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EDUCATION

Teachers Applicants' Self- Efficacy and English Proficiency Test

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Abstract

Self-efficacy is a belief in someone's capability in accomplishing a certain task. And most of the related studies concluded that having a high self-efficacy has something to do with high performance at work, or it has something to do with an individuals' work output/ production however, some other literature revealed that it has not something to do with individuals' performance. On the other side, the English language is the required medium of instruction yet the most feared. This study was conducted to investigate the self-efficacy towards the English Proficiency Test of the teacher applicants from the Division of Romblon. This study used a descriptive- correlation method employing a self-made questionnaire conducted through an online form to assess the Self- Efficacy status towards English Proficiency among applicants in 2018. Findings showed that respondents have Low Self- efficacy status towards English Proficiency Test. It was concluded that among the levels of English Proficiency, respondents who are Proficient have a Very Low Self- efficacy compared to other levels that reached the Low level. Further, it revealed that the overall English Proficiency of teacher applicants was at the Beginners level.

Keywords: *english proficiency test, proficiency, self-efficacy*

Self-efficacy substantiates the proficiency of an individual for it embodies the competence and performance towards the real world. It also dictates how someone exerts efforts in a certain work. Study on teacher's credence about themselves in terms of the English language is too vital to view how they devote themselves to the importance of education. Self- efficacy is one way of conceptualizing how teachers manage instruction. Academe must assure stakeholders that stipulations in aligning to globalization are being achieved, like communication skills in English. Both teachers and learners must be equipped for the needs of the 21st-

century education system since education is an avenue to the employability trend of young professionals. The educational institution must ensure the innovativeness of teachers in terms of teaching the second language (L2). The eloquence of the target language especially the significance of the four linguistic skills; (i.e., listening, speaking, writing, and reading) are necessary for the learners to achieve; for they will give justification on the quality of education that the country has been providing. The improvisation of every department under education must uplift the importance of strict implementation of the English language.

Institutes of education are obliging

skilled workforce who are in height of literacy in English, which is presently the primary medium of instruction in the instructive organization to ensure quality education and economic advancement. Moreover, English Proficiency Test is a way on how the academe could examine the interventions suited for the development of the teachers' credibility in the field of work. In such a way, the school administrators are guaranteed that their human resource competes globally and can alter the perception of neighboring countries about the current status of the English Proficiency Level of the Philippines. 21st-century learners expect a brighter future after graduating from college for they know that they are advantageous because of experiencing the new system of education, which is the K12 Program. At the same time, industries outside the academe are waiting for qualified graduates for the betterment of the organization. Throughout the year, English language proficiency contributes a large portion to the development of the country's socio-economic system.

In revealing the advantageous part of English proficiency, the ongoing phenomena of this language in the Philippine setting are too alarming because recent researches disclosed that the competence of Filipino workers in English declined throughout the years, and the alarming part there is, untrained and non-proficient teachers were heavily blamed about this matter (Meniado, 2018). In sustenance with this declaration, the Department of Education had led a study in 2008, it was discovered that 80 percent of secondary school teachers in the Philippines miscarried an English proficiency test. This expresses teachers' low proficiency in English, hence generating graduates with comparatively a similar proficiency level is too alarming.

This status of declination must be addressed properly. Certainly, interventions that will be created must meet the objectives and can give a satisfying impact on the

institution. The consistency of high performance in using the foreign language is a pre-requisite to certify the Filipinos' inclusion in the global arena. The English Proficiency Test result of the teachers must be coherent with their teaching performance inside the 21st-century classrooms. As for the researchers' observation, some of the K12 graduates who pursued college were having a hard time in the English language, especially in writing, speaking, and language comprehension. In this matter, it must be checked if the delivery of the language essentials is being met with consistency, and if the exposure of the students to the English language is sufficient. The commitment of the education to stabilize the requirements being asked by the need and demand must be elevated for us not to be left behind. It is a call to all of the educators to pre-define the status quo before it turns into an unresolvable matter. The researchers conducted this study for the needs and sustainability of the education system based on the given findings and conclusion stipulated in other studies and literature.

This study targeted to (a) determine the self-efficacy status of the teacher applicants in the Department of Education (Division of Romblon) towards English Proficiency Test; (b) determine the English Proficiency Level of the teachers in terms of the following linguistic skills: Structure, Written Expression, and Reading Comprehension; (c) determine if the reading and Writing self-efficacy are the same across any field of specialization; and (d) determine and validate the correlation among reading and writing self-efficacy predicts English proficiency.

Figure 1 presents the pattern of this research. Since this study opted to determine the Self- Efficacy of teacher applicants toward the English Proficiency Test, there is a need to collect all the essential documents. Initially, the requested English Proficiency

Test 2018 result from the Department of Education – Division of Romblon was analyzed to define its classification of proficiency levels. Then, the dissemination of a self-made Self-Efficacy questionnaire was done through an online survey. Finally, the result of the online survey determined teacher applicants' Self- Efficacy towards the English Proficiency Test.

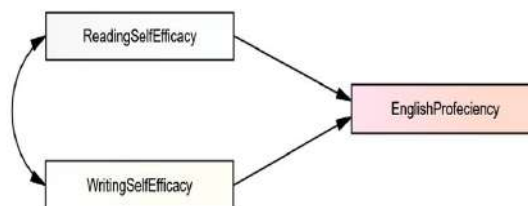


Figure 1. Schematic Diagram

Research Design

This study utilized a descriptive-correlational research method to characterize the English Proficiency Level and Self- Efficacy of teacher applicants. Correlational was used to check the relationship between the aforementioned variables (Beauvais et al., 2014).

Population and Sampling Techniques

The respondents of this study were the teacher applicants of the Division Office of Romblon – Department of Education. They were randomly selected from 244 total applicants with 229 turnarounds or 93.85%. The necessary permission and communication relevant to the study were done before gathering the data.

Instrumentation

The data were collected in different manners. Self- efficacy data were done through a self-made questionnaire disseminated using the virtual survey form. On the other side, the English Proficiency Test result was requested from the Division Office of the Department of Education. The self-made questionnaire was validated to assess its face and content validity. In the process of validation, copies of the questionnaire and research queries were given to three (3) jurors as the validators whose expertise is in the field of measurement and evaluation. A pilot testing was also conducted on 25 graduating students of the College of Education for reliability testing. The reliability test of Cronbach's Alpha has resulted in 0.92.

Data Analysis

Data were analyzed, tallied, tabulated, and analyzed using weighted mean; composite mean was used to determine the English proficiency, reading and writing self-efficacy of the teachers' applicant; ANOVA One-Factor to test if the reading and writing self-efficacy of the teachers' applicant differs across the field of specializations. To determine the correlation between English proficiency, Pearson's Moments Correlation was utilized. In facilitating the validation of correlation, a confirmatory factor analysis (CFA) by structural equation modeling

(SEM) using Analysis Moments of Structures (AMOS) was utilized.

Results and Discussion

The succeeding data are the product of this study, discussions were placed right after the presented tables.

Table 1. *Self- efficacy in Reading towards English language Proficiency*

Statements	Mean	Rank
1. I have advanced reading skills in the English language.	2.19	5.00
2. I feel proud of myself every time I read English reading materials.	1.90	11.00
3. I am confident with the adeptness of my vocabulary, which is helpful in reading.	2.11	6.50
4. I value employing comprehension in reading any English printed material.	1.72	14.00
5. I am willing to help someone who is poor in understanding English texts.	1.71	15.00
6. I deliver the correct accent and pronunciation during the English reading session.	2.32	3.00
7. I can easily detect errors in English grammar when reading.	2.51	1.00
8. I am sure of the reading strategy/is to be applied.	2.36	2.00
9. I know how to easily get the main topic of any passage that I read.	2.11	6.50
10. I do an evaluation every after reading if the perspectives of the author are the same as mine.	2.28	4.00
11. I am motivated to read English books for it will elevate my knowledge of anything.	1.73	13.00
12. I force myself to read more books for an in-depth rationalization/ explanation of the topic assigned to me.	2.06	8.00
13. I am reading a lot in English in requisite to strengthen my spelling skill.	2.03	9.00
14. I incline myself in reading English since it is the most widely used language of many academic books.	1.97	10.00
15. I believe that by reading English materials, I can think analytically and critically.	1.80	12.00
CM	2.05	Low

Legend: 1.00-1.71 Very Low (VL); 1.72-2.53 Low (L); 2.54-3.35 Medium (M); 3.36-4.17 High (H); 4.18-5.00 Very High (VH)
CM=Cumulative Mean

Table 2. *Self- efficacy in Reading towards English language Proficiency*

Statements	Mean	Rank
1. I have advance writing skills in the English language.	2.47	1.00
2. I feel proud of myself once I finish writing using the English language.	1.95	8.00
3. I am confident with the words I use in writing because of my broad vocabulary.	2.37	3.00
4. I give importance to every Academic Writing especially those in English written materials.	2.02	7.00
5. I am willing to help someone, who has difficulty in writing the English language.	1.93	9.50
6. I see to it that my ideas are well presented based on the patterns of organization in writing.	2.04	6.00
7. I write sentences that are free from grammatical errors.	2.38	2.00
8. I reread my written output and make sure that the language of it is clear.	1.72	15.00
9. I am consistent with my punctuation usage.	2.14	4.00
10. I avoid plagiarism in all of my written outputs.	1.87	11.00
11. I am motivated to write using the English language for I want to explain myself certainly.	2.07	5.00
12. I motivate myself to write in English because it allows me to conceptualize my thoughts.	1.93	9.50
13. I am more likely to succeed if I can write well.	1.81	13.50
14. I think of the goal I wanted to achieve in my writing.	1.86	12.00
15. I ask myself to give effort in all of my English writings.	1.81	13.50
CM	2.03	Low

Legend: 1.00-1.71 Very Low (VL); 1.72-2.53 Low (L); 2.54-3.35 Medium (M); 3.36-4.17 High (H); 4.18-5.00 Very High (VH)

Teacher applicants in the Division of Romblon have a low status of self-efficacy towards Writing and Reading the English language. Hitting low self-efficacy status in both linguistic skills reflect that teacher applicants do not have the desired status of self-efficacy before taking the said examination, which can impact their examination result, and teaching works. These statuses of self-efficacy towards English Proficiency Test covering Reading and Writing agree with the study of Feng et al. (2019) stating that teachers' self-efficacy is critical since it foresees future behavior and impact turnovers. Most of them start their career with moderate to high self-efficacy for teaching, however frequently undergoing a sharp declination during the first year. Furthermore, testing self-efficacy was essential in the field of teaching. Since this is also the status, it affirms that the Philippines needs more study like this as Topkaya and Yavuz (2011) discovered that in the field of English language teaching, however, studies on self-efficacy perceptions are extremely scarce.

Table 3. *Proficiency Level: Structure, Written Expression, and Reading Comprehension*

Linguistic Skills	n	Min	Max	M	SD	DI	R
Structure	229	13	100	62.33	15.68	B	2
Written Expression	229	16	84	49.90	15.05	B	3
Reading Comprehension	229	38	90	72.17	8.73	B	1

Legend: Beginners (B) – 74 % and below; Developing (D) – 75%- 80%; Approaching Proficient (AP) – 81% - 86%; Proficient (P) – 87%- 91; Advance (A) – 92% - 100%; R=Rank Legend: Beginners (B) – 74 % and below; Developing (D) – 75%- 80%; Approaching Proficient (AP) – 81% - 86%; Proficient (P) – 87%- 91; Advance (A) – 92% - 100%; R=Rank

The English Proficiency Level of the respondents was tested using a national test comprising of three (3) sections of multiple-choice type of test namely Structure, Written Expression, and Reading Comprehension. It is an English Proficiency Test that is administered for one and a half-day. Structure measures how the parts of speech are used and put together or organized as a modifier or used in the sentence. Written Expression is designed to assess one's ability and skill in the use of English in written form (e.g. use of the present progressive form of the verb, etc.). Reading comprehension measures the ability to understand what has been stated directly in the printed material. The three linguistic skills were tagged as 'Beginners' accumulating low scores.

Table 4. *Self-efficacy in English in terms of Field of Specialization*

Category	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.	Interpretation
Reading Self-Efficacy	Between Groups	660.328	7	94.333	1.688	0.113	Not Significant
	Within Groups	12353.969	221	55.900			
	Total	13014.297	228				
Writing Self-Efficacy	Between Groups	941.227	7	134.461	1.964	0.061	Not Significant
	Within Groups	15128.957	221	68.457			
	Total	16070.183	228				

Comparing the self-efficacy of the respondents as to their field of specialization, it was found out that there was no significant difference in the self-efficacy of the respondents in terms of reading, $F(7,221)=1.688$, $p=0.113$. In the same way, there was no significant difference in the self-efficacy of the respondents in terms of writing, $F(7,221)=1.964$, $p=0.061$. This only indicated that the level of self-efficacy of the teachers is approximate at the same level.

Predictor Determination

Table 5. *Self- efficacy status and English Proficiency Test Result Correlation*

Variables	N	r_{xy} -value	p-value	Description
Reading Efficacy →English Proficiency	229	-0.109	0.100	Not Significant
Writing Efficacy →English Proficiency	229	-0.143*	0.031	Significant

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

The correlation between self-efficacy and English proficiency is revealed. The Reading efficacy and English Proficiency has no significant correlation, $r_{xy}(229) = -0.109$, $p = 0.100$. It means that reading efficacy does not affect English Proficiency in any manner. The result contradicts the study made by Tanyera (2015) in which, Self- efficacy in Reading (SER) was absolutely and significantly correlated to Reading performance.

On the contrary, Writing efficacy and English Proficiency that has a significant correlation, $r_{xy}(229) = -0.143$, $p = 0.031$. It means that Writing efficacy predetermines Writing proficiency. It established a negative correlation that as the status of writing efficacy goes up, the English Proficiency status goes down as shown in Figure 2. These results also coincide with the study of Yilmaz (2011), which indicated that teachers' perceived efficacy is correlated with their self-reported English proficiency. The study provides useful insights into the need to help teachers develop their language proficiency that, in turn, has relevance for their perceived self-efficacy. Also writing efficacy is the predictor of English proficiency.

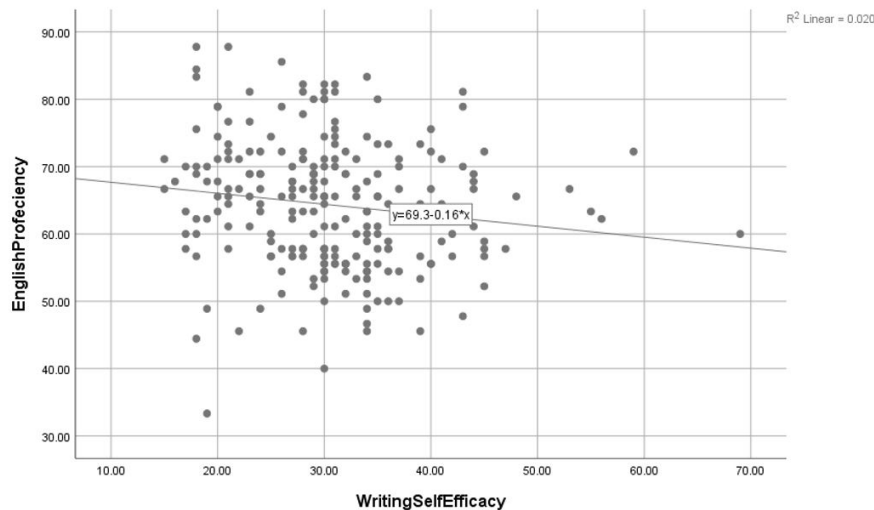


Figure 2. *Linear Behavior Writing efficacy and English Proficiency*

Validating Relationships

The correlation of writing self-efficacy to English proficiency is equal with estimates of -0.143 and the linear behavior is shown in Figure 2 is the same as the linear behavior in Figure 3 which indicates that both figures have a 0.02 or 2.00% explanatory power of variation on the English proficiency be explain by writing self-efficacy. Thus, the observed behavior by writing self-efficacy towards English proficiency by teachers' applicant is affirmed in this process.

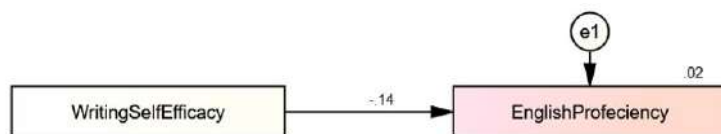


Figure 3. CFA of Model 1

Table 6. Regression Analysis

Standardized Regression Weights for Model 1		Estimate
English Proficiency<--- Writing Self Efficacy		-0.143
Squared Multiple Correlations for Model 1		Estimate
English Proficiency		0.02

Conclusion and Recommendation

This research greatly concluded that teacher applicants have low positive Self- Efficacy towards English Proficiency tests. Also, respondents failed to demonstrate the expected proficiency level intended for them. It proved that Reading Efficacy cannot affect English Proficiency results. On the other side, there is a Writing Efficacy and English Proficiency does. The level of self-efficacy in English readings of the teachers is approximately the same level across specialization. The English Writing Self –efficacy of the teachers is different from each other with a moderate effect size. This research gives impact to DO 52, S. 1987 – The 1987 Policy on Bilingual Education that aims to achieve competence in both Filipino and English at the national level, through the teaching of both languages and their use as media of instruction at all levels. Universities producing teachers may revive the self-efficacy of teacher candidates towards the English language since it is the most used medium of instruction. Further, the self-efficacy of students must be checked before graduating to assess their overall readiness not only with the use of the English language but also with their future job performance and satisfaction. Division of Romblon – Language Planning Department may use this study to assess the Self-efficacy towards English Proficiency Test of teacher applicants. This can provide administrators with where shall they need to focus in terms of development.

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EDUCATION

Best Practices of a Faith-Based Institution on Special Needs Education Program: An Appreciative Inquiry

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Abstract

In Asia, there are still no concrete special needs education program (SNEP) established in Adventist Institutions. This study aimed to benchmark the best practices of intensive SNEP of a faith-based institution (FBI) in the United States of America. Employing an appreciative inquiry (AI) design which accentuates the strengths of the program becoming the channel of practical application of social constructivist (SC). AI is rooted in SC theory and used to explore experiences and meanings of SNE program. Data were gathered through one-on-one interview among eight purposively sampled participants and had varied triangulation. Data were analyzed using Seidel's model of thematic approach. SNE Connectedness Model was developed which summarizes the practices of FBI such as instructional, professional, curriculum, and social practices. The central core that glued the four concepts is the church mission. It is recommended for institutional leaders in Asia to contextualize and implement SNEP through church and school organizations.

Keywords: *appreciative inquiry, special needs education, inclusive education*

Globally speaking, many children are excluded from school because of their race, belief, indifference, gender, social status, or disability (Open Society Foundations, 2015). However, every child, no matter who he is, where he comes from, or what he is incapable of, deserves a quality education. All children deserve to holistically develop their potentials through the empowerment of their mental, physical, social, and spiritual faculties (Reeder & Pacino, 2013). There are over 1 billion people and estimated by 15% of the world's population are individuals with special needs (ISN). In many cultures, people who had experienced physical challenges are often disregarded and rejected. In 1992 the United Nations (UN) started to have an annual International Day of Disabled Persons around the world until today. The primary

purpose of this significant event is dedicated to promoting awareness, and equal rights for those individuals having some form of limitation (Beth Thomas, 2017). According to Gargiulo and Bouck (2016), Special Education is designed to allow all types of learners to learn at their best. As a personalized instructional program, SpEd may need special resources, facilities, services, and teaching methodologies.

SDA church has the same concern. In 2011, a committee for the special group formed under the Sabbath School and Personal Ministries Departments. This program led to the development of Special Needs Ministries (SNM), an umbrella ministry that initially served the hearing and visually impaired. During General Conference session in 2015, Larry Evans, assistant to the president for

Special Needs Ministries was appointed to head the said ministry. Evans passionately realized that churches should integrate special needs ministry into their yearly outreach strategies believing that the integration of special needs ministry is prophetic (Byrd, 2018). As was envisioned by Mrs. White, it is God's providence that "widows and orphans, the blind, the deaf, the lame, and persons afflicted in a variety of ways, have been placed in close Christian relationship to His church" this happens develop the true character of God's people. God sent the angels to watch how the less privileged are treated (Byrd, 2018).

According to "*Reaching to Educate All Children to Heaven (REACH) manual*", the supreme rationale behind the Seventh-day Adventist education is to teach the learners the love for God and man. Thus, the objective of both teaching and learning are utilizing an active premeditated plan and driven by "an inclusive spirit of strategy, modification, and support intended to meet the needs of all students" (North American Division [NAD], 2018).

Statistics showed that "less than two percent of Adventist elementary in the United States of America and less than three percent of all Adventist schools provided direct, special services to the students (Archer, 2016). Moreover, only six percent of schools reported access to Adventist special education services in 2014." Worldwide prevalence rates show that students with special needs are increasing, as evidenced in the latest statistics in the United States, indicating that 2.8 million (5.2%) of all school-aged students have disabilities, 7.3% of those 2.8 million children enrolled in private schools and while 3.3% children unenrolled in any institution. (U.S. Census Bureau, 2011). With these remarkable figures, determining the best practices of special education programs becomes vital, thus, would help faith-based institutions administrators and educators to create a program suited to SSN when placed in a typical classroom setting.

However, the Southern- Asia Pacific Division of Adventist Institution (Seventh-day Adventist World Church, 2019), proved that no special education programs had been created yet among Adventist institutions in the Philippines. The current situation of Adventist schools in accommodating the SSN is very significant to Adventist communities who are involved in dealing with the SSN. The Seventh-day Adventist education system illustrates the work of education as the harmonious development of the physical, mental, social, and spiritual aspects (Nyagwoka et al., 2015). Ironically, as mentioned in the statistics, there are only a few Adventist schools in the world that provide special education services.

Southeastern Adventist University (SAU) in Tennessee, USA, an Adventist community, is ranked number 65 in Regional Universities South because of its remarkable performance across a set of generally accepted indicators of excellence (US News and World Report, 2018). SAU, being the leading Adventist Higher Education Institution in North American Division (NAD), that has pioneered the advocacy for special education in the Adventist community. In 1996, SAU initiated to offer a course of Master's degree in Inclusive Education and that same year, the Upper Columbia Conference K-12 Board of Education developed a team who will study the different issues concerning students with learning differences and support educators in dealing with such students with more compassion.

In the Philippines, the Department of Education (DepEd) reported an estimated 350,000 students with special needs and data from "Save the Children" revealed that of three Filipino children with special needs, only one has a chance to attend school. Moreover, there is only one in seven of those children attending school has access to specialized education that caters to their varied needs (Senate of the Philippines 17th Congress, 2017). The statistics mentioned above

show that in the United States there are few SSN could go to Adventist Schools. Therefore, in the Philippines, minimal rate of SSN has access to go to school. However, in the Adventist education system in the Philippines, there is no special concrete needs education program to accommodate SSN.

This study only focuses on the institution under the Adventist denomination system with the provision that all workers have the same faith, and the program aligned with the philosophy of Adventist education. It aimed to benchmark the best practices of SAU in terms of special needs education in the context of faith-based organization. There are very limited people or educators who have exposure or handling student with special needs in a faith-based institution. Based on the study of Archer (2016), among the Seventh-day Adventist schools, only 3% offer SPED programs. This small percentage of Adventist schools offering SPED served as the research gap of this study. From the original plan to conduct the study among two Adventist schools, it ended up to be done only in SAU for it is the school that met the criteria set for the study, resulting in a limited number of participants.

Anderson and Boyle (2015) defined inclusive education as a system wherein learners, regardless of their capacities and abilities, will learn together and be considered as members of the school community. This kind of education discourages discrimination and separation between regular students and students with special needs. Moreover, inclusive education provides opportunities for all learners, whatever are their cultures, beliefs, strengths, and weaknesses physically, mentally, socially, and emotionally.

Gregory (2013) argued that albeit the adaptation of inclusion program for SSN in many schools, its implementation is still a puzzle to many educators. The current educational trends in adapting the inclusion program supported by many public school and private school educators across districts (Villa & Thousand, 2016). Moreover, many learners succeed when a classroom is conducive for their successes and the teacher applies various strategies that maximize the learning of all students.

Best Practices in Special Needs Education

According to Rieser (2012), inclusive education is implemented in many places in the world. These schools believed that education is for all, no matter what abilities and disabilities the learners have.

Learning environment. An organized learning environment is a vital element in the success of both the teachers and the learners. Various factors affect the overall tone or atmosphere in the classroom (Friend, 2011).

Assessment. For many years, numerous programs were created and mandated by the government. However, different leaders in the field of special education were anxious that the use of these assessment tools might not directly address the unique needs of young children. According to Pierangelo and Giuliani (2016), there are two significant types of assessment: formal and informal assessment. Informal assessment is composed of different tests such as criterion-referenced tests, standards-referenced, ecological assessment, curriculum-based assessment, curriculum-based measurement, dynamic assessment, portfolio assessment, performance-based assessment, task analysis, and outcome-based assessment. On the other hand, the type of tests under formal assessment is the norm-referenced test and standardized test.

Instructional Models. Integrating several validated instructional models may be the

best solution for teaching a diverse learning environment. To promote extensive learning, it is paramount to select and integrate instructional models in teaching a heterogeneous class (Kilbane & Milman, 2013).

Using Effective Teaching Behavior. A Chinese proverb states that “tell me, I will forget, show me, I may remember, but involve me, and I will understand.” Many models provide a framework for teaching diverse groups of students (Miller & Veatch, 2011). Regardless of which model or models teachers use, there are numerous effective teaching behaviors that could enhance the effectiveness of instruction (Kurbanoğlu et al., 2017).

Modifying Curriculum and Instruction. To diversify instructional arrangements, teachers can use various curricular and instructional modifications to enhance student learning and performance. They can do modification, accommodation, adaptation, assistive technology to help students with special learning needs, and using universal designed curricula (Bender, 2012).

Well-Trained Teachers. Not all general education teachers are well-prepared in handling SSNs due to insufficient training. Maiwa and Ngeno (2017) found out that primary teachers in public schools do not usually undergo training in special needs education. Teachers play an essential role, and the success of their students (Hamir & Gozik, 2018).

Collaboration Climate Between Special Education and General Education Teachers. In the study of Obiakor et al. (2010), the researcher mentioned that collaboration between general and special educators is critical in implementing special education services; thus, recommended that teachers collaborate.

Supportive Administrators. In the study by Hehir and Katzman (2012), the researchers argued that teachers and school administrators should work together and support each other. The school administrators have the responsibility to enhance and support all the programs of the school because they are accountable for the learning and the achievement of students with special needs.

Facilities. Classroom facilities should adopt the uniqueness of the learners. In inclusive education, the success of inclusion also depends on the facilities of the school (Buli-Holmberg & Jeyaprabhan, 2016). Thus, facilities of the school and instructional materials should be suited to accommodate students with special needs.

Cost-effectiveness. According to Causton and Theoharis (2013) some schools hesitate to accept inclusion due to cost issues and expenses; however, in the long run, the costs are minimal. Financial capacity is usually one of the reasons for the institution hesitant and ignored the implementation of inclusion.

