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EDUCATION

Teachers' Adherence to the Code of Ethics

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Abstract

The code of ethics is deemed important so that professional teachers may be able to perform well in the learning environment and deliver the best learning experiences to the benefit of students. The Department of Education desires that all teachers adhere to and strictly comply with the code of ethics. Hence, this study aimed to identify the ethical practices that are exercised by the teachers, the unethical practices performed by the teachers, and the extent of adherence to the code of ethics of senior high school teachers as perceived by their students. The study employed a descriptive design utilizing a 5-point Likert-type scale questionnaire adopted from Article VIII of the Code of Ethics for Professional Teachers. Random sampling procedure was done which involved 80 students from a selected school in Binan, Laguna. The data were analyzed using the Jamovi statistical software. Results revealed that teachers *oftentimes* practice ethical standards, with a grand mean of 4.28, as perceived by their students which implies a high level of adherence. It is therefore recommended that senior high school teachers in one of the schools in Binan should continue practicing the code of ethics to the highest level. Moreover, future studies are recommended to utilize a qualitative approach to cater to the wide and vague range of ethical practices.

Keywords: *code of ethics, ethical practices, adherence, senior high school teachers*

Teachers are undoubtedly crucial members of society. Adams (2000) reiterated that teachers' influence outstretched eternity. They play essential roles in education which is vital in the growth and development of society. When people are educated, they can contribute through their various capacities in creating a progressive and sustainable community. Since teachers are most likely involved and in close contact with students in their educational experiences, they have enormous representation in preparing a developed generation and achieving social progress.

Teachers should have professional skills in order to perform with the highest standard. That is why schools are also investing in the training and development of their teachers to be more effective and competent in helping students attain their full potential. Bell et. al (2018) mentioned that the quality of teaching given by the teachers affects student learning and has a lasting impact on students' success in school and in the labor market. Wise (1989, as cited by Tichenor & Tichenor, 2005) described professional teachers as experts in their field of practice. They are also able to know and address the needs of their students. Their role is to make judgments about how to make their classroom conducive for effective learning to take place (Pezaro, 2016). Gunduz (2016) added that when students perceive their teacher as honest, reliable, knowledgeable on the subject matter, being a leader, open to criticism, respectful to students, and having a sense of humor and confidence, their success in learning increases. Moreover, Gunduz (2016) concluded that when a teacher performs his/her responsibilities in the classroom combining them with his/her humane attitudes, students develop more quickly a sense of reliability and responsibility on learning. Thus, aside from having professional skills in teaching, teachers should also develop and master effective competence to cater to the holistic development of the learners.

Teachers' professional ethics in education is deemed important for professional teachers that they may be ethical in their reasoning and judgments and become autonomous moral agents, considerate, and caring to their students (Banter, 2003). Adeolu (2018) conducted a study about the relationship of teachers' ethical practices and students' academic performance and the research findings divulged that teachers' professional ethics have significant influence on students' scholastic achievement. Professional ethics guide teachers in ensuring cognitive as well as moral progress of their students and showing an equal level of dignity to every person they handle (Gluchmanova, 2014). Professional ethics is a set of ethical rules and principles which direct and regulate the behavior of teachers in order to create the best moral environment and better learning experiences (Al-Hothali, 2018). While Kokemuller (2019) defined code of ethics as a business document outlining professional standards expected of all company workers and representatives, Indeed Editorial Team (2021) provided a broader definition of the code of ethics. They elucidated that:

> A professional code of ethics offers a set of guidelines [which] teams or organizations can use to make good decisions in the workplace. It allows you to set a baseline expectation for what is socially acceptable and how professionals should approach problems. Though creating and maintaining a professional code of ethics takes some time, it can help your organization's employees work honestly and with integrity, which can help create a healthier work environment.

It is the goal of Philippine education to provide school age population and young adults with skills, knowledge, and values to become caring, self-reliant, productive and patriotic citizens (World Data on Education, 2006). Thus, to fulfill the aims and objectives of the organization, in the Philippine education setting, teachers' work should follow the professional code of conduct (Barlett 2019). Ashraf et al. (2017) cited Dorudi and Ahari (2015) who viewed professional ethics as a field concerned with ethical commitments. Crawford (2017, as cited by Shapira-Lishchinsky, 2020) mentioned that ethics plays an intrinsic role in educational practice around the world. Lynch (2016) broached that teachers should be able to make decisions on the spot and have the conviction to bear the consequences if they are practicing code of ethics strongly. A blog posted by DepEd Tambayan (2022) reiterated that it is teachers' responsibility to push their learners not only to their full potential but also to develop their personalities. Teachers would be able to facilitate their learners with love, care, affection, and commitment through their knowledge of professional ethics (Karma 2018). Hence, it is needed that teachers understand and apply this understanding into practices in their teaching endeavor.

The Department of Education orders adherence to and strict compliance of its policies on teaching and non-teaching related issues and concerns. The Code of Ethics for Professional Teachers specifically Article VIII provided standard guidelines for teachers to uphold as professionals toward their learners. These are as follows:

- Section 1. A teacher has a right and duty to determine the academic marks and the promotions of learners in the subject or grades he handles, such determination shall be in accordance with generally accepted procedures of evaluation and measurement. In case of any complaint, teachers concerned shall immediately take appropriate actions, of serving due process.
- Section 2. A teacher shall recognize that the interest and welfare of learners are of first and foremost concerns, and shall deal justifiably and impartially with each of them.
- Section 3. Under no circumstance shall a teacher be prejudiced nor discriminated against by the learner.
- Section 4. A teacher shall not accept favors or gifts from learners, their parents or others on their behalf in exchange for requested concessions, especially if undeserved.
- Section 5. A teacher shall not accept, directly or indirectly, any remuneration from tutorials other than what is authorized for such service.
- Section 6. A teacher shall base the evaluation of the learner's work only in merit and quality of academic performance.
- Section 7. In a situation where mutual attraction and subsequent love develop between teacher and learner, the teacher shall exercise utmost professional discretion to avoid scandal, gossip and preferential treatment of the learner.
- Section 8. A teacher shall not inflict corporal punishment on offending learners nor make deductions from their scholastic ratings as a punishment for acts which are clearly not manifestation of poor scholarship.
- Section 9. A teacher shall ensure that conditions contribute to the maximum development of learners are adequate, and shall extend needed assistance in preventing or solving learner's problems and difficulties.

Caslib (2014) gave an account that teachers are observing and exhibiting the highest moral and ethical standards both in their personal and professional lives. However, Hoyle (1975, as cited by Peretomode, 2021) claimed that the code of ethics for teachers has not been taken as seriously as it deserves. The ethical practice of teachers in the Philippines is rarely discussed in papers that this study was intended to fill the gap. It specifically aimed to answer the following questions:

1. How do the teachers practice the code of ethics?
2. What is the extent of the adherence of the teachers in the Code of Ethics?

Methodology

Research Design

This study utilized the descriptive-survey research to assess students' perceptions towards their teachers' practice of the code of ethics. This design is appropriate because the data were collected at one point in time (Mbuva, 2023).

Population Sampling and Technique

The study was conducted among Senior High School students enrolled during the academic year 2021-2022 from a selected school in Binan, Laguna. Random sampling procedure was done by choosing 80 respondents, of which 41 (51.2%) were males and 39 (48.8%) were females; 20 (25%) were Grade 11 students and 60 (75%) were on Grade 12 level. The data in this study were collected by distributing questionnaires to all respondents using Google forms.

Instrumentation

The research instrument utilized was adopted from the Code of Ethics for Professional Teachers specifically Article VIII with little modifications made by the researchers, but it did not undergo validation procedure and pilot testing. The instrument has two sections; the first section is the demographic profile that asks about the respondents' sex and grade level; the second part is the ethical practices of the teachers to be evaluated by the respondents which is made up of 12 items.

Data Analysis

A five-point Likert scale ranging from 1 (Never) to 5 (Always) was used to determine the ethical practices of teachers as perceived by the students. Data were analyzed using the statistical software Jamovi 2.2.5 and were interpreted into tables.

Ethical Considerations

Ethical considerations were observed during the study such as sending a letter of permission to the school principal. The respondents voluntarily answered the questionnaires and the gathered data were treated with confidentiality.

Results and Discussion

Practices of Teachers

This study assessed the teachers' practice of the code of ethics based on the Code of Ethics for Professional Teachers (Article VIII: The Teachers and Learners) as perceived by their students. It specifically delved on three main points: the ethical practices that are always exercised by the teachers; the unethical practices performed by the teachers; and the extent of the practice—all based on the perception of the students.

Table 1

Ethical Practices of Teachers

	Mean	SD	Interpretation
1. My teacher follows a standard in grading and promoting students.	4.51	1.09	Always Practiced
2. My teacher follows protocols and takes appropriate action in dealing with complaints.	4.56	1.08	Always Practiced
3. My teacher addresses properly my needs and interests as a learner.	4.46	1.05	Oftentimes Practiced
4. My teacher deals with each student equally.	4.46	1.09	Oftentimes Practiced
5. My teacher models positive behavior without showing prejudice and partiality.	4.45	1.07	Oftentimes Practiced
6. My teacher does not accept gifts and favors from learners or from others in exchange of undeserved grades or awards.	3.91	1.55	Oftentimes Practiced
7. My teacher does not accept any kind of payment from tutorials and remedial classes.	3.88	1.61	Oftentimes Practiced
8. My teacher evaluates the performance of students objectively.	4.40	1.15	Oftentimes Practiced
9. My teacher avoids unprofessional conduct.	4.13	1.36	Oftentimes Practiced
10. My teacher is not abusive and does not deduct points as a form of punishment.	4.36	1.25	Oftentimes Practiced
11. My teacher makes our class interesting and interactive.	4.40	1.15	Oftentimes Practiced
12. My teacher is approachable and helpful in dealing with our problems and difficulties.	4.42	1.12	Oftentimes Practiced

Legend: Never (N) – 1.00-1.49; Rarely (R) – 1.50- 2.49; Sometimes (S) – 2.50-3.49; Oftentimes (O) – 3.50-4.49; Always (A) – 4.50-5.00

Table 1 reveals that among the ethical practices that students always perceived among their teachers, the statements "teacher follows protocols and takes appropriate action in dealing with complaints" with a mean of 4.56 and "teacher follows a standard in grading and promoting students" with a mean of 4.51 garnered the highest mean with a verbal interpretation of Always Practiced. However, the statements "teacher does not accept gifts and favors from learners or from others in exchange of undeserved grades or awards" with a mean of 3.91 and "teacher does not accept any kind of payment from tutorials and remedial classes" with a mean of 3. 88 got the lowest mean but still has a verbal interpretation of Oftentimes Practiced.

Extent of Adherence in the Code of Ethics

Table 2 shows the summary of the result of the study arranged by sections based on the Code of Ethics for Professional Teachers (Article VIII: The Teachers and Learners). The sections in Table 2 are arranged as follows: 1-2 (Section 1), 3-4 (Section 2), 5 (Section 3), 6 (Section 4), 7 (Section 5), 8 (Section 6), 9 (Section 7), 10 (Section 8), and 11-12 (Section 9).

Table 2

Summary of the Result

Code of Ethics	Mean	Interpretation
Section 1	4.54	Always Practiced
Section 2	4.46	Oftentimes Practiced
Section 3	4.45	Oftentimes Practiced
Section 4	3.91	Oftentimes Practiced
Section 5	3.88	Oftentimes Practiced
Section 6	4.40	Oftentimes Practiced
Section 7	4.13	Oftentimes Practiced
Section 8	4.36	Oftentimes Practiced
Section 9	4.41	Oftentimes Practiced
Overall Mean	4.28	Oftentimes Practiced

Legend: Never (N) – 1.00-1.49; Rarely (R) – 1.50- 2.49; Sometimes (S) – 2.50-3.49; Oftentimes (O) – 3.50-4.49; Always (A) – 4.50-5.00

The result clearly indicates that Section 1 of Article VIII of the Code of Ethics for Professional Teachers that states "A teacher has a right and duty to determine the academic marks and the promotions of learners in the subject or grades he handles, such determination shall be in accordance with generally accepted procedures of evaluation and measurement…" got the highest mean of 4.54 with a verbal interpretation of Always Practiced. However, Section 4 "A teacher shall not accept favors or gifts from learners, their parents or others on their behalf in exchange for requested concessions…" with a mean of 3.91 and Section 5 "A teacher shall not accept, directly or indirectly, any remuneration from tutorials…" with a mean of 3.88 got the lowest mean but still with a verbal interpretation of Oftentimes Practiced.

With the given result, the researchers found out that teachers always practice Section 1 of Article VIII of the Code of Ethics for Professionals teachers based on students' viewpoint. Though Sections 4 and 5 got the lowest mean, the result claims that teachers still practice them—not always but still often, which implies that teachers have no unethical practices as perceived by the students. The ethical practices of teachers based on the Code of Ethics for Professional Teachers (Article VIII: The Teachers and Learners) as perceived by the students got a grand mean of 4.28 with a verbal interpretation of Oftentimes Practiced which also implies high adherence to it.

Conclusions and Recommendations

Overall, the results reveal that the senior high school teachers in one of the schools in Binan, Laguna oftentimes practice the code of ethics with high level of adherence. The results of this study are crucial evidence that identify teachers as professionals who uphold ethical standards. Based on the results, the researchers therefore recommend that senior high school teachers in Binan, Laguna should continue practicing the code of ethics to the highest level. Further research should also be conducted utilizing a qualitative approach to explore and cover the encyclopedic range of ethical practices.

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EDUCATION

Association of Teachers' Feedback to Learning Motivation of Senior High School Students

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Abstract

The success of teaching-learning situations depends on the motivational factors that influence the learners. This study wanted to find out if teachers' feedback motivated students to learn and help to achieve the learning goals. Descriptive-correlational study was utilized and a total of 100 senior high school students at Adventist University of the Philippines were randomly gathered to answer the research instrument. The results showed that the participants had very high positive assessment in corrective feedback and high positive assessment in terms of constructive feedback and praise. The learning motivation of senior high school students was high also. Correlation results showed that there was a significant relationship between the dimensions of teachers' feedback including corrective, constructive, and praise to learning motivation of the respondents. Moreover, praise feedback significantly predicted learning motivation. On the other hand, it was found out that there was no significant difference in the learning motivation when sex and grade level of the respondents were considered. It is concluded that feedback improves learners' motivation to study. Future researchers may consider using a qualitative study to allow participants to express their feelings about teachers' feedback, as well as other types of feedback to broaden the scope of the study.

Keywords: *teachers' feedback, corrective feedback, constructive feedback, praise, learning motivation*

One of the things teachers can do to increase students' learning motivation is to provide feedback, which is one of the most effective learning and teaching strategies that teachers use to boost their students' motivation (Nagpal, 2020). According to Wisniewski et al. (2020), the power of feedback should not be underestimated as it can help students' learning, particularly on their motivation. By giving feedback to students, it helps them to develop better ideas and skills during the challenging learning process, thus giving them more motivation to do better in their learning.

Motivation is one of the most contributing factors to a student's success and better learning experiences. The students are not motivated to learn during distance classes because of a lack of communication that leads to misunderstandings between students and teachers (Mese & Sevilen, 2021). The urge, will, and strong desire to do something is known as motivation (Howley-Rouse, 2020). To be able to understand the complexity of learning motivation, it is not enough to know the extent to which students are motivated, but it is also important to understand the factors that contribute to their motivation. Teachers motivate their students to learn by giving them good feedback that allows them to gain control over their own learning and confidence in their abilities (Johnson, 2017).

There are three different types of feedback: corrective, constructive, and praise feedback. According to Li (2022), corrective feedback does not allow many corrections of errors during feedbacking. It is also used when the given task needs any corrections while constructive feedback is one of the popular strategies that teachers use for feedbacking their students that would help them accept the feedback more openly, motivate them to improve and at the same time, boost their self-confidence (Aslam et al., 2021). On the other hand, praise is another type of feedback that can be an effective strategy that the teachers can use to their students. It is used when the teacher compliments the work of the students and helps the student to continue what he or she is doing, improve the work, and exert extra effort in doing the other projects (Amemiya, 2018).

Furthermore, teacher behaviors are one of the most significant factors influencing student learning. Students from different cultures may have different interpretations of their teachers' behavior. This study compared the associations between strictness, teacher feedback, and students' motivational beliefs. Teachers' feedback had significant positive associations with the motivational beliefs of both Western and East Asian students (Jiang, Lee, Wan, & Chen, 2021).

The theories that would serve as the basis of this study are two of Skinner's behaviorism learning theories: operant conditioning theory and theory of reinforcement (Skinner, 1948; Skinner, 1953; McLeod, 2018). These two theories recognize that behavior contributes to increasing motivation and are used by teachers to ensure efficient learning of the students inside and outside the classroom. Skinner's operant conditioning theory is defined as the positive and negative feedback, praise, or reward that helps change and correct student behavior in the classroom based on environmental influences. The rewards or positive feedback helps students achieve high motivation, whereas punishment makes the students learn, which results in effective learning by reflecting the consequences of their actions. In addition, Skinner's theory of reinforcement has been used extensively in most educational institutions. It is also based on reward and punishment, which impacts the flow of teaching and learning. Positive reinforcement, which serves as a form of feedback to students, improves the motivation and achievements of the students. Moreover, this theory proposes that teachers should provide effective feedback to students to improve their performance since students should be rewarded to increase their academic motivation (Rogti, 2021).

Research on the influence of teachers' feedback towards the motivation of the students have been conducted before. In the study of Turda (2021), they assessed the association of teachers' feedback in increasing students' self-efficacy and motivation and the participants were students aged 11-16 years old. Moreover, Gan (2020) conducted a study on how different engagement in feedback affects the learners' fundamental motivational characteristics and found out that it promotes a positive self-concept and self-confidence. However, only a few studies focus on senior high school students. Furthermore, this study is purposely conducted to determine if teachers' feedback influence the learning motivation of the students in senior high school at Adventist University of the Philippines.

This study determined the influence of teachers' feedback towards the learning motivation of the senior high school students of AUP Academy. Specifically, the study answered the following research questions:

1. How are the perceptions of senior high school students towards teachers' feedback in terms of:
   a. corrective feedback
   b. constructive feedback
   c. praise?
2. What is the extent of learning motivation of senior high school students?
3. Is there a significant relationship between the teachers' feedback and learning motivation of senior high school students?
4. Which among the dimensions of teachers' feedback best predicts the learning motivation of the respondents?
5. Is there a significant difference in learning motivation of senior high school students when their sex is considered?

Methodology

Research Design

Descriptive-correlational research design was utilized in this study which is basically quantitative in nature. Descriptive statistics was used to analyze, interpret, and describe the data that determined the perceptions of participants towards teachers' feedback and the level of their learning motivation. Moreover, correlational research design was used to find the relationship between the teachers' feedback and their learning motivation.

Population and Sampling Technique

The participants of the study were students enrolled in senior high school of Adventist University of the Philippines Academy during the second semester of the school year 2021-2022. Students with a total of 100 were drawn as the sample of the study. Random sampling technique was used in the study wherein students who were present during online classes were randomly given a Google link containing the survey questions. The questionnaires were then gathered as samples of the study.

The distribution of the participants of the study is presented in Figures 1 and 2. Figure 1 shows the distribution of the participants by their sex. The majority of the participants of the study, fifty-seven or 57%, are females while forty-three or 43% remaining number of participants are males.

Figure 2 presents the distribution of the participants by their grade level. As shown, 52% of the participants are Grade 12 students and 48% are from Grade 11.

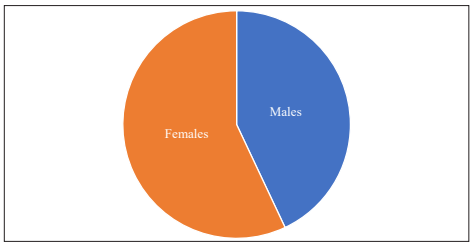

Figure 1. *Distribution of the Participants According to Sex*

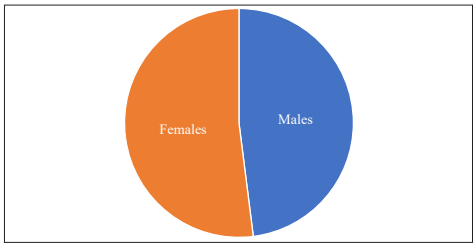

Figure 2. *Distribution of the Participants According to Grade Level*

Instrumentation

The data gathering tool used in this study was a combination of adapted and self-constructed items as guided by different sources of literature. The questions about corrective feedback were adapted from the study of Mastang (2019), but were modified to fit in the needed instrument for this study. The evaluation questionnaire consisted of students' perceptions about teachers' feedback and learning motivation that were measured using a 5-point Likert scale ranging from 1 (Never) to 5 (Always).

