lipunan kundi nagiging motibasyon rin ito sa mga nandarayuhan na bisitahin at maitampok ang paraan ng tradisyunal na panggagamot na kinapapalooban ng hiwaga at misteryo na maaring pumukaw sa kamalayan ng mga dayuhan. Sa paraang makilala at mapayaman ng mga tao lalong- lalo na ang mga kabataan ang sariling panitikan mas pahahalagahan pa nila ito at mamahalin bitbit ang kabatirang ito ay bahagi ng kanilang pagkatao kaya marapat lamang na tangkilikin at paunlarin.

Ang herbalismo ay isang pag-aaral tungkol sa mga halaman na gagamitin bilang panggagamot o kaya naman ay pagkaing makakatulong upang maging malusog. Unang ginamit ang mga halamang gamot ng mga tao sa Panahong Paleolithic 60,000 taon na ang nakararaan. (www.wikipidea.org (2018). Noon pa man bago dumating ang mga mananakop ay may sarili ng pamamaraan ng panggagamot ang mga Pilipino partikular na ang mga Bikolano. Ngunit dahil sa gustong iwaksi ng mga dayuhan sa isipan natin ang mag makalumang tradisyon itinatak sa isip natin na ang mga tradisyunal na panggagamot ay gawi ng mga samahang naniniwala sa itim na kapangyarihan o mahika. Ang mga Babaylan (mga tradisyunal na manggagamot) ay nagpatuloy sa panggagamot at napangalagaan nila ang tradisyong ito hanggang sa kasalukuyan (www.scribd.com (2012).

Sa website na www.bandera.inquirer.net (2012) kasama ng herbalismo ang santigwar o

pagtatawas sa katagalugan at iba pang uri ay bahagi ng "faith healing". Ayon naman sa www.philippineculturaleducation.com (2015) ang iba't ibang uri ng "faith healer" ay ang mga sumusunod: Una ay ang mga albularyo na gumagamit ng mga halamang gamot at ritwal sa pinaniniwalaang nagkasakit dulot ng mga nilalang tulad ng duwende, nuno sa punso, lamang lupa, tikbalang at kapre. Pangalawa ayon sa website na www.worldslastchance.com ang mga espiritista na miyembro ng sekta na nagmula sa Europa at gumagamit ng "séances" para makipag-usap sa mga patay o sa iba pang ispiritu. Pangatlo ay ang mangtatawas na kilala sa bikol bilang "parasantigwar" na gumagamit ng ritwal at mga bagay tulad ng kandila, itlog, salamin, plain paper, balat ng sigarilyo at alum o crystalline double sulphate ng aluminum at potassium na kilala sa tawag na tawas.

Pinatutunayan lamang nito na may naiambag rin ang tradisyunal na panggagamot sa kultura upang matugunan hindi lamang ang paggaling ng isang maysakit kundi pati na rin ang mas mapatingkad pa ang kultura ng isang bayan. Ang tradisyunal na panggagamot bilang bahagi ng kultura ay nalimbag na rin at naging lunsarang panitikan sa mga pag-aaral. Sa katunayan dito sa rehiyong bikol pa lang masasabi nang bahagi ito ng kayamananang pinagmamalaki ng isang bansa, sapagkat ayon kay Ramos (2014) ang Rehiyong Bikol ay lubhang mayaman sa iba't ibang uri ng akdang lokal, nababasa ang mga ito sa anyong dula, rawit-dawit mga awiting bikol at iba pang anyo ng panitikan.

Nang maipatupad ang CHED Memorandum Blg.59, s.1996 na may layuning maituro ang panitikan ayon sa rehiyong kinabibilangan mas nahimok pa na manulat ang mga manunulat na bikolano bilang bunga ng kanilang pagtanggap sa hamong ito. Ang Sorsogon ay binubuo ng 14 bayan sa lalawigan dagdag pa rito ang lungsod ng Sorsogon. Ang mga tao sa lugar na ito hanggang sa kasalukuyan ay naniniwala pa rin sa tradisyunal na panggagamot ng mga herbularyo lalong-lalo na doon sa mga malalayong lugar na walang doktor at hindi nakararating ang serbisyo ng pamahalaan sa larangan ng kalusugan.

Mismong ang "World Health Organization" (WHO) ay naglimbag ng pamantayan sa paggamit ng mga herbal na gamot na pinamagatang "Quality Control Methods for Medicinal Plant Materials" noong 1998. Sinuportahan din ito ng ating dating Pangulong Fidel V. Ramos nang pirmahan noong 1997 ang batas na nagpapahalaga sa tradisyunal na gamot at ang iba pang programa

nito ang “Republic Act 8423: The Traditional and Alternative Medicine Act (TAMA) of 1997. Binuo ng batas na ito ang “Philippine Institute of Traditional and Alternative Health Care (PITAHC) na naglalayong mas mapaunlad pa ang paghahatid ng serbisyong pangkalusugan ng mga Filipino sa tinatawag na “National Health Care Delivery System”.

Ayon naman sa www.hawaii.edu.com mahalaga ang paggamit ng mga halamang gamot noon pa man dahil sa kawalan ng ospital at mga doctor. Ang literature na ito ay mahalaga sapagkat pinatutunayan nito sa kasaysayan na mahalaga ang mga halamang gamot sa tao noon pa mang unang panahon.

Ayon sa www.theasianparent.com kailangan ang mga halamang gamot dahil ayon sa may akda ay nakatutulong ito upang guminhawa ang pakiramdam ng isang may sakit lalo na at hindi naman puwedeng tuloy-tuloy ang pag-inom ng medisina.

Isa sa mga patunay ng kagalingan ng pagtatapal ng dahon ay nagmula sa website na www.kalusuganph.halamang-gamot na ang dahon ng ikmo ay maaring itapal sa dibdib sa mga taong may hirap sa paghinga o may pananakit ng dibdib. Kung ikukumpara sa pag-inom ng gamot na mayroong “side effects” mas mainam na ang pagtapal ng dahon na hindi mo kailangang isilid sa loob ng ginhawa mo ang gamot.

Pinatutunayan na ang pag-inom sa pinaglagaan ng halamang gamot ay mabisa. (www.hawaii.edu/Filipino). Gaya na lamang ng dahon ng bayabas kapag ininom ang pinaglagaan ay mainam sa mga nagtatae o may diarrhea. Ito ay mainam at hindi sensitibo sa mga bata, matanda, may allergy at mga buntis sapagkat organikong mga halamang gamot.

Isa sa mga patunay na mabisa ang pagpapahid ng langis ay makikita mula sa website na www.kalusuganph.halamang-gamot. Isa sa mga halimbawa ay ang dahon ng ikmo na pinahiran ng langis na isang mabisang panggamot sa mga masakit ang tiyan.

Ayon sa datos ng World Health Organization (WHO) noong 2014, humigit-kumulang walo sa sampung tao sa buong mundo ang gumagamit ng halamang gamot dahil mas mura ang mga ito. At higit na madaling mahanap kumpara sa mga gamot sa botika. (www.varsitarian.net (2016)

Ayon kay Atienza et al. (2010), na sa panitikang Filipino, inilalahad ang ideya na tunay ang isang panitikan kung nagtataglay ng walang kamatayang diwa. Ito rin ay nagpapabatid ng damdamin ng tao bilang sukli niya sa reaksiyon sa kanil-

ang pang-araw-araw na pagsusumikap upang mabuhay at makamtan ang kaligayahan sa kanyang kapaligiran at sa kanyang pagnanais na makita ang dakilang Lumikha.