Methodology

Research Design

This study is qualitative research which utilized case study method. This study is accentuating the appreciative inquiry (AI) model by Cooperrider and Sureh in 1987 as cited in Coghlan and Brydon-Miller (2014). AI's goal is to recognize good practice, design effective development plans, and ensure that implementation work well. The researcher deemed it most appropriate to employ AI to identify the existing inclusive education best practices in the faith-based institution involved in the study and to develop a model from the existing practices for the benefit of faith-based institutions as a whole.

Figure 1 illustrates the 4-D cycle of Appreciative Inquiry (AI) such as: discovery, dreams, design, and destiny.

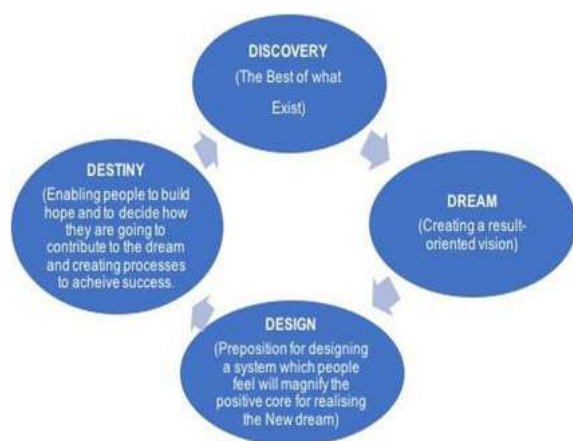


Figure 4. *Cycle of Appreciative Inquiry (Coghlan & Brydon-Miller, 2014)*

Research Setting

The selected faith-based institution is SAU at Collegedale, Tennessee, which is a part of the educational system of the Adventist denomination. In 1892, SAU, a private institution, was founded. It has a total undergraduate enrollment of 2,564, its setting is rural, and the campus size is 1,000 acres. Furthermore, it utilizes a semester-based academic calendar. SAU was ranked 65th in the 2019 edition of Best Colleges in Regional Universities - South. Tuition and fees range from \$21,950 as of Academic Year 2018-2019.

Sampling

Through purposive sampling technique, the eight participants from SAU was selected (4 administrators and 4 faculty members). Moreover, expert-validated interview guide questionnaire and classroom observation guide were used to gather data.

Data Collection

Before the arrival of the researcher to the US, consent forms, demographic profiles, and interview guide questionnaires were sent through the emails of the SAU's Institutional Review Board Chair and Disability Support Service (DSS) Coordinator. The coordinator referred the possible participants and before the set date of interview, the researcher presented the study to the SAU faculty meeting for peer debriefing. The interview commenced at the preferred time and place of each participant. The researcher conducted a one-on-one interview and classroom observations to enrich the data gathered. Triangulation was also done among one parent, two students and one alumnus.

Data Analysis

All the gathered data were transcribed and afterwards analyzed using Siedel's Data Analysis Model. After identifying the themes through thematic analysis, member checking was employed to counter-check if the transcribed and analyzed data were correct.

Ethical Considerations

The researcher made sure that a clearance to conduct the study was sought from the Ethical Institutional Review Board of University of Perpetual Help System – Las Piñas. Afterwards, a letter of permission to conduct the study was e-mailed to the President of SAU. Each participant was given a separate consent form and was asked to voluntarily participate. The researcher assured the participants that the gathered information will only be used for the study and their identities will remain anonymous. All recordings were deleted, and the data gathered were burned after the study.

Researcher's Reflexibility

The researcher was made aware of personal biases to avoid during the data gathering and interpretation of data as well. The researcher has its perception of what special needs education program should look like; however, the researcher understands that personal perception should not be dominant and should not affect other participants' opinions. Therefore, the researcher needed to employ objectivity in listening during interviews and observation; and to interpret the data accurately by following and maximizing the questionnaire guide for an interview; for structured observation using a checklist.

Results

Four themes emerged regarding the best practices of SAU namely professional, instructional, social, and curricular. These themes are still subdivided into themes in the succeeding discussion.

Professional

Training. Training was the overarching theme that is prevalent among the responses of the participants. They specifically mentioned two types of training which are: (a) in-service training and (b) pre-service training.

In-service training. SAU facilitated professional development training which they called "Faculty Showcase" seminar-training given to all teachers and staff who are interested in attending. It is scheduled every 2nd and 4th Wednesday during the academic year. Faculty members shared ideas for teaching Biblical Foundations and showcasing successful teaching strategies. While every first Wednesday of the month, Teach-3 or called "Teacher Teaching" is done for sharing their best practices. The lecturer will present for twenty minutes, followed by the table discussion of the presentation where teaching pedagogy and educational strategies were analyzed, for possible assimilation or adaptation on their campus. Teachers arrived at the training sessions well rested, eager to learn, with easy access to the resources they will need to implement

what they learn.

According to Che (2014), in-service training is needed to equip teachers with updated information and skills to prepare them to face new challenges in education. It will also enhance the professionalism of the teachers and improved motivation to work with enthusiasm. In-service training is an avenue to encourage teachers in sharing their burdens and find ways to helping each other (Ong et al., 2016).

Pre-service training. Participants emphasize not only in-service training that contributes to their best practices, but students could also apply for pre-service training on the campus as part of their workload at least 20 hours a week. There is a pre-service training done on campus. Administrator 1 stated “graduate students that typically follow up on those names, trying to find out what is going on...and then trying to assist them getting services where they need, uh, uh... tutoring, or see a counselor”.

Instructional

Accommodation. The participants elaborated on the different accommodations given to students. Administrator 4 explained, *“Letting us know what accommodations are needed...we make those arrangements as best we can with the facilities that we have”*. Faculty 1 mentioned that things happening inside the classroom are not very easy but students are accommodated. To justify that, Faculty 2 cited a situation: *“we cannot lower standards, but for our instructions, we make sure we have recorded lectures... or summarize some of the material ... by their group activity, make sure that they are participating ... we have a mid-lecture assessment”*. Further, Faculty 3 described the role of DSS Office to the kind of accommodation the students are getting in the regular classroom: *“DSS’ program here helps to make sure that every student is accounted for getting the accommodations that they need”*. Lectures are being video-recorded and posted immediately after class to accommodate the students with special needs.

Through triangulation, Student 1 stated, *“With the DSS department...some of the letter of accommodations, it means that uh I can have a bit more time for exams sometimes... however you can videotape the action... I personally like it...Most of them do this”*. Student 2 reiterated that most of the teachers are very accommodating of the students with special needs: *“They do, for the most part, they are accommodating. As far as I have disabilities, they work with you as far as taking exams, and homework...they want to make sure, you understand what is going on. So you have an education rather than just able to pass the test”*.

Accommodations usually does not change the content of the materials but make it more personalized to the learners with this, encourage independence by providing strategies fitted to the learners (Joyce, Harrison & Gitomer, 2018). These tools help the learners reach their potentials to the fullest in the general education classroom. According to Beech (2010), there are many ways on how to implement accommodation, and before applying this strategy, the school’s stakeholders should answer the following questions such as; how the student will access the information? How will the student demonstrate competence? Where will the student be instructed and assessed? Also, lastly when the student will be instructed and assessed? These are essential questions that need to be answered first by the school administration and staff to come up with accommodation services to students with special needs in a regular school.

Social

Awareness. According to the National disability Center, there are about 9 billion individuals with a disability in the world right now. Few of them get the services they need. Educators have a significant role to play in making an awareness program for individuals with special needs. In promoting awareness to the community, the policy has a significant role to play to ensure everyone has access to availing of the services they need, and for that reason, teachers need appropriate preparation to provide needed help (Defreitas, 2018). Three subthemes emerged under awareness: community, policy, and collaboration.

Community. The participants described their experiences on how community became one of the best practices in SAU. Administrator 1 cited *“Former vice president for student development, Bill Wallers, he’s retired...occasionally, there was a student arriving on campus that would present with a disability, and I think, wherever they showed up they started ending up in his office being referred to his office”*. Administrator 3 also affirmed that her office collaborates with other community sectors to extend help to their students. Additionally, Faculty 2 cited that SAU wants to meet the standards of other institutions as much as the available resources and accommodations of SAU allow.

From the participants, presenting community awareness is an important way to develop a positive attitude towards IWA, because it affects their integration not only in schools but also in the community (Williamson, 2014). Most researchers believe that in the early development of a child is a good start to teach the valuing individuals worth. It would teach the child in developing positive attitudes towards IWD (Harris, 2017). This kind of program would lead to other people in the community to have a deeper understanding, increases knowledge about different types of learners (Ison et al., 2010). The researcher discovers that having disability awareness programs have a big impact on the school environment that educates students to exhibit positive attitude like, understanding and acceptance towards IWD (Magnusson & Boissonnault, 2017).

Policy. All stakeholders should know the importance of giving equal access to all types of learners and not being aware of the policy governing the land would put the school into jeopardy. One participant stresses out the importance of the policy in accepting and accommodating students with special needs (Reiter & Lezama, 2013). Participants testify how the state policy mandates to do accommodation to all types of learners; Faculty 3 said, *“The US requires title 9... which is that you must have accommodations for people who need accommodations like they have a legal right ... we are required by law to make sure that the opportunity is granted you know”*.

In the US policy stated “Title IX protects all students (as well as other persons) at recipient institutions—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of a recipient’s educational programs and activities” (US Department of Education, 2015). This Title IX (9) resource guide is a mandated law and policy with regards to civil rights; it states that all types of students should be accepted and protected in the school premises. According to this section, Title IX, the anti-discrimination policy emphasizes the proper implementation of all educational programs and activities. In this study, the appreciative inquiry discovery stage reveals the importance of government policy in the country. Thus, it exemplifies that education for all policy is a universal primary education goal in the world. Laws and policies obliged all government entities to provide access to universal education rights for all people. However, given the appropriate program for individuals with a disability, the goal of universal rights can be archived (The

Republic of Kenya, 2009).

Collaboration. One of the participants explained the importance of teachers collaborate with other professionals is vital in taking some time to make things ready and plan ahead of time when dealing with students with special needs. Faculty 1, states one of her experience before she started teaching a class: *“Every year I listen to Ms. Mariella, presentation on about how to deal with students with special needs and I learned more and more, because she changes it, you know, after two weeks... You know I had learned new things and realized many things before class started”*.

The participant believes the significant effect on teachers when doing preparation and planning before class started (Meador, 2019) is part of the objective when collaborating. A teacher works faster and efficiently when there is a team working together to reach a specific goal. In this stage of discovery of appreciative inquiry, the researcher observed classes that show how teachers work collaboratively to others and to ensure that the students will benefit more from the topic discussed in the class with or without disability (Datnow & Park, 2018).

In the dream phase, it gives reflections to the participants on what else is possible we have. It involves passionate thoughts, positive image created in mind, and a positive worth looking forward to (Kessler, 2013).

Curricular

Placement. The fourth theme that emerged is placement. The basis for developing this theme was after the process of admission and retention of the students. They are (a) universal assessment and (b) specialized curriculum or services. Participants believe that providing appropriate placement to the learners would achieve their full potentials. At this stage, participants enumerated their experiences on how admission and retention process; some of them are not familiar with the protocol; however, they revealed their interest in involving themselves on these services.

Universal assessment. The admission requirements are the same for all students, with or without a disability. Everybody is entitled to get a state assessment or school assessment (Special Education Guide, 2013). Administrator 2 mentioned:

“What is the admission process is the same for them as it is for anybody, yeah, we do not, we do not discriminate at all. So just in the communication, they are informed, you know, they have a disability, of course, you know, most students know that if they had a disability in high school, or academy, then they are gonna need accommodations.”

Moreover, Administrator 3 clarified that the admission is for all and nobody has to be discriminated. Faculty 3 reinforced Administrator 3’s statement saying that a national standardized test was administered to all college admittance and that regular entrance exams is not practiced in SAU, rather they use ACT or SAT scores, or high school GPAs. On another hand, Faculty 1 stated, *“I understand, the whole process of testing in everything and at the admission level to see where what their needs are and how we could address those needs”*.

According to Hughes and Dexter (2019), Response to intervention (RTI) model is a universal screening that dealt with the first step in identifying the students who are at risk for learning difficulties. It was recommended to have this early assessment to identify students who are at risk from the very beginning of the school year. RTI program would allow the students

to be part of prevention services to avoid potential academic deficits. School personnel should collaboratively select universal screening tools for each academic or behavior area and train school personnel, inconsistent administration, scoring, and interpretation of results (Miao & Heining-Boynton, 2011).

Participants are familiar with SAT or ACT exam, thus, all University as an entrance exam. However, participant A1D003 mentioned the term “full documentation testing” these are being done when students failed the universal assessment or partly some of the requirements and found documentation attested that the students have the impression to have disabilities. In that case, after students will take a series of testing, the students will be in probationary status for one semester until documentations completed.

At this stage, participants presented the importance of universal assessment on how it would be helpful for the teachers as well to identify the strength and weaknesses of their students. However, participants agreed that the admission process started from the universal assessment, which is the college entrance exam. Then later on, when the results indicate that the students need a series of testing. However, the students will be placed on probationary status for a semester when the documentation is incomplete.

Specialized curriculum or service. In this category, participants pinpoint the program which Disability Support Services (DSS) offer to the students. DSS office identifies students who have difficulty or struggling with their academic requirements, time management, study skills, and behavior management. DSS office has a specialized curriculum such as Transition Support Plan (TSP) for students who need specific remediation and assistance.

The best practices of SAU are in the professional, instructional, social, and curricular aspects. The strengths of the SNE program in SAU is beyond the compromise of policy mandate because it is part of the mission statement of the Seventh-day Adventist Church to accept, accommodate, equip, and mobilize people with disabilities. There is a need to invest in practitioners’ professional development so that they are exposed to effective SNE programs, best practices, and will have a clear vision of how to have an effective SNE program. Moreover, the implementation of having a useful SNE model requires the collaborative effort of all faith-based institution stakeholders that would make the inclusive special education program effective. Since spirituality (church-mission) and connectedness emerged in this study as new contributors to have a successful inclusive special education program (ISEP), the quantitative researchers might be interested in exploring to what extent spirituality and connectedness affect the student SNE stakeholders’ experiences.

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EDUCATION

Back to School: Experiences of Non-Traditional Students**Rowena Imelda A. Ramos**

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Abstract

This phenomenological qualitative study investigated the challenges, coping strategies and needs of nontraditional students. This study involved students who are over 24 years old, presently enrolled in a university, and have either deferred enrollment in tertiary education or did not receive a standard high school diploma but earned some type of certificate of completion. There are seven participants who were interviewed using open-ended and semi-structured questions. Responses were coded, categorized, and synthesized to yield meaningful interrelated ideas. The results of this study identified several primary needs of nontraditional students. These include (a) assistance with financial aid, (b) improved speaking, math, reading, and study skills, (c) increased awareness, and (d) access to personal, academic and career counseling services. Because of these identified needs, more opportunities should be provided for financial gains, tutorial classes on basic subjects should also be offered, counseling services for this group should also be conducted.

Keywords: *traditional students, back to school, university experience*

Nontraditional students are increasing in the classrooms. The National Center for Education Statistics (NCES) report on 2015 noted that these students who are often referred as “nontraditional,” constitute a significant proportion of the undergraduate student enrollment. This study adapted the following criteria for nontraditional students: (a) over 24 years of age (b) enrollment patterns and (c) high school graduation status (Radford et al., 2015).

Research has shown that nontraditional students often have very different learning styles and needs than traditional students. Bohl et al. (2017) noted that the number of nontraditional students enrolled in tertiary education is increasing, however, retention is a challenge. Remenick (2019) noted that nontraditional student population is growing

throughout higher education, but they have far greater barriers to success than their traditional peers. While there was literature on experiences and challenges of nontraditional students, there is a necessity to conduct an updated research on their needs in attending a university. A review of literature done by MacDonald (2018) further suggested that it is important for administrators and instructors to learn how to work with these students because they deal with various struggles to stay in school than their traditional counterparts. This study consolidated the difficulties and successes of nontraditional students. It gave voice to nontraditional students in identifying their special needs. The results of this study will benefit instructors, guidance counselors, and administrators to enhance the learning environment and increase retention for

nontraditional students. The four major questions that were explored in this phenomenological qualitative study are the following:

1. What were the previous experiences of non-traditional students prior to going back to school?
2. What motivates traditional students to go back to school?
3. What are the experiences of traditional students with their professors and fellow students?
4. What are the challenges and coping strategies of non-traditional students?

Methodology

Research Design

Phenomenological qualitative research approach was utilized in this study to gain a deep understanding of the student experience. Phenomenology is an approach to qualitative research that focuses on the commonality of a lived experience within a group.

Population and Sampling Technique

Purposive sampling was utilized in this study. The participants were selected from the researcher's existing channels of nontraditional students. The participants of this study were seven nontraditional students who are over 24 years old and were presently enrolled in a faith-based institution in the Philippines during the school year 2019 - 2020. Additionally, these students have deferred enrollment in tertiary education by a year or more after high school graduation. Further, some of them did not receive a standard high school diploma but earned some type of certificate of completion to be accepted in the University.

Instrumentation

The consolidation of what the nontraditional students think, how they interpret their experiences, and the actions they have taken were the main concerns of this study. To achieve the goals of this research, in-depth interviews were conducted as the primary data gathering method to reach participants' reflection on their challenges and difficulties. In this case, the interviews used open-ended and semi-structured questions about demographic characteristics and experiences of the participants. Some of the semi-structured questions were:

1. Can you tell me about your
 - a. age and educational level when you stopped going to school
 - b. reason why you stopped from going to school
 - c. number of years of being out of school
 - d. age when you decided to go back to school?
2. What motivates you to go back to school?
3. Can you speak about your encounters with your
 - a. professors,
 - b. classmates and
 - c. other students in the university?
4. What are the challenges you faced in going back to school?
5. How did you cope with the challenges you encountered in going back to school?

Analysis of Data

The approaches mentioned by Strauss and Corbin (1998) in conducting a qualitative research were employed to systematically analyze responses in sequential stages. Conducting interviews with the participants enabled the researcher to understand and recognize their outlooks. A voice recording of the conversation was taken for easy transcription. The participants used English or Tagalog to make sure that they can communicate their thoughts and feelings effectively without language barriers. To confirm and support the key themes that emerged from the interviews, as well as to analyze the participating nontraditional students' experiences, verbatim statements from participants' answers were used. Back translation was applied for the translation of Tagalog answers to English. Short narratives were also written by the participants. Interview with their peers were also conducted for the purpose of triangulation. Concepts were coded, categorized, and synthesized to yield meaningful interrelated ideas.

Ethical Considerations

The researcher sought the approval of the University's Ethics Review Board in conducting the study. Each participant was provided with a copy of the informed consent form after they have agreed on their involvement in the study. The in-depth interviews were conducted on the participant's chosen secured place during their most comfortable time. The real names of the participants were not presented to protect their anonymity.

Results and Discussion

This study involved seven nontraditional students who are currently enrolled in Adventist University of the Philippines. Although their stories regarding their experiences as nontraditional student were exceptional, they also revealed some commonalities. The emerging common themes of the study were previous experiences prior to going back to school, motivation to go back to school, encounters with professors and fellow students, challenges in the university and their coping strategies.

Previous Experiences Prior to Going Back to School

Five of the seven participants stopped schooling after their high school graduation while two of them were in their first-year college. Financial inability, and lack of focus and motivation were the mentioned reasons why they deferred their tertiary education. Five of the participants identified financial inability as reasons for not going to college after their high school graduation. One of them, Alexandra, relayed her responsibilities as the eldest of the eight children in the family. Even now that she went back to college as a working student, she helps her parents to earn for her family.

"After graduating from high school, I had no more plans of going to college. I would like to focus on helping my family because I am the eldest in our family of eight children."

Lack of focus and motivation were also identified as reasons for interrupted schooling. Blake stopped going to school after his graduation from Senior High School when he was 17 years

old. Fernando was 18 years old and was a freshman when he stopped from attending his classes. Nathan, on the other hand, did not feel to continue his nursing program and took only general subjects.

“I had a scholarship for college, but I ended up in using drugs and alcohol. My scholarship expired because I did not take it immediately. I played around and discovered later that all my classes were no longer available. So, I was discouraged, and I just worked. I was out of school for 14 years from 2005 – 2019. I am now 32 years old.”

“I am 26 years old at present. I was 18 when I stopped going to school. I was just first year high school when I stopped. Because I am already older than my classmates, I was 18 and many of them were just 14 years old. I am not focused in going to school because I just want to play DOTA. I was out of school for 10 years. I took Alternative Learning System to be accepted in college.”

Some of the participants stopped from school because they do not have money. They are concerned about their immediate financial family needs. Thus, they considered that having a full-time job is the best way to support their family. Lack of focus and motivation also draw the respondents away from their studies. Because they were not motivated, they just played around and took their studies for granted.

Motivation to go Back to School

All the participants expressed high motivation to complete their college degree. First, they believed that getting a degree would better qualify them. Since some of them have tried working in a company they also believed that university diploma provides a competitive edge. Further, some were also motivated to get a degree have a better lifestyle and meet higher expectations.

“My aunt inspired me to go back to school. She said that while I am still young, companies are still interested to hire me, but as I aged opportunities will decreased. At least if I go back to school and finished a degree, I will get a better job. I thought about a better future and more opportunities after getting a degree. After that, I resigned immediately from my job as a merchandizer.”

“I felt God calling me to go to ministry. I understand that to lead the flock I need to become educated. Going to school to get an education will better fit me to where the Lord wants me to go. I know testimonies will be used to moved others, but I feel the need to be enhanced.”

“I saw the real life in our province. I felt bored of my routine. And I do not want the things happenings around us. I felt a need for redirection.”

Career advancement is the main driving force for the respondents to go back to school. Getting a degree will make them more valuable to an employer and increase the likelihood of having a secured future. Further, completing a degree program will give them a sense of accomplishment and prepare them to be more confident and equip in the field.

Their motivation made them worked harder in order to pursue their education. Some of

their fellow students gave them used materials that can be recycled for their requirements and projects. Some worked on part time jobs to earn extra money for them and their families.

One of the respondents believe that going back to school is a calling from God. She said that:

“Despite of the challenges, I believed God calls me to be here, so I need to go where he put me. I get along with people, try and learned to ask questions from teachers and students. My mind is already expanding. Reading the Bible, putting my mind into it.”

Experiences with Professors and Students

Some of the participants gained the feeling of awkwardness and nervousness towards their professors and fellow students. On the other hand, many of them felt the kindness and understanding of their professors and peers in the university.

“I was nervous because many students are English speaking. But my teachers are supportive. They can sense if I have problems. During my 1st semester, I had a teacher who is so concerned with his students. So, I was inspired to finish my studies. I am a friendly person. Students are supportive when they know you are having a hard time.”
“Personally, I am shy, but I want to go out of my comfort zone, but specifically out of the country. When I talked to teachers and students, they are very helpful. They do not know about my age. They were surprised to know about my age. They started calling me Kuya after knowing my age, but their treatment is the same.”

Nontraditional students are challenged with the anxiety of returning to school after taking a break. Though the respondents were uncomfortable when they go back to school, their teachers and classmates showed support and encouragement. The respondents did not identify any problems they encountered with their classmate and teachers. Their positive encounter with students and professors is important for them to stay inspired and be successful.

Challenges and Coping Strategies of Non-traditional Students

Challenges. Nontraditional students can experience challenges just like any typical student. Because these students are older and typically balancing jobs, families, and school, they face different issues than their traditional counterparts. Financial difficulties were a part of participants' lives from the very beginning. Some of them are working students or had a scholarship to sponsor them for the program. Some of the participants were financially supported by their parents. Some are even supporting their families on top of their needs. Time management was also considered a problem because they must work on multiple responsibilities and finish their requirements before deadlines. Some also expressed communication difficulty in expressing themselves. Some had trouble in their lessons because they had already forgotten what they had learned before. They found that going back to school was overwhelming. They felt worried and pressured. Some of the participants experienced all these challenges.

“The worst thing I experienced was when I enrolled only for 3 units on the 2nd semester of being enrolled. In academics, I had a hard time recalling the basics. In social aspects,

sometimes I am shy because I am already 25 years old and some of them were our occupants in the place where I work. I attend most of the activities when I have no work schedule. My family had a difficult time because I can no longer send them money. It was challenging because I want to study and at the same time help my family. I do sidelines to support myself and my family. Had difficulty in time management.”

“Being out from school for 14 years is tough especially I played around in High School. And lesson in College are totally different. Time management was difficult, coping up with the lessons was a challenge.

“My social skills were not good but going back to school helped me develop it. I was not that studious back home, so I felt the pressured of going back to studying again. It is different here because I get to enroll around 28 units compared to 9 units in my former school. So, it is like overwhelming. I was just worried. I guess I cannot fit in because I am shy and the culture in Canada is different. I had culture shock I am worried of making friends.”

Coping Strategies. The participants of this study persevered despite the challenges and put success at the center of their lives. Trust in God, trust in personal capabilities, thinking of their purpose in life are some of the coping strategies of the non-traditional students. Since they are determined to finish their studies, they are more motivated of the long-term results and ignore the hardships they encounter. Their social skills were eventually developed as they get along with others.

Conclusion and Recommendation

The findings of the study were also mentioned by several previous studies. On the literature review of Pfordresher (2016), it was found out that nontraditional students face situational, institutional, and dispositional barriers in their academic pursuits. Alshebou (2019) emphasized that the lack of time and funding constraints are the main obstacles for adult students. Time management is a significant issue for adult learners as they struggle to find a balance between maintaining their family and financial obligations while still performing well in school. MacDonald (2018) stated that academically, given their length of time out of school, most adult learners struggle with transitioning back into the classroom facing problems with skills like notetaking, test taking, reading textbooks, time management, and teacher expectations. Moreover, adult learners’ anxieties can be their biggest battle. However, the participants of this study received a strong support from students and professors.

The results of this study identified the non-traditional students’ previous experiences prior to going back to school, motivation to go back to school, encounters with professors and fellow students, challenges in the university and their coping strategies.

The identified challenges particularly on financial could be addressed by the university by offering more scholarship programs that are not only credited to students’ school fees but may also give them chance to earn extra cash. Their academic related challenges can be address by providing tutorial classes on basic subjects to help the students recall the basics and connect them to their present lessons. Counseling services for this group should be conducted to help them cope up with their worries. They need to feel like they belong on campus, and that other students are sharing some of the same experiences. Working with them to break through negative feelings

and define goals and opportunities may serve as a powerful motivator. It is particularly important that nontraditional students find the right support that they can access in the places and times that work best for them. Further research is recommended to develop, implement and validate appropriate programs to address the needs of these nontraditional students.

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EDUCATION

Exposure to English and Language Proficiency of Indonesian Students in the Philippines

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Abstract

This study investigated the relationship between exposure to English and language proficiency of Indonesian students in the Philippines. It also determined the significant difference in English exposure and English proficiency in terms of years of stay, age, and sex. A descriptive-correlational design was utilized among 56 students from 3 private universities. They were asked to complete an exposure to English scale and IELTS test. Findings indicated that respondents have been exposed to English environment and material at a moderate level. The language proficiency in reading, listening and speaking are at a competent user level while writing is still at a modest user level. Pearson correlation showed a significant relationship between exposure to English environment and speaking skill ($p = 0.002$), writing skill ($p = 0.006$), and listening skill ($p = 0.035$), but not significantly correlated with reading proficiency. There is also no significant relationship between exposure to English material and all language skills. Furthermore, students, whose length of stay is longer, have more exposure in English environment and the difference between two parties is significant. In terms of sex, female respondents have more exposure in the English material and the difference is significant. Finally, in terms of age, the significant difference was found in the exposure to English material and speaking skill, wherein respondents who are 20 years old and above performed better. Further study is needed to examine the factors that motivate Indonesian students to improve their exposure to English environment and materials.