Table 1 presents the reliability of each sub-scale of the instrument used, determined through Cronbach's Alpha. The result implies a good and acceptable evaluation instrument.

Table 1
Reliability Test Result of Teachers' Feedback and Learning Motivation

Variables	Number of Items	Cronbach's Alpha	Verbal Interpretation
Teachers' Feedback			
Corrective Feedback	10	0.799	Acceptable
Constructive Feedback	10	0.855	Good
Praise	10	0.902	Good
Learning Motivation	10	0.827	Good

Analysis of Data

The data collected were tabulated and statistically treated in Jamovi version 2.25 to obtain the necessary statistical treatment for analysis and interpretation of the result of the study. In analyzing the data, descriptive statistics of frequency, percentage, mean, and standard deviation were used to get the profile of the respondents, their perceptions towards teachers' feedback, and the extent of their learning motivation. Pearson's r coefficient of correlation was used to find the relationship between teachers' feedback and students' motivation. Regression analysis was applied to identify the predictor variables of learning motivation. Independent T-test was used to find the difference in learning motivation of the students when their sex and grade level are considered.

Ethical Considerations

Upon the approval of the University Ethical Review Board (ERB), the researchers asked for an endorsement letter from the principal to the faculty and staff of Adventist University of the Philippines Academy to conduct data gathering. A non-disclosure of responses of the senior high school students was attached to the online questionnaire through Google Forms explaining the purpose of the study, voluntary participation, and discretion to withdraw from the study any time they wish to. Confidentiality was strongly implemented during the entire study.

Results and Discussion

Perceptions Towards Teachers' Feedback

Teacher's feedback is one of the important factors for a student's learning process. The descriptive analysis of the respondents' perceptions towards teachers' feedback is presented in Table 2

Table 2
Descriptive Statistics of Perceptions Towards Teachers' Feedback

	Mean	SD	Scaled Response	Verbal Interpretation
Corrective Feedback	4.54	0.44	Always	Very Highly Positive
Constructive Feedback	4.47	0.53	Often	Highly Positive
Praise	4.46	0.62	Often	Highly Positive
Grand Mean	4.49	0.54	Often	Highly Positive

Legend: *1-1.49 = Never; 1.50-2.49 = Rarely; 2.50-3.49 = Sometimes; 3.50-4.49 = Often; 4.50-5 = Always*

The result of the study shows that corrective feedback is highly positive as perceived by the participants of the study with an overall mean of 4.54 and a standard deviation of 0.44. This means that the respondents appreciate corrective feedback given by their teachers. Constructive feedback is positive with an overall mean of 4.47 and a standard deviation of 0.53, and praise feedback is positive with a grand mean of 4.46 and a standard deviation of 0.62.

According to the study of Pratolo (2019), the students showed a feeling of being worried if the earlier mistakes were not evaluated and learners are aware that they are still learning. In another study of Tavakoli

and Zarrinabadi (2018), learners wanted to know the number of errors they made because it provided progress checks on their performance. They also noted that comprehensive feedback provided tangible information about their progress.

Furthermore, Pratolo (2019), found out that corrective feedback serves as a guide to learners which will help them perform their task correctly and help them avoid producing the same error. Pratolo noted that the learners are grateful that they are corrected by their teachers and that feedback is a crucial part of the learning process.

Extent of Learning Motivation

Learning motivation influences human behavior and performance. It helps students to maintain their achievements and helps them to continue achieving more of their goals despite the hardships that they may encounter throughout the process. Things that motivate them like feedback also plays a big part to keep them going. Table 3 presents the extent of learning motivation among the respondents.

Table 3

Descriptive Statistics of Learning Motivation

	Mean	SD	Scaled Response	Verbal Interpretation
Learning Motivation	3.88	0.61	Agree	High

Legend: *1-1.49 = SD; 1.50-2.49 = DS; 2.50-3.49 = MA; 3.50-4.49 = A; 4.50-5 = SA*

The results show that the respondents have a high level of learning motivation with an overall mean of 3.88 and a standard deviation of 0.61. According to Tus (2020), motivation is one factor that affects student's academic performance even though for the past two years, students suddenly changed their learning modality from face-to-face learning to online learning due to the pandemic, and the results of the research above demonstrated that senior high school students' learning motivation is high. Six out of eight questions from the questionnaire's scaled response agree.

Relationship Between Teachers' Feedback and Learning Motivation

The results of the study show that there is a significant relationship between the teachers' feedback and the learning motivation of the participants. Corrective feedback has a correlation coefficient of 0.481, constructive feedback has a correlation coefficient of 0.538, and praise has a correlation coefficient of 0.592. All variables have their significance at 0.001 level, and the relationship is moderately positive. The result of the study implied that if students are receiving corrective, constructive and praise feedback from their teachers, they are also motivated to learn. Therefore, the null hypothesis, which states that there is no significant relationship between the teachers' feedback and learning motivation, is *rejected*.

Table 4

Relationship Between Teachers' Feedback and Students' Learning Motivation

		Teachers' Feedback		
		Corrective	Constructive	Praise
Learning Motivation	r	0.481***	0.538***	0.592***
_____	p	.000	.000	.000
	Interpretation	Significant	Significant	Significant

*Note. * p < .05, ** p < .01, *** p < .001*

Hajebi (2018) found out that the corrective feedback had a positive relationship between the students' motivation as the students had a positive attitude instead of having a negative attitude towards receiving corrective feedback as they consider it as a motivating learning tool. This means that students are willing to be corrected by their teachers as they will become aware of their errors and mistakes which improve their motivation.

Predictors of Learning Motivation

Table 5 presents the multiple regression analysis with learning motivation as dependent variable. Results show that the total variance is explained by only one predictor, $F(3, 97) = 20.2$, $p < .001$). Of this total variance accounted for, 61.30% of students' learning motivation is attributed by praise. Furthermore, this result indicates the rejection of the null hypothesis stating that none of the dimensions of teachers' feedback best predict the students' learning motivation.

Table 5

Predictor of Learning Motivation

Model	R	R^2	R^2 Change	df	F	t	Sig.
Praise	0.613	0.376	0.357	3	20.2	0.973	.001

Dependent Variable: Learning Motivation

This signifies that the participants appreciate receiving praise from their teachers because they do their best even more; it makes them happy, and it helps them to be encouraged to study more. In the study of Guo and Zhou (2021), it supports the results in praise feedback wherein they also found out that teachers' praise had moderately positive significant relationship with the students' learning motivation. Positive interactions with students and praise for accomplishments lead to high levels of learning motivation because praise statements are regarded to be motivating, encouraging, and affirming tool for reinforcement. Moreover, they are positive evaluations of students' performance or behavior (Benson-Goldberg & Erickson, 2021).

Difference on Learning Motivation When Sex is Considered

As shown in Table 6 below, males had means of 3.87 (SD = 0.669) and females had means of 3.89 (SD = 0.560) on participants' learning motivation. The results of the study indicate that there is *no significant* difference on participants' learning motivation when grouped according to sex with t-value of 0.190 and associated probability of 0.850.

Table 6

Difference in Learning Motivation When Sex is Considered

	Group	N	Mean	SD	t	p	Verbal Interpretation
Learning Motivation	Male	43	3.87	0.669	0.190	0.850	Not Significant
	Female	57	3.89	0.560			

The results show that males and females have the same learning motivation, Thus, the null hypothesis stating that there is no significant difference in learning motivation of participants when grouped by sex is accepted.

Previous studies contradicted this present result. Chang & Chung's (2017) study concluded that females had higher learning motivation than males. Female students were more likely to be motivated relating to academic achievement and learning strategies for education purposes. For instance, studies explained that females unlike males had higher intrinsic motivation and self-efficacy (Guo & Zhou, 2021).

Difference on Learning Motivation When Grade Level is Considered

Table 9 presents the results that there is no significant difference on participant's learning motivation when grouped according to grade level. Grade 11 had a mean of 3.94 and a standard deviation of 0.526 while Grade 12 had a mean of 3.88 and a standard deviation of 0.526 with a t-value of 1.21 and associate probability of 0.231. Therefore, the researchers concluded that the null hypothesis is *accepted*.

Table 6

Difference in Learning Motivation When Sex is Considered

	Group	N	Mean	SD	t	p	Verbal Interpretation
Learning Motivation	Grade 11	48	3.96	0.618	1.21	0.231	Not Significant
	Grade 12	52	3.81	0.592			

The results of this study contradict the findings of Wenjuan (2020) wherein the study revealed that Grade 11 students are more motivated by receiving feedback than the students that are in 12th Grade. It is because Grade 12 students can motivate themselves and strive harder to know their incompetency in their work. Meanwhile, Grade 11 students need to know more about learning motivation.

Conclusions and Recommendations

The findings of the study were relevant to the presented theories that determining the causes of behavior is the most important factor for understanding why human behaves in a particular way. Accordingly, senior high school students at Adventist University of the Philippines Academy have a positive perception of teachers' feedback in terms of corrective, constructive, and praise. However, the students in this institution prefer corrective feedback as it gives a clearer understanding of their errors, instills learning, helps them not to commit the same errors in the future, and motivates them to do better next time. Feedback is positively pivotal to students' learning; it is important that teachers give feedback to students that would make them feel comfortable and appreciated. Teachers should also give feedback that will assist students in improving their proficiency and competence. It is important that the intentions of the feedback given are to inculcate learning, so that they will gain knowledge and not commit the same error in the future, and to increase their learning motivation to perform much better next time.

The learning motivation of senior high school students is high extent which means that the students have high motivation in their learning because their teachers are giving them feedback regarding their work performance. The students become more motivated in a way that they are studying harder, and it positively affects their study habits and attitude. Thus, teacher's feedback resulted in good learning motivation, satisfaction, and positive behavior of the students.

Based on the results of the study, it is concluded that there is a significant relationship between teachers' feedback and learning motivation of the senior high school students. The result of the study implied that whenever the teachers give feedback to the students, it is linked to their learning motivation, which either the feedback can motivate or demotivate them. It is therefore recommended that teachers consider giving these three types of feedback to their students as it will help the students to motivate them in their learning. They may provide praise and corrective feedback more frequently to their students to strengthen their learning motivation since they are the students' preferred feedback.

On the other hand, there is no significant difference on participant's learning motivation of senior high school students when their sex and grade level are considered. Thus, it is recommended that further studies on differences in terms of sex and grade level be considered to substantiate the results.

Future researchers may do further study on the influence of teachers' feedback to learning motivation of students from other grade levels such as in junior high school to examine whether they would have a different perspective regarding teachers' feedback. Future researchers may consider using a qualitative study to allow participants to express their feelings about teachers' feedback, as well as other types of feedback to broaden the scope of the study. It is also recommended to have an equal ratio of respondents of male and female to show better and accurate results in finding the difference in their learning motivation.

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EDUCATION

Challenges and Successes in Learning English as a Second Language Among Chinese Students: A Phenomenological Study

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Abstract

This paper discusses the challenges Chinese students face and the successes they achieve when studying abroad, using phenomenology to explore their experiences specifically in learning English as a second language. Ten Chinese students, three girls from high school and seven from college, including three boys and four girls, participated in this study. They had been in the Philippines for six months to three years to learn English. The study utilized the six-stage guide of Braun and Clarke's thematic analysis to analyze the data. The challenges that the students faced include fear and psychological burden. Change of environment and unfamiliarity with pronunciation and grammar caused students to be reluctant to communicate with others and this created a psychological burden for them especially when they did not understand what the teacher was saying. On the other hand, their successes include new skills and horizons. Through their study of English, they could read English materials, make reports in English, communicate with others in English, and become more confident themselves. It was found out that when Chinese students come to study abroad, they face difficult times of changing environment and language barrier, but through continuous hard work they can overcome these difficulties and develop their abilities. For future researchers, qualitative studies may be conducted to explore the processes and have an in-depth understanding of the challenges and successes of English learners.

Keywords: *second language, Chinese students, challenges, successes*

Language barrier is a common problem among non-English-speaking students who study abroad (Gatwiri, 2015). Although some students scored seven on the International English Language Testing System (IELTS), they do not have actual English proficiency, hence, they cannot comprehend full English lectures and write academic papers. International schools start English learning by giving presentations and developing English skills from a young age (*Benefits of Attending an International School | ACS International Schools*, 2021). Nevertheless, this language skill is not available in the traditional domestic classroom back home. The domestic classroom is dominated by the teacher explaining and students taking notes, and the teacher is doing more while students are in a receptive state (Lathan, 2022).

One domain of language learning is reading skills. The lack of reading skills can also have a negative educational impact on students (Mataka, 2017). Students' reading ability affects their second language skills, and the earlier the exposure to a second language, the better the child's ability to learn.

Language is not only a way for people to communicate with each other, it is also a 'tool' to understand a person's personality and his/her desire to express oneself. Hence, overseas students need to learn a new language aside from their mother language if they want to thrive effectively in the new environment.

According to the Institute of International Education (IIE, 2017), more than 5.6 million international students studied at the tertiary level worldwide in 2020. Students who come abroad must learn English or another relevant language. This is something that all students need to face, no matter what country they belong to. They need to learn the language to succeed in their studies.

Learning a new language such as English is not an overnight activity. Overseas students experience a "lack of confidence in speaking English" (Adil, 2022, p. 4). Self-confidence plays a very important role when speaking English. If students do not believe in themselves and have no confidence, then they cannot speak English. International students who are non-English speakers are generally shy and do not speak their minds and suggestions easily for fear of saying the wrong thing. This situation leads to a lack of practical action when communicating in English.

With this context, the current study aims to determine the challenges and successes of second language learning among Chinese students in a faith-based institution. Moreover, it seeks to answer the following research questions: (a) What challenges do Chinese students encounter in learning English? (b) What successes have Chinese students had in learning English? This research, however, was limited in terms of scope as it only examined the information that the researcher would gather through interviews.

Methodology

This research utilized a qualitative research approach, specifically the phenomenological design to understand the experiences of Chinese students who were learning English as a Second Language. The next segments describe the research design, participants and sampling technique, and data collection tool and procedure. Moreover, the data analysis and the ethical considerations are also detailed herein.

Research Design

This study used the qualitative research method called phenomenological research design to explore the challenges and successes of Chinese students in learning English as a second language in a faith-based institution in the Philippines. Phenomenology helps describe, discover, and assign meaning to the experiences of the research participants (Creswell, 2013). Creswell further defines phenomenology as a study that describes the lived experiences of several individuals who have lived a common phenomenon. The study specifically utilized hermeneutic phenomenology and this design is best suited for the research because it explores the issues and experiences that Chinese students face when they study abroad. Hermeneutic phenomenology is about the interpretation of the field of study. It is also about the details of everyday life and the act of interpretation that integrates things into a meaningful whole (Kramer, 2022).

Participants

This qualitative phenomenological study was conducted in a faith-based institution in the Philippines. The study employed purposive sampling technique. Ten Chinese students participated in the study. Three of them were girls from high school and the remaining seven were students from college, including three boys and four girls. They had been in the Philippines for six months to three years to learn English. All of them had a basic understanding of the language and had their opinions on how to learn English. Their age range is between 16 and 29 years and they have a good ability to learn and memorize.

Data Collection Tool and Procedure

Data were collected using semi-structured interview questions. These interview questions were designed to support answering the two research questions: (1) What challenges have Chinese students encountered in learning English? (2) What successes have Chinese students had in learning English? The process of gathering data involved getting consent from the participants before the interview. The interview was conducted online using chat transcripts from WeChat, a social media application. The transcripts were analyzed to get the essence of the phenomenon.

Analysis of Data

The study utilized the six-stage guide of Braun and Clarke (2006) thematic analysis to analyze the data. The six-step process involves the following: (1) Familiarization, (2) Coding, (3) Generating themes, (4) Reviewing themes,(5) Refining and naming themes, and (6) Writing up. These steps allow focus and rigor in the researcher's work (Caulfield, 2022).

Ethical Considerations

Participation in this study was voluntary. Participants were not subjected to any pressure or coercion. They all received and understood all the information they needed to decide whether to participate or not. The results were reported in aggregation to maintain anonymity and confidentiality.

Results and Discussion

Four main themes emerged from the data. These are fear, psychological burden, new horizon, and new skills. These themes are discussed in this section.

Challenges in Learning English as a Second Language

Fear

Fear is one of the most primitive emotions people feel, sometimes from real threats and from imagined dangers (Fritscher, 2022). For newcomers in a foreign country, the first thing they face is the stress of a change of environment followed by a fear of communication, confusion in grammar and pronunciation.

Fear of a New Environment. The first thing students face is the dilemma of a changing environment. Street (2019) mentions that students learn better in a motivating environment. They need a period to adjust and become familiar with the environment and the things around them, so they can be in a better position to study.

When the participants were asked why they were afraid to speak in English, some of them responded that there is no English learning environment in China (P1, P3, P7). Also, students are afraid of saying the wrong thing, "I don't want to communicate with others" (P4) and "Speaking is one of the challenges" (P5). One student said, "I may not understand the teacher and classmates' conversation" (P8). This mindset can greatly reduce the student's motivation to communicate with other students. They became less courageous to speak English (Clark, 2020).

Fear of Confusion in Grammar and Pronunciation. Another problem is the confusion of grammar. "I don't know how to use grammar" (P5) and " pronunciation is difficult" (P4, P6). In terms of grammar, Chinese people find it challenging to order words and pluralize (Colquhoun, 2022). English follows the structure

of subject-verb-object, and the plural aspect of English is equally confusing. In terms of pronunciation, English is a combination of many languages, and it has strange pronunciations and combinations (Konrad, 2017). The second reason is that English and Chinese have very different writing forms (English, 2021b).

The difference between English and Chinese forms of writing makes it more difficult to pronounce the words correctly. So, to learn English grammar and pronunciation well, Chinese people should learn the correct order of words from daily practice and pay attention to the change of tense.

Psychological Burden

Psychological burden refers to the management of work, interpersonal relationships, life, and study that generate stress (What Is Mental Load? Recognize the Burden of Invisible Labor, 2022). According to the analysis of data, the psychological stress of Chinese people after coming to study comes from the pressure they felt when they could not understand what the teacher was saying in class. "You feel frustrated when you don't understand anything the teacher is saying" (P7). "You don't understand what the teacher is saying, and you are under a lot of pressure" (P10).

International students are more prone to psychological disorders, anxiety, and emotional and stress-related disorders when studying abroad, and the language barrier makes them lose control when it comes to emotional management, thus students are crankier. Because of the language difference, students can have a serious psychological burden. For international students, the mental health of each student should be considered. This is especially true for men and women in their teenage years, who should be given the right guidance.

Successes in Learning English as a Second Language

New Horizon

This can be interpreted as new ideas for life that give you new meaning as your horizons continue to broaden (Collins English Dictionary, 2023). "My horizons have broadened" (P9). When a person lives abroad, they will always be exposed to the local culture and unique traditions, and they will face more problems to solve. It made them more aware of how different the cultures are and gave them a new perspective in the world. The problems abroad are diverse and can be solved in many ways (Bejaoui, 2017). Rich life experiences can make us calmer in the face of challenges.

"Found a shift in attitude towards things, from pessimism to optimism, which is an attitude shift" (P10). Pessimistic people tend to suffer more from depression and anxiety (Scott, 2022). There is a need to change perspective on things. An individual's beliefs ultimately determine the attitudes and perceptions of the reality around him.

New Skills

Chinese students recognized new skills they have developed while learning English and studying abroad. The new skills include making presentations and better communication with foreigners.

Making presentations. Creating presentations is an amazing way to improve our knowledge (Summer Boarding Courses, 2022). "I can also make presentations in English" (P2). "Now I can do reports" (P10). By studying at school we have now adapted to this form, and we could now also make reports in English. We can showcase learning in the classroom. Reports allow students to do things more efficiently while allowing others to better understand what they are learning. (Education Summary, 2022)

Better communication with foreigners. Simple communication is the passing of an information to the next person. Since the Chinese students have come to study abroad, they inevitably must communicate with foreigners, and through their studies, they can already communicate with foreigners. "My success was communicating with my teachers and friends" (P1-P10). In this area of communication, some problems have been solved, and they should continue to practice being able to understand the exact meaning of foreigners when communicating with them. If people could master a second language, they would also see the world in a different manner (PsyPost, 2011).