Sinabi naman nina Pangkalinawan et al. (2006), masasalamang sa panitikan ang buhay dahil dito mababatid ang pamumuhay at paraan ng pakikipamuhay ng mga tao sa lipunang gingalawan niya. Ang ating isipan ay mas pinapatalas at ang ating puso ay pinaiibig ng mga panitikan. Ito ay bahagi n gating buhay na hindi maaaring iwaglit.

Ayon kay Tiongson et al. (2008), ang panitikan ay kailangang maging kasangkapan upang lalong maitayo ang bandila ng pagka-Filipino sa pamamagitan ng panulat gamit ang katutubong wika. Kung gagamitin ang katutubong wika ay mas mahihimok ang mga Filipino na tangkilikin at mahalina ang wikang sarili. Mahalaga ito upang ang isang lahi ay makilala ayon sa pag-unlad ng sariling wika sa pamamagitan ng paggamit nito.

Tinuran din ni Arrogante et al. (2007) makikilala ang bawat bansa sa kanilang sari-sariling kultura at sari-sariling identidad. Kaya karaniwan lamang na may sariling pantikang naglalahad ng tangi at tunay na pagkatao, pagkalahi at pagkabansa na tanda ng sariling pagkakakilanlan.

Ang mga literaturang nabanggit ay mahalaga dahil ang panitikan ay salamin ng isang lahi at dito naipapahayag ng mga tao ang kanilang saloobin. Tumatalakay sa ideyang patungkol sa usapang pampanitikan at patungkol sa pagkakakilanlan sa pamamagitan ng kultura. Ang mga nabanggit na literature ay mahalaga pa rin sa kasalukuyang pag-aaral sapagkat nakatuon ang silbi at gamit ng panitikan at kultura sa ikabubuti ng sangkatauhan.

Ayon sa pag-aaral nina Firenzouli et al. (2007) na pinamagatang “Herbal Medicine Today: Clinical ang Research Issues” mula sa ang mga herbal na gamot ay gumagamit ng mga halamang gamot upang makaiwas at makalunas sa mga karamdaman na mula sa mga tradisyunal at kilalang mga halaman ng isang bayan na kinuha mula sa mga katas nito (www.hindawi.com (2007). Ang pagkakatulad nito sa pag-aaral na ito ay pareho silang nangungusap sa herbalismo ang pagkakaiba naman ay mas maunlad ang isinagawang pag-aaral tungkol sa mga pamamaraan ng panggamot ng herbulario. Ayon sa pinaghangang website na <https://en.wikipedia.org> ang herbalismo ay isang uri ng pag-aral sa mga halaman na may layuning makagamot o kaya naman ay manaliksik sa mga pagkaing makatutulong sa kalusugan. Ang literature na ito ay mahalaga

sapagkat inilalahad dito ang kahulugan ng herbalismo upang bigyang linaw ang konsepto nito sa mambabasa.

Ayon sa pag-aaral ni C.V. Little (2009) na pinamagatang “Simply Because It Works Better: Exploring Motives for the Use of Medicinal Herbalism in Contemporary U.K. Health Care mula sa marami pa rin sa kalahok sa pag-aaral ang patuloy na tumatangkil ng halamang gamot para sa pang-araw-araw na pagtugon ng mga suliranin sa kalusugan. Ang pagkakatulad nito sa pag-aaral ay parehong tumatalakay sa pagtangkil sa halamang-gamot at ang pagkakaiba ay mas tinalakay sa pag-aaral ang tungkol sa pamamaraan ng panggagamot ng herbularyo.

Ayon sa pag-aaral na pinamagatang “Albularyo ng Pagbilao: Pag-aaral sa mga Tradisyunal na Panggagamot sa Pagbilao, Quezon” mapalad ang mga Pilipino sa pagkakaroon ng iba’t ibang uri ng halamang gamot na praktikal gamitin sapagkat ito ay matipid at matatagpuan lamang sa paligid. Ang pagkakatulad nito sa pag-aaral na ito pareho itong patungkol sa tradisyunal na panggagamot at ang pagkakaiba naman ay ang pag-aaral na ito ay tumatalakay nang pangkalahatan sa tradisyunal na panggagamot samantalang ang pag-aaral ng mananaliksik ay sa paraan ng panggagamot ng herbularyo. (www.academia.edu(2017)

Ayon naman sa pag-aaral ni Paderan (2016) mula sa website na may limang uri ng “folk healing” siyang inihayag sa Bato, Camarines Sur at isa na rito ay ang “Santigwar”. Kasama rin sa mga uri ang “Ukag”, “Sibang”, “Pagmundag” at “Pray-Over” na ginagamit sa pagpagaling ng sakit, sakuna at pangkukulam. Ang pagkakatulad ng pag-aaral na ito sa kasalukuyang pag-aaral ay parehong tumatalakay sa mga tradisyunal na panggagamot at ang pagkakaiba naman ay sa mga uri lang ng folk healing ang pokus ng pag-aaral naito samantalang ang kasalukuyang pag-aaral ay tumatalakay sa mga pamamaraan ng herbularyo sa panggagamot.

Sa pag-aaral ni Yu (2006), ang mga nalikom na alamat, dula, tula at sarsuela ng Bikol ay masusing isinalin niya sa Filipino upang magamit sa mga paaralan bilang karagdagang lunsaran sa pagtuturo. Mula naman sa pag-aaral ni Clariza (2005) ang mga karunungan bayan ng Rinconada gaya ng alamat, bugtong, dalit at tigsik ay nilikom at sinuri. Bilang karagdagang kagamitan sa pagtuturo sa ikaanim na baitang gumawa siya ng modyul upang linangin ang iba’t ibang kasanayan sa pagbasa. Ayon sa pag-aaral ni Arcilla (2006), ang

mga karunungan-bayan ng rehiyong Bikol ay nalikom. Bilang kagamitang pampagtuturo ng panitikan at sa paglinang ng makataong kahalagahan ito ay pinangkat niya sa apat na unit.

Layunin kung gayon ng pag-aaral na ito na mailahad sa publiko ang iba’t ibang pamamaraan ng tradisyunal na panggagamot ng mga herbularyo bilang isang uri ng panggagamot na bahagi na ng kultura at panitikang Sorsoganon na maaring gamitin na lunsaran sa pagtuturo upang magdulot ng kamalayan at pagpapahalaga ang mga tao at mag-aaral sa sariling kultura.

PAGLALAHAD NG SULIRANIN

Ang layunin ng pag-aaral na ito na malaman ang iba’t ibang uri ng panggagamot ng herbularyo bilang bahagi ng kulturang Sorsoganon at panitikan. 1. Malaman ang iba’t ibang pamamaraan isinasagawa ng mga herbularyo sa panggagamot. 2. Malaman kung paano isinasagawa ng mga herbularyo ang panggagamot. 3. Malaman ang impak ng panggagamot ng herbularyo sa mga taong nakatira sa rural at urban na barangay. 4. Malaman ang mga naging ambag ng panggagamot ng herbularyo sa kulturang Sorsoganon at panitikan. 5. Malaman ang maipapanukala at maimungkahi batay sa resulta ng pag-aaral.