Keywords: *exposure to English, english proficiency, Indonesian students*

There are two major perspectives toward acquiring English language. For the English-speaking countries, the process of acquiring English language is naturally simple and common countries' speakers learn their first language. However, for the Non-English-speaking countries, the process of learning English might encounter various challenges. The challenges can be in the form of anxiety to speak, misspelling letters, wrong collocations of words, grammatical errors, and many

more. Regardless the challenges they might encounter, a significant number of people from all around the world are motivated to learn English. It is due to the specific purposes the learners have and the advantages that English language proficiency provides such as good working opportunities, high salary and position, chance to study at international school or going abroad, and so on. The general and common endeavor is through exposing themselves to the targeted language.

Exposure to English refers to the state of English Language Learners (ELLs) while being connected to the variety of English activities and environment. Apairach and Vibulphol (2015) found out the belief of students in their study that exposing themselves to English environment is the best strategy to acquire the language. Rezzonico et al. (2017) revealed that exposure to English can happen when children enroll in schools where English is used as a primary mode of instruction and communication. Moreover, Schmidtke (2017) discovered that students who begin to acquire English earlier and receive more exposure to English have the tendency to perform well in English.

Yeung and King (2016) described that students in Hong Kong are exposed to English language through an English subject scheduled 2 to 3 times a week for 20 to 30 minutes taught by a native speaker. They also drill English writing for 20 to 30 minutes every day. Fitzgerald et al. (2015) tried to describe the exposure to English as private tutoring, having parents who speak English, and supportive parents who concern about English learning. Further, some researchers have found out that this exposure offered some positive influences. Gusewski and Rojas (2017) mentioned that systematic exposure to English can enhance tense-marking accuracy among bilingual students. On another hand, Duncan and Paradis (2016) addressed English exposure as one of the predictors on English learners' non-word repetition (NWR) task. The longer is the exposure, the better is their NWR accuracy.

Pertaining the English language acquisition, Marzetta et al. (2018) classified the English Language Acquisition (ELA) students as those who are good in speaking the language, yet still lack in reading and writing skills. Many people argued that younger individuals can acquire language easier and faster than older ones. Ducharme (2018) mentioned that kids' ability to acquire language is better than adult since their brain is still flexible to adapt and respond the input. Besides this, Thadphoothoon (2018) found out other determining factors that affected English language competence is ELLs' educational background and English language training they received.

Teachers' role in supporting the learners is imperative to tackle the problem in the acquisition of English language. Mustafa et al. (2018) found out that teachers' role is crucial in developing English language acquisition among students. They have to assist the students to engage with English-speaking teachers and friends so they can acquire the language better. Tuan and Mai (2015) suggested that teachers need to motivate students to be more courageous in the process of acquiring the language. In addition, Fitriani (2017) emphasized that teachers' role is a determining factor for students' language acquisition.

In regard to English language acquisition, some studies have shown similar controversial issues of the exposure. Gusewski and Rojas (2017) mentioned that while English served as the main academic instruction in the school, the use of L1 is tolerated when children need it. The study of Sa'd and Qadermazi (2015) found out that exposure to English can be maximized through English-only policy. However, only 20% of the participants in their study supported this program while the 80% were opposing due to some needs like confirming the instruction and grammatical and lexical items. Furthermore, this study challenged the perspective that L1 is the obstacle in acquiring English.

A mere exposure to English circumstance without considering the proper strategies does not significantly contribute to language acquisition of the English learners. Pangket (2019) conveyed that the cause of students' poor performance in oral language proficiency is teachers' unplanned methods, curriculum, and error in analyzing the need of the students. These studies

signaled the existence of disagreement in terms of teachers' practice at exposing students to English language.

The DepEd of Indonesia has established the program to expose all students to English language from basic education to college level. In other words, all Indonesian students are exposed to English language when they start their educational path. Supriyani (2018) described that English has become part of education in every level of school. However, students do not show sincere willingness to learn the language. Corocki et al. (2019) pointed out that the students learn English because it is one of a compulsory subject in all school levels in Indonesia. This factor inhibits the exposure to English which will certainly disturb language acquisition.

Upon analyzing the literature, the researcher discovered three gaps in this area. First, there have been many studies about English language acquisition, but none of them have chosen Indonesian students in the Philippines as the participants. Second, the researcher did not find any study which examined the relationship between English language acquisition and exposure. Third, while so many studies conducted to explore the early level of education, very limited has been done in the college and graduate level. Hence, the researcher saw the need to find out about the involvement of exposure in terms of English language acquisition among Indonesian college and graduate students in the Philippines which can contribute to literature.

Problems have been discovered in the public and private school in Indonesia where most English teachers tend to neglect the importance of speaking English by using their L1 or mixing Indonesian and English in the classroom. Rahman & Sarker (2019) stressed that the use of L1 is the weakness in exposing student to the English atmosphere and a barrier to language skill acquisition. Undoubtedly, most Indonesian students suffered from poor English acquisition. As the respondents of this study transferred to this country for the sake of their education, the country that employs English as a second language, the researcher tried to find out how their lives in the Philippines influenced their English acquisition. Another problem appeared in the study of Poedjiastutie and Rhonda (2017) which mentioned that the students in Indonesia cannot improve their communicative skill due to teachers' practice in requiring students to memorize many grammatical rules rather than to teach them the appropriate time and way to apply it. This study aimed to know the extent of English exposure of students in terms of environmental and material dimension. In addition, the researcher aimed to measure the level of English proficiency of students which involve four English macroskills. This study determined the relationship between exposure to English and language proficiency of Indonesian students in the Philippines. Further, this study compared English exposure and English proficiency when classified according length of exposure, age, and sex.

Research Questions

1. What is the extent of English exposure of students when classified according to;
 - 1.1 Environment
 - 1.2 Material
2. What is the level of English proficiency of students when classified according to;
 - 2.1 Speaking
 - 2.2 Listening
 - 2.3 Reading
 - 2.4 Writing
3. Is there any significant relationship between exposure to English material and

environment and English proficiency?

4. Is there any significant difference in English exposure and English proficiency when classified with;

- 4.1 Years of stay
- 4.2 Age
- 4.3 Sex

Hypothesis

H1: There is no significant relationship between exposure to English and language proficiency.

H2: There is no significant difference in English exposure and English proficiency when classified with;

- a. Length of exposure
- b. Age
- c. Sex

Methodology

Research Design

This study employed quantitative research approach with correlational design. The main aim was to determine the relationship between English language acquisition and exposure among Indonesian students in the Philippines.

Population and Sampling Techniques

The population of this study consisted of college and graduate students from various universities in the Philippines. The study involved 60 Indonesian students (50 undergraduate students and 10 graduate students) from three selected institutions. Convenience sampling were employed in choosing the respondents.

Instruments

An English language exposure survey questionnaire was primarily adopted from Magno et al., (2009). There were 23 items in the original instrument, but the researcher removed items which are not applicable and added 8 items. Content validity was applied in this questionnaire. Furthermore, to obtain the actual English proficiency skills of the respondents, the researcher adopted IELTS exam test which comprises of reading, writing, speaking, and listening skills.

Data Analysis

To determine the relationship between English language acquisition and exposure among Indonesian students in the Philippines, the Pearson-product moment Correlation was used. To determine whether the exposure to English predicts the language acquisition of the respondents, a multiple regression analysis was performed.

Ethical

In the papers, some information about respondents are required. However, the personal identity of the respondents were kept confidential.

Results and Discussion

Table 1 presented the answer to the first research question: *What is the extent of English exposure of students when classified according to English environment and English material?*

Table 1. *The exposure to English environment (n = 56)*

No	Description	Mean	Median	Verbal Interpretation
1	My parents talk in English	2.45	2.00	Low
2	English is spoken at home	2.39	2.00	Low
3	I converse in English among my family	2.64	3.00	Low
4	I engage in activities where English is used	3.66	4.00	Moderate
5	My friends speak in English	3.89	4.00	Moderate
6	I attend social gatherings where English is spoken	3.61	4.00	Moderate
7	I talk with my friends in English	3.82	4.00	Moderate
8	My teachers speak in English	4.61	5.00	High
9	The activities in my school are conducted in English	4.70	5.00	High
10	My classmates speak in English	4.43	4.50	High
11	My school encourages students to speak in English	4.63	5.00	High
12	The medium of instruction used in the classroom is English	4.57	5.00	High
13	I chat online in English	3.88	4.00	Moderate
14	I send text messages in English	3.73	4.00	Moderate
15	I receive text messages in English	3.63	4.00	Moderate
Total		3.77	3.73	Moderate

Verbal Interpretation: (1) Very low, (2) Low, (3) Moderate, (4) High, (5) Very High

Table 1 presents the result of the Indonesian students' exposure to English environment. It illustrated that item No. 9 "the activities in my school are conducted in English" reached the highest mean (4.70). In the second rank was item no. 8 "my teachers speak in English" with the means score reached (4.61). Items 10, 11 and 12 means were good. Items 4,5,6 and 7 were moderate and the rest of the items were rated low -. The table also shows that the respondents have moderate exposure to the English language with an overall mean of 3.73.

Table 2. *The exposure to English Material*

No	Description	N	Mean	Median	Verbal Interpretation
16	I listen to songs in English	56	4.29	4.00	High
17	I watch movies in English	56	4.32	4.00	High
18	I watch TV shows in English	56	4.02	4.00	High
19	I read magazines written in English	56	3.46	3.00	Moderate
20	I read newspapers written in English	56	3.09	3.00	Moderate
21	I read books written in English	56	4.07	4.00	High
22	The information I read around is in English	56	4.14	4.00	High
23	I learn English from on-line games	56	2.79	3.00	Moderate
24	I learn English from ESL free-online games	56	2.13	2.00	Low
25	I learn English from YouTube	56	3.71	4.00	High
26	I learn English from grammar books	56	3.34	3.00	Moderate
27	I learn English from social media (IG, FB, etc.)	56	3.79	4.00	High
28	I read the on-line books	56	3.34	3.00	Moderate
29	I read English Bible	56	3.75	4.00	High
30	I learn English words from dictionary	56	3.73	4.00	High
Total		56	3.60	3.57	Moderate
<i>Verbal Interpretation: (1) Very low, (2) Low r, (3) Moderate, (4) High, (5) Very high</i>					

Table 2 presents the result of the respondents' exposure to English material. It illustrated that Item 17 "*I watch movies in English*" reached the highest mean (4.32). Items 16, 18, 21, 22, 25, 27, 29 and 30 were rated high implying a high exposure to English material and Items 19, 20, 23, 26 and 28 were moderate. Among all the items, Item 24 attracted the researcher's attention, since that was the only one that classified the lowest mean (2.13). The results revealed that the respondents have a moderate exposure to English materials with an overall mean of 3.60. Table 3 presents the answer to the second research question: *What is the level of English proficiency of students when classify according to speaking, listening, reading, and writing?*

Table 3. *Determining the Participants' Level of English Proficiency in the Area of Reading, Writing, Listening, and Speaking*

	Reading	Writing	Listening	Speaking
N	56	56	56	56
Mean	6.46	5.52	6.71	6.54
Median	6.00	6.00	7.00	6.50
Minimum	2	3	0	4
Maximum	9	8	9	8.50

IELTS is useful to determine the English ability of English learners in the four areas namely reading, writing, listening, and speaking. Therefore, IELTS band score was utilized to find out the level of English proficiency of the respondents. The scale ranges from 0 – 9; (1) *Non-user*; (2) *Intermittent*; (3) *Extremely limited user*; (4) *Limited user*; (5) *Modest user*; (6) *Competent user*; (7) *Good user*; (8) *Very good user*; (9) *Expert user*.

Based on the findings in Table 2, the mean score of respondents' reading skill is at competent user level (band score 6.46), writing skill is at the modest user level (band score 5.52), listening skill is at the competent user level (band score 6.71), and speaking skill is at the competent user (band score 6.54). Among the four English skills, the respondents' writing skill appeared to be a step lower than the other three. Besides, the researcher found that the highest score was found in reading and listening (band score 9). While the assessment of listening skill showed the maximum score, the lowest score was found in this skill as well. Al-Zoubi (2018) mentioned that the students' performance in the four English macroskills is determined by the amount of exposure they get. The more exposure they get, the higher score they will achieve.

Table 4 presents the answer to the third research question: *Is there any significant relationship between the environmental and material exposure to English and language proficiency?*

Table 4. *Determining the Relationship Between Exposure to English and English Proficiency*

		Speaking	Reading	Writing	Listening
ExpoEn	Pearson's r	0.401	0.242	0.363	0.283
	p-value	0.002	0.073	0.006	0.035
ExpoMat	Pearson's r	0.203	0.037	0.099	0.044
	p-value	0.133	0.786	0.469	0.745

Based on the findings in Table 3, there is a statistically significant relationship between exposure to English environment and speaking skill ($p = 0.002$), writing skill ($p = 0.006$), and listening skill ($p = 0.035$) yet English environment does not significantly correlate with the respondents' reading skill. On the other hand, there is little to no relationship found between the exposure to English material and all English skills. Table 1 shows that the respondents' exposure to English material is more poorly than their exposure to the English environment. Paradis and Jia (2017) found that environment is a great factor that influence students' global comprehension. In terms of listening skill, Yin (2015) suggested that there is a significant correlation between English speaking environment and listening comprehension of the students. Al-Zoubi (2018) said

English environment provides many advantages to help students improve their language skills. In addition, it is recommended to expose students to more pleasurable English materials to improve their English proficiency.

Table 5 presents the answer to the fourth research question. Is there any significant difference in English exposure and English proficiency when classify with the years of stay?

Table 5. *Independent Samples T-Test for Years of Stay*

	Group	N	Mean	Statistic	df	p	VI	Cohen's d
ExpoEn	1 – 3 yrs	32	3.66	-2.111	57.0	0.039	Significant	-0.5516
	4 – 6 yrs	27	3.88					
ExpoMat	1 – 3 yrs	32	3.55	-0.532	57.0	0.597	Not Significant	
	4 – 6 yrs	27	3.63					
Reading	1 – 3 yrs	32	6.16	-0.897	57.0	0.374	Not Significant	
	4 – 6 yrs	27	6.63					
Writing	1 – 3 yrs	32	5.66	1.112	57.0	0.271	Not Significant	
	4 – 6 yrs	27	5.26					
Listening	1 – 3 yrs	32	6.72	-0.115	57.0	0.909	Not Significant	
	4 – 6 yrs	27	6.78					
Speaking	1 – 3 yrs	32	6.36	-1.583	57.0	0.119	Not Significant	
	4 – 6 yrs	27	6.78					

Apparently, students whose length of staying are longer, performed better in most areas. The data showed that the mean score of their reading ability is 6.63, listening skill (6.78), and speaking fluency (6.78), but their mean score in writing is (5.26) which is lower than the others. However, the differences were not significant. In terms of exposure, those who stayed longer have more exposure in both areas, exposure to material which (3.63), but the difference between two parties is not significant. The only significant difference was found in the exposure to English environment with the mean score of 3.88. Those who have stayed longer have received more exposure to the English environment than the other students who stayed shorter. Sheela and Ravikumar (2016) stated that English fluency is determined by the amount of exposure to the target language. This finding is supported by Bedore et al. (2016) suggesting that students who have more exposure have higher achievement than those who have stayed shorter. Furthermore, Cattani et al. (2014) mentioned that the length of exposure can significantly predict student's English language performance.

Table 6 presents the answer to the fourth research question: Is there any significant difference in English exposure and English proficiency when classified with the sex of the participants?

Table 6. *Independent Samples T-Test for Sex*

	Group	N	Mean	Statistic	df	p	VI	Cohen's d
ExpoEn	Female	23	3.82	0.6512	54.0	0.518	Not Significant	
	Male	33	3.75					
ExpoMat	Female	23	3.81	2.5409	54.0	0.014	Significant	0.6902
	Male	33	3.45					
Reading	Female	23	6.70	0.7264	54.0	0.471	Not Significant	
	Male	33	6.30					
Writing	Female	23	5.61	0.4136	54.0	0.681	Not Significant	
	Male	33	5.45					
Listening	Female	23	6.74	0.0781	54.0	0.938	Not Significant	
	Male	33	6.70					
Speaking	Female	23	6.85	1.9020	54.0	0.063	Not Significant	
	Male	33	6.33					

The mean scores of females in all areas are higher than males: in terms of the exposure to English environment, female (3.82) and male (3.75); English material, female (3.81) and male (3.45); reading, female (6.70) and male (6.30); writing, female (5.61) and male (5.45); listening, female (6.74) and male (6.70); and speaking, female (6.85) and male (6.33). Apparently, females performed better in all areas. However, the differences were not significant. Among all areas, the significant difference between male and female was only found in the exposure to English material with a p-value = 0.014 and effect size of 0.6902 or with medium effect. Females tends to have more exposure than males. This finding is aligned with Lasekan (2018) who found out that females' English proficiency is higher than males. Furthermore, females' attitude in learning English which involves the willingness to expose themselves to various English material is also better than their counterparts.

Table 7 presents the answer to the fourth research question: *Is there any significant difference in English exposure and English proficiency when classified with the age of the respondents?*

Table 7. *Independent Samples T-Test for age*

	Group	N	Mean	Statistic	df	p	VI	Cohen's d
ExpoEn	Below 20	30	3.67	-1.849	57.0	0.070	Not	
	20 and above	29	3.86				Significant	
ExpoMat	Below 20	30	3.42	-2.471	57.0	0.016	Significant	-0.6435
	20 and above	29	3.76					
Reading	Below 20	30	6.27	-0.346	57.0	0.730	Not	
	20 and above	29	6.45				Significant	
Writing	Below 20	30	5.13	-1.997	57.0	0.051	Not	
	20 and above	29	5.83				Significant	
Listening	Below 20	30	6.87	0.820	57.0	0.415	Not	
	20 and above	29	6.45				significant	
Speaking	Below 20	30	6.28	-2.100	57.0	0.040	Significant	-0.5468
	20 and above	29	6.83					

Table 7 shows that the respondents who are 20 years old and above performed better in most areas. In terms of the exposure to environment, the mean score is 3.86 and 3.76 for the exposure to material. In terms of English proficiency, their reading ability is 6.45, writing skill is 5.83, and speaking fluency is 6.83. On the other hand, their score in listening is 6.45 which is lower than their younger counterparts. However, the significant difference among the respondents in terms of age was found only in the exposure to English material and speaking skill. This finding is supported by Mallillin and Castillo (2016) stating that older people have more possibility to develop speaking proficiency. Also, Miller et al. (2019) cited that younger students' performance is poor compared to older students in terms of speaking.

The findings of this study suggested that Indonesian students in the Philippines have been moderately exposed to English environment and English materials. However, the exposure to English environment has been rated more than the other one. In regard to their English proficiency, their speaking, listening, and reading proficiency have reached the competent user level while writing was still at a modest user level. Furthermore, a statistically significant relationship was found between the exposure to English environment and their speaking, writing, and listening proficiency. On the other hand, there is little to no relationship found between the exposure to English material and all English skills.

This study also revealed that there was a significant difference in the exposure to English environment among the respondents who have stayed longer and shorter. In terms of sex, female have more exposure to English materials than male, and the difference was significant. Finally, the significant difference among the respondents' age was found in the exposure to English material and speaking skill.

Since English proficiency is highly influenced by the amount of the exposure, further study is needed to examine the factors that can motivate Indonesian students to improve their exposure to English environment and materials. Besides, it is also important to know the challenges they have in learning English and how to solve them.

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EDUCATION

Integration of Multimedia in Spiral Approach in Teaching Science: Effects on Biological Science Achievement and Science Process Skills

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Abstract

While education is one of the most promising tools for social transformation endeavor, Science education is important in the development of a nation. However, Philippines is still gasping to improve and upgrade the quality of education as manifested by lower scores in International and National Assessments. Framed by Bruner's Theory of Cognitive Development, this study determined the effects of integration of multimedia in spiral approach in teaching science to biological science achievement and science process skills. It utilized quasi-experimental design with the pretest-posttest equivalent groups. Thirty-five (35) respondents were used as the control (without multimedia integration) group and 35 as the experimental group (with multimedia integration). Results revealed that spiral approach can improve performance of students in biological science and skills in science process with or without multimedia integration. Moreover, the integration of multimedia in spiral approach has no significant effect in biological science achievement ($U = 601$, $Z = -0.14$, $P = 0.89$) and in science process skills ($U = 522.20$, $Z = -1.06$, $P = 0.29$) except for interpreting data category ($U = 404.50$, $Z = -2.46$, $P = 0.01$). Future researchers who may want to duplicate this study may consider utilizing a true experimental design and random group selection. Further, it is recommended that they use a high quality multimedia validated by an expert, conduct the study in a longer duration, divide the groups according to their learning styles and lastly, explore on the effect of various multimedia format in the context of Filipino students.

Keywords: *spiral approach, multimedia integration, science process skills, biological science achievement, teaching approach*

Major breakthroughs that the human world ever experienced were brought about by science. Technology, an application of science, brought us so much comfort as it made man's tasks easier, faster, more efficient, and accurate; in general, improving every man's life (Lazaga, 2014). Indeed, science education is important in the development of a nation; for in this era, science is the "backbone for the prosperity of a nation" (Khan & Shah,

2015). However, despite the innovations in science, Owolabi and Abiola (as cited in Israel & Thomas, 2014) discovered that the rate at which science students do shift to arts and commercial subjects is alarming. All efforts to attract prospective students to science appear to be inadequate because students' performance in science is still not satisfactory. Moreover, in Nigeria, it has been identified that poor teaching methods adopted by teachers

at senior secondary school level is one of the major factors contributing to poor performance of students in biology. The conventional teaching method is classroom-based and consists of lectures and direct instructions conducted by the teacher (Gambari et al., 2014).

Back in 2003 and 2008, when the Philippines last joined the TIMSS, del Rosario (2014) claimed that the Philippines ranked 23rd of the 25 participating countries. In the high school level, the Philippines landed at 43rd of the 46 countries that competed in Science. De Dios (2013) highlighted how the fourth-year students in the country performed during the school year 2011-2012 National Achievement Test (NAT). Based on the result, the fourth-year high school students got a Mean Percentage Score (MPS) of 40.53 in Science during the school year 2011-2012 compared to MPS of 39.49 of the school year 2004-2005. On the other hand, the MPS in Science is 41.35 during the school year 2012-2013 (Philippine Education for All [PEFA], 2015). It is somehow improving; however, this result in the performance in Science is the lowest among other subjects, such as English, Math, Filipino, Araling Panlipunan, etc., which are included in the examination. In addition, the country should have at least 75% MPS in NAT to say that the country's education system is working well, but this is not yet the case. Guevara (2015) said that up to now, Philippines is still gasping to improve and upgrade the quality of education as this is one of the most promising tool for social transformation endeavor. Specifically, Filipino students are expected to develop scientific, technological, and environmental literacy, and be productive citizens who can solve problems critically, make sound decisions, innovate creatively, communicate effectively, and be a steward of nature to become globally competitive individuals (Department of Education [DepEd], 2013). Moreover, Filipino graduates remain below par by international standards in terms of science process skills, among other learning outcomes. This may be because the development of skills in the processes of science is not among the priority of the traditional science class in the Philippines. The teaching of these skills through the traditional lecture mode is faced with problems such as time constraint. Likewise, the limited opportunity for students to participate in inquiry and hands-on activities may not serve the students' need for more enhanced psychomotor development (Guevara, 2015).

Furthermore, in the Philippine setting, according to Department of Science and Technology – Science Education Institute & University of the Philippines – National Institute for Science and Mathematics Education Development (DOST-SEI & UP-NISMED, 2011), many Filipino students' content retention is low; they can hardly reason out and analyze things. They cannot communicate well, and they cannot apply the concepts they have learned in school into real life situations. These challenges in Philippine education could be caused by the quality of teachers, teaching-learning process, school curriculum, instructional materials, and administrative support. Philippines changing from one curriculum to another is a remedy that everyone is expecting to answer the problems in the educational system. It was April 24, 2012 when the former President Benigno Aquino launched the K+12 Curriculum in Malacañang Palace where spiral progression approach is one of its features (Regualos, 2014).

According to Mohammadi and Veladat (2011), one way of increasing the learning quality of students is using spiral learning method. Even one of the leading countries in international assessment, Singapore, uses spiral approach particularly in teaching Mathematics wherein they follow the concrete, pictorial, and abstract approach to understand concepts (Fong, 2015). This is in line with Bruner's Theory of Cognitive Development.

In his theory, Bruner discussed the three ways on how knowledge is being represented or how it is being stored and encoded in our memory. First is enactive representation or mode which

involves encoding and storing of action-based information, thus a person represents past events through making motor responses. In this mode, a person uses some aspects of reality without using words or imagination. Second is iconic representation or mode which refers to action-free mental images wherein children can be able to think of the object even though it is not physically present. In here, knowledge is characterized by a set of images that stand for the concept. Finally, symbolic representation or mode, wherein language as a symbol or code is usually the form of information being encoded and stored as knowledge such that one can understand abstract concepts of language and mathematics for instance. In this mode, representations of the actual objects or phenomena are the ones being manipulated (Bruner, 1963; Johnston, 2012; McLeod, 2012; & Schunk, 2012).

On the other hand, to Khan and Shah (2015), there is a need to move from traditional approaches to more innovative information and communications technologies (ICTs) enriched approaches for meaningful learning. To Gray and Rolfe (2011) multimedia-aided teaching (MAT) is a means of instructional delivery usually used with the traditional method of teaching because multimedia can enhance and strengthen the impact of activities in the Science classroom. It can visually demonstrate scientific ideas and concepts. Further, multimedia can facilitate the development of Science Process Skills of students, necessary to engage in authentic scientific inquiry. Israel and Thomas (2014), on the other hand, suggested computer Assisted Instruction (CAI) and Video Tape Mediated Instruction (VMI) for teaching science subjects. They further explained that the use of animated materials, such as cartoon instruction, reduces the learning task and time; it creates room for consistency and learning mastery by increasing retention, safety, and motivation.

Above are just some of the many researches claiming the advantageous effect of using multimedia in instruction and spiral approach. However, there was no research yet about their effect to biological science achievement and science process skills when used together in delivering instruction especially here in the Philippines. In addition, most of the schools in the Philippines have just started the grade 11 senior high school for the first time in 2016, except for those who became subjects for pilot study. They were the ones who first experienced the Spiral Approach required in the K-12 Basic Education. Since this approach in teaching a particular subject is new, it entails an assessment to evaluate its effects so far. Further, the researcher would like to delve on what could be the effect of Spiral Approach in teaching science on Biological Science Achievement and Science Process Skills when multimedia is integrated.