The English-language works are among the top in terms of publications, newspapers, and magazines. Students acquire knowledge by reading materials in English. "And use English as a tool for me to learn more and more" (P2). "Now, I can read the English materials" (P8). Students have textbooks and books in English, which play an important role in learning. It is also very good to read other magazines and newspapers. This can also make one's knowledge of English grow. Reading more books can help us reduce stress and alleviate the symptoms of depression (Mfa, 2019).

Conclusions and Recommendations

When Chinese people first arrived abroad, they were challenged by the change in environment. Being unable to communicate makes them feel uncomfortable so they choose to be silent. It creates fear of communication and psychological burden.

English language learners have improved their skills in communication, thereby enable them to create presentations and their circle have become broader. The challenges and opportunities of studying abroad coexist. Nevertheless, individuals can gain fruitful experiences. This study recommends that future researchers conduct a study on English language learners using mixed research methods to have an in-depth understanding of the challenges and successes of English learners.

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PSYCHOLOGY

Applying the Theory of Planned Behavior to Carpooling as a Form of Collective Action

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Abstract

Carpooling is a form of transportation that reduces carbon emissions, lessens travel costs, and improves travel conditions. This research examined the influences on intention to carpool as a form of pro-environmental collective action through the integration of the theory of planned behavior (TPB) and the social identity model of collective action (SIMCA). A total of 386 employees in Metro Manila were surveyed via an online questionnaire that measured the influence of the constructs of TPB and SIMCA. The sample data were analyzed using multiple regression and mediation analysis. Results established that attitudes, perceived behavioral control, and social identity positively influenced intention to carpool. Further analysis showed that attitudes, subjective norms, and perceived behavioral control significantly mediated the effects of social identity and collective efficacy to intention to carpool. Social identity also positively influenced collective efficacy. Overall, the findings support TPB as a predictor of intention towards pro-environmental behavior, specifically carpooling. Results also reflect the importance of understanding an individual's intention to participate in pro-environmental collective action. From a different perspective, influences on what would make car drivers initiate carpool rides can also be an area for future studies.

Keywords: *transportation, pro-environmental behavior, social identity model of collective action*

Carpooling refers to an arrangement wherein individuals share a vehicle to reach a common or proximate destination. It is an agreement to share the use of a private car by several individuals, for a similar journey, at a mutually compatible time (Bresciani et al., 2018). Carpooling provides several societal benefits such as reduction in energy consumption and emissions, and congestion mitigation (Molina et al., 2020). A carpool service provides a sensible solution to transport consumers with lower total mileage and therefore, less gasoline use (Zhang et al., 2016).Carpooling is an interesting transportation habit for individuals and similarly for companies, as it can reduce transportation costs and CO2 emissions. Carpooling is seen also to fit well with the millennium goal of the United Nations that aims at ensuring environmental sustainability (Bruck et al., 2017). It allows individuals to have the flexibility and speed of private cars, but with lower costs and reduced ecological footprint for travelers and society (Olsson et al., 2019).

Despite the myriad benefits of carpooling, there is still reluctance towards its complete adoption (Dinesh et al., 2021). Promoting carpooling is an approach emphasizing travel behavior modifications using available transportation facilities and resources.To better understand the influences on intention to carpool as a form of pro-environmental collective action, this study will integrate two cornerstones in social psychology, which are the social identity model of collective action (SIMCA) and the theory of planned behavior (TPB). The theory of planned behavior (TPB), proposed by Ajzen in 1991, posits that attitudes, subjective norms, and perceived behavioral control are predictors to intention. Attitudes refer to the feelings or beliefs of an individual toward a behavior. Subjective norms center on the social pressure that affects the participation in the behavior. Perceived behavioral control, on the other hand, concentrates on the perception of an individual of the ease or difficulty to perform the behavior. SIMCA suggests that social identity directly predicts collective action and likewise indirectly through the mediation of collective efficacy and group-based emotions (Van Zomeren et al., 2008). Group-based emotion is the feeling of anger that arises due to the comparisons that group members make in contrast to situations of other groups (Bamberg et al., 2018). Collective efficacy refers to a sense of control, influence, strength, and effectiveness to change a group-related problem (Van Zomeren et al., 2008). In this sense, people will participate in collective activities if they believe that the efforts of their group will be successfully carried out (Keshavarzi et al., 2021).

This study focused on examining the factors that influence the intention to carpool as a form of pro-environmental collective action. An integrative model was proposed that utilizes two frameworks in social psychology found to successfully predict intention towards PEB. More specifically, the research questions tested the constructs of the TPB and SIMCA to predict intention to carpool. Specifically, this study proposed the following research questions and predicted the following hypotheses:

1. What are the direct influences on intention to carpool?
   Hypothesis 1. Social identity positively influences intention to carpool.
   Hypothesis 2. Collective efficacy positively influences intention to carpool.
   Hypothesis 3. Attitudes positively influence intention to carpool.
   Hypothesis 4. Subjective norms positively influence intention to carpool.
   Hypothesis 5. Perceived behavioral control positively influences intention to carpool.

2. Does social identity have an indirect influence on the intention to carpool?
   Hypothesis 6. The influence of social identity on intention to carpool is mediated by attitudes.
   Hypothesis 7. The influence of social identity on intention to carpool is mediated by subjective norms.
   Hypothesis 8. The influence of social identity on intention to carpool is mediated by perceived behavioral control.

3. Does collective efficacy have an indirect influence on intention to carpool?
   Hypothesis 9. The influence of collective efficacy on intention to carpool is mediated by attitudes.
   Hypothesis 10. The influence of collective efficacy on intention to carpool is mediated by subjective norms.

Hypothesis 11. The influence of collective efficacy on intention to carpool is mediated by perceived behavioral control.

4. Does social identity influence collective efficacy?
   Hypothesis 12. Social identity positively influences collective efficacy.

The proposed conceptual framework is illustrated in Figure 1 below. The model relates the constructs of Social Identity Model of Collective Action (SIMCA) and TPB to determine the intention to carpool.

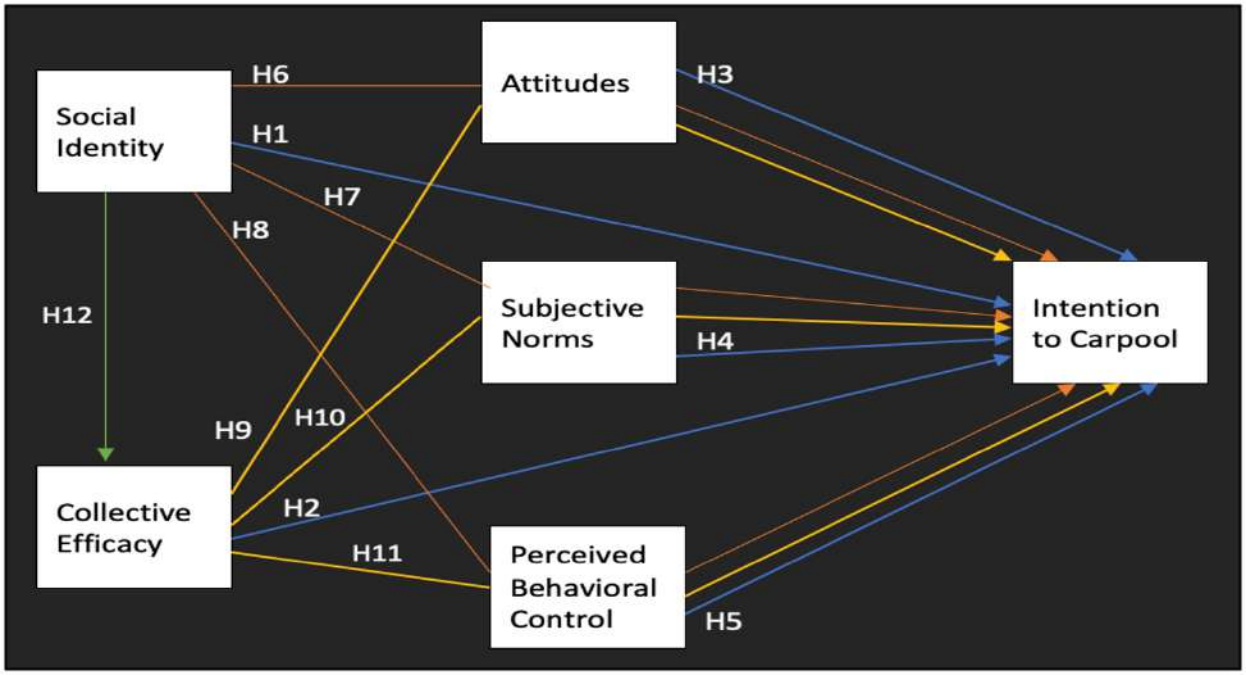

Figure 1. *Conceptual Framework*

In this conceptual framework, the construct of group-based emotions from SIMCA will not be included as this may be considered as not relevant to carpooling as a form of collective action. Group-based emotions, according to the relative deprivation theory, can occur when social comparison results to injustice. Collective action is then seen to address the injustice (Van Zomeren et al., 2008). However, injustice as an influence does not apply in carpooling. In addition, the construct of group-based emotions is seen to be an insignificant factor in research done on insurgence, which does have an element of injustice (Abi-Ghannam, 2020).

Methodology

Research Design

The goal of this study is to expand the understanding on intention to carpool. As such, quantitative research method was used as it fits the objective of the study and it contributed to a deeper knowledge on a relatively new aspect of sustainability. The statistical approach is correlational in nature and the relationships of the variables of TPB and SIMCA were tested to determine the factors that influence intention to carpool.

Population and Sampling

Respondents were employees in Metro Manila who sometimes to almost always bring a vehicle to go to work. Given that major business districts are situated in Metro Manila and road transport is dominant in the vicinity, it is suitable to conduct the research in the area. Metro Manila is also representative of the traffic and sustainability issues of other large cities in the country.

Respondents were those residing in a different city from that of their work location within Metro Manila as a precaution to ensure that the distance for regular trips between home and work is such that it leads to the bringing of cars vis-à-vis walking, biking, or taking public transportation. Employees were targeted for this research as they would be more likely to regularly use a vehicle to travel to their place of work, and their transition to carpooling would potentially contribute most to the lessening of emissions. Commuters were not included as participants for this study as their use of public transportation is seen as a greener and more desirable alternative to the individual bringing of cars. Age, gender, and marital status were not important considerations in the selection of employees. Convenience sampling was utilized in the recruitment of the respondents, which was done by posting an invitation to participate in the survey in online groups and messaging platforms.

The sample size for this study was originally 405. However, 16 participants were excluded from the survey since they do not use their own vehicle to go to work. In addition, two participants did not meet the criteria of working in Metro Manila and one participant's response was removed due to rarely bringing a vehicle to work. As such, the final sample size in this study was 386.

Respondents consisted of 50% of employees working in the eastern district of Metro Manila, 44% working in the southern district, 4% working in the capital district, and 2% working in the northern district. Over 88% of the participants work a day shift, 7% in mid shift, and 4% in night shift. Furthermore, 56% of the participants frequently bring their vehicle to work, 34% almost always bring their vehicle to work, and 10% sometimes bring their vehicle to work.

Instrumentation

A five-point Likert scale was used as the measurement scale for the questionnaire items. The scale was ranked from 1- Strongly disagree to 5- Strongly agree. The items in the questionnaire were based on the studies of Abi-Ghannam (2020), Gibson (2016), and Koustova (2017). Respondents were requested to read the statements related to the variables and indicate the extent of their agreement.

Social Identity

This construct was measured by three items derived from research by Abi-Ghannam (2020), namely: 1) "I would like to belong in a group whose members participate in carpooling to protect our environment", 2) "I would feel strong ties with members of a group who participate in carpooling to be more environmentally conscious", and 3) "Being a member of a group that participates in carpooling to help reduce pollution could be an important part of my self-image".

Collective Efficacy

Based on the collective efficacy statements constructed by Koustova (2017), respondents were asked to indicate how much they agree with the three items as follows: 1) "As a group, I think we can participate in carpooling to protect our environment", 2) "I see that my group can collectively participate in carpooling to be more environmentally conscious", and 3) "I believe that together, as a group, we can participate in carpooling to successfully help reduce pollution".

Attitudes

It was measured based on three statements (Gibson, 2016): 1) "Participating in carpooling would allow me to protect our environment", 2) "Participating in carpooling would allow me to be more environmentally conscious", and 3) "Participating in carpooling would allow me to help reduce pollution".

Subjective Norms

This construct was measured by three items adopted from Gibson (2016) research: 1) "Most people think I should participate in carpooling to protect our environment", 2) "Most people would want me to participate in carpooling to be more environmentally conscious", and 3) "Most people would prefer that I participate in carpooling to help reduce pollution".

Perceived Behavioral Control

Three items adapted from the study of Gibson (2016) were used. These are: 1) "It is up to me to participate in carpooling to protect our environment", 2) "I am confident that if I want to, I can participate in carpooling to be more environmentally conscious", and 3) "I have the available opportunities to participate in carpooling to help reduce pollution".

Intention to Carpool

Adapting from research by Gibson (2016), intention to carpool was measured by the following statements: 1) "I am willing to participate in carpooling to protect our environment", 2) "I plan to participate in carpooling and be more environmentally conscious", and 3) "I am going to make an active effort to participate in carpooling to help reduce pollution".

In addition, a social desirability scale was included to detect response bias. It was seen as vital to use the scale to be able to assess the validity of the findings (Lavidas et al., 2019). The short form scale developed by Reynolds (1982) was applied in this study, where the 11 components were lifted from the Marlowe-Crowne Social Desirability Scale (Crowne et al., 1960 as cited by Leite & Nazari, 2020). Lavidas et al. (2019) discussed in their research that the 11-item form by Reynolds (1982) is an adequate measurement of social desirability. Results based on Pearson correlation indicated that social desirability did not have a significant influence on the relationships between social identity (*r=0.0293, p=0.3166*), collective efficacy (*r=0.0175. p=0.1952*), attitudes (*r=0.0111, p=0.3935*), subjective norms (*r=0.0115, p=0.3810*), perceived behavioral control (*r=0.0312, p=0.2149*) and intention to carpool (*r=0.0323, p=.0.2734*). Pearson correlation is a common criterion to measure the relationship between variables. According to the Pearson correlation formula, there is significant correlation between two factors when the *r* value is between 0.5 and 0.8. Yang et al. (2021) discussed that Pearson analysis can analyze linear correlation factors better.

Before the final administration of the tool, a pilot study was conducted with 30 employees. Beta testing was conducted using SPSS software (ver. 28) to test the responses gathered and establish the validity of the instrument. Results show the constructs all having Cronbach's alpha higher than the cutoff point of .80, which indicates that the statements have relatively high internal consistency. This follows the study of Adeniran (2019), where the acceptable range of Cronbach's alpha is between .80 to .90.

Data Gathering Procedure

The survey was administered through an online questionnaire. The researcher sent an informed consent form to the participants to document their agreement to participate in the survey without coercion. There were no restrictions to participation if the participant was an employee in Metro Manila.

Data Analysis

Data analysis was done using multiple regression and mediation analysis. Similar to the preliminary study, SPSS software (ver. 28) was used to assess the survey results.

Results and Discussion

Climate change poses a great danger to humanity and natural system due to man-made activities and interferences (Sarkodie et al., 2019). One measure that can help in the mitigation of climate change effects is behavioral change. Thus, this research explored the importance of collective action in a pro-environmental activity in the form of carpooling. The study investigated the factors that influence intention to carpool. Particularly, the study contributes to literature on employee engagement in carpooling activity by understanding their intention through adopting an integrative approach that consolidates SIMCA and TPB.

Direct Influences on Intention to Carpool

Multiple regression analysis was conducted to test the effects of TPB and SIMCA predictors on intention to carpool. The confidence level used was the standard 95%, with the remaining 5% as the cut off for error (Greenland et al., 2016). Regression analysis was run based on the direct influences on intention to carpool.

The overall regression model summarized in Table 1 has a good fit with the data with $F(5, 383) = 64.691$, $p < 0.05$ and the 5 independent variables explain 45.8% of intention variation. The results of the multiple regression analysis indicated that the p-value of social identity (0.000), attitudes (0.000), and perceived behavioral control (0.000) were all less than 0.05, which denote that these constructs significantly influenced intention to carpool. These results provided support for H1, H3, and H5. On the other hand, collective efficacy has a p-value of 0.369 and subjective norms a p-value of 0.098, both of which were above the 5% cut off for error. This signifies that the two constructs have no significant influence on intention to carpool. Thus, H2 and H4 were rejected.

Table 1

The Direct Influence of the TPB and SIMCA Constructs on Intention to Carpool

Variable	p-value (influence on intention)
Attitudes	0.000*
Subjective Norms	0.098
Perceived Behavioral Control	0.000*
Social Identity	0.000*
Collective Efficacy	0.369

*p-value <0.05

Employee respondents' attitudes, subjective norms, perceived behavioral control, social identity, and collective efficacy significantly predicted intention to carpool based on the results of the study. However, the predictive power of the conceptual model is relatively low wherein the constructs of TPB and SIMCA only accounted for 45.8% of carpooling intention variation. This contrasts with existing literature where variance of the combination of TPB and SIMCA constructs are within the 62% to 68% range (62% in Abi-Ghannam, 2020 and 68% in Bamberg et al., 2015). The lower predictive power in this study might be due to the participants' unwillingness to share a ride with strangers and other psychological factors such as desire for personal space and reluctance to socialize (Al-Masaeid et al., 2022). Moreover, the study was conducted during the COVID-19 pandemic, where there were increased work-from-home scenarios and shared mode of transportation was seen as less attractive (Hensher, 2020).

As originally predicted and in line with TPB literature, the results showed that attitudes and perceived behavioral control significantly predicted intention. Attitudes toward carpooling as a form of pro-environmental collective action was positively and significantly correlated to carpooling intention. This explains that if the employees' attitude is more positive towards carpooling as a form of pro-environmental collective action, then they will have higher intention to participate. Likewise, the outcomes of this study indicated that perceived behavioral control translated to higher intention to participate in carpooling as a form of pro-environmental collective action. This means that if employees perceive that it would not be difficult to carpool, the more likely they would participate in carpooling activities.

However, subjective norms did not show significant effect on intention to carpool. Results demonstrated that perceived social pressure to perform or not to perform carpooling activity did not have significant influence on employees' intention to participate. This finding aligns with the study of Hasan et al. (2020), wherein subjective norms are found to have no indicative outcome on buying intention of organic food. The study explained that this result is due to subjective norms not originating from oneself or is not their own inclination unlike attitudes and perceived behavioral control. Lujja et al. (2016) also confirmed in their

research that there is no direct relationship between subjective norms and intention. Therefore, particularly for this study, pressure from external environment such as friends and coworkers are not influential to the intention of an employee to participate in carpooling.

Indirect Influence of Social Identity on the Intention to Carpool

Mediation analysis was performed using Sobel Test to investigate whether the constructs of TPB mediated the effects of social identity and collective efficacy to intention to carpool. Sobel test is one method commonly used in mediation analysis. Its purpose is to test whether a mediator carries the influence of an independent variable to a dependent variable. Ozdil et al. (2019) found in their study that Sobel test yielded more reliable results in more than 100 samples.

Using SPSS version 28 and Sobel's Test calculator, mediation analysis was conducted first to identify if social identity has an indirect influence on the intention to carpool. Results are presented in Table 2.

Table 2

The Effect of Social Identity on Intention to Carpool as Mediated by the TPB Constructs

Independent Variables	Mediator	Dependent Variables	p-value (influence on intention)
Social Identity	Attitude	Intention to Carpool	0.000*
Social Identity	Subjective Norms	Intention to Carpool	0.000*
Social Identity	Perceived Behavioral Control	Intention to Carpool	0.000*

**p-value <0.05*

To get the effects of the independent variables to the dependent variable, mediation analysis was run twelve times, each time with a different mediator, keeping social identity and collective efficacy as independent variables and intention to carpool as dependent variable.

Since the p-value of attitudes, subjective norms, and perceived behavioral control are all less than 0.05, it explains that these constructs significantly mediated the influence of social identity to intention to carpool. Thus, support was provided for H6, H7, and H8.

Indirect Influence of Collective Efficacy on Intention to Carpool

Similarly, mediation analysis was used to investigate if collective efficacy has an indirect influence on the intention to carpooling. Results are presented in Table 3.