METODOLOHIYA

Deskriptib analisis ang disenyo ng pag-aaral na ginamit ng mananaliksik sa paglikom ng mga datos na kinailangan sa pag-aaral na ito. Upang malaman ang kahalagahan at kontribusyon ng herbularyo sa kulturang Sorsoganon at ang impak nito sa mga urban at rural na barangay ng Sorsogon sa kabila ng mga makabagong pamamaraan ng panggagamot. Ang mga kalahok ay ang mga herbularyo at mga nakaranas ng panggagamot. Binubuo ng 480 na kalahok na pinili sa pamamagitan ng alisagang halimbagay o random na mga pagsasampol (random sampling) nagmula sa iba’t ibang barangay ng bayan at lungsod ng Sorsogon. Tseklist ang ginamit bilang instrumento sa pagkuha ng datos na kakailanganin at pakikipanayam. Ang mga nalikom na datos ay inanalisa, sinuri at binigyan ng interpretasyon sa tulong ng nararapat na estatistika tulad ng frequency count at pagraranggo.

Talahanayan 1 Iba't Ibang Pamamaraan sa Pangagamot na Isinasagawa ng Isang Herbularyo

Pamamaraang Ginagamit	Kabuuan	Bahagdan
Pagtatapat ng dahon sa katawan	399	1
Pagpapainom ng pinaglagaan ng dahon	389	2
Pagpapahid ng langis	340	3
Pagpapausok mula sa nilagang dahon	265	6
Paghilot gamit ang katas ng dahon	338	4
Bulong o orasyon sa mga dahon bago gamiting panggamot sa pasyente	292	5
Pagpapadaan sa apoy ng dahon bago gamiting panggamot sa pasyente	247	7.5
Pagbabad sa dahon sa langis na may iba't ibang sangkap bago gamiting panggamot sa pasyente	247	7.5

Ipinapakita sa talahanayan ang iba't ibang pamamaraang isinasagawa ng mga herbularyo sa pangagamot nangunguna ang pagtatapat ng dahon sa katawan ayon ito sa sagot ng 399 na kalahok sa pag-aaral. Isa sa mga patunay ng kagalangan ng pagtatapat ng dahon ay nagmula sa website na www.kalusuganph.halamang-gamot na ang dahon ng ikmo ay maaring itapat sa dibdib sa mga taong may hirap sa paghinga o may pananakit ng dibdib. Kung ikukumpara sa pag-inom ng gamot na mayroong “side effects” mas mainam na ang pagtatapat ng dahon na hindi mo kailangang isilid sa loob ng ginhawa mo ang gamot.

Sa mga pasyente maaaring maganda ang naidulot nito nakaiwas na sila sa mga “side effects” nakatipid pa sila sa mga gastusin sapagkat ang dahon na pantapat nila ay maaari lang makuha sa kanilang paligid. Mas magiging maalaga ang mga tao sa kanilang kalusugan lalo na at hindi naman kinakailangan ang malaking halaga para sa pangagamot sa mga karamdaman gamit ang mga halamang gamot na nasa paligid lamang.

Sinundan ito ng pagpapainom ng pinaglagaan ng dahon ayon sa sagot ng 389 na kalahok sa pag-aaral. Pinatutunayan na ang pag-inom sa pinaglagaan ng halamang gamot ay mabisa. (www.hawaii.edu/Filipino). Gaya na lamang ng dahon ng bayabas kapag ininom ang pinaglagaan ay mainam sa mga nagtatae o may diarrhea. Pangatlo ay ang pagpapahid ng langis ayon sa sagot ng 340 na kalahok sa pag-aaral. Isa sa mga patunay na mabisa ang pagpapahid ng langis ay makikita mula sa website na www.kalusuganph.halamang-gamot. Isa sa mga halimbawa ay ang dahon ng ikmo na pinahiran ng langis na isang mabisang panggamot sa mga masakit ang tiyan.

Pang-apat ang paghilot gamit ang katas ng dahon ayon sa sagot ng 338 na kalahok sa pag-aaral. Pinatutunayan ito na mula sa katas ng sabila (aloe vera) ay mabisang ipinapahid sa balat na natilamsikan ng mainit na mantika at sa sugat. (www.hawaii.edu/Filipino). Panlima ay ang bulong o orasyon sa mga dahon bago gamiting panggamot sa pasyente ayon sa sagot ng 292 na kalahok sa pag-aaral. Pang-anim ay ang pagpapausok mula sa nilagang dahon ayon sa sagot ng 265 na kalahok sa pag-aaral. Pinapausukan ng herbularyo ang mga dahon bilang ritwal upang maalis ang mga negatibong enerhiya at minsan naman ay paraan nila ito upang matuyo ang halamang gamot. Parehong nakakuha ng pampitong puwesto ang pagpapadaan sa apoy ng dahon at pagbabad ng dahon sa langis na may iba't ibang sangkap bago gamiting panggamot sa pasyente ayon sa sagot ng 494 na kalahok sa pag-aaral.

Paraan ng pagsasagawa ng Herbularyo sa Pangagamot.

Iba't ibang pamamaraan ang ginagawa ng mga herbularyo mula sa iba't ibang bayan sa Sorsogon. Sa bayan ng Barcelona ayon sa mga herbularyo ay nilalagyan nila ng pinaghugasan ng bigas ang dahon at ipapainom sa mga pasyente. Samantala sa mga bayan naman ng Bulan, Magallanes, Pilar at Prieto Diaz ayon sa mga herbularyong ay nilalagyan ng langis ang dahong gagamiting panggamot bago itapat sa pasyente.

Sa bayan ng Bulusan, Castilla, Donsol, Irosin at Matnog ayon sa mga herbularyo ay pinapaku-luan o nilalaga ang dahon upang ipainom sa pasyente. Sa bayan naman ng Casiguran, lungsod ng Sorsogon, Gubat at Juban nabanggit ng mga herbularyo na pinapadaan nila sa apoy ang dahon bago itapat sa pasyente sa kadahilanang pagpatay sa mikrobyo na nakakapit sa dahon.

Sa bayan naman ng Sta. Magdalena ang mga ay nagsabing ay gumagamit ng kagamitang bakal at doon iniinit ang dahon bago ito gamiting gamot sa pasyente ito ay sa kadahilanang upang hindi masunog ang mga dahong pinapadaan sa apoy.

Impak ng Pangagamot ng Herbularyo sa mga Taong Nakatira sa Rural at Urban na Barangay Bilang Bahagi ng Kulturang Sorsoganon.

Ipinapakita sa Talahanayan 2 ang mga impak ng pangagamot ng herbularyo mula sa urban na barangay bilang bahagi ng kulturang Sorsoganon.