Statement of the Problem

This study aimed to determine the Effects of Integration of Multimedia in Spiral Approach in Teaching Science to Biological Science Achievement and Science Process Skills of students. It specifically answered the following research questions:

1. What is the level of achievement in biological science of the students with multimedia integration (WMI) and without multimedia integration (WOMI) in their:
 - a. pretest?
 - b. posttest?
2. What is the level of science process skills of the students with multimedia integration (WMI) and without multimedia integration (WOMI) in their:

- a. pretest?
- b. posttest?
3. Is there a significant difference between the pretest and posttest achievement of students in biological science under the group:
 - a. with multimedia integration
 - b. without multimedia integration
4. Is there a significant difference between the pretest and posttest science process skills of students:
 - a. with multimedia integration
 - b. without multimedia integration
5. Is there a significant effect of integration of multimedia in spiral approach on students' achievement in biological science?
6. Is there a significant effect of integration of multimedia in spiral approach on students' science process skills?
7. Is there a significant effect of integration of multimedia in spiral approach on students' achievement in biological science when sex is considered?
8. Is there a significant effect of integration of multimedia in spiral approach on students' science process skills when sex is considered?

Methodology

Research Design

This study is quasi-experimental which utilized the pretest-posttest equivalent groups design. The study involved selecting groups, upon which a variable is tested, without any random assignment to treatment or control. Moreover, the dependent variable was measured both before and after the manipulation of the independent variable.

Population and Sampling Techniques

The respondents of the study were the grade 11 STEM students of CSTC College of Sciences, Technology and Communications, Inc. Sariaya campus during the second semester of the academic year 2018-2019. Students were taking the General Biology 1 during that time, hence they were chosen as the respondents. Through purposive sampling, one section composing of 35 students was utilized as the experimental group (with multimedia integration) and another section composing of 35 students as the control group (without multimedia integration).

Instrumentation

This study utilized two cognitive tests: the Biological Science Achievement Test with a reliability coefficient result of 0.791 and the Science Process Skills Test with a reliability coefficient result of 0.842.

Biological Science Achievement Test. This instrument used to assess the students' biological science achievement was a self-constructed test by the researcher. The instrument

was based on the selected topics in General Biology 1 of STEM students, which included the following: (a) Chapter 5: Cells in Action, comprising of 9 lessons; (b) Chapter 6: What's Inside the Cells, composing of 4 lessons; (c) Chapter 7: Biomolecules: Compounds that Matter Most, with 5 lessons; and (d) Chapter 8: Fuels for Life, with 3 lessons. Table of specifications was made according to these topics and originally, fifty multiple-choice questions were synthesized. Of these, 11 questions were to test the knowledge, 15 questions were to test the comprehension, and 24 questions were for application.

Science Process Skills Test. This instrument used to test the level of science process skills of the students was a self-constructed test based from Aktamis and Ergin (2008). Originally, this was a 7-item problem-solving test, which assessed the integrated science process skills of students. Furthermore, this assessed the higher level of knowledge of students namely, analysis, synthesis, and evaluation.

It included formulating hypotheses, defining operationally, identifying and controlling variables, experimenting, interpreting data, and formulating models. The given situations in each item were also based on the topics covered in the course of study.

For the scoring, the highest possible score of each item is 24 points since there are six (6) integrated science process skills in each item and the highest possible score in each scale is four (4). On the other hand, the lowest possible score is six points in each item since the lowest score in each scale is one (1).

Data Analysis

To answer the problem posed in this study, the Statistical Package for Social Science (SPSS) was used to analyze the data. In addition, nonparametric statistics were the ones particularly used in this study. Nonparametric statistics, including descriptive and inferential statistics, are statistics not based on parameterized families of probability distributions. These are sometimes called a distribution free test because these do not assume anything about the underlying distribution. In fact, these are usually used when the population data does not have a normal distribution. In determining the profile of the respondents, frequency, and percentages were used. In measuring the level of achievement and science process skills of the students under the group with multimedia integration and without multimedia integration, descriptive statistics was used. Moreover, in determining the difference between control and experimental group, Mann-Whitney test was used; in determining the difference between pretest and posttest Wilcoxon Signed Ranks test was used; and in determining the difference of the sex and socioeconomic status effect on students' biological science achievement and science process skills, Kruskal Wallis test was used.

Ethical Considerations

After undergoing validation and reliability testing of the questionnaire, it was submitted to the Ethical Research Board of Adventist University of the Philippines to be reviewed and was granted a certificate thereafter. Endorsement letter was given to the school where the research was conducted, and consent of the respondents were secured before conducting the experiment. During the conduct of experimentation, confidentiality of the information gathered and

anonymity of the respondents' identity were secured accordingly.

Results and Discussions

Level of Pretest – Posttest on Biological Science Achievement of Control Group (WOMI) and Experimental Group (WMI)

Table 1 shows the pretest and posttest mean scores, standard deviation, and verbal interpretation of the biological science achievement of students under control (without multimedia integration) and experimental groups (with multimedia integration). The pretest of the control group has a mean score of 12.74, standard deviation of 3.04, and verbal interpretation of low achieving. On the other hand, the pretest of the experimental group has a mean score of 11.31, standard deviation of 2.79, and verbal interpretation of low achieving. This indicates that the respondents of the control and experimental groups only had a superficial understanding of the topics in biology before the start of the study.

Table 1. *Level of Pretest – Posttest on Biological Science Achievement of Control Group (WOMI) and Experimental Group (WMI)*

		No. of Items	M	SD	Verbal Interpretation
Control Group (WOMI)	BSAT (Pretest)	35	12.74	3.04	Low Achieving
	BSAT (Posttest)	35	19.46	3.86	Average Achieving
Experimental Group (WMI)	BSAT (Pretest)	35	11.31	2.79	Low Achieving
	BSAT (Posttest)	35	18.00	3.61	Average Achieving

Meanwhile, the posttest of the control group has a mean score of 19.46, standard deviation of 3.86, and verbal interpretation of average achieving. The posttest of the experimental group has a mean score of 18.00, standard deviation of 3.61, and verbal interpretation of average achieving. As it is observed in the result, the mean scores and standard deviation of control group in their pretest and posttest are higher than that of the experimental group. However, they have the same verbal interpretation in the result of pretest that is low achieving and posttest that is average achieving. Moreover, the result indicates improvement in the control and experimental groups' mean scores and standard deviation after the course of the study.

Low performance of students in science has been one of the problems of the country in the aspect of education. These may be due to the following factors: access to state-of-the-art science education facilities and equipment, quality of science teachers, the learning process, instructional materials, curriculum, administrative support, teacher training, and funding. It was proven by the poor performance of Philippine high school students in several standardized tests, including national achievement test (NAT). The DepEd reports that the NAT mean

percentage score (MPS) for high school in school year 2012-2013 was 51.41%, or 23.59%. The MPS in science was 41.35%, and 46.83% in mathematics. The Philippines even ranked 67th of 140 countries in quality of math and science education in the 215-2016 Global Competitiveness Report of the World Economic Forum, and 79th of 138 in the 2016-2017 data (Dela Cruz, 2017).

Level of Pretest – Posttest on Science Process Skills of Control Group (WOMI) and Experimental Group (WMI)

Table 2 shows the pretest and posttest mean scores, standard deviation, and verbal interpretation of the science process skills test of students under control (without multimedia integration) and experimental groups (with multimedia integration).

Table 2. Level of Pretest – Level of Posttest on Science Process Skills of Control Group (WOMI) and Experimental Group (WMI)

		No. of Items	M	SD	Verbal Interpretation
Control Group (WOMI)	SPS (Pretest)	3	26.63	5.77	Lowly Skilled
	SPS (Posttest)	3	43.49	9.75	Averagely Skilled
Experimental Group (WMI)	SPS (Pretest)	3	26.49	5.99	Lowly Skilled
	SPS (Posttest)	3	46.89	10.74	Averagely Skilled

The pretest of the control group has a mean score of 26.63, standard deviation of 5.77, and verbal interpretation of lowly skilled. On the other hand, the pretest of the experimental group has a mean score of 26.49, standard deviation of 5.99, and verbal interpretation of lowly skilled. This indicates that the respondents of both control and experimental groups only had superficial science process skills before the start of the study.

Meanwhile, the posttest of the control group has a mean score of 43.49, standard deviation of 9.75, and verbal interpretation of averagely skilled. The posttest of the experimental group has a mean score of 46.89, standard deviation of 10.74, and verbal interpretation of averagely skilled. The result indicates improvement in the control and experimental groups' science process skills after the course of the study. Unlike the biological science achievement test, the experimental group in this study got a higher mean score and standard deviation; however, both groups have the same verbal interpretation of lowly skilled in their pretest and averagely skilled in their posttest.

It shows that through studying science, skills like asking questions, conducting investigations, using a variety of methods to gather evidence, analyzing and interpreting data, making conclusions, and communicating the results can be developed. Moreover, it can create a thinking society (Dela Cruz, 2017). However, according to DOST-SEI & UP-NISMED (2011), not only that many Filipino students' content retention is low, they even can hardly reason out and analyze things, they cannot even communicate well, and cannot apply the concepts they have learned in

school into real life situations.

Based on the result of Aydogdu's research, even teachers have a below average level in both basic and integrated science process skills. This is what the DOST-SEI & UP-NISMED (2011) meant when they say that the challenges in education could be caused by the quality of teachers, teaching-learning process, school curriculum, instructional materials, and administrative support.

Level of Pretest – Posttest on Science Process Skills of Control Group (WOMI) and Experimental Group (WMI)

Table 3 presents the level of pretest and posttest on science process skills between and within control and experimental groups. In formulating hypothesis, the control group has a pretest mean score of 6.91 (SD = 2.17) and posttest mean score of 9.80 (SD = 2.91) while the experimental group has a pretest mean score of 6.74 (SD = 1.95) and posttest mean score of 10.46 (SD = 1.82). In defining operationally, the control group has a pretest mean score of 4.03 (SD = 1.04) and a posttest mean score of 6.49 (SD = 1.70) while the experimental group has a pretest mean score of 4.14 (SD = 1.52) and a posttest mean score of 7.37 (SD = 2.28).

Table 3. *Level of Pretest – Posttest on Science Process Skills of Control Group (WOMI) and Experimental Group (WMI)*

Science Process Skills	Control M (SD)		Experimental M (SD)	
	Pretest	Posttest	Pretest	Posttest
Formulating Hypothesis	6.91 (2.17)	9.80 (2.91)	6.74 (1.95)	10.46 (1.82)
Defining Operationally	4.03 (1.04)	6.49 (1.70)	4.14 (1.52)	7.37 (2.28)
Controlling Variables	4.11 (1.39)	7.14 (2.69)	4.40 (1.79)	7.51 (1.98)
Experimenting	4.03 (1.07)	7.03 (1.84)	4.06 (1.41)	7.49 (2.13)
Interpreting Data	3.83 (1.04)	5.89 (2.18)	3.49 (0.74)	7.00 (2.25)
Formulating Model	3.71 (1.07)	7.14 (2.34)	3.66 (1.11)	7.06 (2.53)

In controlling variables, the control group has a pretest mean score of 4.11 (SD = 1.39) and posttest mean score of 7.14 (SD = 2.69) while the experimental group has a pretest mean score of 4.40 (SD = 1.79) and a posttest mean score of 7.51 (SD = 1.98). In experimenting, the control group has a pretest mean score of 4.03 (SD = 1.07) and posttest mean score of 7.03 (SD = 1.84) while the experimental group has a pretest mean score of 4.06 (SD = 1.41) and posttest mean score of 7.49 (SD = 2.13). In interpreting data, the control group has a pretest mean score of 3.83 (SD = 1.04) and posttest mean score of 5.89 (SD = 2.18) while the experimental group has a pretest mean score of 3.49 (SD = 0.74) and a posttest mean score of 7.00 (SD = 2.25). Lastly, in formulating model, the control group has a pretest mean score of 3.71 (SD = 1.07) and posttest mean score of 7.14 (SD = 2.34) while the experimental group has a pretest mean score of 3.66 (SD = 1.11) and a posttest mean score of 7.06 (SD = 2.53).

Furthermore, it shows a variation in pretest and posttest mean scores of both groups. In the pretest, the control group has a higher mean score than the experimental group in formulating hypothesis (6.91), interpreting data (3.83) and formulating model (3.71). In posttest, control

group has a higher mean score than the experimental group in formulating model only (7.14). These indicate that the respondents have a variation in skills where they are good at and these were improved after the course of the study. Same is true with the result of the research conducted by Kaniawati et al. (2017) wherein after the intervention, the students' science process skills have dramatically improved by 47% (moderate) on observation skill; 43% (moderate) on summarizing skill, 70% (high) on prediction skill, 44% (moderate) on communication skill and 49% (moderate) on classification skill. The development of science process skills is also found in each indicator with the highest increase in predicting skill indicator, while the lowest increase is on summarizing skill and communication skill indicator.

Difference between the Pretest and Posttest Scores in Biological Science Achievement of Control and Experimental Groups

Table 4 shows the comparison of pretest and posttest in biological science achievement between the control and experimental groups. The control group has a pretest mean score of 12.74 (SD = 3.04), posttest mean score of 19.46 (SD = 3.86), z-value of -5.03, p-value of 0.00 and verbal interpretation of significant. Experimental group, on the other hand, has a pretest mean score of 11.31 (SD = 2.79), posttest mean score of 18.00 (SD = 3.61), z-value of -5.01, p-value of 0.00 and verbal interpretation of significant. These results indicate that the control and experimental group had an improvement in biological science achievement test score after the course of study. Further, this could also indicate that spiral approach in teaching have caused this improvement in the performance of the students in biological science achievement even with or without multimedia integration.

Table 4. *Comparison of Pretest – Posttest in Biological Science Achievement Between and Within Control Group (WOMI) and Experimental Group (WMI)*

		M	N	SD	Z	P	Verbal Interpretation
Control Group (WOMI)	BSAT (Pretest)	12.74	35	3.04	-5.03	.00	Significant
	BSAT (Posttest)	19.46	35	3.86			
Experimental Group (WOMI)	BSAT (Pretest)	11.31	35	2.79	-5.01	.00	Significant
	BSAT (Posttest)	18.00	35	3.61			

In every research conducted, it has always been expected that after intervention there will be improvement that will be seen in the result. This happened in the research conducted by Behera and Satyaprakasha (2014) who concluded that achievement with respect to knowledge, understanding, and application and total achievement in biology was enhanced after the intervention. Ibrahim (2016) also concluded in his study that the strategy he used could improve the academic achievement of students. On another hand, Ilhan and Oruc (2016) found out that the academic achievement of students particularly those under the experimental group supplant

those in the control group after the intervention was applied.

Difference Between the Pretest and Posttest Scores in Science Process Skills of Control and Experimental Groups

Table 5 shows the comparison of pretest and posttest in science process skills between the control and experimental groups.

Table 5. *Comparison of Pretest – Posttest in Science Process Skills Between and Within Control Group (WOMI) and Experimental Group (WMI)*

		M	N	SD	Z	P	Verbal Interpretation
Control Group (WOMI)	SPS (Pretest)	26.63	35	5.77	-5.06	.00	Significant
	SPS (Posttest)	43.49	35	9.75			
Experimental Group (WOMI)	SPS (Pretest)	26.49	35	5.99	-4.94	.00	Significant
	SPS (Posttest)	46.89	35	10.74			

The control group has a pretest mean score of 26.63 (SD = 5.77), posttest mean score of 43.49 (SD = 9.75), z-value of -5.06, p-value of 0.00, and verbal interpretation of significant. the experimental group, on the other hand, has a pretest mean score of 26.49 (SD = 5.99), posttest mean score of 46.89 (SD = 10.74), z-value of -4.94, p-value of 0.00, and verbal interpretation of significant. These results indicate that both the control and experimental groups had an improvement in science process skills after the course of the study. Further, this could also indicate that spiral approach in teaching have caused this improvement in the skills of the students in science process with or without multimedia integration.

Effect of Integration of Multimedia in Spiral Approach on Student's Biological Science Achievement Between Control and Experimental Groups

Table 6 shows the comparison of gain scores on biological science achievement of students between and within control and experimental group using Mann-Whitney test. The control group has a mean gain score of 6.71 (SD = 3.64) and a mean rank of 35.83 while experimental group has a mean gain score of 6.69 (SD = 3.71) and a mean rank of 35.17. Overall, it has a total Z-value of -.14, a p-value of 0.892 and verbal interpretation of not significant. It indicates that integration of multimedia in spiral approach of teaching has no significant effect in the biological science achievement score of students.

Table 6. *Comparison of Gain Scores on Biological Science Achievement of Students Between and Within Control Group (WOMI) and Experimental Group (WMI)*

	Group	N	M (SD)	Mean Rank	U	Z	P	Verbal Interpretation
Biological Science Achievement	Control	35	6.71 (3.64)	35.83	601	-0.14	0.89	Not Significant
	Experimental	35	6.69 (3.71)	35.17				

In 2010, where use of multimedia was somewhat new, Wang (2010) concluded that there is no significant difference between students who learned under a traditional teaching method and students who studied with the multiple media platform with respect to the professional cognition or skill operation cognition. It was also believed that both the multimedia platforms and traditional teaching methods have their own advantages and features. In contrast, Osman and Vebrianto (2013) noted that if multimedia is integrated in presenting the lesson, the students' achievement in Biology will be enhanced. Another study, which aims to put forward the effect of multimedia technique on the academic achievement of students, the significant different between the control and experimental groups is found to be in the benefit of the experimental group. In other words, multimedia technique is a much better instruction way than traditional ways. Additionally, students' interest, motivation, and participation increased according to the researcher and teacher of experimental group (Ilhan & Oruc, 2016).

The contradictory result of this study is may be due to some of the limitations encountered by the researcher during the conduct of the study, which includes: (a) wide interval of the class schedule (control group is from 7:30-8:50 am while for the experimental group the class schedule is from 3:30-4:50 pm); (b) timeframe (the study was conducted in a duration of two months); (c) random selection (inability to randomize the selection of the respondents); (d) Hawthorne Effect (the alteration of behavior by the subjects of study due to their awareness of being observed); and (e) learning styles (students were not divided according to learning styles because it was not allowed by the school and learning styles were not assessed accordingly, which can be the basis of the group's division).

Effect of Integration of Multimedia in Spiral Approach on Student's Science Process Skills between the Control and Experimental Groups

Table 7 shows the comparison of gain scores on science process skills of students between and within control and experimental group using Mann-Whitney test. In formulating hypothesis, the control group has a total mean gain score of 2.89 (SD = 3.43) and a mean rank of 33.83 while experimental group has a total mean gain score of 3.71 (SD = 2.55) and a mean rank of 37.17. It has a z-value of -0.69, a p-value of 0.49 and verbal interpretation of not significant. In defining operationally, the control group has a total mean gain score of 2.46 (SD = 1.99) and a mean rank of 32.14 while the experimental group has a total mean gain score of 3.23 (SD = 2.46) and a mean rank of 38.86. It has a z-value of -1.39, a p-value of 0.16, and verbal interpretation of not significant. In controlling variables, the control group has a total mean gain score of 3.03 (SD = 3.00) and a mean rank of 35.39 while experimental group has a total mean gain score of

3.11 (SD = 2.52) and a mean rank of 35.61. It has a z-value of -0.05, a p-value of 0.96 and verbal interpretation of not significant. In experimenting, the control group has a total mean gain score of 3.00 (SD = 2.07) and a mean rank of 33.77 while the experimental group has a total mean gain score of 3.43 (SD = 2.30) and a mean rank of 37.23. It has a z-value of -0.72, a p-value of 0.47 and verbal interpretation of not significant.

Table 7. *Comparison of Gain Scores on Science Process Skills of Students Between and Within Control Group (WOMI) and Experimental Group (WMI)*

	Group	N	M (SD)	Mean Rank	U	Z	P	Verbal Interpretation
Science Process Skills	Control	35	16.86 (10.32)	32.93	522.20	-1.06	0.29	Not Significant
	Experimental	35	20.40 (11.81)	38.07				
Formulating Hypothesis	Control	35	2.89 (3.43)	33.83	554.00	-0.69	0.49	Not Significant
	Experimental	35	3.71 (2.55)	37.17				
Defining Operationally	Control	35	2.46 (1.99)	32.14	495.00	-1.39	0.16	Not Significant
	Experimental	35	3.23 (2.46)	38.86				
Controlling Variables	Control	35	3.03 (3.00)	35.39	608.50	-0.05	0.96	Not Significant
	Experimental	35	3.11 (2.52)	35.61				
Experimenting	Control	35	3.00 (2.07)	33.77	552.00	-0.72	0.47	Not Significant
	Experimental	35	3.43 (2.30)	37.23				
Interpreting Data	Control	35	2.06 (2.33)	29.56	404.50	-2.46	0.01	Significant
	Experimental	35	3.51 (2.28)	41.44				
Formulating Models	Control	35	3.43 (2.38)	36.04	593.50	-0.23	0.82	Not Significant
	Experimental	35	3.40 (3.07)	34.96				

In interpreting data, the control group has a total mean gain score of 2.06 (SD = 2.33) and a mean rank of 29.56 while the experimental group has a total mean gain score of 3.51 (SD = 2.28) and a mean rank of 41.44. It has a z-value of -2.46, a p-value of 0.01, and verbal interpretation of significant. In formulating model, the control group has a total mean gain score

of 3.43 (SD = 2.38) and a mean rank of 36.04 while the experimental group has a total mean gain score of 3.40 (SD = 3.07) and a mean rank of 34.96. It has a z-value of -0.23, a p-value of 0.82, and verbal interpretation of not significant. Generally, in science process skills, control group has a total mean gain score of 16.86 (SD = 10.32) and a mean rank of 32.93 while the experimental group has a total mean gain score of 20.40 (SD = 11.81) and a mean rank of 38.07. It has a z-value of -1.06, a p-value of 0.29, and verbal interpretation of not significant. In general, this indicates that respondents in the experimental group had improved more on science process skills in general than the control group.

Table 7 shows that integration of multimedia in the spiral approach has a significant effect in the ability of the students to interpret data. This may be due to the exposure of experimental group to the multimedia which enhanced their visual literacy, a term coined by Debes (1968). According to him, visual literacy is a group of vision-competencies that human being can develop by seeing and at the same time having and integrating other sensory experiences. In addition, when this is developed in a person, the person will be able to discriminate and interpret the visible actions, objects, symbols, natural and man-made things that are encountered in the environment. In the case of this study, if this is developed in the students, this will enable them to interpret the data gathered from their experimentation.

However, though it had a significant effect to one of the science process skills, which is interpreting data, this could not cover up the fact that integration of multimedia in spiral approach in teaching has no significant effect in science process skills of students in general. The result of the research is contrary to the study conducted by Kaniawati et al. (2017) where they found out that utilizing multimedia computer in linear motion concept for junior high school students is able to increase science process skills with moderate normalized gain score in each sub-concept learnt. However, it has not been able to improve summarizing and communication skills well. It is supported by the results of their research, which shows that the normalized gain scores are still low.

Effect of Integration of Multimedia in Spiral Approach on Student's Biological Science Achievement and Science Process Skills when Sex is Considered

Table 8 shows the effect of integration of multimedia in spiral approach on male and female students' biological science achievement and science process skills using Wilcoxon Signed Ranks test.

In biological science achievement of the control group, male respondents have a mean rank of 18.68, while female respondents have a mean rank of 16.85. Overall, they have a total Z-value of -0.52, p-value of 0.61, and verbal interpretation of not significant. In science process skills of control group, male respondents have a mean rank of 17.98, while female respondents have a mean rank of 18.04. Overall, they have a total z-value of -0.02, p-value of 0.99, and verbal interpretation of not significant.

Table 8. *Effect of Integration of Multimedia in Spiral Approach on Student's Biological Science Achievement and Science Process Skills when Sex is Considered*

Group		Sex	N	Mean Rank	Z	P	Verbal Interpretation
Control	Biological Science Achievement	Male	12	18.68	-0.52	0.61	Not Significant
		Female	13	16.85			
	Science Process Skills	Male	22	17.98	-0.02	0.99	Not significant
		Female	13	18.04			
Experimental	Biological Science Achievement	Male	15	15.50	-1.26	0.21	Not significant
		Female	20	19.88			
	Science Process Skills	Male	15	14.43	-1.79	0.07	Not significant
		Female	20	20.68			

In biological science achievement of the experimental group, male respondents have a mean rank of 15.50, while female respondents have a mean rank of 19.88. Overall, they have a total z-value of -1.26, p-value of 0.21, and verbal interpretation of not significant. In the science process skills of experimental group, male respondents have a mean rank of 14.43, while female respondents have a mean rank of 20.68. Overall, they have a total z-value of -1.79, p-value of 0.07, and verbal interpretation of not significant.

The results are indicative of the following: (a) in control group, more male respondents had an improvement in biological science achievement than female respondents, but more female respondents had an improvement in science process skills than male respondents; (b) in experimental group, more female respondents had an improvement in both biological science achievement and science process skills than male respondents; and (c) though by looking at the mean rank, differences between male and female can be observed, however, the results also indicate that integration of multimedia in spiral approach has no significant effect on the biological science achievement and science process skills of both sexes.

The result of this study is similar to the study of Satyaprakasha and Sudhanshu (2014) which revealed that both boys and girls in experimental group significantly attained different objectives like knowledge, understating, application, and total achievement in biology.

This concludes that spiral approach in teaching can improve the performance of students in biological science and skills in science process with or without multimedia integration. The integration of multimedia in spiral approach had a significant effect in interpreting data, which is part of the science process skills. It was also concluded that the use of multimedia integration in spiral approach have not had any significant effect in the respondents' biological science achievement and science process skills when sex and social economic status (father and mother's education and family's monthly income) are considered.

Researchers may duplicate this research considering the following recommendations:

- Utilize a true experimental design and randomized group.
- Choose a class schedule, which is close to the first group to avoid contamination.
- Make sure that the multimedia to be used is of high quality and has been validated by a

multimedia Expert.

- Take into consideration of checking the school calendar of events to make sure that the class schedules will not be affected by any unexpected co-curricular activities.
- Conduct the study in a longer duration to really see the effect of integration of multimedia in the approach of teaching to be explored.
- Be mindful of the Hawthorne effect. Find a way on how to lessen this effect on the respondents to be used.
- Divide the groups according to their learning styles to ascertain that the two groups are balanced.
- The researcher could also explore on the effect of various multimedia format in the context of Filipino students because there are no known studies yet about it that was done in the Philippines.

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HUMANITIES

Taalburoto: Netizens' Reactions About the Taal Volcano Eruption Posted on Facebook

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Abstract

Disasters and calamities bring various emotions to many people and in the 4.0 era, netizens usually post these emotions through Facebook. This qualitative study intended to know the reactions of the netizens on the Taal volcano eruption that happened in January of 2020. This case study gathered 67 posts and 165 comments through purposive sampling method. Posts and comments were thematically analyzed and were tabulated. News updates reported by the Philippine Institute of Volcanology and Seismology (PHIVOLCS) were considered for triangulation. The posts were categorized into three themes with subthemes: (a) positive posts (grateful, optimistic, submissive to God, and moved by the bayanihan spirit), (b) negative posts (angry, regretful, and afraid), and (c) neutral posts (cautious and factual). The comments were divided into 4 themes with subthemes: (a) positive comments (grateful, optimistic, submissive to God, and moved by bayanihan spirit), (b) negative comments (angry), (c) neutral comments (cautious and factual), and (d) funny comments (memes). Regardless of age and sex, the netizens post their feelings and observations on social media. However, date range is a perceived predictor of what the netizens will post or comment. If in time, the circumstances worsen or get better, people react more negatively or positively. Results also showed that most netizens are positive more than negative with what happened, hence, there were more posts and comments on being grateful, optimistic, submissive to God, and moved by the bayanihan spirit. The Facebook activity "Chained Positivity" is suggested based on the result of the study.