Table 3

The Effect of Collective Efficacy on Intention to Carpool as Mediated by the TPB Constructs

Independent Variables	Mediator	Dependent Variables	p-value (influence on intention)
Social Identity	Attitude	Intention to Carpool	0.000*
Social Identity	Subjective Norms	Intention to Carpool	0.000*
Social Identity	Perceived Behavioral Control	Intention to Carpool	0.000*

**p-value <0.05*

The p-value of attitudes, subjective norms, and perceived behavioral control in relationship to collective efficacy were also all less than 0.05. The results indicate that the constructs of TPB significantly mediated the effect of collective efficacy to intention to carpool. Thus, support was provided for H9, H10, and H11.

Direct Influence of Social Identity Collective Efficacy

Linear regression analysis was applied to examine if social identity influences collective efficacy. Results are presented in Table 4.

Table 4

The Direct Influence of Social Identity on Collective Efficacy

Independent Variables	Dependent Variables	p-value (influence on intention)
social identity	collective efficacy	0.000*

**p-value <0.05*

The p-value of social identity was 0.000 which is less than 0.05 which signified that social identity positively influenced collective efficacy. H12 was thus supported as well.

Overall results of the regression and mediation analyses are summarized in the model presented in Figure 2 seen below.

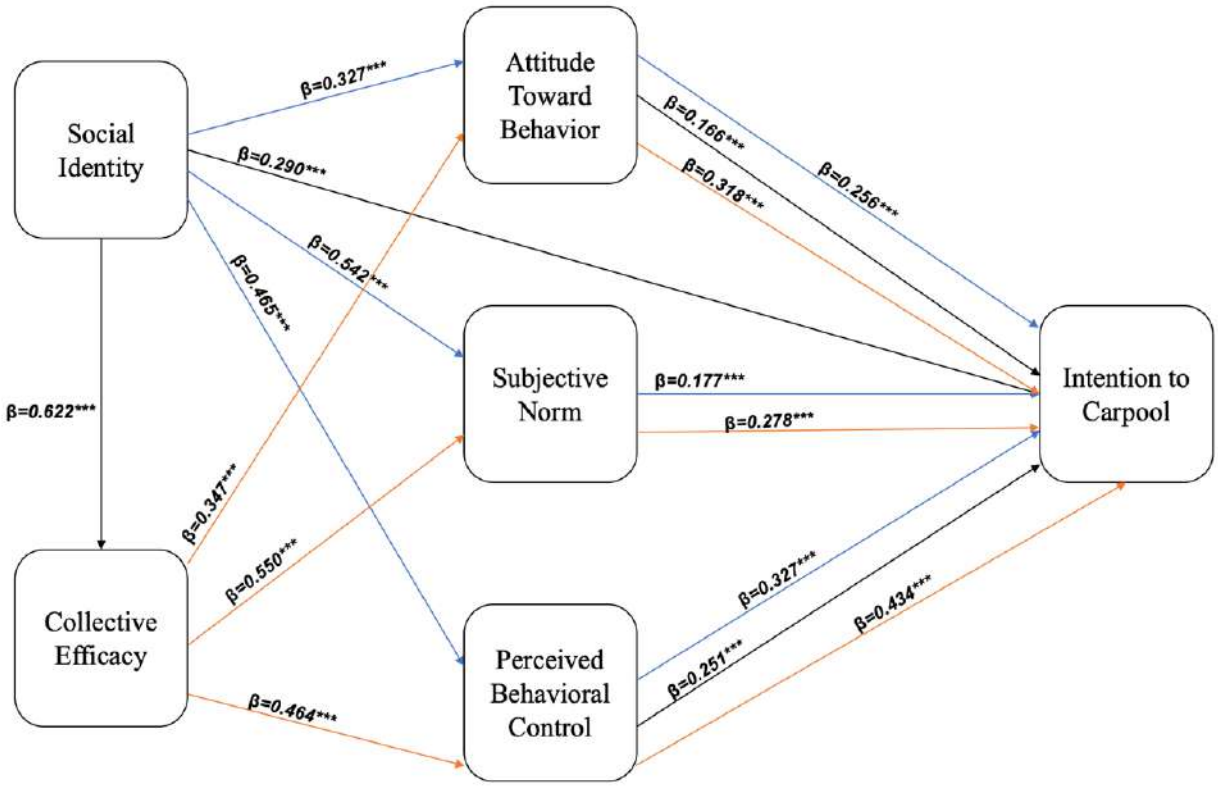

Figure 2. *Summarized Model with Significant Coefficients*

Corresponding to SIMCA, social identity and collective efficacy have direct and indirect influence on collective action intention. For the SIMCA predictors, only social identity directly and significantly predicted collective action intention. This suggests that strong ties or connectedness to a group can be seen to encourage an individual to participate in a pro-environmental collective action. Social identity also significantly influenced intention when mediated by attitudes, subjective norms, and perceived behavioral control, providing further support for this construct as an important consideration in understanding collective actions.

Contrary to the initial hypotheses, collective efficacy did not directly predict intention to participate in carpooling. This follows the study by Bamberg et al. (2015), where collective efficacy did not qualify as a

significant predictor of participation intention and supports Van Zomeren et al.'s (2013) idea that one's own actions in collectively achieving a group goal exceeds the impact that a group can reach its goal through common actions. For carpooling, collective efficacy did not influence intention perhaps because employees do not regard the success of carpooling as something strongly dependent on group efforts.

Although collective efficacy did not directly influence the intention to participate in carpooling, the results of the mediation analysis show an indirect effect when mediated by attitudes, subjective norms, and perceived behavioral control. This indicates that the constructs of TPB improve the predictive power of collective efficacy on intention to participate in pro-environmental collective action. In the study by Kelly and Breinlinger (1995), the addition of attitudes, perceived behavioral control, and subjective norms measures significantly influenced the effect of collective efficacy in predicting intention. Several studies (Kelly and Breinlinger, 1995 and Bamber et. al, 2015) suggest that integration of TPB could grant comprehensive conceptualization and well-rounded exploration of collective action.

Conclusions and Recommendations

It is believed that while social psychological literature remarkably furthered the understanding of collective action formation, it is still lacking regarding collective action intention particularly on pro-environmental activities. This research concluded that it is important to study collective action in a multi-level process, with different antecedents at each stage. Despite the significance of the results using different statistical tools, all relationships in the conceptual model are identified.

The results of this study provide some foundation to promote sustainable transport. Social psychological factors play vital roles in choosing a transport mode. Specifically, findings from this research reflect the importance of understanding an individual's intention to participate in pro-environmental collective action, i.e. increased use of carpooling leading to more sustainable mobility. In such a perspective, the results of this paper could be understood as a useful tool for both researchers and practitioners, since it seeks to help become aware about the motives leading people to adopt alternative transport systems. To achieve a paradigm shift, more significant and meaningful actions must be implemented to increase willingness and encourage an individual to shift from individual use of motor vehicles to other more sustainable modes of transportation.

One effective way to exploit carpooling as an energy saving potential is for private companies or public institutions to implement carpool programs. As findings of this study suggest, people who perceive carpooling to be easy to use and consider themselves being able to carpool have an increased intention to carpool. Hence, organizing meetings to match people who live near each other could be a possible solution. In addition, private companies can offer commuting programs to work, whereas public institutions can focus on the connectivity of people in rural areas. The intervention of public institutions can be useful if they adopt policies aimed at giving concrete support to the spread of carpooling. These policies may help to persuade people to increase their intention towards carpooling as an alternative transport system.

Focusing on individual intention can provide rapid reduction in emissions. Although change in individual intention cannot solve the entire problem of greenhouse gas emissions, it has potential to reduce emissions at a faster pace. Utilizing carpooling can be an effective strategy for individuals to achieve greenhouse gas emissions reductions.

The present study has certain limitations. To start with, the sample size and location of the study are constraints to the generalizability of the findings. Studies show that 88.6% of the households in Metro Manila do not own a car (Hasselwander et al., 2018), which, in consequence, limits the range of the study. The research also does not consider the use of other possible forms of transportation. It may also be possible that employees who do not regularly bring a car to their place of employment would be just as interested in joining carpooling groups as a form of pro-environmental behaviour.

Another limitation is that this study only focused on carpooling as a pro-environmental activity and other aspects such as convenience, comfort, and financial and social benefits are not taken into consideration. The roles of the participants, such as being the driver or the passenger, were not weighed in this study. The

frequency of car use gathered did not factor in the time of travel and the work setup of the employee. Furthermore, the findings presented in this study only delved into understanding the intention to carpool of individuals and do not measure actual behavior of carpooling.

To address the limitations presented in this study, future research could consider different samples and compare commuter and non-commuter responses. While it is important to understand the perception of employees, it might be useful to obtain students' views of carpooling as well, as they can help promote it as a more sustainable form of transportation. From a different perspective, influences on what would make car drivers initiate carpool rides can also be an area for future studies.

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PSYCHOLOGY

A Support Guide for COVID-19-Related Bereavement: Results from a Phenomenological Study

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Abstract

A death of a loved one, especially a family member, costs a toll to an individual. Death and bereavement are a part of each person's life that are inseparable. The study explores the COVID- 19 related bereavement experiences of bereaved individuals throughout the pandemic. Data were collected through a semi-structured interview with seven participants. Findings show that denial of death and emotional distress were mostly felt during their bereavement period. The challenges that they predominantly faced were accepting the loss of a loved one, emotional management during pandemic, financial difficulties caused by the death, and inability to mourn normally. Informal assistance, avoiding stressful situations, and trust in God were the things that helped the family members cope during the bereavement process. The new perspectives that the participants learned from the experience were treasuring their family and friends, devotion, and positivity amidst the loss. Lastly, a support guide was created for the bereaved. Results allowed a greater understanding of the lived experiences of those with COVID-19 related bereavement. Further research that focuses on bereavement and individual experiences can help widen the knowledge of people about bereavement.

Keywords: *bereavement, grief, pandemic, family members, support*

A death of a loved one, especially a family member, costs a toll to an individual. Everyone has different experiences and goes on different journeys of bereavement and those journeys are the ones that make or break them. The World Health Organization (WHO) proclaimed the coronavirus disease 2019 (COVID-19) to be a Public Health Emergency of International Concern. Globally, according to WHO, as of May 17, 2023, there have been 766,440,796 confirmed cases and 6,932,591 people died due to COVID-19. Efforts in preventing the spread of the disease such as quarantines, lockdowns, travel bans, social distancing, and coronavirus 2019 vaccines helped. However, this also resulted to societal changes that affected many aspects of life, including how people bereaved.

The COVID-19 pandemic made most of the people alter their everyday life (Aguiar et al., 2020). Moreover, the study of Neergaard et al. (2021) shows that in the United States alone, about 1 in 5 individuals have experienced a death of a friend or family member to COVID-19. Bereavement is a period or process of mourning or state of intense sadness, especially after a loss of a family member through death. Bereavement is harder with the addition of the occurring pandemic caused by the COVID-19. Death and bereavement are a part of each person's life that are inseparable. While the grief responses following bereavement is different from everyone, the grieving process is still a tough road to go through and puts a person's health, both mental and physical, in a vulnerable state (Stroebe, et al., 2007). In a study in 2020 conducted by Verdery et al. (2020), it stated that on average, every single death from COVID-19 there are roughly nine bereaved individuals.

Fear, stress, and anxiety of the bereaved family due to COVID-19 death of a family member can easily overwhelm a person. Individuals who bereaved due to natural loss have lower levels of grief than individuals due to COVID-19 (Eisma, et al., 2021). Bereaved individuals because of COVID-19 especially those who are mentally challenged such as having dysfunctional grief, separation anxiety, and post-traumatic stress are at higher risk of having functional impairment than those who don't have those illness (Breen, et al., 2021). In a 2021 study of Juaquim et al. (2021), it shows an increase in psychological concern because of the loss of a friend or a loved one due to COVID-19 especially when the individual already has a mental disorder.

Along with the COVID-19 disease pandemic the family who just lost a family member due to the COVID-19 disease faces new experiences and challenges. Other studies focus on health care providers such as palliative care providers (Wallace et al., 2020), mental health professionals (Kelly, 2020), physicians (Lichtenthal et al., 2020) and hospital workers (Selman, et al., 2020).

However, only a little research is focused on bereaved families. The study aimed to create a support guide based on the family member's experiences after a loss of a family member due to death in COVID-19. Specifically, the intent of the study is to answer the following questions which are: (1) What are the psychological reactions of the participants to bereavement? (2) What are the challenges faced by the participants during bereavement? (3) How do the participants cope with the bereavement challenges? (4) What perspectives in life do the participants learn from this experience? (5) What support guide can be developed for the bereaved family based on the results of the study?

A support guide can provide essential information and guidance to individuals who have experienced loss due to COVID-19. It can help them understand the grieving process, validate their emotions, and provide practical advice on coping strategies, self-care, and accessing appropriate support services. Thus, there is a need to develop a support guide among COVID-19 related bereavement. The difference between this support guide from other existing guides is that this support guide was developed with an emphasis on the delayed bereavement experienced by individuals who lost a loved one during pandemic.

Methodology

This section shows the methods and procedures of the study. This aims to discuss the research design, participants of the study, instruments, data analysis, ethical considerations, and analysis of data.

Research Design

The study is qualitative in nature. Particularly, phenomenological research design is applied to this study. Such design is used in interpreting and describing the experiences of the participants. Phenomenological research design captured the lived experiences of the bereaved family members which could not be fully identified by data presented in a quantitative research design. A semi- structured interview was used as a guide with follow up questions not included in the guide.

Interview guide questions were consulted and validated by experts in the field who gave an in detail qualitative judgment and recommendations to make sure of the study's methodological rigor. Aside from triangulation of a family member and close friends, the researcher also applied reflective journal, code-recode strategy, and member checking.

Participants of the Study

The participants of the study are members of families who have lost a close relative during the pandemic. The study was guided by following the criteria in selecting participants to ensure variation: must be a Filipino citizen, at the age of 18 to 80 range, had an immediate family member who died due to COVID-19 during the pandemic, the bereavement period must be above 6 months or more, and has access to Facebook Messenger, Zoom or Google Meet. The exclusion criteria of the study were individuals with underlying mental illnesses and who are in a broken and/or branched family.

Immediate families in the inclusion criteria only include bereaved spouses, parents, brothers, sisters, sons, and daughters. The reason of death by the deceased must be because of COVID-19 and not by other sickness or death-related occurrences. Also, the above 6 months bereavement period is a must since studies show that the height of emotions is during the 6th month of bereavement and is gradually reduced as time passes on especially for resilient individuals (Galatzer-Levy et al., 2018).

Table 1

Participants of the Study

Participant Number	Pseudo-nym	Relationship with the deceased	Sex	Age	Religion	Triangulation
1	Cathy	Daughter	Female	25	SDA	Boyfriend
2	Cel	Sister	Female	55	SDA	Husband
3	Eve	Wife	Female	58	SDA	Son
4	Imelda	Wife	Female	80	SDA	Granddaughter
5	John	Son	Male	23	SDA	Close friend
6	Maria	Wife	Female	65	SDA	Helper
7	Sam	Daughter	Female	23	SDA	Sister

Instrumentation

The semi-structured interview questions were checked by professionals, advisers, and methodologists to ensure ethical considerations and safety of the data gathering among the participants. Follow-up calls and messages were made with the participants to ensure the data were accurate and consistent.

Data Gathering Procedures

The participants were interviewed via Facebook Messenger, Zoom or Google Meet. During the interview, the faces of the participants were not shown and only their voices could be heard on the recording. Permission for audio or video recording was acquired. The gathering of data was ceased as data saturation was achieved by the participants as well as the triangulation process by family members or close friends of the participants.

Ethical Consideration

The informed consent includes the basic information of the study, agreed schedule for the interview and their approval to be included in the study. The participants were also notified about the factors that may influence their willingness to participate in the study such as potential risk, discomfort, and adverse effects. They were also informed about their right to withdraw from the study anytime in which case three participants did not continue their participation in the study.

All respondents have rights and that is the reason why ethical considerations are needed. The respondents' privacy and confidentiality were guaranteed. All the information that each respondent gave was only accessed by the researcher and other associates involved in the research. The researcher also made sure that the respondents were provided complete information about the study, which they understood and signed on the printed informed consent. The participants were given the opportunity to know the results of the study for them to take reasonable steps to correct any misconceptions the participant have. Every recorded interview was kept confidential; however, the researcher had the right to disclose any information if the participants show signs of self-harm, harm to others and/or permitted by law. After the collection of data and final research writing, the gathered data were properly disposed.

Data Analysis

Thematic analysis was used to analyze the qualitative responses of the respondents. Sources such as observations and interviews that were collected after the data gathering were stored for analysis.

Following the data gathering, audio and video recordings were transcribed word-perfect to easily understand. With the help of a professional, the responses in Filipino were translated to English. The transcribed interview was then sent to the participant to check for accuracy and if it was correctly transcribed. Similarities and differences from the answers during the interview were noted. The answers were thematically analyzed along with other notes such as observations by the researcher to come up with a meaningful interpretation.

There were two rounds of coding that were conducted. The two sets were compared for their similarities and differences. Initial interpretation was integrated from the analysis of other researchers and thesis adviser. The second interpretation was done and was compared to the initial interpretation. The researcher validated the findings by consulting with experts. Finalizing of the data was conducted. The data collected were stored in a secure folder that only the researcher can access and was later deleted to protect the data privacy of the participants.

Results and Discussion

The data gathered from the interview with the seven bereaved family members as key informants and their respective relatives and significant others for triangulation process were condensed. Themes were drawn from the condensed interview data. The primary aim of this study is to investigate the participants' psychological response, the challenges they faced, and how they were able to cope with those challenges, what they have learned, to create a support guide for the bereaved individuals.

Psychological Distress

Two themes emerged as indicators of psychological distress among the participants. The responses were centered on the denial of the death and emotional distress such as loneliness from being left behind and shock after the death.

Denial of Death

The first theme that emerged as psychological reactions of bereaved family members is denial. Some participants acknowledged that they were not able to accept the death of their loved one.

Denial is often the first reaction of an individual after knowing an overwhelming news, such as death (Kübler-Ross, 2009). Eve shares her personal experience, describing the overwhelming disbelief she felt

when confronted with her husband's sudden absence saying, *"My mind went blank, and I still cannot believe that Daddy was gone because we were just together the day before. It was hard to accept because I just went home because I cannot stay at the hospital then I never thought I will never see him again."* Cathy expressed her difficulty in accepting the death of her loved one because of the abruptness of the situation, she said *"It is hard to accept because we thought he would be okay. I was not informed that he is in such critical condition."* Some individuals get stuck in the early phases of bereavement with the reason of refusing to believe that the death is real.

Recognizing the significance of denial in the bereavement process can help individuals and their support systems in offering understanding and care. Encouraging open and compassionate communication, creating a safe space for expression of emotions, and offering suitable resources and professional help can assist individuals in navigating denial and moving towards healing and acceptance.

A person's mental health is at risk during the bereavement process (Thimm et al., 2020). One participant expressed her loneliness after the death of a loved one. Maria said, *"My natural reaction was sadness of course. I kept asking my friends the reason why is it that I have not moved on still and the sadness does not fade. They usually respond with a reasoning that my husband loves me so much."* Cel emphasizes her deep sadness and missing her loved one saying, *"I'm very sad. Yes, it really made my very sad and miss her so much."* Another participant, Cathy, recounts her shock in response to the sudden and unexpected nature of their family member's death saying, *"I was shocked because it was Saturday then I did not hear the news directly to my mom. It is just the day before when he tested negative. After that I thought it was already okay then suddenly, he was gone."*

Emotional Distress

The second psychological reaction that bereaved family members experienced is emotional distress. All the participants express their feelings of sadness and loneliness throughout their bereavement journey. Some participants also recount their shock in response to the sudden and unexpected nature of their family member's death.

All the participants experienced emotional distress in any part of their bereavement. The responses provided by the participants express their emotions and experiences of emotional distress and shock following the death of their loved ones. They highlight the profound impact that COVID-19 related bereavement can have on individuals, both mentally and emotionally. The emotional impact of a death of a loved one during pandemic is more intense (Eisma & Tamminga, 2020).

Moreover, sadness along with shock, anxiety, yearning and guilt can be characterized as a psychological and emotional reaction to losing a significant person (Shear, 2015). A study in Brazil by Joaquim et al. (2021) shows that the death of a family member or a friend due to a COVID-19 infection amplifies psychological distress. Also, during COVID-19 pandemic, it was observed that there was an increase in psychological distress such as depression and anxiety (Duan & Zhu, 2020). The results indicated that the respondents experienced negative psychological reactions during bereavement.