Talahanayan 2a Impak ng Panggagamot ng Herbularyo mula sa Brgy. Urban

Impak ng Panggamot ng Herbularyo	Ka-buuan	Bahag-dan
Nakatutulong sa mga kababayang mahihirap	189	1
Pagpapanatili ng kultura ng isang lugar	138	4
Mas napapalakas nito ang pananampalataya sa Diyos	104	8
Mas nakakatipid sa mga gastusin kapalit ng mahal na gamot	152	3
Nakatutulong sa mga komunidad na malayo sa bayan at hospital	162	2
Mas mainam sa kalusugan ang mga dahon kung ikukumpara sa synthetic na uri ng gamot	130	7
Mas madaling makakuha ng mga dahong gamot na makikita sa paligid lang	133	5
Mas madaling makahingi ng tulong medical lalo na sa oras ng emergency o kinakailangan	132	6

Ipinapakita sa talahanayan ang impak ng panggagamot ng herbularyo mula sa mga urban na barangay ng Sorsogon. Nangunguna rito ang impak na nakatutulong sa mga kababayang mahihirap ayon ito sa sagot ng 189 na kalahok sa pag-aaral. Nakatutulong sa mga kababayan sa pamamagitan ng murang serbisyo ng herbularyo at makikita lamang sa paligid ang mga dahong panggamot. Mababawasan rin ang kanilang iisipin pagdating sa pinansiyal na aspeto sapagkat hindi nangangailangan ang mga herbularyo ng limpak-limpak na salapi para sa panggagamot at kung minsan ay ang pasyente na ang bahala kung magkano ang kanyang ibabayad sa herbularyo.

Pinatutunayan ito mula sa website na <https://gamotinfo> na likas sa mga pinoy ang pagiging matipid lalo na sa mga mahirap na pamilya na naghahanap ng gamot kung saan makakamura. Sa kasalukuyang panahon lalo na at lahat ay nagtataasan praktikal na pamamaraan sa pamumuhay ang pagtitipid at pagtangkilik sa mga halamang gamot. Isa itong ideya na nagbibigay pag-asa lalo na sa mahihirap nating kababayan na kapos at kaunti lang ang budget sa bahay.

Pumapangalawa dito ang nakatutulong sa mga komunidad na malayo sa bayan at hospital ayon ito sa sagot ng 162 na kalahok sa pag-aaral. Isa sa mga patunay nito ay ang mga isla at liblib na lugar ng Sorsogon na kung hindi man malayo sa bayan at hospital ay minsan lamang sa isang taon kung marating ng mga serbisyong pangkalusugan ng pamahalaan.

Pangatlo sa mga impak ay mas nakatitipid sa mga gastusin kapalit ng mahal na gamot ayon ito sa sagot ng 152 na kalahok sa pag-aaral. Nasusulat ang isang patunay mula sa website na <https://gamotinfo> na kung mahirap ka kailangang tipirin ang anumang bagay kaya mas pipiliin ng

ating mga kababayan ang gamot kung saan sila makatitipid.

Pang-apat sa mga impak ay ang pagpapanatili ng kultura ng isang lugar ayon ito sa sagot ng 138 na kalahok sa pag-aaral. Nasa kultura na ng mga herbularyo ang pagsasalin sa mga susunod na henerasyon ng kanilang bokasyon.

Panlima sa mga impak ay mas madaling makakuha ng mga dahong gamot na makikita sa paligid ayon ito sa sagot ng 133 na kalahok sa pag-aaral. Isang patunay dito ay kung ang isang mag-anak ay masipag magtanim sa kanilang bakuran ng mga halamang gamot. At kung minsan naman ay pangunang lunas lang naman bago dalhin sa ospital ay maaring makakuha ng saglit na gamot sa paligid ng bahay.

Ayon sa website na <https://gamotinfo> mas mainam na magtanim ng mga halamang gamot sa paligid ng bahay lalong lalo na ang mga halamang madaling tumubo ; bayabas, aloe vera, lagundi, oregano, sambong ampalaya at pansit-pansitan. Pang-anim sa mga impak ay mas madaling makahingi ng tulong medikal lalo na sa oras ng emergency o kinakailangan ayon ito sa sagot ng 132 na kalahok sa pag-aaral. Kapag ang pasyente ay nasa bingit na ng kamatayan lalo't malayo sa bayan at ospital ang pangunahing solusyon ng isang komunidad upang ang karamdaman ay agarang malunasan ay magpagamot sa isang herbularyo.

Pangpito sa mga impak ay mas mainam sa kalusugan ang mga dahon kung ikukumpara sa synthetic na uri ng gamot ayon ito sa sagot ng 130 na kalahok sa pag-aaral. Kung ihahalintulad ang mga halamang gamot sa mga nabibili sa botika ay may mga negatibong pekto sa katawan ng tao ang mga nabibili sa botika kasama dito ang mga side effects at pagkasira ng internal organs tulad ng atay at kidney.

Talahanayan 2.b Impak ng Panggagamot ng Herbularyo mula sa Brgy. Rural

Impak ng Panggamot ng Herbularyo	Ka-buuan	Bahag-dan
Nakatutulong sa mga kababayang mahihirap	183	1
Pagpapanatili ng kultura ng isang lugar	138	5
Mas napapalakas nito ang pananampalataya sa Diyos	103	8
Mas nakakatipid sa mga gastusin kapalit ng mahal na gamot	180	2
Nakatutulong sa mga komunidad na malayo sa bayan at hospital	163	3
Mas mainam sa kalusugan ang mga dahon kung ikukumpara sa synthetic na uri ng gamot	126	7
Mas madaling makakuha ng mga dahong gamot na makikita sa paligid lang	148	4
Mas madaling makahingi ng tulong medical lalo na sa oras ng emergency o kinakailangan	127	6

Ipinapakita sa Talahanayan 3.b ang mga impak ng pangagamot ng herbularyo mula sa rural na barangay bilang bahagi ng kulturang Sorsoganon. Makikita rin dito ang pagkakasunod-sunod ng impak mula sa tingin nilang pinakamahalaga hanggang sa hindi gaanong mahalagang dahilan kung bakit nila mas tinatangkilik ang pangagamot ng herbularyo sa kabila ng kasalatan ng serbisyong pangkalusugan sa mga barangay sa rural na pook.

Nangunguna pa rin sa impak sa mga rural na barangay ng Sorsogon ang nakatutulong sa mga kababayang mahihirap ayon ito sa sagot ng 183 na kalahok sa pag-aaral. Ayon nga sa mga naunang patunay mula sa website na <https://gamotinfo> mas pipiliin ng mga pinoy ang mga gamot kung saan sila makatitipid. Sa isang pamilyang nagtitipid sikmura ang mas nangungunang prayoridad kaysa sa pagpuno sa mga medikal na pangangailangan.

Pumapangalawa nitong impak ay ang mas nakakatipid sa mga gastusin kapalit ng mahal na gamot ayon ito sa sagot ng 180 na kalahok sa pag-aaral. Dahil sa kasalatan anumang bagay ay kailangang tipirin kaya mas pipiliin pa rin ng isang pamilya na matipid na epektibo pa. Ang mga halamang gamot ay makikita sa paligid at hindi nangangailangan ng malaking halaga ng pera upang maibsan ang isang may karamdaman.

Pangatlo sa mga impak ang nakakatulong sa mga komunidad na malayo sa bayan at hospital ayon ito sa sagot ng 163 na kalahok sa pag-aaral. Nakatutulong lalo na sa mga bata at matatanda na mahina pa ang resistensiya at sakitin sapgkat malayo ang bayan at ospital mas mainam na sa herbularyo magpatingin. Pang-apat sa impak ay mas madaling makakuha ng mga dahong gamot na makikita sa paligid lang ayon ito sa sagot ng 148 na kalahok sa pag-aaral. Ayon nga sa naunang patunay mula sa website na <https://gamotinfo> kinakailangang magtanim ng mga halamang gamot sa bakuran ng bahay lalong-lalo na ang mga madaling tumubo upang may mapagkunan sa oras ng pangangailangan.