Keywords: *bayanihan spirit, netizens, memes, Chained Positivity*

Calamities or natural disasters such as typhoons, earthquakes, hurricanes, floods, forest fires, and volcanic eruptions, among others, have been considered a part of human life. Though their nature can be scientifically studied, their exact time and date of occurrence cannot be predicted. Science explains that natural disasters are "extreme" results of geophysical processes (Hewitt, 2020).

News on various disasters from around the globe welcomed 2020. The latter part of 2019 ended with the news of a bushfire in Australia. On January 3, a US airstrike outside Baghdad, Iraq led to Iraq's retaliation against the US; this event was the alleged reason

for the crash of a Ukrainian plane in January 8 which killed 176 passengers. Then there is locust plague in Kenya, the viral Novel Coronavirus that was said to have originated in Wuhan, China, and the 6.8 magnitude earthquake in Turkey. Philippines was not an exemption. On January 12, Taal volcano erupted which caused almost 135,000 people to evacuate and has affected billions of agricultural lands (Daily Sabah, 2020).

Among the 53 volcanoes in the Philippines, 23 are active (Rivera et al., 2015) and Taal is among the active ones. Taal volcano or the Volcano Island that rises 300 meters above the water level of Taal Lake,

is found in the southwestern part of the Philippines, particularly in the province of Batangas. It erupted 35 times from 1572 (Encyclopaedia Britannica, 2020) to its latest eruption on January 12, 2020. It is a tourist spot in Batangas that is best viewed at the Tagaytay ridge in the province of Cavite.

Taal volcano is a complex type of volcano because, according to the NASA Earth Observatory (2014), instead of having just one dome, Taal volcano has “multiple stratovolcanoes, conical hills, and craters of all shapes and sizes. These features have grown together to form the 5-kilometer (3 mile) wide Volcano Island, one of the Philippines’ most volcanically active areas” (par.1). After its violent eruption in September 1965 (NASA Earth Observatory, 2014), Taal rekindled fear among the Batangueños and Caviteños in the afternoon of January 12, 2020. News about its eruption widespread not only in the Philippines but around the globe (e.g., CNN Asia, 2020; The New York Times, 2020).

The aftermath of the violent calamity has been visualized and portrayed through different social media such as Facebook, YouTube, Twitter, and Instagram. The Filipinos were saddened with the devastating effects of the Taal Volcano eruption and most emotions were expressed through Facebook. This study was initiated to know the different reactions of the netizens caused by the eruption of Taal which were posted on Facebook. Specifically, this study dealt with the following questions:

- a. What were the netizens’ posts about the Taal volcano eruption?
- b. What were the netizens’ comments to the Taal volcano eruption?
- c. If grouped according to sex, age, and date range, what are the common posts and comments about the Taal volcano eruption?
- d. What Facebook activity can be suggested based on the result of the study?

Methodology

This study employed qualitative research design. Through purposive sampling, 67 posts, and 165 comments of netizens from Facebook were gathered. Posts and comments were between January 12 - January 26, 2020 (from the onset of the eruption until the alert level was decreased to alert level 3). Only the public posts and comments were included. The posts were tabulated and grouped to find themes, differences, and similarities, and later form categories that would answer the research questions. Themes were then identified through content analysis. For triangulation, news updates reported by the Philippine Institute of Volcanology and Seismology (PHIVOLCS) and other reliable sources were taken into account.

Some limitations were also acknowledged. Age may not be as accurate as in an actual interview because the researchers only looked through the netizens’ Facebook accounts to observe and check their photos. Since the accounts were open to the public, the researchers were able to check the available photos and posts. Also, there was no interview or member-check conducted to verify if the content analysis is accurate to their feelings when they posted/ commented their statements.

Results and Discussion

Posts were categorized into three themes with subthemes. The three categories are: (a) positive posts (grateful, optimistic, submissive to God, and moved by the bayanihan spirit), (b) negative posts (angry, regretful, and afraid), and (c) neutral posts (cautious and factual). Posts may be more than the number of netizens because one post may have 1 or more themes.

Netizens' Posts About the Taal Volcano Eruption

Positive posts. There were a total of 36 positive posts from 67 netizens: 6 grateful posts, 7 optimistic posts, 10 submissive to God posts, and 13 moved by the bayanihan spirit posts.

Grateful. The netizens were grateful that despite the eruption, there were still many blessings that have been received by the victims. Some of them were thankful because many people and entities extended help. Netizen 53 was thankful to the volunteer clowns, *"Tunay na napasaya nyo po ang mga evacuees dito, lalo na ang mga bata"* (You really made the evacuees here happy, especially the children). Netizens 29 and 30 were grateful that there were many donations given to different evacuation centers. Other netizens are grateful to God for keeping them safe from severe damage, and grateful to other people who pray for them and check if they are okay.

Optimistic. Eruption, just like other disasters, makes people worried and unhappy. However, some of the netizens posted positive reactions to give themselves and others a glimpse of hope. The common hashtag on social media was #BangonBatangas(rise Batangas). Netizen 3 shared *"Laban batangueños...babangon tayo at magsisimulang muli...Kaya ntn to.."* (Fight Batangueños.. / We will rise and start again...We can do this..). Netizens 22 and 45 post a message to Taal Volcano to calm down and come back to its normal state. On the other hand, Netizen 34 who posted on January 17 tells that "THE 'MAGIC' DATE IS JANUARY 26ish. Let's continue to pray hard." This shows that the netizens are looking forward to a positive news on January 26, 2020; that the alert level will lower down.

Submissive to God. It is during hardship that people usually pray and submit to God everything. Ten among the positive posts are prayers submitting everything to God. The netizens were praying for the safety of their families, loved-ones, and people who are directly affected by the eruption (Netizens 6, 8, 9, 13, 16, 25, 40, and 65). Other netizens are reminding fellow Filipinos to just pray and have faith in the Lord (Netizens 28 and 31).

Moved by the bayanihan spirit. Results proved that amidst chaos, Filipino citizens unite into helping one another survive. Among all the positive posts, moved by the bayanihan spirit has the highest number (13 posts). Some netizens are sharing the different conditions of the families affected and evacuation centers.

Negative posts. Some netizens posted negative reactions due to various reasons. A total of 12 negative posts were gathered. There are 4 angry posts, 6 regretful posts, and 2 afraid posts.

Angry. The netizens angry posts were triggered by what they "say" was happening in the evacuation centers and the actions of the government. Netizen 7 mentioned that even in the evacuation centers, families were getting hungry because not everybody is being served with food. Moreover, Netizen 61 complained that some evacuation centers are not in the list, hence, there were very limited donations coming in resulting in the shortage of supplies for the

families there. Other netizens like Netizens 27 and 56 expressed their disappointments with the government because of what they think are improper measures taken to consolidate the matter.

Regretful. All the netizens who posted regretful reactions expressed how and what they lost. Netizens 1, 2, 5, and 26 come from places near Taal and they posted pictures with captions showing how devastated their places were. “These pictures are showing how it ruined our place, the place where I grew up is now field with ashes...” [sic] (Netizen 2). Netizen 63 expressed. “My heart falls into pieces for my hometown and affected areas.” Because of the eruption, some jobs are also affected. Netizen 23, who is an ESL teacher, complained “Because of Taal, chaos ensued. Students left all of a sudden... And just like that, once again unemployed.”

Afraid. Many posts and news online depicted the aftermath of the eruption which brought fear to the hearts of many Filipinos and foreign nationals who are staying in Batangas and Cavite. Netizen 33, an Indonesian resident of Cavite posted a photo of dark clouds with the caption “I don’t know what’s this....How i wish that the sky is showing us its beauty and not disaster Some people are trying to record this cloud, it drives me nervous Masih trauma deng Taal.” Other netizens posted videos of the terrifying onset of the eruption (Netizen 52).

Neutral posts. There were also netizens who remain neutral and factual on the situation. There were 15 cautious and 6 factual posts that comprise the 21 neutral posts of the netizens.

Cautious. Nine posts of the netizens are reminding the Batangueños to “keep safe” (Netizens 12, 14, 15, 17, 18, 19, 20, 21, and 41). Other netizens are reminding the public to take precautionary measures due to the threat of a bigger explosion (Netizens 38, 47, and 49). The rest are reminding the affected families to stay in the evacuation centers or their homes if they are beyond the 14-km radius danger zone (Netizens 55 and 67). Netizen 59 posted a video coverage of Taal volcano on January 14, 2020 with the caption “*Live Footage of Taal Volcano. Para po alert tayo*” (So we can be alert).

Factual. For every current event, the public deserves to know the truth. Many netizens shared the current state of the affected areas and Taal volcano. Netizen 66 elaborated that “*as of now eto na po ang Ash fall affected areas. Nakarating na din po sa Central Luzon. Amoy Asupre na sa labas ng bahay napaka kapal ng ashfall na kulay itim. 1977 ang huling Eruption ng Taal Volcano. phreatic eruption ang tawag sa pag sabog ngayon*” (As of now these are the ashfall affected areas. It has also reached Central Luzon. It smells like sulfur outside the house the ashfall is very thick that is black in color. 1977 was the last eruption of Taal volcano. The current eruption is called phreatic eruption [sic]). Other netizens, such as Netizen 50, are also giving facts about the health hazard caused by the ashes. There are others reiterating to the public the Alert Level update and other advisories (Netizens 10, 38, 48, 50, and 51).

Netizens' Comments About the Taal Volcano Eruption

The comments gathered from 165 netizens were subdivided into four categories: (a) positive comments (grateful, optimistic, submissive to God, and moved by bayanihan spirit), (b) negative comments (angry), (c) neutral comments (cautious and factual), and (d) funny comments (memes). Comments may be more than the number of netizens because one comment may have 1 or more themes.

Positive comments. There were a total of 137 positive comments from 165 netizens: 54 grateful to God comments, 33 optimistic comments, 36 submissive to God comments, and 14 moved by the bayanihan spirit comments.

Grateful to God. Among the 137 positive comments from the netizens, the highest number is showing how grateful they are despite the disaster (54 comments). Although the grateful reactions ranged from January 16 - 26, 2020. It can be gleaned from the data that majority were on the 26th, the day when the alert level was lowered down to alert level 3 and many families were given permission to return to their respective homes. *“Alert level 3 na lang thank God”* (only alert level 3 thank God [sic]) and *“Thank po Lord Jesus Christ praying tuloy tuloy ng bumaba”* (continue to go down) as commented by Netizens 88 and 26, respectively.”

Optimistic. The netizens are hoping that Taal volcano would continue to calm down. “Hoping that the Taal Volcano continues to calm down and brings back the life of Batanguenos and Cavitenos into its normal condition. Praise God” (Netizen 54). Others are encouraging the affected people through their comments. Netizen 17 commented, *“Go Batangas buti naman humupa na ang pag aalburuto ng taal Lord ingatan at gabayn mo po silang lahat”* (Go Batangas it is good that Taal’s disturbance has died down Lord take care of and guide them all [sic]). There are also netizens who pray for the country. Netizen 91 exclaimed, “We pray for you and the people from South Africa. Be safe, God be with [with] you.”

Submissive to God. Just like the posts of 10 netizens, 36 comments submit everything to God. Netizen 107 commented, “Let your will be done in our lives.” Other netizens are praying for the safety of their families (Netizens 92, 104, and 111), fellow Filipinos (Netizens 4, 25, 139, 140, 152, and others), and themselves (Netizens 105, 110, 145, 163, and others). The results implied that God is still the one people ask help from.

Moved by the bayanihan spirit. Many netizens are moved by others’ ways of helping the victims of the Taal volcano eruption. Netizen 2 shared, *“Sobrang tuwa at sarap sa pakiramdam na makikita mo ang mga kapwa batangueno mo na masaya. Thank you Lord and keep safe parin po sa ating laht Godbless po”* (It feels happy and good to see that your fellow Batangueños are happy. Thank you Lord and keep safe still to all of us God bless [sic]). On the other hand, Netizens 57 and 62 wished that all donations be fairly distributed among all the affected families. Others are moved to tears of joy because of the bayanihan spirit of the Filipinos such as Netizen 46 who commented *“Nakakapaluha naluluha ako kase damang dama ko ang katuwaan at kagalakan ng mga evacuees. Ingat padin kayo mga Kaptid”* (It makes me cry I feel like crying because i can really feel the happiness and gladness of the evacuees. Take care still brethren).

In a January 18, 2020 report in Manila Bulletin, it was mentioned that bayanihan spirit is one of the most endearing values of the Filipinos in times of disasters. There were motorists who gave free ride to the evacuees, foods and donations are flooding, face masks were distributed, basic necessities were provided, and a lot more (Pedrajas, 2020).

Negative posts. A few netizens’ comments are negative due to various reasons, too. A total of 8 angry comments were gathered.

Angry. Because of different reasons, there are netizens who express their negative emotions on Facebook especially when they hear or personally experience a negative incident, in this case, on the Taal volcano eruption. Most of the angry comments are about the relief goods and donations given. Netizen 12 reiterated that relief goods should be given to the evacuees instead of spoiling/rotting the goods. Netizen 128, on another hand, appealed to the people that if they will give clothes, they should make sure that the clothes are in good condition and usable. Netizen 155 commented that these are “work of evil men.”

There are also citizens who remained tough in the tensed situation. GMA News Online (2020) reported some situations where the netizens fight back against the military troupes and police officers who manned the different points of exits and entries of the affected towns.

Neutral posts. There were also netizens who remain neutral and factual on the situation. There were 25 cautious comments and 1 factual comment that comprise the 26 neutral posts of the netizens.

Cautious. There are netizens who are reminding the people to reach out to Christ in times of disasters. Netizen 121 pointed out that “*Marahil nakakalimot na tayo sa Diyos kaya tinapok niya tayong lahat. Trust God with all your heart*” (Maybe we are forgetting God, therefore he tapped us all. Trust God with all your heart). The others are reminding the people to use mask (Netizens 9 and 130). There are also others who reiterated that being careful and prayerful would help (Netizens 10, 20, 61, 67, 141, and others). Malacañang urged the public to be vigilant (Artida, 2020) especially on the critical days after the eruption.

Factual. Since social media is a public platform, there is very little screening of what people can or cannot post. Many fake news came out that brought more panic to the people. That is why there are netizens who are reminding others to scrutinize if a news is fake or true. There is one netizen who commented that people should be aware of “FAKE NEWS” (Netizen 39).

Funny comments. Filipinos are known to always find humor in the midst of catastrophe. A total of 3 funny comments were gathered by the researchers which fall under the theme “memes”. Some evacuees used the time to play “dressing up in the strangest clothes they’ve received as donations. In the rush to get supplies to victims of the disaster, people have been tossing everything from party dresses to work uniforms into donation boxes” (North & Nefas, 2020, par. 2).

Memes. Netizen 78 shared “*Itinaas na po sa alert level 10 ang pag aalburuto mng mga taga batangas kaya kailangan ng lumikas ang Bulkang taal*” stating that the threat of the Batangueños has reached Alert Level 10 and Taal volcano is advised to evacuate. This was commented after some news showed the rage of many Batangueños when they were asked to evacuate from the 14-kilometer danger zone. On the other hand, Netizens 158 and 159 commented that people should ask a certain religious leader to “stop” Taal from exploding.

Common Posts About the Taal Volcano Eruption in Terms of Sex, Age, and Date Range

There is a total of 36 males and 31 females who posted about the Taal volcano eruption. Most of the male and female netizens shared posts showing Bayanihan spirit. Additionally, there were a total of 27 netizens who are 31-40 years old, 23 who are 21-30 years old, 11 who are 41-50 years old, and 3 for each of the 18-20 and 51-60 years old. Most 31-40 and 21-30 years old netizens shared posts about being cautious; many of the 41-50 years old netizens are optimistic and moved by the bayanihan spirit; while the 18-20 years old netizens are factual, regretful, and submissive to God. The posts also ranged within three weeks from January 12-16, 17-21, and 22-26, 2020 and most posts fall under January 12-16, 2020. The posts are mostly about being cautious. This implied that most cautious posts were shared on the day of the eruption and next four days after the eruption. This time was a crucial time for the people because the psychological trauma can still be high since the event has just occurred and is still fresh for them.

Common Comments About the Taal Volcano Eruption in Terms of Sex, Age, and Date Range

A total of 48 males and 117 females commented on various posts on Facebook. Most of the males and females are grateful with 15 and 39 comments, respectively. The females also showed being submissive to God (29) while males are more cautious about the tragic event. In terms of age, 31-40 years old netizens have the most comments (58), followed by 21-30 years old netizens (49), 41-50 (39), 51-60 (12), 61-70 (5), and 18-20 (2). The highest comments for all age range except 18-20 years old netizens were gratefulness with the ages 31-40 years old having the highest number (19) followed by 21-30 years old (17), and 41-50 (10). On the other hand, 21-30 years old shared the highest in terms of optimistic comments (13), followed by 31-40 years old (10), and 41-50 (7). Most of the 51-60 and 61-70 years old netizens are grateful despite what happened during the eruption.

The dates covered in gathering the comments ranged within three weeks from January 12-16, 17-21, and 22-26, 2020 and most comments fall under January 22-26, 2020 (110). Most of the comments during the first five days (January 12-16, 2020) are about submitting to God what lies ahead. There were very few comments during the second week (January 17-21, 2020) and they are mostly being grateful. The last five days (January 22-26, 2020) also showed being grateful with a total of 49 comments. This result implied that being the crucial week, the first five days are enveloped in fear and trauma and the people are submitting their lives to God. The second week is the waiting stage and most people are starting to recover and clean up. The third week was the time when plumes and ashes are becoming weaker. From the data, most comments are shared on January 26, 2020 when the alert is lowered to level 3 and the people are grateful for that.

According to the PHIVOLCS, as reported by the Office for the Coordination of Humanitarian Affairs (2020), Taal volcano continues to emit dark gray ash plumes up to 800 meters high on January 16, 2020 which made it dangerous for the people living in the 14-kilometer dangerous zone to go back to their respective homes. After two weeks, PHIVOLCS (2020) reduced the alert level to Alert Level 3 which implies a decreased tendency towards hazardous eruption.

Suggested Facebook Activity

It can be gleaned from the results that the netizens' posts and comments are dependent on the news and other posts shared online. Therefore, the researchers thought that if the netizens opt to share positive yet factual posts, other netizens will be influenced positively.

An activity that the researchers came up with is derived from the chain messages common through short messaging services (SMS) or text message. Instead of texting a message through a chain of people, messages will be posted online tagging a number of friends. The title of the activity is "Chained Positivity" with the following objectives:

- a. To share reliable and factual information to the netizens
- b. To share positive vibes amidst a negative event
- c. To increase the netizens' rational thinking regarding a negative event

The mechanics are:

1. Netizen A will choose a video or news article about the current catastrophe (disaster or calamity). Make sure that the video or news article is from a reliable source.
2. Regardless of the nature of the video or news article (positive, negative, or neutral), Netizen A should think of a positive caption about the video or news article. The caption can be in the form of a Bible verse, inspirational quote, short testimony, and or a personalized caption, for as long as it depicts a positive vibe.
3. Upon sharing, Netizen A should clarify at the last part of the caption that the post must be shared to others and the captions should be changed and personalized by the next set of netizens. It should also be clear that the goal is to share positive vibes to others in the midst of a disaster or calamity.
4. Netizen A should tag 5 people from his/her friends list (Netizens B, C, D, E, and F) before sharing the video or news article.
5. Should there be comments (positive, negative, or neutral) once the video or news article is posted, Netizen A will comment in a positive way and will encourage others to comment positively too.
6. Netizens B, C, D, E, and F will do the same to continue the chain online positive posts.

This is just a simple way that any netizen can do to lessen negativities online and increase the netizens' ability to rationally think and thoroughly research about an event before commenting and/or posting on Facebook or any other social media.

Based on the result, the posts and comments of the netizens are based on how they perceive and feel about the circumstances connected to the Taal volcano eruption. Regardless of age and sex, the netizens post their feelings and observations on social media. However, date range is a perceived predictor of what the netizens will post or comment. If in time, the circumstances worsen, people react more negatively. If in time, the events get better, people react more positively. Results also showed that most netizens are positive more than negative with what happened, hence, there were more posts and comments on being grateful, optimistic, submissive to God, and moved by the *bayanihan* spirit. Therefore, it is recommended that during catastrophes, agencies involved should utilize any possible media to disseminate current and factual information to the people. For the netizens, the rule "think before you click" may sound cliché but is still relevant in the use of social media. Positive posts and comments are also suggested to be spread because these may influence other netizens too.

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HUMANITIES

Information-Seeking Experiences of Parents of Children Diagnosed with Autism Spectrum Disorder

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Abstract

Parents of children diagnosed with Autism Spectrum Disorder (ASD) are anxious for their children's uncertain future. Needing to search for ASD information for their children's wellbeing, but there is a dearth of information in the country leaving important questions unanswered, hence this phenomenological study identified the information-seeking experiences of four purposively sampled parents with children with ASD in Region IV-A, Philippines. Data gathered from the interview were transcribed and coded for thematic analysis. This study answered two questions: (a) What are the information needs of parents of children with ASD? (b) How did they get information about ASD? On the information needs of parents of children with ASD, six themes (a) caring for children with ASD, (b) social adjustment, (c) financial needs, (d) healthcare needs, (e) education needs, and (f) government assistance. As to the methods of getting information, the parents preferred to use the traditional and new media such as the television, Google, Facebook, and YouTube in information-seeking and ask their family, friends, neighbors, therapists, pediatricians, and SPED teachers for advice. In conclusion, parents of children with ASD were either passive or avid seekers of ASD information depending on their children's diagnosis, needs, growth, and development. Conducting a phenomenological study with a more specific demographic of parents with children diagnosed with other developmental disorders may be done for future research.

Keywords: *information-seeking behavior, information needs, information sources, parents of children diagnosed with autism spectrum disorder (ASD), media*

The number of children born with a form of developmental deficiency continues to increase in the Philippines. Parents of children diagnosed with Autism Spectrum Disorder (ASD) are anxious for their children's uncertain future. They need to seek out information that could be useful for the development of their children's wellbeing, but the country lacks reliable local information and resources concerning ASD leaving important questions unanswered. The

American Psychiatry Association (APA) (as cited in Abbey, 2018) stated that "ASD is a neurodevelopmental disorder distinguished by difficulty in communicating and socializing, limited interest and repetitive behavior" (p. 8), which is a lifelong disorder that begins at childhood and often develops comorbid problems overtime. Several studies across the globe indicated that parents of children with ASD are actively seeking information about ASD to cope up with stress and negative

thinking. Before their child's diagnosis, most parents were unknowledgeable and unaware of ASD (or any other related mental illnesses) and experienced emotional and financial burdens within the family. Parents were then prompted to seek out information and counsel from professionals to religious leaders for advice about 'the next step' of their endeavor and seek available treatment from various places that ended up delaying intervention and therapy (Abbey, 2018; Lwoga & Mosha, 2013; Mahapatra et al., 2019; Murphy & Tierney, 2019). A possible explanation as to why parents experience hardship in their search for information is caused by a phenomenon called information inadequacy or lack of needed information. According to Kajtazi (2012), "information inadequacy is a problem that occurs when the needed information is lacking (non-existent, insufficient, censored or undelivered in manner) or it occurs if the information sent is overflowing (ambiguous, redundant, irrelevant and undervalued in manner)" (p. 325). Notably according to studies, problems arise because parents are unaware and unknowledgeable about ASD and insufficient sources of information of which both professionals and service providers have failed to deliver (Mahapatra et al, 2019; Martinovic & Stricevic, 2016; Murphy & Tierney, 2019).

A study from the Philippines conducted by Quilendrino et al. (2015) disclosed that Filipino parents are aware of ASD and can identify early symptoms and would immediately seek health interventions from pediatricians, neurologists, relatives, friends, teachers, the internet, and religious leaders for any health-related support they could receive. It was also reported that they do not believe in the myths about ASD and they rely more on professional advice compared to previous studies. However, the need for future studies to focus on a different paradigm of health-seeking behavior that includes parents and their children who never received any local interventions and consultations from a professional, revealing a different scenario and concerns that their study has not discovered was recommended. Despite the important role of information in guiding parents to raise their child diagnosed with ASD, there is a lack of local studies in the Philippines on the information-seeking experiences of parents of children with ASD; hence, this study highlighted the appropriate information needs of parents, information sources, and channels available to them, and significant impacts of information to their family and children. Understanding these needs benefits the children with ASD and their families, informing governmental and organizational sectors of health, education, social communication, and research.

This study focused on the information-seeking experiences of parents with children diagnosed with ASD in Region IV-A, CALABARZON, Philippines. This aimed to identify the information needs of parents seeking information concerning ASD using the comprehensive model of information seeking by Johnson (1995). Information about ASD has been a major struggle for parents to seek out locally. The Philippines is a progressive developing country that has recognized the need for special education (SPED) and financial assistance for persons with disabilities (PWD) but lacks resources to fund and produce quality health services for people with other mental illnesses. Unavailability of local ASD services and programs, and insufficient information, aid, and affordable therapy have put parents in a financial crisis and stagnation of their child's special needs. Because of this, the study explored the experiences of parents with children diagnosed with ASD and the challenges they face in their search for information. This study answered these questions:

1. What are the information needs of parents of children diagnosed with ASD?
2. How did they get the information about ASD?

Methodology

Research Design

This qualitative study employed a phenomenological approach to describe the experiences of parents of children with ASD in their search for information related to ASD through various media and interpersonal communication channels. Phenomenology studies the lived experiences of humans and how they perceive things that appear to consciousness (Tuffour, 2017). With this approach, the study reflects the lived experiences and challenges parents of children with ASD encounter in their search for useful ASD-related information. Phenomenology has been frequently used in qualitative research methodologies (Tuffour, 2017) and could contribute more to literature to provide meaning on the gaps that occurred from the lack of available studies (Creswell, 2009 as cited in Schuemann, 2014). Data from this approach were then gathered and underwent the process of thematic analysis to accurately reflect the experiences parents of children with ASD face in their information seeking with the use of themes.

The participants were given enough time to answer an interview which consists of questions concerning the frequency and relevance of their used media and channels in their search for ASD-related information. The purpose of the study and questions concerning the participants' information needs and information sources were discussed to them before the interviews. Since the Philippines was under the enhanced community quarantine (ECQ) which led to the complete lockdown in Luzon since March 17, 2020, caused by the spread of the Coronavirus disease 2019 (COVID-19), the study, with the approval of the members of the panel, the participants were then interviewed via online call services.

Population and Sampling Technique

This study used the purposive sampling technique; 10 parents were recruited for the individual survey, and interview within Region IV-A, CALABARZON, the Philippines from March to April 2020. The selection of participants relied on their availability to participate in the study. The participants of this study were any of the following: mother, father, or guardian of children who had been diagnosed with ASD, 0 to 12 years of age who is currently living in the Region IV-A, CALABARZON. Parents and guardians of children diagnosed with other developmental deficiencies were excluded from the study.

Table 1. *Participants' Demographic Profiles*

Parent	Age	Sex	Educational Attainment	Occupation
P01	37	Female	Bachelor's Degree	Associate Manager
P02	37	Male	Bachelor's Degree	IT Manager
P03	40	Male	Bachelor's Degree	Assistant Manager

P04	38	Female	Bachelor's Degree	Teacher
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The participants were demographically profiled before the interview which tackled the participants' age, sex, educational attainment, and occupation to identify their backgrounds, determine their capabilities to support their child's needs, and understand them and their conditions. Table 1 shows that the participants ($n = 4$) were all biological parents of the children with ASD, 50% ($n = 2$) were females and 50% ($n = 5$) were males. All the participants 100% ($n = 4$) were between the ages of 37 – 40, had attained a bachelor's degree and were all working parents.