During this challenging time, it is crucial for bereaved individuals to seek support and care for their mental well-being. Engaging in self-care practices, reaching out to support networks, and seeking professional help when needed can be beneficial in navigating the emotional challenges associated with bereavement.

Challenges Faced

The participants faced different challenges after the death of their loved ones. These include accepting the loss, emotional management during pandemic, financial difficulties caused by the death, and inability to mourn.

Accepting the Loss of a Loved One

The first theme that emerges as a challenge faced by bereaved family members is acceptance. Several participants acknowledge having a difficulty accepting the death of a family member.

Accepting the loss of a loved one is a deeply personal and individual process. It is a process in which the more a person has accepted the loss, the less grief that individual will feel.

However, it is not an easy thing to do as expressed by Eve by saying, *"One challenge I faced is acceptance because of the abruptness. I really thought he will be fine because he is still strong before he died. We even had video call as a family."* Maria also reflects on the memories which trigger her emotions and hinder her acceptance. She expressed, *"These are the memories. I remember them whenever I see things, I hear words that he used to say or things he used to do. I always cry. Those are the challenges I must overcome, but I still cannot."*

The responses of the participants demonstrate the complex and deeply personal struggle faced by bereaved family members in accepting the loss of their loved ones to COVID-19. The suddenness of the deaths and the lingering memories make the process of acceptance particularly challenging. However, acceptance does not mean forgetting or moving on from the memory of a loved one.

Emotional Management During the Pandemic

The second theme that emerged as a challenge to bereaved family members is emotional challenges. Some participants acknowledged having emotional challenges after the death in their family. The loss of a loved one can intensify existing emotional struggles or create new ones, making it difficult to manage emotions effectively, especially during pandemic in which the individual is already focused on their emotional struggles caused by the pandemic.

John opens about his struggle with emotional challenges saying, *"What is difficult for me is that I have a very explosive personality. My mom and I often argue whenever we do not agree with her decisions because we can notice that it really is wrong. I noticed that my aggression is worsening and the responses I give to my mother whenever we argue is getting worse."*

Bereavement experience is more intense especially during pandemic. When an individual is faced by death, the loss of a loved one can trigger intense grief, sadness, and a sense of emptiness. The way people express their emotions during bereavement can vary, with some individuals openly expressing their emotions while others may choose to keep their emotions private.

Bereavement presents a high risk to mental health (Thimm et al., 2020). In the same way, grief by an unexpected loss of a relative or a close friend seems to be related to the increase of psychological risk during pandemic (Breen et al., 2021).

Bereavement is both exhausting and emotionally draining. Some people also express their emotions publicly while others keep their emotions private. In the dual process model presented by Stroebe and Schut (1999), the emotions of an individual during bereavement can 'oscillate' from loss-oriented which can focus on the negative emotions during of the loss.

Financial Difficulties Caused by the Death

The third theme that emerged as a challenge for bereaved family members is financial difficulty. The death of a family member especially a parent puts an economic burden to the family.

Moreover, losing one of the main sources of income in the family creates a hole in the family's finances. Sam expresses the impact of financial challenges they have faced, and the financial burden accompanied by losing a source of financial support saying, *"Almost all the problems that troubled us are about finances or money. Since it was not expected, our family is not ready for the financial hardship that followed when my mother died."* The unexpectedness of the death creates problems to families who are already relying on a limited resource. Individuals who are experiencing financial hardship during COVID-19 pandemic have a high chance of psychological distress (Liu et al., 2022).

Financial concerns are natural after a death of a loved one. It is important to recognize and address the financial challenges faced by bereaved families, as it can significantly impact their overall well-being and ability to cope with the loss. Individuals who are experiencing financial hardship during COVID-19 pandemic have a high chance of psychological distress.

The relationship between financial problems and psychological well-being highlights the importance of addressing the financial impact of the COVID-19 pandemic on individuals' mental health. Implementing measures to alleviate financial strain, such as providing financial assistance, employment opportunities, and access to mental health resources, can play a crucial role in mitigating the psychological distress experienced by individuals.

Inability to Mourn

The fourth theme that emerge as a challenge to family members after the death is mourning. The participants acknowledge that they are having a hard time mourning after the loss of a family member.

The morning ritual was greatly affected during the Covid-19 pandemic. Cel highlights the helplessness they felt due to the sudden loss and pandemic restrictions explaining, *"Another challenge we face is the helplessness we felt. We cannot do anything because it's sudden and the pandemic. We cannot even visit each other because it was not allowed yet back then. Also, we cannot even see her. After the announcement of her death, she was brought straight to cremation. Moreover, we cannot go to our province for her other siblings to see her. We must wait for the restrictions to loosen up."*

The participants' responses identified the challenges faced by bereaved family members in their mourning process. The inability to have physical support from relatives, restrictions imposed by quarantine protocols, feelings of loneliness, and the need to juggle various responsibilities can hinder the mourning rituals and emotional expression of grief. Mourning is the public display of grief (Stroebe et al., 2008). During COVID-19 pandemic, the death rate of the world has increased (Zhai & Du, 2020). It can also be said that the mourning of the individuals during the pandemic is different from pre-pandemic mourning (Bertuccio & Runion, 2020).

Moreover, the inability to properly say goodbye, to see their deceased loved one with their own eyes, and to hold a proper funeral affected the individuals' ability to peacefully deal with the loss (Biancalani et al., 2022). The relationships that help grieving people cope, such as having in-person funeral rituals, pushed families to resort to online memorial services (Waters, 2020). During the COVID-19 pandemic, the bereaved experienced a form of delayed mourning because those who adhere to the government's health protocols were prevented from participating in the customary rituals of mourning after a loss and from receiving the necessary social support, both of which could interfere with the bereavement process (Mortazavi et al., 2021).

Coping with Bereavement

Three themes emerged in answering research question number 3. The participants' strategies in coping with the bereavement challenges include avoiding the stressful situation, trust in God, and informal support.

Avoiding Stressful Situations

The first theme that emerged as a way of coping with bereavement of bereaved family members is avoidance. Some participants acknowledged that avoiding people helped them cope with bereavement.

Engaging in studies, seeking distractions, ignoring pity from others, and finding solace in entertainment and social interactions are strategies that individuals employ to navigate their grief. Avoidance coping involves avoiding stressful situations or experiences (Elliott et al., 2011). Cathy mentions her approach of keeping busy with her studies and focusing on her goals stating, *"I just went on with my life, I did not think of it much. Maybe it is a big factor also that I was in med school, took the board exam, and made myself busy. I do not know what will happen if I'm just hanging out doing nothing."* In the short term, avoidance can serve as a coping mechanism, providing relief from the overwhelming emotions and challenges that come with grief. Studies have shown that prolonged avoidance of distressing emotions and thoughts can contribute to increased levels of anxiety and depression (Grant et al., 2013; Hofmann & Hay, 2018).

According to the dual-process model of mourning proposed by Stroebe and Schut (1999), avoidance is considered an important aspect of a healthy grieving process. It allows individuals to allocate their attention and energy towards rebuilding their lives in the aftermath of loss. In the short term, avoidance can serve as a coping mechanism, providing relief from the overwhelming emotions and challenges that come with grief. This temporary relief can provide individuals with the necessary space to process their grief at a pace that feels manageable for them.

However, it is important to note that relying on avoidance as a long-term coping strategy can have negative consequences for mental health. Studies have shown that prolonged avoidance of distressing emotions and thoughts can contribute to increased levels of anxiety and depression (Grant et al., 2013; Hofmann & Hay, 2018). Avoidance may prevent individuals from fully engaging with their grief, inhibiting the necessary emotional processing and healing that are essential for long-term adjustment.

Trust in God

The second theme that emerged as a way of coping with bereavement of bereaved family members is spirituality. Some participants acknowledged that their spirituality helped them cope after the death. They expressed their reliance on prayer and their belief that God would provide comfort and strength during difficult times.

On the other hand, placing trust in God serves as a foundation for the individual to find strength and have inner peace. John shares that surrendering everything to God has been instrumental in accepting the death of his father saying, *"Personally, the biggest thing that helped me is when I surrendered everything to God. I believe that if that happened anytime of the year, I might not have accepted what happened to my father."* In a study of Biancalani et al. (2022), spirituality and religiosity showed to be protective factors when the individual is processing grief during crisis, such as COVID-19, and provide support for bereaved individuals.

Other studies also show that individuals suffer less and are more resilient when spirituality is included during their bereavement journey (Damianakis & Marziali, 2012; Walsh, 2020). Also, spirituality, which provides existential framework, helps individuals who have spiritual beliefs recover from sorrow following the loss of a loved one more quickly than those who do not (Walsh et al., 2002).

Informal Support

The third theme that emerged as a way of coping with bereavement of bereaved family members is informal support. Almost all participants acknowledged that having family and friends around to support them during bereavement helped them cope during bereavement.

Another support a bereaving individual experiences is through informal support. Maria emphasizes the impact of friends in uplifting her spirit. She said that *"Friends do help a lot. I am lucky because of my colleagues. They are kind enough to assist me, call me, and they wanted me to be in the classroom. I really want to experience the retirement phase, that is why I did not accept the offer though my name is already there. So, friends do cheer you up. They divert your mind for you to forget the sadness."*

According to Harrop et al. (2021), those bereaved during the COVID-19 pandemic have significant levels of support requirements and difficulty receiving support. Bereaved people are more likely to seek help from relatives and friends than from experts (Aoun et al., 2018). Social support during the bereavement process makes it easier for bereaving individuals to cope and it positively affects their well-being (Cakar, 2020). Especially when social support is perceived by the individual receiving it to be helpful, it is one of the best determinants of positive psychosocial outcomes after bereavement (Lobb et al., 2010) and even protects the individuals' mental health (Chen, 2022).

Perspectives Learned

The participants expressed that they gained insights in their experience of losing a loved one. It made them realize to treasure friends and family, have faith in God, and exemplify positivity amidst loss.

Treasure Friends and Family

The first theme that bereaved family members learned is treasuring their friends and family. Participants expressed that having a family or friends during bereavement makes the bereaved individual have an easier journey and that is why it is a need to take care of them and keep them close.

Having a family or friends during bereavement makes the bereaved individual to have an easier journey and that is why it is a need to take care of them and keep them close. Eve considers herself fortunate to have friends and family who surround her saying, *"I am very blessed to have friends and family around me. My eldest son is always there to check on me and my daughter is there to make me smile. Even the plants that I have make me feel that I am not alone even though it is pandemic. My friends even tell me to remarry but it is up to the Lord if he will give it to me or not."*

The responses of the participants identified that keeping their family and friends close to them is one of the things they learned during bereavement. Their presence, care, and willingness to offer support, both emotionally and practically, are essential during the grieving process. Friendship, intimacy, and sentiments of togetherness that were spent with friends are highly valued especially among young adults (Johnsen & Tommeraas, 2022).

In the study of Cacciatore et al. (2021), it shows that the amount of contact between friends and family does not associate to helpful social support. However, the presence of emotional support and expressions of caring are highly valued. Their presence, care, and willingness to offer support, both emotionally and practically, are essential during the grieving process.

Have Faith in God

The second theme that bereaved family members learned is devotion, highlighting the importance of their faith and devotion during the bereavement process. The participants acknowledged how one's devotion is important in the bereavement process.

John shares how his trust in God helped him overcome sadness and grief during bereavement: *"I learned how God helped me overcome the sadness and grief I experienced during bereavement. I trusted Him and He did not fail me to give me people who are there to help me. Also, how becoming a speaker strengthened me and helped me at those times. I am glad I accepted that calling."*

Imelda acknowledges the power of daily prayers for guidance and protection: *"We really need to entrust everything to God. I prayed to God every day for guidance and protection. When I thought I lost everything He gave me more reasons to continue."*

Maria realizes that God is always there to help her: *"I can say that even though I questioned God back then, I learned that He is always there to help me. God is always there; we just need to talk to Him. That is why I am so thankful to God and that is also why I do not just pray to Him; I talk to Him."*

The responses above show that improving one's devotion is one of the things they learned during bereavement. The responses also show the profound impact of devotion to God in the lives of bereaved individuals. Death and religion are inseparably connected in human experience. It is to be said that a person's religious beliefs give considerable help to the individual's grief (Frants et al., 1996). Their experiences illustrate how their faith, trust, and communication with God have provided them with strength, guidance, and a sense of peace during their grief.

Positivity Amidst Loss

The third theme that bereaved family members learned is positivity. The participants acknowledged that they learned to look at the positive side of things and face the future in a better perspective.

By focusing on the positive aspects of their lives, they can face the future with optimism and resilience. Bereavement can test the resilience of a person, but individuals still see a brighter side after the loss Eve emphasizes the importance of maintaining a positive outlook saying, *"We all need to be positive even though someone died because we need to move on, and we need to be strong for our family."*

The responses of the participants show the resilience and strength of the bereaved individuals in finding positivity amidst loss. Bereavement can test the resilience of a person. By focusing on the positive aspects of their lives, they can face the future with optimism and resilience. Resilience, as described by Masten (2001), is the process of adaptively adjusting in the face of adversity, such as the death of a loved one. The grief experienced during bereavement, particularly during the COVID-19 pandemic, can significantly impact a person's mental health (Eisma et al., 2021). Nevertheless, there are positive aspects that bereaved individuals may encounter, especially within their social support systems, which can contribute to their resilience throughout the bereavement process (Vegsund et al., 2019).

Support Guide

A support guide was developed which will be integrated into a program. It is proposed based on the results of the study for family members with COVID-19-related bereavement who are still have lingering problems. This program was based on the psychological reactions, challenges, and coping mechanisms the participants faced during bereavement. This program will be piloted, improved, and enhanced when it is tested with individuals with COVID-19-related bereavement.

Support Guide for COVID-19 Related Bereavement

Table 2

Support Guide for COVID-19 Related Bereavement

Timeline	Topic	Activities	Expected Outcomes
Week 1	Introduction Orientation	Lecture Discussion Presentation	Establish a safe and inclusive space Introduce the purpose of the group Provide accurate and relevant information about bereavement
Week 2	Emotional Awareness	Lecture Discussion Presentation	Equip with relaxation techniques
Week 3	Financial Management	Lecture Discussion Presentation	Learn acceptance Accept the new normal of mourning
Week 4	Financial Management	Lecture Discussion Presentation	Prepare financially
Week 5	Coping	Lecture Discussion Presentation	Gain new coping mechanisms to help them
Week 6	Resilience	Lecture Discussion Presentation	Reflect on personal and spiritual growth and the strength they have discovered throughout their experiences

Program Sequence

The basis of the program that will be implemented was drawn from the results of the themes that emerged from the three research questions namely, (1) What are the psychological reactions of the participants to bereavement? (2) What are the challenges faced by the participants during bereavement? (3) How did the participants cope with the bereavement challenges? This program was based on the psychological reactions, challenges, and coping mechanisms the participants faced during bereavement. This program will be piloted, improved, and enhanced when it is tested with individuals with COVID-19-related bereavement.

The sequence of the program are as follows:

Assembly. The participants will be gathered and will be given some instructions for the current session. A calm soothing music will be played in the background as participants wait before the session starts. It is during this time that the participants can interact with other participants, lecturer, and facilitators before the session.

Opening Session. During the opening session, the facilitator will gather all the participants in one group. They will then be welcomed with open arms. In the preceding sessions, the group facilitator will provide a recap of the previous session and offer an overview of the activities planned for the current session.

Activity. In this part of the session, activities such as letter making, drawing, reflection, and writing will be performed.

Lecture Proper. The facilitator will take charge of conducting the lecture or introducing a guest lecturer. The lecture will follow the specified order and strive to accomplish the set objectives.

Closing Session. The facilitator will provide a summary of the session's proceedings. Participants will have the opportunity to share their perspectives and thoughts. The facilitators will give assignments and communicate any announcements regarding upcoming sessions.

During the last session, the facilitator will have to summarize the group's journey, insights, and growth that have emerged throughout the sessions. Also, a copy of the support guide will be introduced and be given to the participants for them to be reminded of it.

The proposed program for bereaved individuals will be for 6 weeks. The support guide will be integrated in the program. The participants will attend a once-a-week session for one and a half hours of learning relevant topics per day. A certificate of completion will be issued to the successful graduates. The topics to be discussed would be about emotional management, acceptance of the death and mourning, financial difficulties, coping, and resilience. Here is the sample of the proposed support guide for the bereaved:

Sample Proposed Support Guide for the Bereaved

Experiencing the loss of a loved one is one of the most physically and mentally challenging experiences. With the addition of the pandemic that has passed, it further complicates the bereavement process of individuals who lost a loved one at that time. This support guide aims to offer practical guidance and emotional support to those who are still affected by the death of a loved one during those unprecedented times. This proposed guide may vary according to the need and preferences of the bereaved family. It is important to approach each situation with empathy, sensitivity, and respect for their unique bereavement process.

Table 3

Proposed Support Guide for the Bereaved

Objectives	Purpose
1. Acknowledge the grief	Grief is a natural and individual process. It is essential for individuals who have experienced bereavement during the pandemic to acknowledge and validate their grief. The bereaved individuals should be encouraged to express their emotions. They should understand the impact of the pandemic on their bereavement process to help them understand those additional challenges.
2. Offer empathy and active listening	Be present for the bereaved and allow them to share their feelings and memories. The relatives and other concerned individuals should listen actively, without judgment or interruption, and validate their emotions. They should offer comforting words and reassurance.
3. Facilitate open communication	Encourage family members to talk openly about their loved one and their experiences. Create a safe and non-judgmental environment for conversations, where they can freely express their thoughts, concerns, and questions.

{table continues on the next page}

4. Provide practical support	Relatives and friends should offer assistance with daily tasks, such as meal preparation, errands, or childcare, to alleviate some of the immediate burdens. Coordinate with other friends or family members to share responsibilities and ensure the family feels supported.
5. Memorialize the loved one	Relatives and friends should offer assistance with daily tasks, such as meal preparation, errands, or childcare, to alleviate some of the immediate burdens. Coordinate with other friends or family members to share responsibilities and ensure the family feels supported.
6. Foster self-care	Remind the bereaved individuals to prioritize self-care and take time to rest, eat well, and engage in activities that bring them comfort or joy. The bereaved should be encouraged to seek professional help if needed and remind them that seeking support is a sign of strength.
7. Provide information and resources	The concerned individuals should share information about the practical aspects of dealing with a COVID-related death, such as funeral arrangements, legal matters, and financial considerations. Connect the family with relevant resources, such as support groups, counseling services, or grief helplines.
8. Follow up and check-in regularly	As we all know, bereavement is very long process. The sympathizer and empathizer should maintain regular contact with the bereaved and continue to offer support as they navigate the different stages of bereavement. Be patient and understanding, as healing takes time.

Conclusions and Recommendations

Death and its consequences are inevitable. Bereaved individuals during the pandemic identified various psychological reactions and challenges during their bereavement process that still affects them. Thus, a support guide is necessary to help these bereaved individuals to get informal and formal support and learn coping mechanisms from each other and professionals if they come together for the seminar. It is a way for them to share their struggles and experiences to other bereaved individuals and learn how to develop resilience.

Such support guide is an important contribution of this study particularly for the Philippines where many individuals have experienced delayed bereavement due to the strict COVID-19 pandemic lockdown and protocols. Also, studies and intervention that are usually utilized by professionals in this country were done in first world countries which have a different culture, religious practices, and mourning rituals from the Philippines. Thus, this study contributes to the pool of knowledge as it dealt with the experiences of bereaved individuals during pandemic.

As individuals bereaved during bereavement experience more intense emotions and different challenges compared to individuals who lost their loved one pre- and post-pandemic as shown in the study, stakeholders must take into consideration the welfare of these bereaved individuals as the go on a process of reducing the burden that the delayed bereavement have given them.