Panlima sa impak ay ang pagpapanatili ng kultura ng isang lugar ayon ito sa sagot ng 138 na kalahok sa pag-aaral. Isa sa mga patunay dito ay mula sa website na www.wikipidea.org na panahon pa ng Paleolithic 60,000 taon na ang nakararaan ay gumagamit nan g mga halamang gamot ang mga tao na ipinasa nila sa bawat henerasyon na dumarating. At bago pa man dumating ang mga Kastila ay may sarili ng pamamaraan ng pangagamot ang mga Pilipino noon na ipinasa rin nila sa mga makabagong henerasyon.

Pang-anim sa mga impak ay mas madaling makahingi ng tulong medical lalo na sa oras ng emergency o kinakailangan ayon ito sa sagot ng 127 na kalahok sa pag-aaral. Sa mga liblib na lugar at isla kinakailangan mo pang tumawid ng dagat at ilog o umakyat ng mga kabundukan bago makahingi ng tulong medical mula sa mga ospital at bayan kung saan napipilitan an gating mga kababayan na magpatingin na lamang sa herbularyo lalo na sa ganitong sitwasyon at kapos sa pinansyal na kakayahan.

Pampito sa mga impak ay mas mainam sa kalusugan ang mga dahon kung ikukumpara sa synthetic na uri ng gamot ayon ito sa sagot ng 126 na kalahok sa pag-aaral. Gaya nang naunang patunay mas ligtas gamitin ang mga halamang gamot na walang anumang side effects o pinsala sa atay at kidney. Pangwalo sa mga impak ay mas napapalakas nito ang pananampalataya sa Diyos ayon ito sa sagot ng 103 na kalahok sa pag-aaral. Ayon sa naunang patunay na ang halamang gamot ay bahagi ng kalikasan na likha ng Diyos.

Ambag ng Pangagamot ng Herbularyo sa Kulturang Sorsoganon at Panitikan.

Ipinapakita sa Talahanayan 4.a ang mga ambag ng pangagamot ng herbularyo sa kulturang Sorsoganon.

Talahanayan 4.a Ambag ng Pangagamot ng Isang Herbularyo sa Kultura ng Sorsogon

Pamamaraang Ginagamit	Kabuuan	Bahagdan
Mas tatangkilikin ang pangagamot ng herbularyo kumpara sa makabagong uri ng pangagamot dahil bahagi ito ng kultura	227	6
Mag bibigay ito ng kamalayan sa mga tao na ang pangagamot ng herbularyo ay bahagi ng kultura ng isang lugar	345	2
Mapupukaw ang diwa at isipan ng mga tao na ang panggamot ng herbularyo ay dapat pahalagahan dahil ito ay bahagi ng kultura	320	3
Magkakaroon ng interes na preserbahin at panatilihin ang kultura ng isang lugar sapagkat ang pangagamot ng herbularyo ay bahagi ng kultura	272	5
Mahihikayat ang mga ahensya ng pamahalaan na makiisa sa paglinang ng kultura partikular ng pangagamot ng herbularyo sa kanilang lugar	219	7
Mahihikayat ang komunidad na magsulat tungkol sa kasaysayan at kultura ng herbularyo sa kanilang lugar	184	8
Magpapatunay ng pagmamahal at pagmamalasakit ng mga tao sa kultura ng isang lugar partikular na sa pangagamot ng herbularyo	299	4
Makakatulong upang hindi mawala ang mga sinaunang tradisyon na bahagi ng kultura ng isang lugar	360	1

Mapapansin dito na likas sa mga Sorsoganon ang pagpapahalaga sa kanilang kultura bilang tak ng kanilang pagkakakilanlan. Nangunguna ambag ng panggagamot ng isang herbularyo sa kultura ng Sorsogon ay ang makatutulong upang hindi mawala ang mga sinaunang tradisyon na bahagi ng kultura ng isang lugar ayon ito sa sagot ng 360 na kalahok sa pag-aaral. Upang hindi mawala ang kultura ng isang lugar ipinapasa ng mga matatandang herbularyo ang kanilang kaka-yahan at kapangyarihan sa mga mas batang miyembro ng pamilya o tribu sa bahaging dap-ithapon na bahagi ng kanilang buhay.

Pumapangalawa sa mga ambag sa kultura ay magbibigay ito ng kamalayan sa mga tao na ang panggagamot ng herbularyo ay bahagi ng kultura ng isang lugar ayon ito sa sagot ng 345 na kalahok sa pag-aaral. Pangatlo sa mga ambag sa kultura ay mapupukaw ang isipan at diwa ng mga tao na ang panggagamot ng herbularyo ay dapat pahalagahan dahil ito ay bahagi ng kultura ayon ito sa sagot ng 320 na kalahok sa pag-aaral. Upang hindi mamatay o malimutan ang kultura ng isang lugar kailangan na maikintil sa isipan ng mga tao na tangkilikin ang sariling kultura.

Pang-apat sa mga ambag sa kultura ay magpapatunay ng pagmamahal at pagmamalasakit ng mga tao sa kultura ng isang lugar partikular na sa panggagamot ng herbularyo ayon ito sa sagot ng 299 na kalahok sa pag-aaral. Likas sa mga Pinoy ang sa litang pagmamahal at pagmamalasakit lalo na sa pamilya at sa kapwa kaya malaki rin ang sukatan ng pagmamahal sa kultura na nanalaytay sa dugo ng mga Pilipino.

Panlima sa mga ambag sa kultura ay magakaroon ng interes na preserbahin at panatilihin ang kultura ng isang lugar sapagkat ang panggagamot ng herbularyo ay bahagi ng kultura ayon ito sa sagot ng 272 na kalahok sa pag-aaral. Dahil insentibo lalo na kung may tulong na inilalaan ang local na pamahalaan mahihikayat ang mga mamamayan na preserbahin at panatilihin ang kultura ng isang lugar.

Pang-anim sa mga ambag sa kultura ay mas tatangkilikin ang panggagamot ng herbularyo kumpara sa makabagong uri ng panggagamot dahil bahagi ito ng kultura ayon ito sa sagot ng 227 na kalahok sa pag-aaral. Kung ang mga mamamayan ng isang lugar ay nagkaroon ng oryentasyon na ms tangkilikin ang panggagamot ng herbularyo upang mas mapreserba ang kultura sa tulong ng pamahalaan ay mas mapapadali ang pagtangkilik ng mga mamamayan.

Pangpito sa mga ambag sa kultura ay mahihikayat ang mga ahensiya ng pamahalaan na

makiisa sa paglinang ng kultura partikular ng panggagamot ng herbularyo sa kanilang lugar ayon ito sa sagot ng 219 na kalahok sa pag-aaral. Kung marami na ang nagtitiwala sa mga herbularyo pati ang lokal na pamahalaan ay lilikha na ng mga programa na hindi lang sa ikauunlad ng bayan kundi pati na ang paglinang at pagpapanatili ng kultura ng isang lugar.