Instrumentation

This study developed self-constructed interview questions that were evaluated and approved by the adviser, thesis professor, and other members of the panel. The consent forms were attached to the interview questions to inform the participants about the use of the interview and assure the confidentiality of their answers. The interview was then conducted with the four participants two of which were personally interviewed, but due to the Coronavirus 2019 (COVID-19) global pandemic, the rest of the participants were interviewed online to avoid contracting the virus.

Information Seeking Needs. The in-depth interview was recorded using a voice recorder that lasted for only 15 minutes. Each question was then categorized into four themes based on the variables of the theoretical framework:

Experience. Participants were asked questions concerning their personal past experiences of raising children with ASD, their prior knowledge concerning ASD, and the challenges and support they have experienced throughout their journey.

Salience. Participants were asked questions focusing on their information needs about ASD and how they perceive the importance of the information to their situation.

Beliefs. Participants were asked why they believe that information is or is not important to them, their situation, and their child's immediate needs. Perceived benefits of advantages they would receive from their ISB and believing if they have gathered sufficiently enough information for their use.

Action. Participants were then asked follow-up questions based on their previous answers from the survey and other interview questions.

Sources of Information. The participants were also asked during the interview of the relevant sources of information they used among a list of media and communication channels, asking their perceived relevance, frequency, and availability that reflects the actions of the participant in their information seeking. The interview was then recorded using a voice recorder that lasted for only 15 minutes. Each question was then categorized into two themes based on the variables of the theoretical framework:

Available Communication Channels. The availability and frequency of media and communication channels used by the parents and guardians of children with ASD were assessed using a scale by the questionnaire developed for this study. The participants were asked how often they have used each of the 29 items listed that were categorized into three different themes: traditional media, new media, and interpersonal communication.

The Relevance of Communication Channels. The relevance of media and communication channels used by the parents and guardians of children with ASD was assessed using a scale by a questionnaire developed for this study. The participants were asked how relevant they have perceived each of the 29 items listed that were categorized into three different themes: traditional media, new media, and interpersonal communication.

Data Gathering Procedures

This study purposively interviewed two parents of a child with ASD with the prepared individual interview in Binan, Laguna last 10th of March 2020 during their available time and was conducted inside the house of the participants. On the 16th of March, President Rodrigo Duterte ordered an ECQ on the entire island of Luzon because of the rapid spread of the COVID-19 pandemic locally. Because of the situation, the other two participants were interviewed via an online call on the 3rd and 5th of April.

Ethical Considerations

The study first sought clearance from the Ethics Review Board of the University before interviewing the participants. This study only investigated the experiences of parents of children with ASD's information-seeking behaviors who were then handed out an informed consent form that explained the primary scope of the study; assuring the participants of full anonymity and privacy of the data explaining that the information gathered were for research and academic purposes only. The rights of the participants were also explained and were given a choice that they could refuse to participate in this study should they feel uncomfortable.

Analysis of Data

The recorded in-depth interviews of the participants involved were transcribed, then used axial coding to sort out transcribed statements into highlighted themes of data. The results then went through thematic analysis based on the two RQs, which are: the parents' information needs in caring for the children with ASD, and the parents' methods of gathering information concerning ASD. After completing the coding and the thematic analysis, the results were then further interpreted using a phenomenological approach to reflect the participants' lived experiences in their search for ASD information.

Results and Discussion

All the participants involved in this study were biological parents of children diagnosed

with ASD, the majority of them are currently employed and had attained tertiary education. Most of the participants have stated that they had no prior knowledge about ASD nor had experiences raising children with ASD, though they have specified that there were no problems detecting signs of abnormal behavior and early symptoms of ASD.

It was found that the financially distressed parents had experienced financial trouble affording therapies, interventions, and SPED schools for their children. It was also observed that they prioritize their need for financial stability because without it they would not be able to provide their children's healthcare and educational needs; they are more likely to seek out aid and support from the government or from other entities to lessen their burdens and be able to find a solution for their problems. However, there is a dearth of local information that is circulating in the country. This was further supported when they stated that they do not believe that they have received enough information that they could use to resolve their problems.

On the other hand, the financially fortunate parents felt minimal problems and challenges because they had the means to provide their child's healthcare and educational needs. Some of the participants had shared that they were fortunate enough to have financial benefits from their employment. Though some of them have stated that they would like to know if the government provides free therapy sessions because of the expensive fees of each session, other participants believe that they do not need to seek any support from the government nor any other entities. This was also supported by their statement that they believe they have received enough information for their needs. It was also tackled that the participants have experienced challenges with social adjustment because of the frequent tantrums and challenging behavior of their children. Most of them have also shared that they do need information concerning it, especially, they want to learn more ways of handling their children during their sudden tantrums; believing that the information they have gathered is important because it serves as a guide on how they would treat and raise their children better.

Based on the results of the interview, it was identified that the participants would choose the media and/or channel on their immediate information needs and situation, such as their financial status and the severity of their children's condition. They would filter the information they have gathered according to their perceived relevance of the information from the selected sources of information. The parents would preferably use the television and the internet, specifically Google, Facebook, and YouTube as accessible mediums to search information from and they stated that they also preferred to ask other parents of children with ASD, therapists and development pediatricians, and their immediate family, friends, and neighbors for advice on how to manage and aid their child's further development.

Summary and Conclusion

In conclusion, the parents of children diagnosed with ASD that participated in this study are found to be either passive or avid seekers of ASD information depending on their children's diagnosis, immediate needs, growth, and development. However, it was also found that the parents' information seeking is dependent on their background and capabilities to provide the needs of the children; their current financial status has interfered with the children's access to quality healthcare and SPED services. The lack of affordable treatment and interventions has

put some parents into an immense state of financial instability, while others said to be fortunate enough to have financial support from their employment which aided them to provide their children's needs earlier than other families.

Parents continuously receive social support from their family and friends and ask advice from therapists, pediatricians, SPED teachers, neighbors, and other parents with children having ASD on ways to handle their children exhibiting erratic behavior and tantrums in places they do not recognize. The study had also found that parents prefer to use television, Google, Facebook, YouTube, online articles, and online forums to search for ASD information that they believe benefits their families to overcome problems that would arise. Government assistance is found to be unavailable to some parents because they do not know that there is information about provisions and legislations that are available for PWDs in their respected municipalities, such assistance would have helped their children early access to necessary treatments and schooling.

Despite the scarcity of local information, the participants are well-knowledgeable of ASD and are confident with their skills in raising their children, though some of them continue to seek information as an added learning experience for them to hone their skills and apply new methods in their interactions with the children. The participants had no prior knowledge of ASD nor had experienced handling children with ASD. They have sought help from relevant sources of information and trained professional that aided them to step by step on handling and managing their children's condition and needs. For future researches, quantitative studies may be conducted to explore the information-seeking behavior of parents of children with ASD or other developmental disorders, and other media and communication channels the used to sought out for information.

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HUMANITIES

Parents' Expectations and Character Changes of Children Before and After Taking Piano Lessons: A Case Study

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Abstract

There are parents who opt to enroll their children to any music lesson for additional talent due to a belief that music enhances child development providing intellectual and social benefits that last a lifetime. Though some social behaviors have already been studied, this study tried to look for new findings regarding the social development of a child when taking piano lesson. The study determined the character of a child before and after taking piano lesson, including the expectations of their parents as the child develops the skills in playing the piano. Through purposive sampling, three parents and three teachers were chosen to participate in this case study. The parents' children were also observed during their piano classes for triangulation. A semi-structured interview guide was utilized to gather information which were transcribed, categorized, and thematically analyzed. The results revealed that before taking up piano lessons, the children were impatient, playful, doing their own thing, and lack self-confidence. However, the children became patient, more confident, more focused, and attentive after months/years of taking up piano lessons. It also revealed that the parents expect their children to develop their intelligence, self-discipline and talent for God's service throughout the course of the piano lessons. Therefore, it is commendable for parents to enroll their children to any music classes/lessons at an early age to develop not only musical skill but also soft skills.

Keywords: *piano lesson, expectations, character, parents, children*

Music is the language of emotion. It is being used by the society in many cultures. It is the gateway in which one culture and the other can be understood. Music changes from the time of the medieval era down to the present. As it changes and spread in different cultures, people ought to learn their individual perspective of music. It has undergone proper training from the complex to the minute elements of music. Parents enroll their children to music lessons for additional talent or to fill their free time. However, the researchers observed that music, specifically piano lesson, has a possible contribution in the development of their children's character.

Espiritu (2011), as cited by Kiruja (2013), stated that music improves

concentration, improves memory, brings a sense of community to a group, motivates learning, relaxes people who are overwhelmed or stressed, makes learning fun, and helps people absorb material. A music lesson has many benefits. Through this, children can learn and enhance their musical skills. Most parents enroll their children in individual lessons such as piano, guitar, violin, and others. Also, it can be an extracurricular activity or sole purpose in rearing children to virtuosity. This can be a rigorous training on a child. Schellenberg (2005) stated that there are many different facets involved in Music lessons. These are memorizing, expressing emotion, and learning about musical interval and chords.

Music is formally taught in both

elementary and high school levels as a subject. Because of this, there are parents who are willing to enroll their children in individual lessons specifically in piano. Also, some parents would rather have their children spend extra time on music lessons. Many studies have found out the effect of music mentally. In the international scene, Davidson, Faulkner, and McPherson (2009), found that music can improve both pro-social behavior (voluntary behavior intended to benefit another) and the problem-solving skills of young children; building on existing research which found that making music significantly improves pro-social behavior in young children.

An article by Philips (n.d.) lists the eleven benefits of music education based on research findings. These benefits are holistic in nature covering the intellectual, emotional, social, and cultural among other aspects. These are:

1. Brain areas involved in language and reasoning are developed in early involvement in music trainings.
2. Musical training helps one to be able to visualize, which is needed in critical thinking
3. Musical training helps students to think creatively and solve problems by imagining varying solutions.
4. Musical training exposes and helps children appreciate different cultures.
5. Musical training helps students in craftsmanship.
6. Students learn the value of sustained effort to achieve excellence and the concrete rewards of hard work through music study.
7. Music enhances teamwork and discipline.
8. Music is a means of self- expression.
9. Music helps students to be diligent.
10. Music performance helps children to conquer fear and take risks.
11. Music exposes students to an experience that is not found in any other field.

There are lots of studies that link between the parents and children in their musical achievement. In Western Music, there are powerful images of musicians' parents that have been depicted as exerting enormous influence on their children's musical development, as in the case of Clara Schumann (Galloway, 2002). There is a study conducted by Davidson et.al (2009), where it was found out that once children start learning an instrument, parental involvement is critical as to whether the child persists or gives up. They reported that all children selected for entry to a specialist music school had parents who took an active participatory role in music lessons and daily practice. The most successful children had parents who were involved in lessons, spoke to the teacher at the end of the lesson, took notes and supervised practice, often for up to fifteen years.

Children who have higher achievements receive the most support from their parents. A well-supervised practice by a parent has a great impact for some individuals that enable them to become mature and find more independence. A study in the University of Sheffield shows that parent involvement, in the form of encouragement, support, supervision and participation in lesson, in the early stages of instrumental learning, is a better predictor of student achievement than other factors such as musical aptitude results or parent's musical literacy (Creech, 2001, p.72). According to O'Neill (2001), it helps young people if they believe their parents are supportive of their involvement in musical activities. "Musical talent development in a child is a prolonged process requiring adult assistance of both large investments of time and financial resources" (David & Schader, 2010, p.23).

Music enhances child development providing intellectual and social benefits that last a lifetime. Studies show how powerful music can be in the child's life. Research has largely ignored the influence of social factors (Manstead, 2005). This is unfortunate, as music is commonly associated with many social aspects apparent in everyday life (North & Hargreaves, 2008). For example, peer groups are known to influence the musical preferences of adolescents (Müller, Glogner, & Rhein, 2007) and the social bonding aspects of music have been suggested as the origins of music. Playing a musical instrument follows a great responsibility.

An important feature that distinguishes musical activities from other social behavior is the importance of shared rhythms, and the externalization of predictable rhythms that allow synchronization to occur between two or more people (Bispham, 2006). Furthermore, people attribute movement and human agency to musical sound because they tend to listen and adopt the feeling of the music they come across to or they have been listening to which influences how synchronization occurs as well as impacting upon affective experience (Launay, Dea, & Bailes, 2014; 2015). Exertive movements cause to adopt sentiments and behaviors because they can easily connect with each other if the person has similar outcomes and opinions and the environment they are into. If their music is the same within their environment, then they can easily understand what other people are trying to impart. Their lives and experiences maybe different but they can be connected through music.

A study conducted in Cornell University states that "Music transmitted from generation to generation shapes autobiographical memories, preferences, and emotional responses, a phenomenon we call cascading 'reminiscence bumps'" (Krumhansl, 2012). These new findings of music in childhood likely reflect the prevalence of music in the home environment. As it was stated earlier, the preferences, decisions and memories may determine on the environment and the music the child selects. It is through the influence of the home, the parents, which music may transmit automatically with the same kind of understanding. Music benefits the children equally. It clearly demonstrates increased internal strengths in children. If the music is in the child, it will always reflect on how the child deals with others. Socialization within their peers has improved. Children who were not into music are encouraged with their peers seeing them play their own instruments. It influences the social part of the child leaving the child musically inclined.

Thus, children who played musical instruments showcased great improvements in motor ability and in auditory melodic and rhythmic discrimination skills. The music the child plays, hears, and studies will inculcate through the cognitive skills and will gradually help increase the child's ability; guiding the child to become more influential and ready to the life the child chooses to live. This study is concerned with the behavioral changes of children taking piano lessons in reaching their social development. Though some social behaviors have already been studied, the aim of this study is to find new findings regarding the social development of a child when taking piano lesson. The study would determine the expectations of parents in the child's development through piano lessons and describe the character of a child before and after taking piano lesson.

The purpose of this study is to identify, describe and understand the behavioral changes of children enrolled in piano lesson. This study aims to answer the following questions:

1. What are the parents' expectations from their children upon taking piano lessons?
2. What were the characters of children before taking up piano lesson?
3. What are the character changes of children after taking up piano lesson?

Theoretical Framework

As this study is focused on the behavior of the children taking piano lessons, the researchers decided to set Erikson's psychosocial development theory and Expectancy theory as the basis of this study.

Psychosocial Development Theory. According to Heffner (2001) Erik Erikson psychosocial development theory has eight stages. In each stage, the person antagonizes, and positively masters, new challenges. In a young age of three and six years the children are excited to learn and to accomplish difficult skills. In the third stage of Erik Erikson's theory, which is the initiative vs. guilt preschool-aged child tends to get frustrated for not being able to achieve a certain goal as planned and may result to getting angry and aggressive. When teachers and parents encourage and support the children's effort, they can help them make realistic and appropriate choices or decisions. Then the child can develop initiative-independence in planning and will be more responsible. If the children are discouraged, they may feel guilty of their doings and mistakes.

Expectancy Theory. Expectancy theory proposes that work motivation depends upon the perception of performance and outcomes and individuals modify the behavior based on their calculation of anticipation outcomes. People will be motivated because they consider that their decision will lead to their preferred outcome and that is the basic idea behind the theory (Redmond, 2015).

These theories are most fitted to be the basis because it supports the purpose of the study. By knowing the development stages of the child, learning ability and character will also be observed in relation to taking piano lessons. It may also be that through expectancy theory, parents and teachers expect an outcome based on what the child has accomplished or has shown every lesson

Methodology

This study used case study to determine parents' expectations and children's character changes from taking piano lessons. There were six purposively sampled participants (3 parents and 3 piano teachers). They are parents and teachers of children who have been enrolled in piano lessons in a university in Cavite for 6 months or more and are between 4-7 years old. A semi-structured interview guide validated by experts, and lesson observations were done to gather data. Consent was sought prior to the conduct of the study to ensure that the participation was voluntary. After the data gathering, data were transcribed, analyzed, and thematically grouped to form themes that answered the research questions.

Results and Discussion

Expectation of Parents to the Child's Development Through Music

Among the expectations of parents, to develop intelligence, self-discipline, and talent for God's service, surfaced which became the emerging themes for question number 1.

Develop intelligence. "*siguro yung brain siguro na stretch? Sobrang naging bright*" (Maybe, the brain stretched? He became brighter) (Parent1). An individual who plays any musical instrument at a young age is found to show more robust brainstem responses to sounds than those who do not (Skoe & Kraus, 2012). Moreover, evidence suggests that long-term

engagement in musical activities modulates not only executive functions but also general intelligence (Criscuolo, Bonetti, Särkämö, Kliuchko, & Brattico, 2019).

Develop self-discipline. *“In time, doing piano sa 1 year, yun yung nadevelop niya. Na accept niya na it’s okay to repeat and repeat as long na you’re committing mistakes”* (In time, doing Piano lesson in a year helped him develop. He already accepted that it’s okay to repeat and repeat whenever you commit mistakes) (Parent 1). Teacher 1 mentioned that the students were disciplined during lessons. “To have discipline and for playing the musical instrument” (Parent 3). Learning a musical instrument requires discipline. Without it, one cannot focus on the task at hand. According to Philips (n.d.), “Music enhances teamwork and discipline.” It was also discovered that students were better able to set new practice goals based on the effectiveness or ineffectiveness of their sessions (Mieder, 2018). Thus, music develops self-discipline.

Develop talent for God’s service. *“Ang dream ko talaga is talagang at the age as early as 6 or 7 years old, maka play na siya sa church. Kasi ang objective ko talaga kaya ko siya pinag-aaral niyan is maging ano talaga sa church”* (My very dream is that at an early age of 6 or 7 years old, he will be able to play in church. My objective why I let him take piano lesson is to play and serve in church.) (Parent 1) *“Matuto talaga siya ng proper ng pag play ng piano tas magagamit niya sa church”* (Make him learn how to properly play piano and be of service to the church.) (Parent 2). There are also parents who expect their children to use their talent for the Lord’s service. From the book Evangelism, White (2003) mentioned that music in the ancient times worshipped and praised God through singing and playing instruments. Thus, music was mainly used in religious services.

Characters of Children Before Taking Up Piano Lesson

Four descriptions of the children’s characters before taking up piano lessons emerged. They are: impatient, lack self-confidence, do their own thing, and playful.

Impatient. *“yung patience level niya when it comes to something, na kailangan tiyagain para gawin, maikli”* (His patience level when it comes to something that needs more time to do is short.) (Parent 1). According to Relly (2012), young children do not understand waiting time—30 minutes of waiting is an abstract concept for them, and this thought makes them more impatient.

Lack self-confidence. *“I did not have the chance to put her on the piano. Kasi (because) she would cling to her parents...S/he’s extremely shy”* (Teacher 2). Lyness (2018) mentioned in an article that a child who lacks self-confidence tend to think that they are not good as other kids, thus, they doubt that they can do things well.

Do their own thing. *“She wants to do things on her own. Although iinstruct mo siya, but she has a hard time, uhm, following the details because she wants it to be done by her own”* (Teacher 1). This indicates independence. Children learn on their own. Childhood ages are nearly identical, meaning that children indeed have the potential to master some degree of independence, even at a young age (Blount, 2007).

Playful. Parent 2 mentioned that her child *“was playful. Now there’s diversion aside from playing outside, s/he want to hear and play some piano.”* Play and learning are closely related in early childhood. But when the focus on the educational benefits of play becomes too strong, the most essential feature of play is lost: children’s pleasure (Singer, 2015).

Character Changes of Children After Taking Up Piano Lesson

The children developed some good characters after taking up piano lessons. Four among those characters are being patient, more confident, more focused, and attentive.

Patient. *“She’s very patient. Kasi, hungry actually si Student siguro sa with the absence of the parents gusting-gusto niyang tinuturuan siya”* (She’s very patient. Because maybe Student is actually hungry. Maybe with the absence of the parents, s/he really wants to learn.) (Teacher 3). Learning to play an instrument takes time and effort. A child needs determination in order to play a specific piece accurately and beautifully. During the lesson, the child who sat down for 30 minutes or an hour actually develops patience. Kwan (2014) mentioned that music refines discipline and patience. She illustrated that when a child waits and listens to the teacher’s instruction, the child develops patience and respect as well.

More confident. *“Today is she goes... s/he can do alone”* (Teacher 3) Confidence on other terms is also self-esteem. Shayan et al. (2011) found out that playing music causes an increase of confidence. More focused. *“naging focus siya sa mga ginagawa niya”* (Parent 2) The term cognitive inhibition was found to be another benefit of music lessons. Children who took music lessons are able to tune out irrelevant information and focus the attention on the matter at hand (Jacobs, 2016).

Attentive. *“Dun sa mga estudyante kong hindi expose sa computers, sa television, they are more likely to be longer in sitting position”* (Teacher 1) In a recent study, it mentioned three main components of attentional system in the brain, namely, alerting – keeps ready for action, orienting – distinguish relevancies of sensory information and helps switch focus, and executive control – helps block and remove distracting information (Medina and Barraza, 2019). Musical training produces a long lasting improvement on the cognitive system of a child or an individual. Medina and Barraza (2019) discovered that trained musicians have greater executive control of attention than the non-musicians. Significantly, children taking music lessons have greater and improved attentional system than those who have no training. The more years of music lessons or musical training, the more efficient an individual be in controlling attention.

Summary

The researchers found out that there are huge changes in a child’s character after taking several piano lessons. They were found out to be more disciplined, more patient, developed their self-confidence, they learn faster than those who do not take any music lessons, more obedient in instruction more responsible and more diligent in practicing their pieces. Piano lessons helped the children nurture their skills. Thus, children taking piano lessons improve not only in their behavioral aspect but also are more advance in their intellectual and academic aspects.

Playing the piano as against other instruments demands more concentration, patience, commitment, determination and the right attitude, as it is the only instrument where more than one note can be played at the same time. Some people have neglected the benefits of music in a child’s development. With proper instruction given by the teacher and out-pouring support of the parents, the child can discover more about himself through music.

Based on the results, the researchers recommend the following: (a) parents may enroll their children to any music classes/lessons at an early age to develop not only musical skill but soft skills as well; (b) teachers need to be very patient in teaching and they should also learn different strategies to approach the different behaviors and attitudes of young children; and (c)

future researchers may replicate the study among children from another age range or among those who are old enough to be interviewed.

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HUMANITIES

Perception of Fine Artists and Non-Fine Artists on the Enhanced Poster Design Using Goethe's Color Theory and the Principles of Design

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Abstract

There are many designed posters displayed in the school vicinity, such as posters on religious activity, informational reminders, and school events that do not show concern on the importance of color and the observance of the principles of design in the design. There have not been any studies on the use of Goethe's color theory combined with the principles of design in poster design. Therefore, this study sought to explore and test the effectiveness of these aspects in poster design. The findings were based on these research questions: How do the participants perceive the enhanced poster design using Goethe's color theory and the principles of design? Which poster is more appealing to the target audience, original or enhanced? Why? This case study approach used seven posters shown among five purposively sampled target audience. In comparing the posters that follow Goethe's Color Theory and the principles of design in contrast to those that did not, the participants' perceptions were divided into two themes with subthemes: (a) visual perception with subthemes attractive vs. unattractive and organized vs. unorganized; and (b) final concept perception with subtheme clean professional outcome vs. cluttered outcome. Moreover, the participants agreed that the posters that follow Goethe's color theory and the principles of design appealed more to them because of the posters' composition, design elements, and typography. This study concludes that the role and importance of color and the principles of design affect the poster design. It is recommended that future researchers explore other media of poster design.

Keywords: *piano lesson, expectations, character, parents, children*

Human eyes have more elements which collect information. The eyes assess the object along with the shade. After that, the brain processes the information gathered through the vision. Thus, the brain can associate what the eyes are looking at with the information already stored in the memory (Byrne & Hilbert, 2002). Poster design targets this specific capacity of human beings (Guffey, 2015). Therefore, developing a combination of color, space, shapes, fonts, and principles in the poster design contributes to the response of the viewer (White, 2011).

Posters have been placed strategically in open areas for more than two centuries.

Visually appealing, these public notices were created to attract passersby's interest, make people aware of a political view, encourage attendance to specific gatherings, or persuade individuals to obtain certain products or services (Gallo, 2002). To start with, the development of the printing enterprise consummated in shading lithography and made large scale manufacturing of full-size and good value pictures conceivable. Secondly, the government managed open spaces in various nations (Guffey, 2015). Eventually, people came to use graphics to combine current information on laptop screens, paper, television, or cellphones. Graphics frequently

mixed text, illustration, and color (Macharla, 2017; Meggs & Purvis, 2016; Sperka & Stolar, 2005). Some schools showed posters and pictures on the bulletin, classrooms, offices, and online sites. The presentation of these posters has not been properly deliberated as there are no approaches or well-designed undertakings to do so. Although these posters carry messages and instructions, very few graphs capture the attention of college students and staff (Wallace, 2002).

When it comes to capturing the attention of people, color is a critical factor of a poster design (Cox, 2017). Moreover, the better choice of colors stimulates action and thus creates better sales (Lambert, 2004). Consumers perceive hues first, followed by visual images, arithmetical values, and eventually groups of words (Wallace, 2002). The use of color can direct the viewer's eye, emphasize necessary components or information, and strongly or subtly influence the response of the audience. The choice of colors in posters elicits certain emotions and thus become an effective way of conveying ideas to individuals (Harris, 1766). Colors are used intentionally to arouse moods and feelings (Ouverson, 1992). Knowing about color theories and how colors affect emotions can assist designers in creating artistic works that would compel people to act and react in certain ways. Furthermore, colors combined with other design elements that are arranged in an aesthetic manner would leave a better impression on the mind of the viewers (Cox, 2017).

In line with the concept of color theories, Johann Wolfgang von Goethe challenged the proposition of Sir Isaac Newton who wrote that shades and colors were a byproduct of light and physics (Newton, 1704; Pantone, 2020). Scientifically, Newton was right. However, Goethe's theories work better in art and philosophy than in pure science (MacAdam, 1985). Over time, Goethe came to systematically discover color and the coloration theory, including how colors were perceived and how colors interacted with other colors. He additionally discussed the effect of colors on emotions and attributed a range of traits to different colors (Goethe, 1810).

There have been studies about effective poster design, investigating the effectiveness of color theory in advertising, such as the works of Cunningham et al. (2016) using Kobayashi's (1990) Color Theory. Cunningham et al. (2016) employed a 13-color mixture instrument to examine the impact of color on the participants' thoughts, feelings, and emotions. The study showed that color had a significant impact when it came to how individuals would react towards an advertisement and a product. However, color does not greatly influence the individuals in motivating them to avail of the product or service. Previous studies have been made regarding advertising structures that give a comprehensive view of the impact of color on the mind in relation to sales. However, there has not been any studies on using Goethe's color theory in posters, a type of advertisement. Therefore, this study sought to explore and test the effectiveness of it in poster design.

The purpose of posters being published in the campus vicinity was to inform, attract, and encourage students to willingly attend and engage in the school events or activities. However, the poor designs of the posters fell short of meeting the goal. The designs were poorly made. Thus, students had a hard time understanding what the posters were trying to portray.