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PSYCHOLOGY

The Relationship of Schema and Attachment Styles to Interpersonal Functioning of Young Professionals

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Abstract

When individuals become young professionals, they enter the stage that requires many roles to play. This study sought to understand the relationship between schema, attachment style and interpersonal functioning of young professionals as mediated by coping styles. Two hundred fifty young professionals voluntarily participated through convenient sampling technique. Analyzing the indirect effects suggests that among the schema sub variables, avoidance coping significantly mediates the following relationship with interpersonal functioning: disconnection and rejection and impaired limit and performance. Among the attachment variables, avoidant coping significantly mediates the relationship between secure attachment and interpersonal functioning. Moreover, results show that avoidant coping, anxious attachment, and ambivalent attachment positively predict interpersonal dysfunction. This study concludes that coping partially mediates the relationship between schema, attachment style and interpersonal functioning. This means that coping style may impact the role of both schema and attachment to the interpersonal functioning of young professionals. Meanwhile, avoidant coping, ambivalent attachment and anxious attachment can identify how healthy or unhealthy the interpersonal responses are of young professionals. Implications as well as recommendations to young professionals, HR practitioner, employers, and psychological practice were discussed.

Keywords: *schema, attachment, coping style, interpersonal functioning*

The importance of interpersonal functioning as the foundation to an individual's health and well-being is often, if not always, neglected (Mental Health Foundation, 2016, House et al., 2003). Erozkan (2013) has placed an emphasis on interpersonal functioning and has discussed how these problems deeply affect an individual's life to the point that it has now become one of the most major issues in life. Different discussion on interpersonal relationships brings light to different social aspects of an individual's life - from external influences on internal processes (Psychology, 2020). Having poor interpersonal functioning results to different forms of health problems, ranging from mental health issues to physiological problems (House et al., 2003) and is even one of the defining features and a common diagnostic criterion of most psychological disorders. From the 90's (Horowitz, Rosenberg, & Bartholomew, 1993) to the current decade (McKay, Lev & Skeen, 2012), issues related to interpersonal functioning have become the main contributor on to why individuals seek psychotherapy. Interpersonal problems cause family disagreement, abuse, isolation, loneliness, failed relationship, bullying, and work dysfunction that may lead to interpersonal disorder. It destroys relationships and causes damage to any affected party (McKay, Lev & Skeen, 2012).

Various studies have shown how important early childhood experiences develop as schemas impact individual's interpersonal functioning, especially its negative impact (Janovsky et al, 2020; Mojallal, 2014). Young et al. (2003) has placed an emphasis on how early maladaptive schema thus affect one's interpersonal functioning. Schemas are shaped by an individual based on how they construe the world and progress during childhood and adolescence that creates impact on every aspect of human life (Bricker, & Young, 2012). By adulthood schemas are more permanent. Schemas formed become an individual's guide in responding and relating to the others and the world one lives in. Both maladaptive and adaptive schemas are created as each schema is being developed and strengthened. Schemas are highly correlated to the strength of any interpersonal relationships (Ardebili and Golshani, 2016), marital satisfaction (Yoosefi, Bahrami, Fatehizade, & Ahmadi, 2010) and any dysfunctional attitude (Wang et al., 2010). Early schema then can become a template and foundation in understanding interpersonal relationship, life experiences and intensity of an interpersonal interaction (McGinn and Young, 1996; Stedal and Welander, 2015).

Included in early childhood experiences are the attachments everyone makes. According to Mason, Platts and Tyson (2010), adult attachment style is strongly related to a person's schema and some of the distress a person experiences. Attachment starts during infancy through initial caregivers and persists on over lifetime. For Bowlby (1969) the moment a person is born, it seeks closeness and support that provides a sense of security, that the world can be trusted by having needs met. Thus, an unmet need is moderately related to early maladaptive schemas and different coping styles. Young adults who experience less attachment tend to have poor conflict resolution skills (Mansilla, 2004).

There have been a lot of studies regarding how problems with interpersonal functioning may lead to psychopathology. Despite the importance of interpersonal functioning as emphasis by various research studies, not much focus is given in the development and improvement of this aspect in the totality of one's life. Reports of individuals with interpersonal problems, as stated above, are increasing. Moreover, only a few studies show how early maladaptive schemas are being played out on non-clinical areas as young adults and continue to become a day-to-day struggle of young adults. Attachment styles were also seen to be more focused on intimate relationships but not much on how the individual functions interpersonally in different social situations. Furthermore, it has shown that there are individuals who shared common and general early experiences but do not have the interpersonal functioning. This study would then want to see how schema and attachment styles may have become a factor on how interpersonal functioning becomes dysfunctional.

Methodology

Research Design

This study used the quantitative approach employing a descriptive-correlational research design with a mediating variable. The descriptive design was applied to describe the respondents' demographic profile such as age, educational attainment, employment status, and socio-economic status. The correlational

design was further used to show the relationship between early maladaptive schema and attachment style to interpersonal functioning as mediated by coping style.

Furthermore, mediation analysis was used to measure the relationship of the dependent and independent variable with an intervention of an outside variable. Then, a regression test was run to identify the significance of the said variables in the study.

Population and Sampling Techniques

The participants were young adults that fall under the age group of 25-to-36 years old who were in the National Capital Region and Cavite area. A total number of 250 participants was considered as a sample size due to the factors that population size is unknown and large. Convenience sampling technique was used to select with an objective of identifying the respondents under the population. To properly execute the convenience sampling, the researcher reached out to different individuals that were accessible and available during the time data were collected (Edgar & Manz, 2017).

Instrumentation

Various instruments were utilized to measure the variables presented for this research. To measure schema, attachment styles and interpersonal function, questionnaires with the permission of authors were modified to suit the needs of the study.

The Schema Questionnaire is a 37-item self-constructed inquiry form that is adapted from the Young and Brown (2005) YSQL that measures 4 schema domains namely: disconnection and rejection, impaired autonomy and performance, impaired limits, and exaggerated expectations. It is a 5-point likert scale that ranges from 1 (untrue of me) to 5 (completely true of me). Internal consistency of the SQ was analyzed through Cronbach alpha that resulted to a good internal consistency (r=0.839).

The Attachment Questionnaire is a 19-item self-constructed questionnaire to assess the type of attachment style the respondents portray in their respective relationships. Internal consistency of attachment questionnaire was measured though Chronbach's alpha that signified to have a very good consistency (r = 0.859).

The Interpersonal Functioning questionnaire is based on the FIAT-Q SF that measures interpersonal functioning of an individual with subscales of intimacy, argumentativeness, connection and reciprocity, conflict aversion, emotional experience and expression, and excessive expressivity. The Interpersonal Relationship questionnaire is a 34-item questionnaire with an internal consistency of r=0.824, rated on a 6-point likert scale from 1 (strongly disagree) to 6 (strongly agree).

Data Analysis

Statistical Packages for Social Sciences (SPSS) were used to treat the collected data. The descriptive approach was applied to determine the age, social economic status, and employment status. Then the correlation research design was utilized to determine the relationship between early maladaptive schema, coping style, and attachment style to interpersonal problems of young professionals. The research design allowed the researchers to determine the degree of relationship that exists among variables.

To identify the role of attachment style between the relationship of early maladaptive schema and coping style to interpersonal problems of young professionals, multiple regression analysis was used. The analysis was utilized to determine which among the predictor variables best predict the criterion variable.

As for identifying possible differences in Early Maladaptive Schema, attachment styles, coping styles, and interpersonal functioning along with the moderator variables, Analysis of Variance (ANOVA) was utilized.

Regression analysis was applied to show the possible effect of coping styles to the relationship of early maladaptive schema and attachment style to interpersonal functioning.

Ethical Considerations

For the protection of the participants and intellectual properties, the researchers practiced the following ethical considerations that are taken from the Data Privacy Act of 2012, Psychology Code of Ethics Series

of 2017, and Bryman and Bell (2007). Then the researchers sought the approval from the Ethics Regulation Board (ERB).

The respondents were requested to voluntarily participate in the research as well as have the right to withdraw anytime they want to. In addition, the participants were assured of safety and that no harm was to be done.

An informed consent was distributed prior to the research. Information about the research, the benefits, potential risks, limitations, and their implications were provided in a language that the respondents would understand. Enclosed in the informed consent was the protection to the respondent's privacy as per Philippine Code of Ethics and Data Privacy Act states.

Results and Discussion

Extent of Schema

Table 1 presents the extent of schema in terms of connection and acceptance, autonomy and performance, limits, and responsibility and standards. It shows that the respondents appear to have an adaptive schema with all four domains that were present. Additionally, the respondents tend to have a healthy response in terms of meeting their emotional needs.

Table 1

Descriptive Statistics for Schema

Schema	Mean	SD	Verbal Interpretation
Connection and Acceptance	4.19	.512	*Adaptive*
Autonomy and Performance	3.87	.609	*Moderately adaptive*
Limits	3.75	.436	*Adaptive*
Responsibility and Standards	3.57	.329	*Moderately adaptive*

Of all the schema domains, connection and acceptance have the highest mean (M=4.19, SD=.512). This means that the respondents generally feel a sense of security, safety, and stability towards one's connection. This implies that most of the respondents can meet their emotional need to be safe in the environment, be emotionally fulfilled and have good self-worth.

Autonomy and performance obtained a grand mean of 3.87 with standard deviation of .609 which is verbally interpreted as adaptive. This means that the respondents have a sensible sense of independence and self-care with a healthy perspective of failure.

Additionally, limits obtained a grand mean of 3.75 with standard deviation of .436 which is verbally interpreted as moderately adaptive. This means that the respondents have a healthy consideration for other people's boundaries and moderate temperance over self.

Moreover, in terms of responsibility and standards the grand mean is 3.57 with standard deviation of .329 which is verbally interpreted as adaptive. This means that the respondents are aware of their own personal limits and not setting unrealistic standards for self and others.

Overall, Table 1 shows that the respondents appear to have an adaptive schema with all four domains that were present. The respondents tend to have a healthy response in terms of meeting their emotional needs. The results show that young professionals seem to be able to meet their emotional needs when it comes to creating connections and sense of belongingness in their respective environments. The respondents have also been able to create a healthy sense of limit and realistic expectations within themselves and to others. This allows the respondents to understand that everybody, including themselves, has a sense of limitation and to not create unrealistic goals. The respondents have developed an adequate amount of self-control and discipline when it comes to experiencing pleasurable things. The results also mean that the respondents have an adequate sense of individuality and despite the people around them, the respondents can make their own decisions and choices.

Level of Attachment Style

Table 2 presents the level of attachment styles experienced by the respondents. Secured attachment has the highest mean (M=3.03, SD=.5974) among the attachment style variables. This implies that most of the respondents have a good sense of connection with their significant people. Among the coping styles variables, emotion-focused coping has the highest mean (M=3.00, SD=.5365). This implies that the respondents find relief and cope through regulating one's emotion.

Table 2

Descriptive Statistics for Attachment Styles

Attachment Style	Mean	SD	Verbal interpretation
Secure attachment	3.03	.5974	Moderate
Ambivalent attachment	2.46	.9228	Unlikely
Anxious attachment	2.77	.676	Moderate

Table 2 shows that most respondents have developed a secure attachment with their significant others. This shows that young professionals are comfortable whether their significant others are around them. The results showed that despite distance, the respondents are ensure of the connection established with others. It appears that most are not worried nor doubtful of the attachment they have created.

Level of Interpersonal Functioning of the Respondents

Table 3 shows that the respondents' overall interpersonal functioning has a mean of 3.419 and standard deviation of .8300 with a verbal interpretation of prosocial responding. This implies that in terms of interpersonal relationships, Filipino young professionals respond healthily.

Table 3

Descriptive Statistics for Interpersonal Functioning

Interpersonal Functioning	Mean	SD	Verbal Interpretation
1. Interpersonal Intimacy	3.75	.864	*Fair*
2. Argumentativeness/Disagreement	3.40	.890	*Fair*
3. Connection and Reciprocity	2.46	.7064	*Very good*
4. Conflict Aversion	4.36	.8090	*Poor*
5. Emotional Experience	3.79	.5917	*Fair*
6. Excessive Expressivity	2.73	1.1904	*Good*
Grand Mean	3.419	.8300	*Good*

Emotional experience showed to have the highest mean (*M*=3.738, *SD*=.5917) with a verbal interpretation of problematic behavior. This implies that among the interpersonal functioning variables, each of the respondents find it difficult to allow oneself to acknowledge one's emotional process that tends to overstep boundaries of other people.

On the other hand, the respondents showed to have a low score on connection and reciprocity. This means that the respondents tend to accept, understand, and respect others regardless of what type the person is. The respondents hold their personal biases and prejudices when connecting with people.

Overall, the respondents tend to have good interpersonal functioning. The result showed that the respondents can adapt, cope, and operate in different social situations. The respondents can respond healthily and maturely in different interpersonal contexts.

Relationship of Schema and Interpersonal Functioning

Tables 4-9 show the relationship of schema and interpersonal functioning. It was hypothesized that there is no significant relationship between schema and interpersonal functioning. To test the relationship of the said variables, Pearson r-correlation was applied to examine the data. Results show that schema sub variables and interpersonal functioning sub variables are correlated. The results therefore confirm the rejection of the null hypothesis having most variables of schema and internal functioning a p-value <0.05.

Table 4

Relationship of Schema and Interpersonal Functioning in Terms of Intimacy

		Interpersonal Functioning in Terms of Intimacy			
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.39***	Low Negative Relationship	*0.01	Reject Ho	Significant
Autonomy and Performance	-0.28***	Low Negative Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 4 shows that connection and acceptance (r=-.39, p=.01), and autonomy and performance (r=-.28, p=.01) have a negative correlation with intimacy. This means that the more adaptive connection and acceptance and autonomy and performance are the less likely to avoid intimacy. This shows that individuals that have a good sense of connectedness and belonging are less likely to avoid close relationships. Same results were revealed by Yoo et al. (2014) that connection and rejection are related to difficulties of interpersonal relationships of young adults. The study of Shehu (2019) proved that being connected and accepted in early childhood allows an individual to be socially competent and be able to have a healthy interpersonal functioning.

Table 5

Relationship of Schema and Interpersonal Functioning in Terms of Argumentativeness/Disagreement

		Interpersonal Functioning in Terms of Argumentativeness/Disagreement			
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.25***	Low Negative Relationship	*0.01	Reject Ho	Significant
Autonomy and Performance	-0.24***	Low Negative Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 5 shows that connection and acceptance (r=-.25, p=.01), and autonomy and performance (r=-.24, p=.01) have a negative correlation with argumentativeness/disagreement. This means that the more adaptive connection and acceptance and autonomy and performance are the less likely is argumentativeness. This shows that individuals that have a good sense of connectedness and belonging are less likely to be argumentative/disagreeable. Therefore, adaptive autonomy and performance tend to result in a strong relationship with a healthy sense of intimacy, experience and expression of emotion and being argumentative (Mojallal et al, 2015). The study of Shehu (2019) proved that being connected and accepted in early childhood allows an individual to be socially competent and be able to have a healthy interpersonal functioning.

Table 6

Relationship of Schema and Interpersonal Functioning in Terms of Connection and Reciprocity

	Interpersonal Functioning in Terms of Connection and Reciprocity				
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.24***	Low Negative Relationship	*0.01	Reject Ho	Significant
Limits	-0.17***	Negligible Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 6 shows that connection and acceptance (r=-.25, p=.01) and limits (r=-.24, p=.01) have a negative correlation with connection and reciprocity. This means that the more adaptive connection and acceptance and autonomy and performance are the less likely is argumentativeness. This shows that individuals that have a good sense of connectedness and belonging are less likely to be argumentative/disagreeable. The study suggests that having healthy boundaries and limits shows to be positively connected to healthy interpersonal functioning (Buana & Wibowo, 2019; Ratner, 2015). The study of Shehu (2019) proved that being connected and accepted in early childhood allows an individual to be socially competent and be able to have a healthy way of connecting.

Table 7

Relationship of Schema and Interpersonal Functioning in Terms of Conflict Aversion

	Interpersonal Functioning in Terms of Conflict Aversion				
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.13***	Negligible Relationship	*0.01	Reject Ho	Significant
Limits	0.18***	Negligible Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 7 shows that conflict aversion has negative correlation with connection and acceptance (r=-.13, p=.01) and a positive correlation with limits (r=.18, p=.01). This means that the more adaptive connection and acceptance, the less likely the presence of inconsideration or rejection of others. On the other hand, the more adaptive limits are the more likely inconsideration and rejection would be. This implies that individuals that have a good sense of connectedness and belonging are less likely to be unwelcoming to others. As for having adaptive limits, it shows that boundaries are a present reason to not be accepting of every other individual. Studies also show the association of connection and acceptance toward reciprocity (Janovsky et al., 2020; Thimm, 2013). The study of Shehu (2019) proved that being connected and accepted in early childhood allows an individual to be socially competent and be able to have a healthy way of connecting.

Table 8

Relationship of Schema and Interpersonal Functioning in Terms of Emotional Experience and Expression

	Interpersonal Functioning in Terms of Emotional Experience and Expression				
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.20***	Negligible Relationship	*0.01	Reject Ho	Significant

{table continues on the next page}

Autonomy and Performance	-0.19***	Negligible Relationship	*0.01	Reject Ho	Significant
Limits	0.15***	Negligible Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 8 shows that conflict aversion has negative correlation with connection and acceptance (r=-.13, p=.01) and a positive correlation with limits (r=-.18, p=.01). This means that the more adaptive connection and acceptance, the less likely the presence of inconsideration or rejection of others. On the other hand, the more adaptive limits are the likelihood to be inconsideration and rejection would be. This implies that individuals that have a good sense of connectedness and belonging are less likely to be unwelcoming to others. As for having adaptive limits, it shows that boundaries are a present reason to not be accepting of every other individual. Studies also show the association of connection and acceptance toward reciprocity (Janovsky et al., 2020; Thimm, 2013). Same results were revealed by Yoo et al. (2014) that connection and rejection are related to difficulties of interpersonal relationships of young adults.

Table 9

Relationship of Schema and Interpersonal Functioning in Terms of Excessive Expressivity

	Interpersonal Functioning in Terms of Excessive Expressivity				
Indicators of Schema	r	Qualitative Description	P Value	Decision	Remark
Connection and Acceptance	-0.16***	Negligible Relationship	*0.01	Reject Ho	Significant
Limits	0.16***	Negligible Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 9 shows that conflict aversion has negative correlation with connection and acceptance (r=-.16, p=.01) and a positive correlation with limits (r=.16, p=.01). This means that the more adaptive connection and acceptance the less likely overly expression is. On the other hand, the more adaptive limits are the possibility of being expressive. This implies that individuals that have a good sense of connectedness and belonging are less likely to be unwelcoming to others. This implies that the more adaptive limits are the stronger the tendency that individuals avoid conflict, avoid expressing self, and avoid expressing emotions. This shows that due to realistic limits that people set for themselves, an individual becomes overly cautious in overstepping other people's boundaries that may become unhealthy to the relationship one has (Layton & Muraven, 2014). The study of Shehu (2019) proved that being connected and accepted in early childhood allows an individual to be socially competent and be able to have a healthy way of connecting.

Relationship of Attachment and Interpersonal Functioning

Table 10-14 shows the relationship between attachment and interpersonal functioning. It was hypothesized that attachment and interpersonal functioning have no significant relationship. To test the relationship of the said variables, the data were analyzed using Pearson r-correlation. Results show that attachment styles sub-variables and interpersonal functioning sub-variables to be correlated. The results therefore confirm the rejection of the null hypothesis having most variables of attachment and interpersonal functioning a p value <0.05.

Table 10

Relationship of Attachment and Interpersonal Functioning in Terms of Intimacy

	Interpersonal Functioning in Terms of Intimacy				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Anxious	0.47***	Moderate Positive Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.38***	Low Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 10 shows that anxious (r=.47, p=.01) and ambivalent attachment (r=-.38, p=.01) are positively correlated with intimacy. This means that both insecure attachments tend to be associated with avoidance of intimacy. This implies that individuals that are not comfortable with their relationships tend to avoid intimacy.

Table 11

Relationship of Attachment and Interpersonal Functioning in Terms of Argumentativeness/Disagreement

	Interpersonal Functioning in Terms of Argumentativeness/Disagreement				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Anxious	-0.35***	Moderate Positive Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.32***	Low Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 11 shows that anxious (r=.35, p=.01) and ambivalent attachment (r=-.32, p=.01) are positively correlated with argumentativeness or disagreement.

Table 12

Relationship of Attachment and Interpersonal Functioning in Terms of Connection and Reciprocity

	Interpersonal Functioning in Terms of Connection and Reciprocity				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Secured	-0.207***	Negligible Relationship	*0.01	Reject Ho	Significant
Anxious	0.16***	Negligible Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.17***	Negligible Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 12 shows that connection and reciprocity are positively correlated with anxious (r=.16, p=.01) and ambivalent attachment (r=-.17, p=.01) but are negatively correlated with secure attachment (r=-.21, p=.01.) This means that both insecure attachments are less likely to understand and accept others. This implies that individuals that are not comfortable with their relationships tend to be less welcoming towards others (Andersen & Przybylinski, 2017).