Pangwalo sa mga ambag sa kultura ay mahihikayat ang komunidad na magsulat tungkol sa kasaysayan at kultura ng herbularyo sa kanilang lugar ayon ito sa sagot na 184 na kalahok sa pag-aaral. Kung suportado ng pamahalaan lalo na at may mga patimpalak sa pagsulat hindi lang ito ang magsisilbing motibasyon upang magsulat ang isang komunidad patungkol sa kanilang kultura.

Ambag ng Panggagamot ng Isang Herbularyo sa Panitikan ng Sorsogon

Ipinapakita sa Talahanayan 4.b ang mga ambag ng panggagamot ng herbularyo sa panitikang Sorsoganon.

Talahanayan 4.b Ambag ng Panggagamot ng Isang Herbularyo sa Panitikan ng Sorsogon

Pamamaraang Ginagamit	Ka-buuan	Bahag-dan
Magkakaroon ng interes na babasahin at malaman ang panitikan na may kaugnayan sa panggagamot ng herbularyo bilang bahagi ng panitikan	310	3
Makaambag sa kabang-yaman ng Panitikang Filipino	256	8
Magsilbing lunsarang panitikan sa pagtuturo at sangguniang panitikan ng iba pang pag-aaral	260	6.5
Makahikayat sa iba pang mga bayan o lugar na pahalagahan ang sariling tradisyon sa pamamagitan ng pagtangkilik sa lokal na panitikan	278	5
Magsisilbing tulay na mahikayat na basahin ang mga panitikang may kaugnayan sa sariling lugar	260	6.5
Magsisilbing instrumento upang maisalin sa susunod na henerasyon ang panitikan bilang bahagi ng kultura	288	4
Magsisilbing gabay ang nabuong panitikan upang mapukaw ang kamalayan ng mga kabataan sa kultura ng kanilang lugar	319	2
Mapapahalagahan ang mga kaugalian na inilalahad ng sariling kultura mula sa nabasang panitikan	331	1

Nangunguna sa mga ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ay ang mapahalagahan ang mga kaugalian na inilalahad ng sariling kultura mula sa nabasang panitikan ayon ito sa sagot ng 331 na kalahok sa pag-aaral. Dahil sa mga nabasang lunsaran titimo sa isipan ng mga mambabasa ang pagpapahalaga sa kanilang kultura. Lalong-lalo na kapag nakita nila ang kahalagahan nito sa pamamagitan ng pagkilala ng mga nandarayuhan.

Pumapangalawa sa mga ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ay magsisilbing gabay ang nabuong panitikan upang mapukaw ang kamalayan ng mga kabataan sa kultura ng kanilang lugar ayon ito sa sagot ng 319 na kalahok sa pag-aaral. Dahil sa mga nababasang pantikan nagkakaroon ng interes at kamalayan ang mga kabataan na preserbahin ang kanilang kultura sa pamamagitan ng patuloy na pagtangkilik dito at paghimok sa iba pang kaibigan na mahalín ang sariling kultura.

Pangatlo sa ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ay ang magkakaroon ng interes na babasahin at malaman ang panitikan na may kaugnayan sa panggagamot ng herbularyo bilang bahagi ng panitikan ayon ito sa sagot ng 310 na kalahok sa pag-aaral. Magkakaroon ng interes na basahin at malaman ang panitikan ng mga tao sapagkat sarili nila itong kultura at dito nila masasalamin kung saaan at paano nagsimula ang kanilang angkan.

Pang-apat sa ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ay magsisilbing instrumento upang maisalin sa susunod na henerasyon ang panitikan bilang bahagi ng kultura ayon ito sa sagot ng 288 na kalahok sa pag-aaral. Kung may alam na ang kasalukuyang henerasyon sa kanilang kultura sa pamamagitan ng panitikan hindi ito mamamatay sapagkat maipapasa ito sa mga susunod na henerasyon sa pamamagitan ng tala man o pasalis-salin sa bibig ng mga tao.

Panlima sa ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ay makahikayat sa iba pang mga bayan o lugar na pahalagahan sa pamamagitan ng pagtangkilik sa lokal na panitikan ayon ito sa sagot ng 278 na kalahok sa pag-aaral. Kung ang isang bayan ay marunong kumilala at tumangkilik sa kultura ng isang bayan magiging modelo ito sa iba pang mga bayan at lugar na kung hindi man gayahin ay isang inspirasyon.

Sa pang-anim na puwesto ay dalawang ambag ng panggagamot ng herbularyo sa panitikan ng mga Sorsoganon ang parehong pinaboran ng mga kalahok ayon ito sa parehong bilang na 260 at may kabuuang 520 na kalahok sa pag-aaral ang magsilbing lunsarang panitikan sa pagtuturo at sangguniang panitikan sa pag-aaral at ang isa pa ay ang magsisilbing tulay na mahikayat na basahin ang mga pantikang may kaugnayan sa sariling lugar. Sa pag-aaral ng kultura ng Sorsogon magsisilbi itong lunsaran lalo na sa mga mananaliksik at pati na rin sa mga indibidwal na may interes sa kultura ng Sorsogon.

Sa pampitong puwesto na ambag ng panggagamot ng herbularyo sa panitikang Sorsoganon ay ang makaambag sa kabang-yaman ng panitikang Filipino ayon ito sa sagot ng 256 na kalahok sa pag-aaral. Sapagkat ang paksa ng pag-aaral an ito ay may kaugnayan sa kultura at panitikan tiyak na kahit papano ay may ideyang pupuno sa basket ng kaalaman ng panitikang Filipino ang pag-aaral na ito.

Mungkahing Gawain Batay sa Resulta ng Pag-aaral.

Ang nabuong aklat ay may pamagat na Herbularyo: Mga Halamang Gamot at Pamamaraan ng Panggagamot. Ito ay isang aklat na naglalaman ng mga pamamaraan ng herbularyo sa kanyang panggagamot at ang halamang gamot na ginamit.

KONGKLUSYON

Batay sa natuklasan, nabuo ang sumusunod na kongklusyon:

1. Ang mga herbularyo ng bawat bayan o grupo ng mga bayan ay may iba't ibang pamamaraan ng pagsasagawa ng panggagamot gamit ang mga halamang gamot sa sa pasyente.
2. May iba't ibang kaparaanan kung paano isinasagawa ang panggagamot ng herbularyo gamit ang halamang-dahon.
3. Magkakaiba rin ang impak ng panggagamot ng herbularyo sa mga taong naktira sa rural o urban na barangay.
4. Magkakaiba rin ang mga naitalang ambag ng mga bayan sa panggagamot ng herbularyo sa kultura at panitikang Sorsoganon.
5. Ang nabuong aklat na may pamagat na "Herbularyo: Mga Uri ng Halamang Gamot at Paraan ng Panggagamot" ay maaring maging gabay ng mga mamamayan sa kanilang pang-araw-araw na pagharap sa mga suliraning may kinalaman sa kanilang kalusugan.

REKOMENDASYON

Batay sa resulta ng pag-aaral na ito nabuo ang mga sumusunod na rekomendasyon:

1. Hikayatin ang mga mag-aaral at mga tao sa komunidad na magbasa tungkol sa sariling kultura sa pamamagitan ng mga panitikang nasusulat tungkol dito upang maikintil ito sa kanilang kamalayan nang hindi ito mamatay bagkus ay patuloy na payabungin at linangin.