The uses of color theory in developing posters in schools has not yet been achieved. Moreover, the poor design of these posters gives off an unorganized aesthetic to the poster and a confusing visual message to the audience. The posters were specifically chosen for this study due to their lack of the proper use of art elements and principles of design such as improper font pairing, the lack of rhythm in its design, and the 'uncomplementary' color scheme, which this study explored. In response to this problem, this study purposed to investigate the poster design

samples. Eventually, informative, eye-catching, modern poster designs were proposed using Goethe's color theory and the design principles that aimed to achieve visual enhancement of the posters and clarify the Fine Arts students' purposes for creating the poster. This study answered the following questions:

1. How do the participants perceive the enhanced poster design using Goethe's color theory and the principles of design?
2. Which poster is more appealing to the target audience, original or enhanced? Why?

Scope and Limitations

This study focused on the colors and designs of the chosen posters. The chosen posters were analyzed based on the color theory, art elements, and layout design principles. Then, new designs were constructed and were shown in comparison to the original posters to the participants of this study. However, the types and quantity of posters were limitations of this study. Another limitation was the number of participants due to the pandemic and ECQ which led to issues in interviewing the participants face to face. Therefore, the study was conducted through online interviews.

Theoretical Framework

Distributed Cognition Theory. To support this study, the Distributed Cognition Theory (Dcog) was used. DCog is a theoretical framework that was crafted mostly with the work of Edwin Hutchins and partners at UCSD in the mid-1980s. With Dcog, one can consider how a person's brain processes items or persons from a certain location even when these things are no longer in sight. For example, a promotional poster for an event has been displayed on the roadside. The driver of a passing car sees the poster, recalls the information, and goes to the occasion promoted in the poster. In the DCog hypothesis, the memory of the poster in its specific spatial setting may likewise turn into a signal thus enabling the passerby to remember the event. Area is a significant prompt for recovering records from memory, and therefore the poster turns into the psychological portrayal of the occasion (Baddeley, 1990). The visual qualities of the poster itself and the relevant placement in its unique area, help to 'offload' the intellectual exertion required to think about the occasion. Designing a poster is no longer only about developing a remotest artifact, but it takes into account the other factors that a viewer might also process. Based on the theory, the poster can also grow to be a part of peoples' personal facts systems. Therefore, designing a poster should supply visible or bodily cues that can be registered into peoples' cognitive systems.

Methodology

Research Design

Art-based research was used in the study. According McNiff (2013), art-based research is the use of personal expression in several artwork types as the most important mode of enquiry. This research might also include the artistic expressions of others, but their special function is the making of artwork by way of the researcher. An art-based research integrates artistic activities inside a research process. The art-based research is useful to explore the role and function of an

aesthetic and phenomena in perception, relationship, emotional, psychological and behavior.

Population and Sampling Techniques

There were five participants in this study who were chosen through purposive sampling. The study focused on the use of colors and layout composition of the poster. Thus, the participants of the study have experienced designing posters and or have encounter a difficulty when reading these kinds of advertisement. Participants were selected using a set of criteria as follows:

1. Had enrolled in AUP
2. Have designed or seen a poster for school events
3. AUP Tradigital Fine Arts Alumni/Alumnus

Instrumentation

The instrument used in this study was a semi-structured interview guide composed of four open-ended questions. Interview is a measurement instrument otherwise known as oral questionnaire. The questionnaire was based on the research questions. The questions aimed to elicit responses from the participants on their perceptions regarding the original posters and the enhanced posters. Two experts in the field of graphic design were consulted in the formulation of the questions.

Data Gathering Procedure

The study had undergone the University's Ethics Review Board (ERB) to ensure that the research followed the ethical standards of the University. Then, permission letters were prepared to use certain posters as samples, and these samples were signed afterwards by the original designers. The posters were analyzed which included the colors chosen along with the other elements that made the poster look confusing and distracting. After the analysis, these posters were redesigned applying Goethe's color theory and the principles of design, but the information and the data remained the same. Once the posters were redesigned, the interview process commenced. Before doing the interview, the purpose of the research was explained and the participants' consent was secured. After the participants' consent was given, the poster designs were shown, ones without using the Goethe's color theory and ones with applying Goethe's color theory. The participants then answered the questions that were prepared.

Ethical Considerations

Before gathering the data, the research process underwent the ERB clearance. After being given the clearance, the consent forms were distributed to the five participants and their rights in participating were explained. Confidentiality of the data gathered, especially their identity, was ensured. Also, voluntary participation was ensured, permitting the participants to withdraw any time they might feel uncomfortable. It was also ensured that the information was only used for research and academic purposes.

Analysis of Data

In this study, the Miles and Hubberman (1994) model on thematic analysis was used to analyze the gathered data. Thematic analysis involves a close examination of the recorded data to elicit certain themes that are frequently found in the transcripts. This approach led to the understanding of the thought processes and psychological responses from the qualitative data gathered. Furthermore, this approach took into consideration that each of the data was important in the analysis.

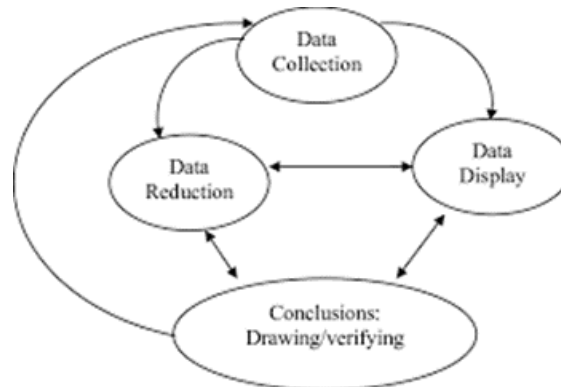


Figure 1. *Mile and HUBberman (1994) Model*

Results and Discussion

Perception of Audience Between the Event Poster Designs

For research question number one, “How do the participants perceive the enhanced poster design using Goethe’s color theory and the principles of design?”, there were two themes found, 1.) visual perception with sub-themes (a) attractive vs. unattractive ; (b) organized vs. unorganized; and 2.) final concept perception with a sub-theme (a) clean professional outcome vs cluttered outcome.

Visual perception. Gregory (1987) states that perception involves the process of bodily reactions that become triggered once an object is viewed. The mind is engaged along with the feelings of the viewer. A poster thus becomes a platform used to promote an idea, product or event and is meant for mass consumption. The way a poster is designed can give a certain idea to the viewer on what it is about.

Attractive vs. unattractive. Based on the posters that the participants chose, the ones that were most likely to be chosen were the ones that applied Goethe’s color theory and the principles of design. The posters that followed the theory and principles tended to attract the audience’s attention more than the ones made without these aspects.

When the audience thinks the poster is attractive, most likely they would attend the event that is being promoted; if not, they will have a thought of not wanting to attend the events. Moreover, to make a poster attractive, besides having good and concise fonts, color also plays an important role in attracting the viewer (Rider, 2009).

Organized vs. unorganized. Besides having a good design composition, a poster is

created to be used as source of information (Kirk, 2013). A good poster should be able to deliver an information without having a difficulty to understand it.

Final concept perception. Concepts are defined in the mind, speech, or thought as abstract thoughts or generic notions. They are the fundamental building blocks of thoughts and beliefs (Carrey, 1991). Concept in art generally means ideas in artistic works that bring forth a development in the use of particular media such as painting. Moreover, it undergoes iterations over a period of time. Before having the final design, multiple solutions are explored. When designing a poster, it is suggested to do a mockup before sending the information out to avoid public confusion and miscommunication. Human's subconscious mind is highly influenced by the specs of colors that they see. As such, color can affect an individual in ways that they are seemingly unaware of. Designers use colors deliberately to evoke a response (Rider, 2009).

Clean professional outcome vs cluttered outcome. To achieve a clean professional outcome from a poster, designers or artists should make use of the elements properly. From pairing contrasting fonts, considering the psychological impact of the color and matching it with the design, applying the rule of thirds, making use of the space, and adding a visual component that supports the design theme, designers or artists must be aware of the influence of each of these factors (White, 2011). The ideal professional poster design should be simple, designed with its purpose in mind, and must address the target audience.

Posters That Appeal More to the Target Audience

Initially, the seven posters were grouped into two: (a) original posters and (b) enhanced posters to answer the second question, "Which poster is more appealing to the target audience, the original or the enhanced one? Why?" Based on the interviews done, the posters that followed Goethe's Theory and applied the principles of design were more appealing to the target audience because of the following reasons: (a) composition; (b) design elements; (c) typography. The posters were redesigned based on Goethe's color theory and the principles of design. The following color schemes used in the poster were: lucid, primary, secondary, complementary, reflective, and melancholic.

Composition. For the participants, the enhanced posters with good composition stand out. In the field of visual arts, composition refers to the organization and positioning of different visual elements as distinct from the subject or style which it is depicting. Based on the interviews, composition is one of the reasons why the participants picked the posters that were redesigned using Goethe's color theory. The participants say that the color usage and combination from the one that used Goethe's color theory attracts their eye attention more than the ones that did not use Goethe's color theory. Referring to the posters that was redesigned using the Goethe's color theory, a balance in a color is important as a part of the poster element, thus it makes the viewer understand what the poster is trying to portray. Balance, in terms of composition, is one of the principles of structural elements in art and design; it contributes to the aesthetic of an image or visual graphic (Breadly, 2015). Balancing the color of the background and the color of the font also helps the viewer to understand and reading the poster and retain the information the poster is trying to deliver.

Visual design elements. For the participants, the enhanced posters appealed more because of the visual design elements. Visual design elements are the primary features that build up a certain design. Graves, wrote in *The Art of Color and Design* (1951) explained that aesthetic order is created by these features namely, line, shape, color, texture, tone, and flow. In a poster

design, color plays a major role as a visual design element to make the overall finished product look professional which would then create the anticipated response from the viewer (Lidwell et al., 2010).

Typography. The interview also revealed that the enhanced posters are more appealing because of typography. Typography is the process of selecting and placing fonts to enhance written communication in graphic design. This process includes but is not limited to analyzing the best font pairing, adjusting the length of lines and tweaking the distance between words and individual characters. For a poster to successfully deliver its intended message, a good typography will be needed to inform the viewer what the occasion is about through the words that are being displayed (Price, McElroy, & Martin, 2016; Rello & Baeza-Yates, 2013).

This study tested the effectiveness of Goethe's color theory and principles of design in a poster design. If a poster were to be designed using the theory and the consideration of the principles of design, it will affect the viewers' perceptions towards the message that is being displayed. Both seven original and seven redesigned posters were shown and compared side by side for the participants who were alumni of Fine Arts, currently enrolled in Fine Arts, and non-Fine Arts students of the Adventist University of the Philippines.

After the analysis and interpretation of the gathered data, it was identified that the posters designed following the Goethe's theory and the principles of design attracted more attention. Aside from the factor that the posters were more visually attractive, the posters also delivered the organized information with less visual element distractions. The composition that was created made it easier for the audience to acknowledge the message that was being announced and the theme of the occasion. The design elements that were used in the poster, such as balancing the color and the hues, made it easier for the audience to see the words. Font pairing that was used in the posters made the text more readable by the audience. Thus, the fonts served the purpose of the poster, which was to clarify the information and details of an occasion or announcement. Lastly, the poster successfully caught the attention of the viewers, not just by the theme that was being presented, but as a whole concept.

Summary and Conclusion

In conclusion, the participants were able to recognize the role and importance of color and the application of the principles of design in a poster design. In addition, understanding the basic concepts of design elements and principles and Goethe's color theory can lead to a greater appreciation of poster designs. These concepts applied can also enhance the design sense of any graphic designer or layout artist. Thus, communicating messages and announcing events become easier and more direct. Based on the findings, it is proven that using Goethe's color theory and the principles of design on a poster design do affect the participants' perception and decision to attend the events that were being promoted, for they were more likely to retain the information that was being projected.

Based on the results, these are the implications of the study and recommendations for further research:

Fine Arts students. Fine arts students can use this study as a design guide and additional information for future projects on making posters or any advertisement device.

Layout artists. The redesigned posters using the Goethe's theory will help enhance their posters to match the events and guide them to improve their poster designs.

Fine Arts faculty. Fine Arts faculty can use this study as a resource for additional information and knowledge to develop their strategies and/or curricula for advertising or design classes.

Future researchers. Future researchers can use this study as a reference for poster design. They may explore the use of other media, aside from the printed ones, such as video clips or slide shows. Further interviews on this topic with faculty or the university layout artist could add value into the research.

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PSYCHOLOGY

Victim Witnesses of Human Trafficking: A Phenomenological Study

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Abstract

Human trafficking may happen to anyone. The study aimed to explore the experiences of victim witnesses of human trafficking. It utilized a qualitative phenomenological study design. Eighteen women, 15 to 46 years old, had experienced human trafficking (sex or labor trafficking), and with a filed case or not. An in-depth semi-structured, open-ended interview was employed to gather information. Guardians were also interviewed for triangulation purposes. Findings showed that the participants experienced fatigue and abuse for their physical aspect and gained negative feelings such as burdened, sad, scared (fear), stress, anger, trauma, depress and suicidal thoughts for their psychological aspect. For the spiritual aspect, the participants concluded to have enhanced spiritual life where they knew about God, became closer to God and learned how to pray. They also faced challenges such as dysfunctional family, delinquent friends, exploitation, problems kept from the family, and poverty which resulted in their becoming victims of human trafficking. To cope with the situation, they utilized family support, prayers, guts or courage (*lakas ng loob*), negotiation with their employer, and support from *kababayans*. Their practices and mechanisms to recover were the Blas Ople Center, rescue/entrapment operation, shelter, and embassy. After the incident, the participants shared that they earned to have thoughts of having a good life without going abroad/*makabayan*, knowledge of overseas Filipino workers, wise choice of friends, contentment, and value for the family.

Keywords: *victim-witnesses, human trafficking, lived experiences, challenges, coping strategies*

Human trafficking impacts every country in the world with victims representing all genders, age groups, and global regions (Kynn et al., 2016). Interpol (2017) stated several types of trafficking of humans such as trafficking in women for sexual exploitation, trafficking for forced labor, commercial sexual exploitation of children in tourism, trafficking in organs, and people smuggling. O'Day (2017) reported that most Filipino trafficking victims fall prey to forced labor and sex trafficking. Given that trafficking is based on the exploitation of individuals, all victims of trafficking may be subject to physical, psychological, and social impacts.

Victims of trafficking often experience harsh physical impacts due to excessive work or the use of force by traffickers (Human Trafficking Search, 2019). According to the World Health Organization (2012), human trafficking has psychological consequences which include depression, post-traumatic stress disorder, and other anxiety disorders, thoughts of suicide, and somatic conditions including disabling physical pain or dysfunction. For interacting with the victims of human trafficking, the Quality Standards for Protecting Child Victims of Commercial Sexual Exploitation states that there is a need to have different types and levels of psychosocial intervention,

depending on various factors such as their experiences, the problems they have that are traceable to the traumatization, and their resilience and ability to cope with what happened (International Labour Organization International Programme for the Elimination of Child Labour, 2006a; 2006b). Also, the United Nations Office of Drugs and Crime (2009) stipulated that the Anti-Trafficking Manual for Criminal Justice Practitioners only caters to the court processes of the victims and that possibly, a variety of psychological symptoms could surface over a period of time even after victims have escaped or are rescued from the trafficking environment, thus, it is critically important to incorporate psychological support and treatment within victims' services and protocols (US Department of State, 2012). There is a great need for therapeutic processes that would enhance the psychological stability and aftercare of victim-witnesses (Office of Monitor and Combat Trafficking in Persons, 2012). In hope of addressing this social concern, this study was developed to shed light and understanding of the collective experiences among victim witnesses, adolescent and adult women, of human trafficking in Luzon and the coping mechanisms/strategies they adhered.

Methodology

Research Design

The phenomenological research design was used in describing and interpreting the experiences of the participants. The study captured the lived experiences, coping mechanisms, and practices to recovery of victim-witnesses which could not be fully identified and explained by data presented by numbers and statistical analysis and the lack of numbers for the said participants.

Participants of the Study

A purposive sampling technique was used in determining the 18 participants that satisfies the criteria. The criteria for the inclusion of participants are the following: a Filipina, adolescent to adult, with or without trafficking case and/or victim-witness of labor and sex trafficking. Moreover, certain conditions and procedures were observed to select the qualified participants. The researcher secured the participants' vulnerability, traumatization, and other risk factors that might be encountered during the interview.

Table 1. *Participants of the study*

Participant	Type of Trafficking	Gender	Age	Location	Triangulation	Symbol
1. Marie	Sex Trafficking	Female	19	Cavite City	Boyfriend	Weather
2. Athena	Sex Trafficking	Female	18	Caloocan City	Mother	Flower
3. Rea	Labor Trafficking	Female	37	Quezon City	Husband	Flower

4. Gina	Labor Trafficking	Female	38	Pasay City	Friend	Poem-sad, hard life of OFW, hopeful and new life
5. Mickey	Sex Trafficking	Female	17	Marikina City	Mother	Song (Patawad Paalam)
6. Coline	Sex Trafficking	Female	16	Marikina City	Mother	Song (Patawad Paalam)
7. Eya	Sex Trafficking	Female	16	Marikina City	Mother	Light (Ilaw)
8. Stephanie	Sex Trafficking	Female	16	Marikina City	Mother	Candle
9. Angel	Sex Trafficking	Female	16	Antipolo City	Mother	Butterfly
10. Ann	Sex Trafficking	Female	18	Quezon City	Social Worker	Song (Kung Hindi Ngayon ang Panahon)
11. Yhej	Sex Trafficking	Female	15	Navotas City	Social Worker	Song (Maghintay ka lamang)
12. Kate	Sex Trafficking	Female	15	Makati City	Social Worker	Song
13. Nathalia	Sex Trafficking	Female	16	Marikina City	Mother	Song
14. Lava	Labor Trafficking	Female	40	Quezon City	Child	Poem (Kisap mata)
15. Corma	Labor Trafficking	Female	35	Aurora Province	Friend	Song (Bawal na gamot)
16. Lea Gina	Labor Trafficking	Female	46	Caloocan City	Friend	Flower
17. Nora	Labor Trafficking	Female	27	Cavite City	Social Worker	Poem
18. Mae	Labor Trafficking	Female	44	Bulacan City	Friend	Religion

Instrumentation

Research questionnaire, semi-structured interview, and study protocol were the instruments used in gathering the data. The research questionnaire was consulted and validated by experts and professionals relevant to human trafficking to strengthen rigor and trustworthiness of the data needed in the study.

Analysis of Data

This study utilized the Colaizzi Method to interpret the collected descriptive data from the questionnaires and interviews. Triangulation was done to reinforce the veracity of the data gathered directly from the participants which is also an integral data for this study. Also, the researcher used the Jefferson transcription system to secure the non-verbal and other behavioral cues of the participants to gather exact emotions and behavioral actions of the participants and other speech patterns.

Ethical Considerations

Ethical considerations were observed in the study. The researcher underwent Trauma Informed Care Training and Trauma-Informed Philippine Psychotherapy for Children and Adolescents. Moreover, the researcher sought professional insights and consultations from authorized personnel and organizations relevant in handling human trafficking to be guided and to validate the research questionnaire, the semi-structured interview, and the study protocol. Informed consent which contains the purpose of the study, procedures, and the participants' rights to decline and/or withdraw from the research, any research benefits, confidentiality, and other significant information and signature, was signed by each participant indicating their willingness to participate in the study.

Results and Discussion

The outcomes of this research aimed to reveal the experiences and coping strategies of confidentially identified 18 victim-witnesses of human trafficking, particularly in labor and sexual exploitation.

The Lived Experiences of the Participants in Terms of Physical, Psychological, and Spiritual Aspects

On the first question, the participants collectively said that they experience physical fatigue and physical abuse. For the psychological aspect, they responded that they felt negative feelings such as burdened, sad, fearful/scared, stressed, angered, traumatized, depressed, and having suicidal thoughts. For the spiritual aspect, the participants concluded to have enhanced spiritual life where they knew more about God, became closer to God, and became more prayerful.

The responses identified the experiences of victim witnesses of human trafficking. The findings of this study concur with previous studies worldwide. Millions of human trafficking

victims are forced to do 'sex work' that often result in serious physical and mental health problems (United Nations, 2014; McTravish, 2017). Reportedly, female victims show signs of poor hygiene, malnourishment, and fatigue that probably are results of the physical and sexual abuse, restraint, confinement and/or torture they experienced (Polaris, 2020). In addition, these individuals are also more prone to acute injuries and chronic physical pain like headache (Naik, 2018), stomach pain and back pain, memory problems, lack of appetite (Oram et al., 2012), sexually transmitted infections, reproductive health complications, and unwanted pregnancy (Public Health England, 2019; Simkhada, 2018). Victims of human trafficking suffer from devastating psychological scars with effects that could emerge from a wide variety of factors (Krisch, 2016). These victim witnesses are at greater risk for mental health disorders; some of the most common are feelings of helplessness, shame, shock, anxiety, burnout, mood and dissociative disorders; the most prevalent among them is post-traumatic stress disorder (PTSD) which is obvious in almost all of the victims of human trafficking (National Human Trafficking Resource Center, 2016; Pascual-Leone, 2016; Zimmerman & Kiss, 2014). This, combined with increased stress levels, further exacerbates their mental health conditions (Symons, 2019). Moreover, rescued victims of trafficking are vulnerable and as the nature of majority of Filipinos being religious, messages of hope from the Bible are encouraged to be used in counseling. Researchers argue that certain expressions or elements of spirituality may have a positive effect on victims. "Emotions encouraged in many spiritual traditions, including hope, contentment, love, and forgiveness, may serve the individual by affecting the neural pathways that connect to the endocrine and immune systems" (Cornah, 2006, p. 3).

The Challenges Faced by the Participants

The participants reported that dysfunctional family, delinquent friends, being exploited, problems kept from the family, and being poor are reasons why they became victims of human trafficking.

It is seen in the participants' responses how family could be a factor for their challenges. The Institute of Medicine and National Research Council Report (2013) published a report about commercial sexual exploitation and sex trafficking of minors in the United States. It showed that possible risk factors for commercial sexual exploitation and sex trafficking of minors is relationships in the family. According to the Marin County Coalition to End Human Trafficking (2020), risk factors are children and adults of families where there is neglect, abuse, violence, and drug use; runaway youth, homeless youth and adults, victims of trauma and abuse, individuals living in poverty, individuals with history of substance abuse, people of color, LGBTQ youth and adults experiencing family rejection, individuals with disabilities, refugees who do not speak English, and undocumented migrants. Further, the exploitation comes in different forms of abuse, like overwork, poor pay, extortionate debt, physical confinement, serious occupational hazards, violence, and threats that span across varying levels of severity (Zimmerman & Kiss, 2014).

Coping Mechanisms of the Participants With the Experiences and Challenges Encountered During the Incident

For the third question on how the participants coped with the situation, they reported that

they utilized having family support, being prayerful, *lakas ng loob* (courage/guts), negotiation with their employer, and support from kababayans.

The findings showed that studies and reports have proven the relationship between family support and the effectiveness of the rehabilitation process for the victims (Hassinger, 2018; Rani & Manglam, 2017). Family and friends could potentially strengthen the morale of victims and reduce risks to the effects of the trafficking experience. Counselors are encouraged to use a family approach when working with survivors to reinforce their lost connections with loved ones and family who had been separated from them when they traveled abroad (McRae & Browne-James, 2017). In addition, the results showed that analyzing these testimonies shows that there are clear correlations between the survivor's positive mindset and faith in God. Each testimony acknowledged faith in God as an important and valuable factor in the process of coping (Deventer-Noordeloos & Sremac, 2018). Also, the results showed that *lakas ng loob* (guts), is a core concept of a theoretical construct used in understanding Filipino social psychology. Guts and courage may come together as human trafficking victims go on with their healing and recovery (Enriquez, 1986). Sukach, T., Gonzalez, N., & Cravens Pickens, J. (2018) showed courage as coping strategies of sex female trafficking survivors. Coping and resiliency work hand and hand among trafficked victims (Djuranovic, 2009). Furthermore, the findings of this study showed that anti-trafficking agencies staff can help foster social negotiation skills and community ties among survivors of recent trafficking events. This can be accomplished by building an expectation of confidentiality, improving self-presentation, and helping them overcome self-blame and self-doubt. Agencies can also work closely with their community to avoid bias, discrimination, and/or stigma associated with trafficking survivors (Loomba, 2017).

Practices and Mechanisms That the Participants Use Toward Recovery From the Incident

Results revealed that the participants utilized the following to recover: seeking aid of the Blas Ople Center, saved by rescue/entrapment operations, seeking benefits of rehabilitation shelters, and seeking help from the embassy.

The findings emphasized the integral role of agencies and centers for the welfare of the abused. The Ople Center works with OFW families and directly connects them with the government agencies and other NGOs and informs them, as well as the general public, about events, policies, programs, and issues related to overseas employment. They involve OFW families to fight human trafficking and illegal recruitment and lobby for programs, policies, and legislation that would benefit OFW families (Antislavery Directory, 2019). The IACAT and Ople Center also share best practices in protective care services for labor trafficking, development of program designs, pilot-testing developed guidelines, and adopting them as policy (Department of Justice, 2017). These initiatives and programs also help in reducing OFW and their families' vulnerabilities to extreme forms of exploitation by raising community-based awareness and educating them about migrants' rights, advocacies, and support services. Researchers suggest that a safe shelter and housing is one of the greatest needs of sex trafficking victims; R.A. No. 10364 also states that appropriate housing is part of the mandatory services given to trafficked persons (Baker & Grover, 2013). Providing therapeutic shelters that provide reintegration and survivor support which specializes in trauma-informed care training and community-based interventions need to be made available to rescued victims and their families (Sarco & Pingul, 2018). Over the years, the Philippine government and its agencies have provided and fully funded temporary

shelters for trafficking victims in many parts of the world (CNN Philippines, 2016).

New Perspectives in Life That the Participants Achieved After the Incident

The participants shared that they earned to have thoughts of having a good life without going abroad (Makabayan), having knowledge of overseas Filipino workers, choosing friends wisely, being contented, and valuing the family.

The findings of this study showed that these efforts are often based on the premise that, if individuals are more informed about migrating for work, they would be less susceptible to being exploited. However, there remains little evidence to demonstrate that human trafficking is caused by information deficits among prospective migrants or about the positive effects of pre-immigration awareness interventions (Dottridge, 2014). Also, the findings of this study showed that being victims of sex trafficking has enabled them to think beyond basic needs and survival; as defined by caregivers, “one that centers the experience of being a survivor and fosters contentment recognition and realization of his talents and life aspirations” (Vatne et al., 2018, pp. 17-18). According to Halili-Jao (2018), Filipinos have a family value system that is heartening to learn that majority of these families still possess the core Filipino family values. Such values had been nurtured and passed on from one generation to the next. Daniel Tuaño (2013), a former OFW said that his seven years of living away from home had given him a profound understanding of how important family is; that people are more important than things that can be bought by money earned from working abroad. Currently, OFWs are being educated on financial literacy to prepare them for a sustainable life in the Philippines and encourage them that they can still prosper and live a good life without leaving the country.

Victim witnesses of human trafficking have different ways of coping, but one common coping mechanism is that they need moral and emotional support from the people that surround them such as government and non-government agencies. They could help them too, but family support matters most. Prayers, courage, and negotiation with their employers may be effective for them. In the end, having new perspectives in life after the situation may help them recover from the bondage of human trafficking.