Table 13

Relationship of Attachment and Interpersonal Functioning in Terms of Conflict Aversion

	Interpersonal Functioning in Terms of Conflict Aversion				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Anxious	-0.18***	Negligible Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.30***	Low Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 13 shows that anxious (r=.18, p=.01) and ambivalent attachment (r=-.30, p=.01) are positively correlated with conflict aversion. This means that both insecure attachments tend to be associated with avoidance of conflict.

Table 14

Relationship of Attachment and Interpersonal Functioning in Terms of Emotional Experience and Expression

	Interpersonal Functioning in Terms of Conflict Aversion				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Anxious	0.19***	Negligible Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.30***	Low Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 14 shows that anxious (r=.19, p=.01) and ambivalent attachment (r=-.30, p=.01) are positively correlated with emotional experience and expression. However, the correlations are negligible and low respectively.

Table 15

Relationship of Attachment and Interpersonal Functioning in Terms of Excessive Expressivity

	Interpersonal Functioning in Terms of Connection and Reciprocity				
Indicators of Attachment	r	Qualitative Description	P Value	Decision	Remark
Secured	0.12***	Negligible Relationship	*0.01	Reject Ho	Significant
Anxious	0.31***	Negligible Relationship	*0.01	Reject Ho	Significant
Ambivalent	0.36***	Low Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

Table 15 shows that excessive expressivity is positively correlated with anxious (r=.31, p=.01) ambivalent attachment (r=.36, p=.01) and secure attachment (r=.12, p=.01.) This means that any type of attachment is likely to excessively express oneself. Based on a study, attachment styles have a correlation with interpersonal functioning (Maunder et al., 2022).

Relationship of Schema, Attachment, Coping Style, and Interpersonal Functioning

Table 16 shows results of relationship among the variables' schema, attachment style and interpersonal functioning. To test the relationship of the said variables, Pearson r-correlation was used. The results therefore confirm the rejection of the null hypothesis having most variables a p value <0.05.

Table 16

Relationship of Schema, Attachment, and Interpersonal Functioning

		Interpersonal Functioning in Terms of Conflict Aversion			
Independent Variable	r	Qualitative Description	P Value	Decision	Remark
Schema	0.38 ***	Low Positive Relationship	*0.01	Reject Ho	Significant
Attachment	0.55***	Moderate Positive Relationship	*0.01	Reject Ho	Significant

Legend: +-1 Perfect Relationship, +-0.91-+-0.99 Very High Relationship, +-0.71-+-0.90 High Relationship, +-0.41-+-0.70 Moderate Relationship, +-0.21-+-0.40 Low Relationship, +-0.01-+-0.20 Negligible Relationship, 0 No Relationship Significant at P < 0.05

The results showed that schema (r=.38, p=01.) and attachment (r=.55, p=.01) are significantly related to interpersonal functioning. This implies that the more adaptive schema, secure attachment and healthier coping style used, the more prosocial interpersonal functioning is. The result is consistent with the conclusion that attachment and coping appears to relate to interpersonal functioning (Nyein et al., 2017). Janovsky et al. (2018) discussed how schema correlates to a positive interpersonal functioning.

Conclusions and Recommendations

The results suggest that Filipino young professionals show an adaptive level of disconnection and rejection and impaired limits. This shows a developed sense of security in terms of emotional fulfillment, social belonging, emotional openness, self-worth, trust, and optimism. Moreover, most respondents have empathic consideration and respect for others, have a good sense of self-directedness, and healthy self-control and self-discipline. Regarding the other domains, impaired autonomy and performance and exaggerated expectations were shown to be moderately adaptive. This means that the respondents do also have a healthy sense of confidence, competence, attachment, safety, and boundaries. There is also an adaptive way for self-care, having realistic standards, the ability to have self-compassion and forgiveness and being assertive.

Most of the respondents showed to have acquired a secure attachment and tend to cope through problem-focus and emotion-focus. Filipino young professionals tend to either seek support, focus on the solution or try to understand the situation whenever stressed out rather than just ignore the problem.

As for interpersonal functioning, the respondents seem to be positively responding to the different types of relationships one has. Respondents tend to avoid arguments and choose to listen. Respondents choose to create close relationships by responding to people, expressing themselves, and have developed good connections and reciprocity. On the other hand, Filipino young professionals seem to have difficulty in experiencing and expressing emotions, averting conflict and avoiding intimacy. Results showed that insecure attachments thus increase problematic interpersonal functioning. The results showed that adaptive connection and acceptance, autonomy and performance, and adequate limits likely increase interpersonal functioning.

Future researchers could include a larger sample to further validate this study. Comparative research regarding the prayer life of residence hall students and off-campus students need to be established as well.

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ART & HUMANITIES

Development Communication Students' Lived Experiences in Producing Audio-Visual Materials During Covid–19

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Abstract

This qualitative study explored the challenges Development Communication (DevCom) students faced in creating audio-visual materials during the COVID-19 pandemic. The Change Cycle served as the basis for the study, which involved four students from Higher Education Institutions. The results showed that the challenges encountered during the pre-production stage were related to content creation, group workflow and connectivity, virtual communication, and the learning environment. In production, equipment issues, external factors, COVID-19 restrictions and protocols, virtual communication barriers, and a shift in the learning environment were the main challenges faced by the students. Meanwhile, post-production challenges included technical skills, equipment, environment, and a lack of diversity in the footage. Despite these challenges, the students found ways to cope and complete their productions. They learned the importance of assigning tasks to the right person and using existing content to compensate for their struggle with brainstorming new ideas. The study highlights the need for quality equipment, access to appropriate environments, and proper resources to create high-quality audio-visual materials. Overall, this study contributes to the understanding of the challenges faced by DevCom students in audio-visual production during the COVID-19 pandemic. The findings provide valuable insights for educators, policymakers, and audio-visual professionals to improve the audio-visual production process and enhance the learning experience of students.

Keywords: *development communication, audio-visual materials, COVID-19 pandemic, challenges, solutions, remote learning, pre-production, production, post-production*

The COVID-19 pandemic halted not just travel but also production throughout the world. Productions associated with the studio, meeting people doing collaborative work, shooting on-site, and interviewing were restricted. Strict restrictions for students and social isolation were also experienced. However, a shift of modality in learning during the pandemic forced and caused many college institutions not to perform laboratory activities, specifically the audio-visual production among Development Communication students. Hence, Development Communication is one of the programs that has been affected the most because of the nature of their academic activities, which is primarily laboratory-based.

Development Communication students are trained in "general areas of competency like reportage, media-based learning systems, multimedia materials design production, and management and communication of technical information." In the areas listed above, multimedia and media materials production are part of the curriculum's core fundamentals. They are often audio-visual materials that are difficult to learn and create without the proper tools and equipment, which Covid-19 mainly made inaccessible. The importance of Development Communication students being able to access and learn the appropriate equipment and tools makes a huge difference to the quality of their production.

With technology today, audio-visual materials are produced remotely at home. Mobile applications have helped produce audiovisual materials and expand one's creative work, but they are not integrated because of their technical limitations (Yllanes et al., 2022). The quality of the material is significantly reduced due to the absence of the studio containing most of the necessary equipment like microphones, recorders, and cameras to produce audio-visual materials.

Learning and teaching modalities changed from face-to-face to online format. Challenges and barriers exist in producing materials, forcing students to make whatever limited resource is available. Similarly, Development Communication students at the Adventist University of the Philippines create their major productions in the laboratory studio. Due to the restrictions of the pandemic, audio-visual productions shifted to online productions. Production students missed out the opportunity to shoot in groups, which meant that projects they had been working on for months could not be completed (Grobar, 2020). However, these barriers often lead to discoveries like a group of students who had difficulties getting instructions but eventually discovered an app to make announcements easier (Allo, 2020). People continue to look for solutions to create a comprehensible environment in an unknown situation like a pandemic. There are studies about the shift of learning to remote learning, like self-directed learning or hybrid classes; however, few evidence shows the impact of the pandemic on communication. Thus, this study aimed to investigate the experiences of Development Communication students in producing audio-visual materials during the Covid-19 pandemic.

This study aimed to describe the experiences of the Development Communication students in producing audio-visual materials during Covid-19. This study specifically answered the following research questions:

1. What were the challenges of the Development Communication students when producing audio-visual materials during the following stages?
   - Pre-production
   - Production
   - Post-production
2. How did the participants address their challenges in producing audio-visual materials?
3. What insights have the participants gained from the sudden shift of creating audio-visual materials during the Covid-19 pandemic?

Methodology

Research Design

Phenomenology was used in this study because of the phenomenon of online learning that was suddenly implemented for the students. This study allowed the researchers to focus on the experiences of Development Communication students in producing audio-visual materials during the Covid-19

pandemic. One important goal of phenomenology is to ground knowledge to disprove skeptics' objections to rationality and its methods fundamentally. Since nothing could be spoken about or seen if it did not come through someone's experience, the issue begins with how objects and events appear (Giorgi,2003).

Participants of the Study

Purposive sampling technique was used in this qualitative research because it helps focus on people's experiences and perspectives on events or phenomena they have experienced. The participants of this study consisted of enrolled Development Communication students in Higher Education Institutions that have taken major courses involved in creating audio-visual materials during the pandemic. They must be enrolled in 2-3 major courses with DC laboratory when online learning was implemented. Further, they must have produced audio-visual communication materials during the pandemic.

After establishing the criteria, the researchers collected a list of schools in Luzon that offered the course program. The researchers expected to receive responses from the university and other universities—private or public—that matched the criteria. The researchers reached out to students from those universities that offered the course program: two students from Central Luzon State University (CLSU), three students from the University of the Philippines-Los Banos (UPLB), one student from Occidental Mindoro State University, and four students from Adventist University of the Philippines. Although the researchers regularly followed up on the desired respondents, only 6 of the ten students who were approached consented to the data collection: two from UPLB and four from AUP.

Table 1

Participants' Demographic Profile

Participant's Code	Sex	Year Level in DC	School	Enrolled in DC Courses with Laboratory	Have produced audio-visual materials during the pandemic
Student 1	Female	3rd	AUP	Yes	Yes
Student 2	Female	3rd	AUP	Yes	Yes
Student 3	Male	2nd	AUP	Yes	Yes
Student 4	Female	4th	UPLB	Yes	Yes
Student 5	Male	4th	UPLB	Yes	Yes
Student 6	Female	4th	UPLB	Yes	Yes

Gathering Tool

An unstructured interview was used to gather the data from the students. The interview guide was submitted to experts for validation.

Based on the research questions posed in this study, the interview questions were anchored on these three research questions with the following format: the challenges, the solutions, and the insights. This type of interview allowed the researchers to tailor the questions to the specific phenomenon of the students. The questions aided the students to recall their experiences from the past. They were directed according to the interview guide questions below to understand better their thoughts, feelings, or experiences (Smith, 2018) The researchers used open-ended probes or follow-up questions in each interview to explore more detailed topics. These were the interview guide questions to ensure the objectives of the study were grounded:

1. What were your challenges in producing audio-visual materials during these stages:
    - Pre-production
    - Production
    - Post-production

2. How did you address these challenges during these stages:
    - Pre-production
    - Production
    - Post-Production
3. What insights have you learned with the shift in producing audio-visual materials during the Covid-19 pandemic?

The researchers used a mobile device to record the face-to-face one-on-one interview with the respondent's consent for accuracy or through an online call if the participants chose to. Four respondents were interviewed in person, and two students via Zoom platform due to their distance from the researchers and time constraints.

Data Gathering Procedure

After the validation of the instruments, the study was reviewed by the Ethics Review Board of the University. The researchers handed in consent forms and permission to interview the respondents. After the respondents had given their consent, the interview proceeded. Once the interviews were complete, the researchers transcribed the recording and compiled the transcript in Word. Since the language used was a mix of English and Tagalog, the transcribed interview was translated into English as its final transcription.

Pilot Study

The researchers chose one DevCom student who met the criteria set to be a study respondent. The researchers proceeded with the interview after the student gave the consent. The researchers followed the set of interview guide questions. The interview lasted 20 minutes, even with a few follow-up questions. After consulting with the research adviser, the interview duration did not reflect an in-depth student experience narration. Hence, it was advised in the data gathering to have 35 minutes as the minimum length of an interview and to have follow-up questions inclined to the research questions.

Ethical Considerations

The researchers obtained clearance from the university's Ethics Review Board (AUP-ERB) with a code 2023-ERB-AUP-083. Protecting individuals by applying ethical principles is crucial in every research study (Arifin. 2018). Qualitative research aims to give informants a chance to express their experiences fully. In case they felt anxious or uncomfortable during the interview, the researchers briefed the participants before and after the interview. Confidentiality and anonymity protect people's identities and the information's data by obtaining informed consent.

The researchers explained the study's sole goal and the questions asked, whereas the informants' rights were also discussed and protected. It was also clear to the participants that the data would be treated objectively and that no sensitive information would be disclosed. The researchers explained the face-to-face interview procedure, especially the significance of voice recording: (1) all information would not be disclosed except to the research adviser and methodologist, (2) before the interview commences, they were oriented of their right to withdraw from the study, (3) once they agree, the interview was set based on the participant's convenient time and location, (4) a signed consent was to signify that the participant agreed to participate in the study voluntarily, and (5) the audio file recorded from the interview would be destroyed after the transcription of the interview. Due to distance constraints with the other two participants, the same procedure was followed; however, a message of confirmation to participate in the study was acquired as proof online. Furthermore, the code "Student" and corresponding numbers were used to maintain anonymity. Lastly, the researchers assured the participants that the experiences they shared significantly contributed to the field of social sciences, development, and communications.

Analysis of Data

The seven steps of Colaizzi were employed to comprehend and inspect the experiences lived by the students (Shosha, 2012), as follows:

1. The written record of conversations with the respondents, also known as transcripts, was carefully reviewed and read multiple times to understand the content thoroughly.
2. The researchers noted any statements in the interview connected to producing audio-visual materials during the pandemic. Once this process was complete, the two researchers compared their work. In total, there were 227 significant statements extracted from the six transcripts.
3. After carefully analyzing the statements, the challenges in producing audio-visual materials during the pandemic were classified into four parts: Pre-production, Production, Post-production, and the general challenges experience. A total of 109 statements were derived. A total of 75 solutions were derived on how the DC students addressed those challenges and were also classified according to the stages of production and its general solutions. Moreover, a total of 42 insights were gained acknowledging the relation in the shift of modality in terms of producing audio-visual materials.
4. The researchers recognized similar meanings through all the narratives and grouped them into themes. After agreeing on the meanings, the researchers grouped them into categories, formed clusters of themes, coded related meanings, and combined vision-related clusters to create a distinct theme.
5. The researchers incorporated themes generated in Step 4 into a comprehensive description of the Development Communication students' experience.
6. This step encapsulates the comprehensive explanation into concise statements that only include those essential to the phenomenon.
7. The last step includes verification of the formulated statements if these encapsulate their experiences.

Ensuring Trustworthiness and Rigor

The confidence level in the data analysis and the method used to ensure the qualitative research's quality were rigor and trustworthiness. They also determined the researcher's efforts to ensure the study's quality and acceptability of the findings.

To establish credibility, this research employed triangulation. After the interview, the researchers acquired the respondent's portfolio with embedded production links to verify the experience mentioned. Moreover, using two or more sets of participants ensures triangulation, and this study also interviewed students from another university enrolled in Development Communication.

This study ensures transferability by using a comprehensive description of the sample and the background, as this allows the readers to create a transfer of findings applicable to other situations. The description composes the number of samples, the selection criteria, and the definition of their location. Reading a rich and thick description assists readers in understanding better the phenomenon at probe.

Results and Discussion

Challenges in Producing Audio-visual Materials

Research question 1 aimed to identify the challenges of the Development Communication students in producing audio-visual materials. Based on the meanings formulated, some challenges emerged during the three production phases: Pre-production, Production, and Post-production, that the students encountered.

Challenges in Pre-Production

In the pre-production phase, four challenges emerged in producing audio-visual materials, namely (1) content creation, (2) group workflow and connectivity, (3) virtual communication, and (4) learning environment.

Content Creation. The students' difficulty in pre-production tasks, such as writing, planning, and proposals, is a significant challenge. These tasks may not align with the students' strengths, especially if they just started the course online. Since the students were new to the platform and were experiencing the

transition, content was imminently seen online. Students 1, 2, 4, and 6 affirmed that they had challenges producing content-worthy AV materials. Due to the sudden change of platform, the researchers determined that the participants experienced a loss to safety, Stage 1 of the Change Cycle theory. They were being cautious when it comes to their content since everything could be seen online.

According to Student 1, it was hard to distinguish reliable information and verify it since some were not up to date. Student 1 stated:

"There are too many sources that you don't know if half of them is true, half of it is false. Even if it is a verified source, sometimes the information is not iterated that it is wrong, "Ahh, this is the updated one."

The challenge in script writing is to verify and incorporate unique content rather than relying solely on internet sources. Student 4 mentioned that in content creation, although almost all information is available online, verifying facts and obtaining specific information is a challenge, as online sources may not be reliable and could result in incorrect information. Student 4 elaborated:

"The challenge here is verifying facts and getting specific information that we need… Mamaya mag labas kami ng story tapos hindi pala sya 100 pecent fact. (Later, we will release a story, but it turns out it's not 100 percent factual)."

Because of the limitations caused by the pandemic, the students struggled to create engaging content. From the students' perspective, the challenges were to validate and verify reliable news information and gather necessary details they could incorporate in their unique AV materials rather than relying solely on internet sources. Student 6 affirmed the notion that content creation was hard because they needed to adjust with what the audience reception would be like:

"Capture the audience's attention as well as its content like how you'll write it because when I wrote back then, I did not know where it was going because there was a process that should be like this, you should know your audience, and if it should be English or Tagalog in the news article. How will you interpret the news, feature, etc."

Group Workflow and Connectivity. Challenges in connectivity in group works emerged as the second theme. Students 1,3, and 5 attested to the struggles they had to go through during the planning stage in collaboration with others. These highlighted the lack of member input and communication in pre-production phases such as planning, brainstorming, and script writing. According to student 1, the draining nature of working on community broadcasting as a lone individual was a challenging experience:

"The community broadcasting is very draining for me because there are very few of us, and I am the only one working on it. From the ideas down to the visuals, I am the only one who created it. Even the script that we used; I was the one that worked on it. And the group benefits…."

Underscoring the risks associated with relying solely on one team member was demonstrated by the dependence on a classmate's script submission. When that individual failed to deliver as expected, it significantly setback the entire team. Student 3 experienced how team communication affected the quality of content in producing audio-visual materials. According to Student 3:

"The situation was hard for the whole team. When one member felt like he couldn't function, the whole team couldn't function as well…."

It emphasized the importance of effective communication, contingency planning, and shared responsibility within the team. He continued:

"The second script from the drama was from our "classmate," He was supposed to write for it but was not in the right mindset. He could not produce a quality script, and then it turns out; we cannot produce as a whole team."

Affirming that there will be disruptions in communication and group coordination if the workflow is poor could lead to the loss of valuable information (Cain, 2011). Looking at the theory of the Change Cycle, the frustrations seen from the experiences due to the limitations of connectivity comparing the setting of face-to-face portrayed a doubt to reality. Salerno (1992) states that people in this stage do not accept the situation wherein they will continue to look at the scenario with the old ways of collaboration in producing audio-visual materials. Given the sudden shift, they would prefer what they did before in group workflow and connects more than the online setup.

Virtual Communication. Without the ability to physically meet and engage in face-to-face discussions, the student had to rely on virtual communication platforms, such as video conferencing or messaging apps, which introduced additional complexities. Technical issues, varying levels of familiarity with virtual tools, and potential miscommunication due to the lack of non-verbal cues all contributed to the challenges faced by the student in effectively planning and scheduling in pre-production. *"It was so one way, but I was pushing for a dynamic communication, but then again, the silence was always the only thing that I ..."* as received by one of the students.

Securing a specialist for the student's story proved to be a demanding task. Establishing connections with specialists in the relevant field was crucial, as it often opened doors to potential interview opportunities. However, without pre-existing connections, the student encountered difficulties contacting experts. Student 4 stated:

> *"Unless you have connections where you can easily get a scientist or filed specialist, for example, in agriculture, we need to develop this story, it is hard to secure a point person."*

Communicating with their team and with resource persons leads the students to experience doubt about the reality (Stage 2) of communicating virtually. It was a challenge to them since they were lost to the same patterns (Stage 1) used before normally in pre-production communication.