2. Gamitin ang mga panitikang may temang kultural bilang lunsaran sa pagtuturo upang matapos mag-iwan ng kabatiran sa isipan ng mga kabataan ay mapahalagahan nila ito.
3. Ang local na pamahalaan ay mahikayat na maglaan ng programa at mga patimpalak na pupukaw sa interes ng mga mamayan na pahalagahan ang sariling kultura.
4. Pukawin ang damdaming kultural sa pamamagitan ng pagbabasa sa akda na naisulat mula sa pag-aaral na ito.
5. Magsagawa ng pag-aaral na may kaugnayan sa kasalukuyang pananaliksik nang sa gayon ay mapalalim pa ang pagtuklas sa mga kaalamang makatutulong upang mas mapahalagahan ang sariling kultura.

PAGKILALA

Ang pag-aaral na ito ay hindi magkakaroon ng katuparan kung hindi dahil sa tulong at suporta ng mga taong naniniwala sa layunin ng mananaliksik, kung kaya't taus pusong nagpapasalamat ang mananaliksik sa mga sumusunod:

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RICE COFFEE PRODUCTION AND ACCEPTABILITY

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ABSTRACT

There are varieties of coffees manufactured now a days and it cost very expensive, while making your own cup of coffee is cheaper than buying it outside. Rice coffee can be an alternative for coffee fanatic. This refreshing beverage has been enjoyed as coffee substitute for decades. It does not have the caffeine that the actual coffee has and Filipino swear that it helps in treating stomach upset. Naturally the flavour is not that strong compared to caffeinated coffee. It has several health benefits and easy to make. This is why the researcher wants to produce rice coffee as an alternative coffee and much cheaper than those coffees available in the market. Rice coffee is a product development made from roasting of dinorado rice. Rice Coffee goes through quantitative measurement through tasting and survey among selected faculty and students of Laguna State Polytechnic University. This study aimed to determine the acceptability of rice coffee (i.e. color, taste, aroma and solubility) and its production procedure. Descriptive statistics using weighted mean and standard deviation was used in determining its acceptability. Result of the study showed that rice can be an alternative coffee. In terms of sensory qualities it was highly acceptable as rated by the two groups of respondents. Further study must be conducted to improve solubility and packaging the product. Shelf life must be tested. Nutritive Value of the developed product must be tested to know the benefits the consumer will get from the utilized product.

Keywords: aroma, color, rice coffee, solubility, taste

INTRODUCTION

According to IRRI Organization (2010) rice is one of the three leading food crops in the world which directly supply more than 50% of all calories consumed by the entire human population. Rice provides 21% of global human per capita energy 15% of per capita protein. It also provides minerals, vitamins and fiber that help to boost energy.

In the Philippines rice is the most important food supply in the economy. It is both adaptable and nutritious and with the gut the history of rice and the given knowledge about the history of rice and the countless varieties that are available, people started cooking and eating it. Rice is produced extensively in Luzon, western Visayas and Southern Mindanao and Central Mindanao.

Like rice, coffee is also a staple beverage for most of the people. Coffee from coffee beans is generally one of the most popular beverages and most liked pastime drinks. It is loaded with antioxidants and beneficial nutrients that can improve health. Coffee contains caffeine which helps to block an inhibitory neurotransmitter in the brain, which leads to stimulant effects; it also helps to

burn fat and increase adrenaline level which leads to significant improvements in physical performance. Drinking coffee transfers from generation to generation.

This study helps to developed and produced organic coffee. This helps and encourages most Filipinos to enjoy food in more nutritious way.

OBJECTIVES

The primary objective of this study was to develop and evaluate the Rice Coffee, it sought to answer the following:

1. What is the production procedure of Rice Coffee?
2. What is the level of acceptability of Rice Coffee in terms of its sensory qualities?
 - a. Color
 - b. Taste
 - c. Aroma
 - d. Solubility?
3. Is there a significant difference between the ratings given by the group of respondents on the level of acceptability of Rice Coffee?

METHODOLOGY

The experimental method of research was employed in this study to determine if rice can be made into coffee granules and know the acceptability of the product through tasting of its sensory qualities such as color, taste, aroma and solubility.

Based on Minzer (2008), the experimental method is a systematic and scientific approach to research in which the researcher manipulates one or more variables, and controls and measures any change in other variables. In the strict sense, experimental research is also called a true experiment.

This product development produced rice coffee; it includes preparing of ingredients and materials needed, roasting of rice, cooling, taste test of the product and packaging of the finish product.

According to Research methodology it is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability.

The researcher selected the respondents (30 faculty and 30 students) of Laguna State Polytechnic University Santa Cruz Campus, Santa Cruz, Laguna and ask to evaluate the product, each respondents received one cup of rice coffee and scorecard for evaluation of the sensory qualities of the product.

After the evaluation, the gathered data were tailed, tabulated and statistically treated in order to achieve the final result. The results were analyzed and interpreted to determine the acceptability of the finished product.

The researcher used purposive sampling technique because he chooses specific and limited set of people within the population as respondents in the study. This study used weighted mean to treat the gathered data for the statement to determine the level of acceptability of Rice Coffee Production. Standard deviation was also used to achieve a better idea of how the data entries differ from the mean.

LITERATURE REVIEWS

Coffee

Coffee trees are pruned short to conserve their energy and aid in harvesting, but can grow to more than 30 feet (9 meters) high. Each tree is covered with green, waxy leaves growing opposite each other in pairs. Coffee cherries grow

along the branches. Because it grows in a continuous cycle, it's not unusual to see flowers, green fruit and ripe fruit simultaneously on a single tree.

It takes nearly a year for a cherry to mature after first flowering, and about 5 years of growth to reach full fruit production. While coffee plants can live up to 100 years, they are generally the most productive between the ages of 7 and 20. Proper care can maintain and even increase their output over the years, depending on the variety. The average coffee tree produces 10 pounds of coffee cherry per year, or 2 pounds of green beans.

All commercially grown coffee is from a region of the world called the Coffee Belt. The trees grow best in rich soil, with mild temperatures, frequent rain and shaded sun. (Retrieved from <https://www.ncausa.org/About-Coffee/What-is-Coffee>)

As with most foods that have been around for centuries, coffees beginnings are enveloped in mystery and lore. There is a popular Ethiopian legend wherein coffee is discovered by a goat herder named Kaldi, who found his goats frolicking and full of energy after eating the red fruit of the coffee shrub. Kaldi tried the fruit for himself and had a similar reaction. After witnessing their strange behavior, a monk took some of the fruit back to his fellow monks; they too spent the night awake and alert. Of course, they would have been reacting to coffees high dose of caffeine. This natural stimulant also serves as an inborn plant pesticide, protecting the coffee fruit from insects.

Before coffee became our morning beverage of choice, it appeared in a variety of different preparations. In its most basic, unprocessed form, coffee is a cherry-like fruit, which becomes red when ripe; the coffee bean is found at the center of the red coffee fruit. Early on, the fruit were mixed with animal fat to create a protein rich snack bar. At one point, the fermented pulp was used to make a wine-like concoction; incidentally, a similar beverage was made from the cacao fruit, before the advent of chocolate, which goes to show that humans are especially adept at finding new ways to imbibe. Another drink that appeared around 1000 A.D. was made from the whole coffee fruit, including the beans and the hull. It wasn't until the 13th century that people began to roast coffee beans, the first step in the process of making coffee as we know it today.