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THEOLOGY

Healing Miracles of Jesus and Their Plot-Function vis-a-vis the Kingdom of God In The Gospel of Luke: A Narrative Reading

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Abstract

Jesus' earthly ministry includes teaching, preaching, and healing. However, Jesus spent more time in acts of healing. The healing motif in the Gospel of Luke functions as the sign that the Kingdom of God has come through the person and ministry of Jesus. Through the preaching and healing acts of Jesus, the Messianic prophecy in Isaiah 61:1,2 has been fulfilled. It also signals the dawn of the New Covenant where the believers experienced universal and wholistic salvation and restoration. The healing miracles of Jesus highlight the underlying concept of Kingdom-salvation theme in the Gospel of Luke. Through healing, the themes of reversal, liberation, and restoration have been emphasized. The authority and power of Jesus to heal and forgive sins make these Kingdom blessings available for believers. Healing is a foretaste of the complete and final restoration that will happen in the future eschatological Kingdom of God. However, Jesus' mighty acts call for repentance and faith as necessary elements to experience the blessings of the Kingdom. The healing acts of Jesus reveal the fundamental ethics of God's Kingdom - the Kingdom is founded on compassion and mercy. Thus, it can be recognized that the healing motif in the Gospel of Luke is closely linked with the Kingdom proclamation of Jesus. The understanding of the Lukan emphasis on Jesus' healing ministry vis-a-vis the Kingdom of God has relevance to the Seventh-day Adventist mission as the church proclaims the wholistic gospel in the context of the Three Angels' Message. For future studies, it is recommended that researchers investigate on the depth of Adventist health professionals' understanding on the ministry of Christ and how they apply it in their professions.

Keywords: *Kingdom of God, Jesus' healing ministry, reversal, liberation, restoration*

Scholars recognize the significance of healing narratives in the Gospel of Luke. This recognition is based on the prominence of healing miracles in Luke and their distribution in the general outline of the third Gospel. The frequency and locations of healing narratives imply that they play a significant function to the major theme of the Gospel of Luke.

A number of authors pointed out that the Kingdom of God is the major theme of Luke. Karl Allen Kuhn considers Luke's narrative as a "kingdom story" that announces the arrival of God's reign in Jesus. Robert Stein states that the importance of the

Kingdom theme has been demonstrated in the frequency of its occurrence and its prominent place in Luke's account. The usage of the word group pertaining to the kingdom shows its centrality in the Gospel - *basileia* (46 times), *basileia tou theou/tōn ouranōn* (32 times), total references to God's kingdom (35 times), and Kingdom of Christ/Son of Man (4 times).

The Kingdom theme was first mentioned in the infancy narrative (Matt. 1:33). It is central in the preaching of Jesus and the disciples (Luke 4:43; 9:2). The relation of salvation with the Kingdom has been made

more pronounced when those who experience salvation has been described as those who enter the Kingdom (cf. Luke 18:18-25). In the Gospel of Luke the terms “salvation,” “eternal life,” and the “Kingdom of God” are used interchangeably (cf. 18:18,25,26). Thus, it should be pointed out that the phrase “Kingdom of God” and “salvation” are closely tied up with each other. Green states,

Luke uses the language of salvation more than any other New Testament writer, but employs that language in co-texts whose effect is to give salvation broad meaning. Salvation is, preeminently, status reversal, and this includes not only the raising up of ‘lowly’ persons whom Jesus encounters in the Gospel, but also the people of Israel as a people, promised liberation from the oppressive hand of Rome. Salvation is also the coming of the kingdom of God, then, the coming of God’s reign of justice, to deconstruct the worldly systems and values at odds with the purpose of God. Salvation also entails membership in the new community God is drawing together around Jesus, a community into which all – especially the previously excluded for reasons of sin, and its corollary, despised status – are invited to participate in the blessings of the kingdom as well as to share in its service.”

The relationship between Jesus’ healing miracles and the Kingdom of God appears to be inseparably linked in the Lukan account. Mark Strauss emphasizes that the healing miracles recorded by Luke were not “showy demonstrations of power or even proof of his identity. They are manifestations of the in-breaking of the Kingdom of God, a foretaste and preview of the restoration of creation promised by God.” Clinton Wahlen points out that the Gospel writer simply assumes the miraculous nature of Jesus’ healings but the main emphasis is in their theological significance, healings are signs of the inbreaking Kingdom of God. He further notes that “the proclamation of Jesus in Luke is characterized in Isaianic terms that include healing...” This healing acts manifest a new and special quality that introduces the Deity of Jesus, the complete restoration of human being, the necessity of faith, and the ultimate triumph of God’s Kingdom. Tannehill further adds,

The healing work is part of something larger – a saving purpose for the world which embraces physical as well as other dimensions of life – is confirmed by the connection between Jesus’ healing and the coming of God’s reign....Thus proclaiming the reign of God and healing, mentioned together in summaries of Jesus’ and the apostles’ work in 9:2,6,11, are related tasks. The healings are concrete realizations for the needy persons of the salvation which the preachers announce in preaching good news of God’s reign.

The link between the Kingdom of God, salvation, and healing are shown in the linguistic and structural content of Luke. The Greek word *sōzō*, for example, has been used in the Gospel of Luke to refer to both spiritual salvation (Luke 7:50; 8:12; 9:24; 9:56; 13:23; 18:26; 19:10) and physical healing (Luke 6:9; 8:48;). The physical healing includes restoration of health through healing of diseases (cf. Luke 6:9; 8:48; 17:19; 18:42; Acts 3:1-8; 5:12, 15-16; 8:6-7; 9:17-18, 32-36; 14:7-10; 19:11-12; 28:3-9), exorcism (Luke 4:31-37; 8:26-39; 9:37-45), and raising of the dead (Luke 8:50). In these usages of *sōzō*, Marshall aptly observes three common concepts – the close link between physical healing and spiritual salvation, the common point that God is the source of healing, and the necessity of faith response on the part of the sufferer.

The distribution of healing episodes in the structure of Luke implicitly emphasizes its role in the plot of Luke’s narrative particularly in relation to the Kingdom of God.

Preface (1:1-4)**The Infancy Narratives (1:5-2:52)****Preparation for Jesus' Ministry (3:1-4:13)****Jesus' Ministry in Galilee (4:14-9:50)**

- Jesus in Nazareth (4:16-30)
- Preaching and healing miracles in Capernaum (4:31-41)
- A leper and a multitude healed (5:12-16)
- Healing, forgiveness, and controversy (5:17-26)
- Jesus, healing, and Sabbath laws (6:1-11)
- Healing the crowds (6:17-19)
- The Centurion's slave healed (7:1-10)
- The widow's son raised to life (7:11-17)
- Signs and miracles performed by the Coming One (7:18-35)
- The Gerasene demoniac (8:26-39)
- The raising of Jairus' daughter (8:40-56)
- Sending of the Twelve (9:1-6)
- A boy is healed (9:37-45)

Jesus' Journey to Jerusalem (9:51-19:27)

- Commissioning and the return of the 70 (10:1-20)
- Jesus' power is from God not Satan (11:14-23)
- A crippled woman healed (13:10-17)
- Healing on the Sabbath (14:1-6)
- Ten lepers cleansed: thankfulness (17:11-19)
- Healing a blind man (18:35-43)

Jesus' Ministry in Jerusalem (19:28–21:38)**The Passion of Jesus (22:1–23:56)**

- Betrayal and arrest in Gethemane (22:47-52)

Jesus' Resurrection and Ascension (24:1–53)**Approaches in the Study of Healing Motif in Luke**

Studies of healing motif in Luke show theological, socio-scientific, metaphorical, and narrative approaches in interpretation. Theological interpretation tends to explain the meaning and relevance of healing miracles performed by Jesus. The socio-scientific approach is equally useful for it presents the miracles of Jesus within the back-drop of the social and cultural world of the Jewish-Greco-Roman setting. John J. Pilch aptly demonstrates the significant contribution of socio-scientific approach in the study of the Gospel of Luke and Acts. He points out that

understanding the “models and concepts from Mediterranean and medical anthropology helps an interpreter to be a respectful reader of biblical material like Luke-Acts.”

Chad Hartsock shows a metaphorical approach in understanding healing miracles. For example, in his metaphorical analysis of the man with dropsy in Luke 14:1-6, he goes beyond the usual approach of understanding the miracle in the context of the Sabbath and meal setting. He focuses in the sickness itself which for him is the main point of the pericope. He proposes that sickness is not incidental but metaphorical. Dropsy is frequently viewed as metaphor for greed and wealth. Thus, the healing of dropsy is Lukan Jesus' critique of greed that must be cured or done away.

Another approach that would complement the above-mentioned methodologies is the study of healing miracles in relation to the overall plot of Luke. Through narrative criticism the role or plot-function of healing motif in relation to the Gospel's major theme would be more elucidated.

Healing Miracles and Their Plot-Function Vis-A-Vis the Kingdom of God in the Gospel of Luke

Narrative reading of the Gospel of Luke shows the function of healing miracles in the development of the plot of the third Gospel. As noted, healing occupies a significant role in Jesus' proclamation of the Kingdom of God.

Miracle and the Infancy Narrative

The first Kingdom statement in the Gospel of Luke is found in the infancy narrative (cf. 1:32,33). The promised child was associated with the throne of David and His kingdom will be no end. God's sovereign rule has been emphasized when Luke pointed out that God will give Jesus the throne of His father David and the Child will be called the Son of the Most High (cf. Luke 1:29-33). Additionally, the mission of Jesus in proclaiming the rule of God and bringing salvation to mankind has been presupposed in the infancy narrative. Jesus made the affirmation in His discourse in the Nazarene synagogue. (cf. Luke 4:16-21,43)

Raymond E. Brown observes the thematic importance of the infancy narrative in relation to the plot of the Gospel. Not only that it is a self-contained narrative but it includes a number of motifs and themes that are found in the proceeding chapters of Luke. In other words, the infancy narrative serves as a broader prologue of the entire Gospel.

A narrative reading of the infancy story shows two birth announcements that contain parallels and allusions to the Old Testament. These include,

1. The appearances of angel in both birth narratives (cf. 1:11; 1:26)
2. The names and descriptions of the persons involved in the two stories (cf. Luke 1:5, 26)
3. The impediments of bearing a child (cf. Luke 1:7, 34)
4. Miraculous birth (cf. 1:13, 35)
5. The reaction of fear and doubt (cf. Luke 1:12, 29,34)
6. The future works of the promised child (cf. Luke 1:13-17, 31-33).

These parallels allude to the stories and themes of the Old Testament. The appearances of angel in the infancy narrative connect the reader to important OT events. Angelic visitations

to announce births of major figures are common in the Old Testament (cf. Gen 16:10-11; 17:15-19; 18:10-15; 25:23; Judg 13:3-21). By placing the birth of John and Jesus within the context of angelic visits, Luke implies that John and Jesus are major figures in his Gospel. These two figures would perform significant roles in the plot of the Gospel. Angel Gabriel describes John as God's messenger filled with the Holy Spirit and will go before Him (Jesus) in the spirit and power of Elijah. Being filled with the Holy Spirit is one of the major characteristics of the Old Testament prophets (1 Sam 10:10; 2 Kings 2:9-16; see Is 61:1; Ezek 11:5; Joel 2:28). The work of John as the forerunner of Jesus signifies Jesus' royal status. Kings in the ancient times often send a forerunner to prepare and secure the way for the royal entourage. The task that John is going to perform is comparable with the work of Elijah in the Old Testament (cf. 1 Kings 17—18). Jesus affirms the greatness of John as God's messenger that will prepare His way (cf. Luke 7:26-28). In speaking of turning the hearts of parents to their children, Luke is indicating the reconciliation with God as the outcome of John's message. The expression echoes Isaiah 43:7 and 2 Samuel 7:24 where a faithful remnant shares in the realization of God's promise because they have turned to him. This is being highlighted by the role of John as the forerunner of Jesus signifying John's identity as a prophet and Jesus as king.

The visits of angels also bring the promise of salvation to God's people and at times participated in bringing its accomplishment. Although the Old Testament Scripture reveals several works and functions of angels, one of their main tasks is to announce God's promise of deliverance or salvation. Angels appeared to Abraham (Gen. 18:1,2) and delivered Lot and his family from destruction (Gen. 19:1-22), an angel's appearance and wrestling with Jacob assures him of deliverance from Esau (Gen. 32:24-30), an angel's appearance in the burning bush affirms the deliverance of Israel from Egypt (Exod. 3:1-2; 14:19), the appearance of an angel to Gideon announces God's purpose of delivering the Israelites from the Midianites (Judg. 6:11-14), Gabriel's appearances to Daniel always assure Daniel that God has been working on behalf of His people (cf. Dan. 9:20-23). In all of these Old Testament narratives, deliverance and salvation occupy a major theme. In the Gospel of Luke, angels play a significant role in the announcement of God's salvation.

The fulfillment of the promise in the Lukan narrative has to be accomplished through supernatural means. Luke describes Elizabeth as barren. Barrenness is a physical defect that brings disgrace to the wife. Elizabeth called barrenness a disgrace (Luke 1:25). The condition of Elizabeth alludes to prominent stories in the Old Testament. The Greek word *steira* and from the Hebrew word *aqar* describes the barrenness of Sarah (Gen. 11:30), Rebekah (Gen. 25:2 1), Leah and Rachel (Gen. 29:31), Manoah's wife (Judges 13:2-3), Hannah (1 Sam. 1:2), and in spiritual sense Zion or Jerusalem (Isa. 54:1). These couples had witnessed the divine interventions in the accomplishment of God's purpose. The great reversal has been seen through the fact that while the Jews considered barrenness as a curse from God because of His judgment of sin, it became an opportunity for blessings so that God's plan would be realized. Metaphorically, T. Rees rightly notes that "Israel, in her days of adversity, when her children were exiled, was barren, but in her restoration she shall rejoice in many children (Isaiah 54:1; Galatians 4:27). Miraculous healing of barrenness either physical or metaphorical is closely linked with the fulfillment of God's promised blessings and salvation.

The reaction of fear and doubt has also been found in the two annunciation narratives (cf. Luke 1:12, 29,34). However, Zechariah became mute because of his persistent doubt of

Gabriel's words (cf. Luke 1:20). This is in contrast with the faith and submission response of Mary to the will of God (cf. Luke 1:38). Zechariah remained dumb until the birth of John. His healing came when "immediately (Grk. *parachrēma*) his mouth was opened (Grk. *aneōchthē*)" (Luke 1:64). The experience of Zechariah's healing foreshadows the healing works of the promised Messiah. The adverbial form "*parachrēma*" is mostly used in the Gospel of Luke in relation to the miracles of healing performed by Jesus (cf. 4:39; 5:25; 8:44, 47, 55; 13:13; 18:43). By implication, Zechariah's experience reveals the negative consequence of unbelief (dumbness) which consequently followed by healing as a result of his restored faith in God's promise. It mirrors the message of Jesus in the Gospel of Luke that faith is indispensable to experience physical healing and spiritual salvation. Jesus explicitly teaches that physical healing and forgiveness of sin come as a result of faith (cf. 5:20; 7:20; 8:46; 17:19; 18:42). Thus, the offer of salvation and being part of the Kingdom requires human response of faith (7:50; 8:12, 48; 17:19; 18:42).

The Lukan infancy narrative is distinct from Matthew for it also shows a particular interest in the lineage of the two chosen couples where the promise had been given. Since Zachariah is described as a priest of the course of Abijah, and his wife, Elizabeth as one of the daughters of Aaron, this would make John a descendant of Aaron on both his father's and mother's side (cf. 1:5). On the other hand, Joseph's and Mary's lineage is along the line of David who is a descendant of Judah (cf. 1:27). In the two birth annunciations the priestly and kingly lineages met, the former as the forerunner of the latter. This echoes the transition from the Aaronic priesthood to the more glorious and superior work of the Messiah as Priest and King that would come from the tribe of Judah. By emphasizing the Judaic lineage of Jesus, Luke alludes to the prophetic statement of Jacob to Judah (Gen. 49:10) and the transition of the covenant from the old to the new (cf. Jer. 31:31-34; Isaiah 42:1-7; 61:1,2). Jesus' use of the word *diathēkē* (Heb. *berith* cf. Luke 22:20) to convey the dawn of the New Covenant in the person and work of Jesus as foretold by Jeremiah and Isaiah (Jer. 31:31-34 and Isa. 42:6). Jesus' direct application of the prophecy of Isaiah to Himself (cf. Luke 4:21) strongly implies that His work of healing and preaching concerning the Kingdom of God fulfill the promise of the New Covenant.

Healing Miracles in the Ministry of Jesus And Their Plot-Function in the Gospel of Luke

The event in Nazareth (cf. Luke 4:16-30) where Jesus appropriated to Himself the prophetic fulfillment of Isa. 61:1,2, serves as an initial portrayal of the preaching and healing ministry of Jesus found elsewhere in the Gospel of Luke. Stein sees Jesus' proclamation in the synagogue of Nazareth the announcement of the coming of God's Kingdom. Jesus' application of Isa. 61:1,2 to Himself alludes to a broader theme of the Old Testament. Isaiah uses the terminology of the year of Jubilee in a more extensive and eschatological term. The Hebrew word "*darar*" (liberty, Heb. *דָּרֹר*) in Isa. 61:1 is clearly linked to Lev. 25:10 when on the fiftieth year the Israelites consecrated themselves and proclaim "*darar*" (*דָּרֹר*) throughout all the land. This liberty has been used by Isaiah in eschatological term pointing forward to the work of the Messiah. The equivalent Greek verb *aphesei* has been used by Jesus to describe His Messianic work. Through Jesus' preaching and healing Luke implies that diseases and demonic possession are "oppressive constraint and bondage." The healing work of Jesus in fulfillment of Isaiah 61:1,2 is the reversal from confinement and bondage towards the experience of release or liberation. This reversal is not only confined to the physical aspect but includes spiritual

dimension as well. Thus, aphasis embraces more than physical healing but includes wholistic restoration.

A number of concepts or themes in Isaiah's prophecy applied to Jesus has also enriched the link between Jesus' healing ministry and the His Kingdom proclamation. Comparing Isa. 61:1,2 and Luke 4:18-19, these concepts include (a) the introduction of the Anointed One, (b) the role and the works of the Holy Spirit through the Anointed One, (c) the preaching and healing ministry of the Anointed One, (d) the terms "liberty" and "acceptable year of the Lord" in reference to the year of Jubilee in Lev. 25, and (e) the universal scope of the eschatological Jubilee prophesied by prophet Isaiah. The One who will carry out the proclamation of "darar" is the Lord's anointed (Heb. מָשִׁיחַ). Luke applies the equivalent Grk *echrisen* (Grk noun *Christos*) to Jesus. The fulfillment of Isaiah's prophecy becomes broader in Luke 4:18,19 because it transcends ethnic and social boundaries by extending Jesus' preaching and healing works beyond the confines of the Jewish nation and the socially favored. The Messiah/Christ in Isaiah 61:1,2 directed His ministry to the outcast described as "poor," "brokenhearted," "captives," and "blind." This has been demonstrated through Jesus' exorcism (cf. 4:33-37), the healing of the centurion's servant (7:1-10), the healing of a man with leprosy (cf. 5:12-14) the commendation of the Samaritan leper (cf. 17:11-19), and the sending of the twelve disciples and the other seventy to preach the kingdom and heal the sick (9:1,2; 10:1-12, 17-20). In Jesus' commission to His disciples to preach and heal the sick, He admonished them to proclaim their healing ministry as sign that the Kingdom of God is come nigh to them (cf. 10:9). Here Jesus once again reversed the Jewish understanding that purity and physical well being are pre-requisites to approach God. Instead Jesus' miraculous healing is a sign or affirmation that the Kingdom of God has already drawn nigh. This concept is consistent with the theme of universal salvation brought about by the coming of the Kingdom of God as proclaimed in the preaching and realized in the coming of Jesus. Bruno rightly comments that:

Although Jesus' proclamation of *ἄφεσις* in Luke-Acts is not as clearly linked to the restoration of God's covenant with Israel as it is in the prophetic books, Jesus' ministry is clearly linked to the proclamation of the Kingdom of God. The forgiveness of sin and the release from demonic oppression can both be defined as "kingdom activities" in Luke.

Healing and Its Relationship to the Kingdom Proclamation of Jesus

Healing and preaching form an indivisible part in the ministry and works of Jesus. Wahlen observes that in Jesus' ministry, there is "no dichotomy between preaching and healing." Immediately preceding the historical account of Jesus' preaching in Nazareth, Luke records a number of healing episodes. The emphasis of these healing narratives strongly implies the role and functions of healing in the Kingdom proclamation of Jesus. Noticeable in these healing stories are the Sabbath healing miracles performed by Jesus. It includes the act of exorcism in the synagogue of Capernaum (4:31-37), the healing of Peter's mother in law (4:38-39), the crippled woman (13:10-17), and the man with dropsy (14:1-6). Similarities are observable in these healing stories: (a) all the venues of these miracles are clearly stated – there is a sequence of synagogue-house-synagogue-house; (b) The description of sickness, its severity and effect to the sufferer, (c) healings are implicitly or explicitly described as freedom from physical and spiritual bondage, (d) the manner in which Jesus healed the sickness; and (e) the impact of healing miracles to the sufferers and those who witness the event. These Sabbath healing

episodes are intentionally included in the third Gospel as Luke makes allusion to the Old Testament themes of creation and liberation. Sabbath in the Old Testament carries the concept of creation-restoration (cf. Exod. 20:8-11) and liberation (cf. Deut. 5:12-15). Wahlen rightly states that;

“Jesus’ act of healing on the Sabbath echoes creation, not only in displaying divine power and authority but also in returning individual to total health on the day that was the first full day of life for human beings in the beginning. It also points to the ultimate triumph of God’s kingdom and, as John makes explicit, eternal life.”

The healing works of Jesus presents the activity of the Kingdom of God in releasing those who are in bondage. In the story of the crippled woman (cf. 13:10-17) the Greek verb *luein* appears three times (cf. 13:12, 15, 16). These threefold repetitions imply that the use of this verb is important. When challenged by the religious leaders if it is lawful to heal on the Sabbath, Jesus’ explanation for the *luein* (“release,” “setting free,” “loosing,” and “untying”) of the crippled woman is to liberate her from Satan’s bondage for eighteen years. The same concept is present in the story of the man with dropsy (cf. 14:1-6) where healing of the man has been compared to a donkey or an ox that has fallen into a pit. It is lawful to pull it out (Grk.. *anaspasei*) even on the Sabbath day. In these healing episodes, Luke integrated the concept of creation, restoration, and liberation themes embedded in the Kingdom proclamation of Jesus. Additionally, healing affirms the authority of Jesus, the importance of faith, and the foundational ethics of God’s Kingdom.

Jesus’ authority to forgive sin has been demonstrated in the healing of the paralytic (cf. 5:24). Jesus in forgiving the paralytic uses the Grk. verb *ἀφένταί* which literally means “to let go.” This goes back to the fulfillment of the Messianic prophecy in Isaiah that the anointed One would proclaim liberty to those who are bound. This liberty includes physical healing and forgiveness of sin.

Jesus’ recognition on the significance of faith to experience the blessings of the Kingdom has been shown in the healing of the leper (cf. 5:12,13) and the Centurion’s servant (7:1-10). In these two episodes of healing Jesus responded to the expression of faith. Throughout the Gospel of Luke, the emphasis on the necessity of faith to enter the Kingdom and experience its blessings has been clearly elucidated (cf. :20; 7:9,50; 8:25,48; 12:28; 17:5-6,19; 18:8,42; 22:32). It is also important not to miss the ethical side of the healing motif. The Kingdom of God manifested through Jesus’ healing miracles is founded in the principles of compassion and mercy. This has been shown in the resurrection of the widow’s son in Nain (cf. 7:11-17).

The three stories of exorcism in the Gospel of Luke (cf. 4:31-37; 8:26-39; 9:37-45) indicate that demon possession is likewise an experience of bondage and oppression by the devil. Jesus’ miraculous acts have been presented as deliverance from bondage as the result of Satan’s defeat through the coming of the Kingdom of God. In the exorcism scenarios, the following points are observable; (a) the devil’s encounter with Jesus shows a sharp contrast between Jesus and the devil, (b) the devil recognized who Jesus is, (c) the devil applies the divine and Messianic titles to Jesus, (d) the devil pleaded for their preservation, and (e) the devil submitted to Jesus’ authority.

The defeat of Satan and the triumph of the Kingdom through exorcism have been illustrated when the seventy joyously returned and said to Jesus that even the demons became subject to them. Jesus responded by telling them of Satan's fall like lightning from heaven (cf. 10:17, 18). On another occasion, Jesus' refutation that His power came from Beelzebub confirmed that He performed exorcism by the finger of God (11:19-20). The finger of God seems to be an allusion to the words of the magicians in Egypt when the Egyptians were struck by the plague (cf. Exod. 8:19). This was an admission that they could no longer contend with the God of Moses. Jesus' conclusion that His exorcism is through the finger of God is an assurance that the Kingdom of God has come upon them (cf. 11:20).

The healing motif in the Gospel of Luke functions as the sign that the Kingdom of God has come through the person and ministry of Jesus. Through the preaching and healing acts of Jesus, the Messianic prophecy in Isaiah 61:1,2 has been fulfilled. It also signals the dawn of the New Covenant where the believers experience universal and holistic salvation and restoration.

The healing miracles in Luke bring to light the underlying concept of Kingdom-salvation theme in the Gospel. Through healing, the themes of reversal, liberation, and restoration have been emphasized. The authority and power of Jesus to heal and forgive sins make these Kingdom blessings available for believers. Healing is a foretaste of the complete and final restoration that will happen in the future eschatological Kingdom of God. However, Jesus' mighty acts call for repentance and faith as necessary elements to experience the blessings of the Kingdom.

Third, the healing acts of Jesus reveal the fundamental ethics of God's Kingdom. The Kingdom of God, as demonstrated through Jesus' preaching and healing, is founded on compassion and mercy.

Understanding the healing motif in the Gospel of Luke has timeless implications to the believers of Jesus. In the Gospel of Luke, Jesus commanded His disciples to continue the works that He has began, the proclamation of the Kingdom of God. The Seventh-day Adventist Church, as a body of believers, is aware of Jesus' commission to proclaim the Gospel of the Kingdom into all nations through the ministry of healing, preaching, and teaching. The Kingdom-salvation motif in the Gospel of Luke includes holistic healing of the people. Being aware that healing ministry is a basic component of Kingdom proclamation, the Adventist Church has the largest Protestant integrated network of hospitals and clinics worldwide, with 173 hospitals and sanitariums, 294 clinics and dispensaries, and 160 lodging facilities, including nursing homes, retirement centers, orphanages, and children's homes. In 2011, Adventist hospitals and clinics provided healthcare assistance to more than 19.4 million people worldwide.

It should be emphasized that the work of healing being done by the church should point the sick to the eschatological restoration and the coming Kingdom of God. The healing motif in the Gospel of Luke points to the theology of reversal, liberation, and restoration of humanity in the future. Now is only a foretaste of the blessings of the coming Kingdom of God. Lastly, the fundamental principles underlying the Kingdom of God through the ministry of healing include faith, repentance, compassion, and mercy.

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