The word coffee has roots in several languages. In Yemen it earned the name qahwah, which was originally a romantic term for wine. It

later became the Turkish kahveh, then Dutch koffie and finally coffee in English.

The modern version of roasted coffee originated in Arabia. During the 13th century, coffee was extremely popular with the Muslim community for its stimulant powers, which proved useful during long prayer sessions. By parching and boiling the coffee beans, rendering them infertile, the Arabs were able to corner the market on coffee crops. In fact, tradition says that not a single coffee plant existed outside of Arabia or Africa until the 1600s, when Baba Budan, an Indian pilgrim, left Mecca with fertile beans fastened to a strap across his abdomen. Babas beans resulted in a new and competitive European coffee trade.

In 1616, the Dutch founded the first European-owned coffee estate in Sri Lanka, then Ceylon, then Java in 1696. The French began growing coffee in the Caribbean, followed by the Spanish in Central America and the Portuguese in Brazil. European coffee houses sprang up in Italy and later France, where they reached a new level of popularity. Now, it is de rigueur for Parisians to indulge in a cup of coffee and a baguette or croissant at the numerous coffee cafes throughout Paris.

Coffee plants reached the New World during the early 18th century, though the drink wasn't really popular in America until the Boston Tea Party of 1773, when making the switch from tea to coffee became something of a patriotic duty. The Civil War and other conflicts that followed also helped to increase coffee consumption, as soldiers relied on the caffeine for a boost of energy. It may have started a bit later here, but Americans love coffee just as much as the rest of the world. Teddy Roosevelt himself is counted among Americas great coffee drinkers due to his rumored consumption of a gallon of coffee daily! Roosevelt is also said to have coined Maxwell Houses famous Good to the Last Drop slogan after being served the coffee at Andrew Jacksons historical home, the Hermitage, in Tennessee.

By the late 1800s, coffee had become a worldwide commodity, and entrepreneurs began looking for new ways to profit from the popular beverage. In 1864, John and Charles Arbuckle, brothers from Pittsburgh, purchased Jabez Burns newly invented self-emptying coffee bean roaster. The Arbuckle brothers began selling pre-roasted coffee in paper bags by the pound. They named their coffee Ariosa, and found great success selling it to the cowboys of the American West. It wasn't long before James Folger followed suit and began selling coffee to the gold miners of

California. This blazed the trail for several other big name coffee producers, including Maxwell House and Hills Brothers.(Retrieved from <https://www.pbs.org/food/the-history-kitchen-/history-coffee>)

Rice

Rice (technically a seed) is a staple food for many, but is the carbohydrate-rich grain a healthy one? It depends on the kind of rice you choose. White rice is considered a nutritionally inferior "refined grain" because its bran and germ are removed during the milling process, which strips away B vitamins, iron and fiber. Though white rice is typically enriched with iron and B vitamins, fiber is not added back. (Retrieved from <https://edition.cnn.com/2017/03/03/health/is-rice-healthy-food-drayer>)

Rice is the most important food all over world. This articles is an effort to inform the people about the nutritive value of rice. Today, scientists are engaged to improve maximum nutritional value of rice which will benefit the human beings. Rice is a high-energy or high calories food and of high biological value of the proteins. These days, several types of rice and their product are used in different nations of the world viz. USA, China, Indonesia, Japan, Sri Lanka, Africa, India etc. The nutritive ea/se of rice includes protein, fat, crude fibre, carbohydrates, ash, minerals viz. Ca, P, Fe, Na, K and Vitamins viz. Thiamine, riboflavin, niacin, tocopherol. It plays an important role in health benefits and disease prevention such as high blood pressure, cancer prevention, Alzheimer's disease, heart disease, skin care, dysentery with together in mankind. (Retrieved from https://www.researchgate.net/publication/236154817_Nutritional_Value_https://www.researchgate.net/publication/236154817_Nutritional_Value_of_Rice_and_Their_Importance)

Rice, *Oryza sativa*, is a cereal food crop that belongs to the grass family (Family: Poaceae) of the plant kingdom. Domesticated rice comprises two species of food crops, *Oryza sativa* and *Oryza glabemna*. These plants are native to tropical and subtropical southern Asia and southern Africa. Rice is a grass "autogame", a crop that is grown more easily in the tropics. Originally rice was probably cultivated without submersion, but it is believed that mutations led it to become a semi aquatic plant. Although it can grow in diverse environments, it grows faster and more vigorously in wet and warm conditions. This plant develops a main stem and mainly tillers and may range from 0.6 to 6 meters (floating rice) in height. The tillers

bear a ramified panicle that measures between 20 and 30 centimeters wide. (Retrieved from http://link.springer.com/chapter/10.1007%2F978-90-481-2465-7_1#page-1)

RESULTS

Table 1. MEAN SCORE FOR SENSORY QUALITIES

Sensory Qualities	Faculty			Students		
	Mean	SD	Verbal Description	Mean	SD	Verbal Description
Color	4.30	0.79	Highly Acceptable Color	4.40	0.86	Highly Acceptable Color
Taste	4.70	0.53	Highly Acceptable Flavor	4.73	0.52	Highly Acceptable Flavor
Aroma	4.60	0.62	Highly Acceptable Aroma	4.47	0.51	Highly Acceptable Aroma
Solubility	4.25	0.70	Highly Acceptable Solubility	4.35	0.67	Highly Acceptable Solubility
Overall Mean	4.46	0.66	Highly Acceptable	4.59	0.64	Highly Acceptable

Legend:
 4.21-5.00 Highly Acceptable
 3.41-4.20 Acceptable
 2.61-3.40 Moderately Acceptable
 1.81-2.60 Fairly Acceptable
 1.00-1.80 Not Acceptable

The computed mean of 4.70 for taste, 4.25 for solubility, 4.30 for color and 4.60 for aroma with the standard deviations of 0.53, 0.70, 0.379 and 0.79 revealed highly acceptable evaluation made by the faculty regarding the sensory qualities of Rice Coffee. This is supported by the overall mean of 4.46 indicating highly acceptable evaluation.

As for student's evaluation, the computed mean of 4.73 for taste, 4.35 for solubility, 4.40 for color and 4.47 for aroma with standard deviations of 0.52, 0.67, 0.86 and 0.51 respectively revealed highly acceptability of Rice Coffee as presented in the above table. This is also evident by the overall mean of 4.59 which is interpreted as highly acceptable.

CONCLUSION

Based on the foregoing findings the following conclusions were drawn:

1. The production procedure of Rice coffee includes roasting of rice, taste test of the product and packaging of the finish product.
2. In terms of sensory qualities of Rice Coffee, it was highly acceptable as rated by the two groups of respondents.

3. It is concluded that generally, the evaluations made by the faculty and students regarding the acceptability of Rice Coffee in terms of color, aroma taste and solubility do not differ from one another. They have similar evaluation for the product produced by the researcher.

RECOMMENDATION

1. Nutritive Value of the developed product must be tested to know the benefits the consumer will get from the utilized product.
2. Further study must be conducted to improve solubility and packaging the product.
3. Shelf life must be tested.

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