Learning Environment. Another hurdle the students encountered was seeking advice in Development Communication, particularly in an online learning environment necessitated by the pandemic. As student 3 explained:

> *"Very hard to seek advisory, at that time, I find it hard like, the situation was I had barely had an experience in terms of audiovisual. Since it's my first year, I entered development communication during the pandemic. And everything is online, and yeah, it is basically in pre-production. I had no idea how things are managed."*

The lack of face-to-face interactions and minimal experience with audiovisuals compounds the difficulties. During the pandemic, multiple measures were taken to minimize the risk of students because instructor is unable to aid and from classmates as well (Schuenemann,2021). The absence of in-person guidance and mentorship may make it harder for the student to navigate the intricacies of the field and understand how pre-production tasks are managed effectively. The researchers saw a pattern of discomfort (Stage 3) from the theory of the Change Cycle since they were overwhelmed by shifting productions and learning environments online. Especially when they cannot reach their professors' advisory, the students' productivity also shut down, which was an overwhelming experience for them since they needed management in their learning.

Challenges in Production

In production, five themes on challenges emerged in producing AV materials: (1) equipment issues, (2) external factors, (3) COVID-19 restrictions and protocols, (4) virtual communication barriers, and (5) shift of learning environment.

Virtual Communication Barriers. These virtual barriers also affected the production stage. For Student 3, it was not easy to communicate virtually. He stated:

"Always delayed, it's hard to converse, and you don't get what they are saying, what they are feeling in that situation."

Concerning this, group participation took a toll on producing audio-visual materials because of virtual barriers in communication. Student 1 described the difficulty of motivating the team to film remotely. As for Students 3, 4, and 5, production issues are rooted in members who do not interact, disappear, or do not contribute to the group. Student 5 related the communication challenge, as follows:

"Of course, there are those group mates who are, you know, who will be ghosts (ignoring messages, AWOL); We don't know how to grade that person because they ghosted, and it's very hard because you have to think about the person…did not communicate if they will still do it or if someone can take their place."

Capturing the team's attention and availability emerged from the experiences of Students 1, 4, and 5. Due to the online setup, communications are discreetly planned, unlike face-to-face interactions wherein the students can see each other at school. These results affirm that resources, time, confidence, and the absence of a group were barriers to production (Dune, 2016). From Student 5 perspective:

"The online setup environment rendered time very… too flexible, so it was not easy to have a feel of the time for interviews like this. And follow-ups were hard to get, if interview letters online were used… also struggle to communicate and sometimes the information being given is somehow compromised."

Shift of Learning Environment. Due to the shift in the learning environment, students faced various challenges that tested their resilience and adaptability during production. With a full load of work, they were constantly overwhelmed and encountered unexpected obstacles that demanded quick problem-solving skills. During the pandemic, multiple measures were taken to minimize the risk of students because instructor is unable to aid and from classmates as well (Schuenemann, 2021). As told by Student 3:

"That time, it was solo. There was no assistance from any members; the only ones who can help you are sir and ma'am…. But other than that, I am alone in producing audio visuals, producing the program itself."

Compounding their difficulties, the student found it increasingly difficult to reach their feedback. The lack of accessibility to collaboration limited the student's ability to seek valuable feedback, address concerns, and receive guidance in crucial areas of production. It confirms how the shift in the learning environment reduces interaction between the learner and their student (Ramirez, 2021). Students 3 and 6 also mentioned an absence of immediate mentorship that created a sense of uncertainty and further intensified the challenges faced by the student. Student 6 affirmed this notion with her statement:

"So, with post-prod, was having it checked before we publish it on YouTube or Facebook. Having it checked was a problem because there were so many corrections, but that is expected because it will be for the viewers who will watch it."

From conceptualizing and planning to executing and delivering the project, Student 3 faced numerous considerations that demanded output after output. This overwhelming workload put their time management and organizational skills to the test, as they had to navigate the intricacies of producing compelling audiovisual material while meeting deadlines and maintaining quality.

External Factors. Another limitation recognized in production, especially in recording, is the external factors such as electrical interruption and noisy environment. Students 2 and 3 highlighted their experience as their challenges. The audio quality of the production was not the best due to the background noises. As described by Student 2:

"Since the village where I live has houses close to each other, you can hear dog noises. The thing is, we have a dog and more outside our house. So, when someone walks by, there would be barking noises. Since I record during the day, it is one of my biggest challenges."

On the other hand, the external factors that affected the production for Student 3 were power outages. Student 3 reasoned:

"It was hard when we were producing in radio drama; I was stuck in Mindoro. Yes, I was in Mindoro. If you didn't know, the electricity there disappears occasionally. Now, in situations within 24 hours, only 4 hours is when there is electricity. Then it would suck if you were sleeping, the electricity came back, and you could not charge the equipment. My grandmother told me the story. So, the challenge for me was that I was in Mindoro, and that was when we were recording for Gracia."

COVID-19 Restrictions and Protocols. Like the challenges mentioned in Pre-production, the students faced setbacks in acquiring talents such as interviewees and actors due to the restrictions and protocols of the COVID-19 pandemic. Students 2 and 3 unfold the lack of variety in interviewees due to restrictions. Student 2 had difficulty conducting interviews during the early stages of the pandemic due to lockdowns and restrictions, resulting in the interviewee being limited to a neighbor or whoever was within proximity. As for Student 3, she desired to gather everyone at once to avoid the repetitive interview, but due to pandemic limitations, it was executed one by one.

Students 4 and 6 seconded on the complications brought by the pandemic restriction in shooting visual materials on on-site locations. Student 4 confirmed on the note that:

"Since the pandemic, it was hard to go to places to shoot something. It is not required for us, but sometimes, going to the location to shoot [is necessary] to genuinely tell the story."

The challenges experienced by the student participants are like those faced by the entertainment media. Since the pandemic came, entertainment and film creatives have been forced to have alternatives in productions with the implementation of the Covid-19 restrictions (Ryu, 2022).

Equipment Issues. Without access to the necessary tools and devices, the students were forced to find alternative solutions or workarounds, which often compromised the quality and efficiency of their work. Students 1, 2, 3, and 6 expounded their limitations with equipment resources. Student 2 acknowledged the difference in studio productions:

"Challenge was the equipment because we cannot go to the AUP studio, so we need to get our equipment."

Moreover, Student 3 faced several technical difficulties that further exacerbated their limitations. A broken laptop, a blurry camera, and a bad internet connection presented persistent obstacles throughout production. These technical issues hindered the student's ability to create high-quality audiovisual content and impacted their overall resources during the production phase. Without reliable and functional equipment, student 3 struggled to achieve the desired production:

"Since it's my first time in the field, I didn't have the necessary equipment such as the microphones, the recording materials such as cameras that are up to date that will be easy for a student like me to produce audiovisual productions."

Student 1 faced difficulties meeting the project deadline. The scarcity of reliable internet, adequate equipment, and sufficient manpower posed significant challenges in project management and timely delivery. These limitations made it difficult for the student to adhere to the established timeline, leading to potential delays and compromises in the overall quality of the final production. Student 6 explained her stress in equipment since her mindset was from the face-to-face setting:

"We didn't have equipment like cameras. Because our mindset was still for face-to-face, where we had access to a camera by borrowing, but at that time, it was only a cellphone with no space, so we used a tablet. It was hard because I had to look for software too."

Limited access to equipment compromised the student's ability to deliver a good quality production and engaging audiovisual experience. Student 2 appealed that:

"The mic. The audio. Those. Because my mic was just the earphones, and I was only using the computer. I did not have a laptop then. When I was using the computer, it was hard because the jack of the earphones was different from the mic… I tried it, but the quality was not good enough."

This statement from Student 1, *"When we try to do it in the morning, due to equipment again, our microphones do not have noise cancellation,"* verified their audio production struggles in acquiring high-end equipment.

Overall, the students' experiences highlighted the critical role that resources, particularly equipment and technical infrastructure, play in the successful execution of audiovisual projects. As some of the main concerns in production would be the lack of "technical expertise" and "appropriate equipment" (Pennell, 2010)

Challenges in Post-production

The post-production phase of audio-visual materials presented the student with challenges such as (1) limited equipment and (2) lack of editing experience.

Limited Equipment. Limited equipment became a significant obstacle, preventing the students from shooting footage outside without proper permission due to community restrictions. This limitation restricted their ability to capture diverse and visually engaging content, potentially quality-produced audio-visual material. In editing, all students attested to challenges on equipment, especially on processors and software.

Student 4 had to contend with extended waiting times and reduced productivity, hindering their ability to meet deadlines and work efficiently.

"Because the laptop that I am using has an old processor. So, when I render, it is slow. I can edit and render from the laptop, but it collapses when the file is too large."

In addition to hardware limitations, software-related challenges posed significant hurdles for the student. Limited access to premium software, resulting from pandemic-related restrictions on media lab access, constrained their options for utilizing advanced editing tools and features. Student 2 said that her computer is the problem:

"Because my PC is so slow, like the equipment. Maybe it boils down to equipment, too, because exporting is so slow. It takes my time. And importing, it is slow."

Lack of Editing Experience. Their limited experience and unfamiliarity with the different interfaces of various software programs complicated the selection process. Student 6 mentioned her inability to edit content since she is not used to editing. Working with personal devices also presented challenges, particularly when splitting long videos. As for student 1, personal hardware and software limitations often made the output material more cumbersome and time-consuming, adding an extra layer of complexity to the post-production workflow. Student 1 explained that she must learn everything by the moment as explained:

"When I need it, I need to know how the transition works. This style is what I want, and that is when I will feel the need to search for it. The hardest part was that I did not think I needed editing software. And I did not know what software I was capable of. I may have very little experience with Vegas. Then when I downloaded it, the interface was far from what I remembered. So, I switched to Premiere Pro. When I saw it, it was so different. I do not know anything; it was far

more different than Vegas. I do not remember the others I used, but before Filmora, I even had PowerDirector. But then, it was not the PowerDirector I knew during high school. So, I changed again. I shifted to Filmora because they said it was the easiest. Finding the easiest video editing software to use was really the biggest challenge because there are so many, and you need to try every one of them before you can arrive at something you are comfortable with and easiest for me to navigate."

These challenges in post-production highlight the critical role of efficient equipment, software accessibility, and technical proficiency in creating high-quality audio-visual materials. There is a need-to-know basis in learning how to edit and learn the software to go through the post-production phase. Students 1, 3, 4, and 5 agreed to the need-to-know learning approach for multimedia production, and the challenge of learning new software due to the lack of equipment since one of the main aspects of skills needed in post-production is editing skills (Lu, 2012).

Addressing the Challenge in Producing Audio-visual Materials

Facilitating effective communication channels, virtually and in person, was essential to ensure smooth collaboration and mitigate potential misunderstandings. Providing training and support in navigating online platforms and promoting a sense of shared responsibility within the group could also help students overcome the obstacles posed by the virtual working environment. By fostering a culture of collaboration, open communication, and mutual support, the challenges faced by students in producing audio-visual materials could be effectively mitigated, leading to enhanced teamwork, improved outcomes, and a more enriching learning experience.

Evaluation of Concepts and Ideas in the Pre-Production Phase

In the pursuit of producing audio-visual materials, the students recognized the importance of double-checking and re-checking their work. This practice of double-checking became an essential part of their creative process, allowing them to refine their work and make necessary adjustments before finalizing their audio-visual materials. Proven in related studies, students emphasize the importance of double checking the work and seeing if there are any problems (McCulloch, 2013), especially in formulating ideas and concepts.

With restricted access to physical resources and limited opportunities for in-person collaboration, the students sought alternative approaches to gather ideas and find inspiration. They turned to existing materials and conducted extensive research to explore similar works and identify trends and innovative techniques used by other creators. By studying and analyzing these resources, Students 1,2,3 and 4 gained valuable insights, expanded their creative thinking, and broadened their understanding of effective audio-visual communication.

Combining double-checking and drawing inspiration from existing content, students 1 and 2 demonstrated a comprehensive approach to their audio-visual production. This holistic perspective allowed them to refine their ideas, ensure accuracy and quality, and leverage the collective knowledge and experiences of others in their field. Ultimately, these strategies contributed to the students' ability to create impactful and engaging audio-visual materials.

Planning was necessary for Students 2 and 4 to ensure the content was well thought out. Student 5 agreed as he elaborated on eradicating the communication challenges by *"how you strategize."*

Proper Delegation of Tasks in the Pre-Production Phase

The solution to address the communication and collaborative struggles was to reach out and coordinate, wherein all students 1-5 agreed. Student 4 further elaborated on her claims:

"I had coordination with my group mates. Sometimes I need to be straight or stern. Not being strict or grumpy, but I need to know their strengths. "When are you free? We need to set who will be assigned to these tasks. We need to finish this. Tell us if you cannot finish it so we can

help you." Not being too grumpy and a nagger, but since you are in college, you need to be professional. It is your responsibility, and you know something will happen, and your team will be affected."

This reflects how most students are found to have "worked as a team" during production and have gained insights on the importance of "professional communication with colleagues" (Al-khalifa, 2020). She believed that task delegation is important in the pre-production planning phase. In this notion, from the stage of discomfort to motivation, the students gained discovery to perspective. They still dislike the thought of team members not contributing but grasp the situation wherein one must act immediately and start with the basics, solving the challenge by delegating tasks.

Sense of Resourcefulness and Collaboration in Production

Students 1 and 2 posited how intrinsic motivation helped to combat the challenges in their skills and learning. They also recognized the advantage of utilizing the accessible resources they had. Students 2 and 3 used the people within the corner of their own homes as their talents as they produced audio-visual materials. Also, Student 4 took advantage of the Zoom platform to outsource talents. Student 4 clearly addressed these challenges on pandemic restrictions for location productions by trusting in her team. According to Student 4:

"We need to deploy a one-man team. He should know how to operate the camera, deliver the script, record the footage, and check everything. They should be an all-in-one person. He should also know how to troubleshoot if anything happens. Only one member can go to the site due to restrictions. Usually one, but at most, would be two team members who can go on-site or in the field who are allowed."

As for collaboration and communication issues, Students 2, 3, 4, and 5 believed that it all boils down to addressing such issues with communication itself. Student 3 was situated to be" more open to communicating with them. Specifically trying to see their comfortability."

Student 2 opted to record their productions during the night to avoid background noises, as she said:

"I opted to record during the night. I record past midnight, 2 am to 3 am. There would be no cars passing by. No gate screeching. No dog barking. No noise in the audio recording."

Importance of Investing in Quality Equipment for Production

The students' dedication to their audio-visual production journey was evident through their actions and investments in equipment and resources. While acknowledging their limitations in editing skills, Student 1 demonstrated their commitment by offering their laptop to someone skilled in editing. This contribution showcased their willingness to collaborate and leverage the expertise of others to enhance the overall quality of their project. Initially relying on their phone for recording, Students 1, 2, 3, and 6 recognized the need for better equipment and eventually invested in a web camera and quality microphones with improved resolution. This decision highlighted their understanding of the importance of visual quality in audio-visual materials and their willingness to invest in equipment that would enhance their production value.

Students 2 and 3 agreed that buying their equipment was a good investment because they had used it until now. Recognizing the importance of having their own audio and video editing tools, Students 1, 2, 3, 4, and 6 took the initiative to purchase their microphones and software. Student 2's pursuit of using a splitter as a solution demonstrates their resourcefulness and willingness to explore different options. This decision highlights their understanding of the importance of reliable and high-quality audio equipment in their work.

By prioritizing the microphone that met their high standards, Student 3 demonstrated their commitment to delivering professional-grade audio in his productions:

"I was working simultaneously. I bought condenser mics, better cameras, and a laptop. It still helps because we are being trained as pocket journalists, so you should be independent. Independence is the term."

Usage of Existing and Available Resources

Students 1-5 employed various strategies in their audio-visual project, such as utilizing stock footage, transferring files before starting, and incorporating filler shots. Students 2, 4, and 5 learned the importance of saving work and creating backups. Also, Student 4 followed and utilized a style guide for consistency and pulled an all-nighter to meet project deadlines. They even delivered a program without a final editing that was nerve-wracking, but it was made possible due to style guides and task delegation. Student 5 resorted to software piracy in certain situations, while Students 1, 2, and 3 provided means to invest in editing software.

In situations where the project exceeded the capacity of their laptop, Students 1 and 4 sought assistance from their group mates.

Effective communication and access to backup files emerged as crucial factors in the students' editing endeavors. Clear and timely communication facilitated seamless collaboration among team members, enabling them to coordinate their efforts and ensure a cohesive product. Additionally, maintaining accessible and updated backup files mitigated the risk of data loss and provided a safety net in case of unexpected setbacks.

Proactivity to Learning and Acquiring New Skills

In their journey of acquiring editing skills, Students 1 and 3 turned to YouTube tutorials, leveraging the vast resources available online to learn the intricacies of the editing process. From their term *"videos that will dumb it down for you"* and *"if it weren't for Youtube,"* the dedication and willingness to explore self-learning avenues enabled them to acquire valuable editing techniques and refine their skills. Thus, information sharing is connected to information seeking (Pilerot, 2011). When students regain control over the situation, discovery is put into perspective (Stage 4) then they make their way to being productive since they have understood the situation they are in (Stage 5).

The students' college group projects significantly improved their editing proficiency. Collaborating with peers, they gained hands-on experience and learned how to edit videos within the context of group assignments. This practical exposure enhanced their technical abilities and sharpened their understanding of the collaborative nature of video editing. Team norms, trust-based communication, and positive interaction lead to the team's success and creativity (Han, 2017).

To overcome limitations imposed by their laptop's capabilities, Student 4 devised a creative solution. She imposed:

"What I did was limit my editing to one-minute videos, then pass them to my group mates to stitch them up into a 5-minute video file. I make sure that the result of their edit is seamless, and they stitched it well."

Overall, the students' experiences in learning editing skills through online resources, collaborating with peers in college projects, and navigating technical limitations underscore the importance of adaptability, collaboration, and effective communication in video editing. Independence and proactivity are much more highlighted online due to "higher demands" (Huang, 2020).

Insights Gained from Producing Audio-Visual Materials During the Covid-19 Pandemic

The students gained many insights from their experience producing audio-visual materials during the Covid-19 pandemic. These insights of theirs still hold up to this day and have gained and improved skills in producing audio-visual materials. The Development Communication students have gained and realized the importance of (a) flexibility, (b) active and clear communication, and (c) management and opportunities.

Flexibility

Flexibility was emphasized by most of the students in producing audio-visual materials. Because of the pandemic, heavy restrictions were placed to access various resources like equipment, guidance, and assistance from the advisers. When the students faced the conditions and limitations, they had to be flexible, innovative, and creative.

Student 3 emphasized the importance of being flexible as it is one of the most important qualities of being a backpack journalist. Student 4 pointed out that making quick adjustments and applying new strategies were worth learning because they helped in situations like the pandemic with restrictions and limitations. Student 1 suggested browsing and looking for software they could be comfortable with. Student 2 said to enjoy the process and be open to criticism. Student 3 mentioned taking advantage of opportunities like going out and taking footage for future use while also trying to improve photography skills. Furthermore, Student 3 emphasized the importance of hands-on learning along with Student 6, like learning and understanding how to use the equipment properly. So just putting oneself in a situation to learn is important.

Active and Clear Communication

Student 4 mentioned the importance of contributing to the team, like providing input or output and working on things they are good at. They also add that if members are struggling, offer them assistance, which Student 5 wants to point out, where they mentioned the importance of being compassionate towards your teammates and understanding their situation so that the workflow can continue. Student 1 emphasized transparency in communicating what you want in production to everyone in the group to address and consider everyone's input because production is usually done in groups. Student 4 states, *"I think you need to be innovative. You need to know how to do things since our productions are not just any normal productions."* Student 4 acknowledged that the online setup differs from the normal production setting, where one can go anywhere and be unrestricted to shoot footage. However, with the current situation then, it was not easy. Hence, they had to change their approach to something unfamiliar, and that is where clear communication comes in to keep the production going. Then Student 1, who was more vocal about input and opinions, addressed the problems like the team was not contributing any output. The quality of produced output is influenced by how the leader communicates and the members' openness to communication (Harper, 1980).

Managing the Opportunities

Student 1 took advantage of emotion to fuel their motivation because motivation for them was crucial for the success of the production. Student 1 also added that avoiding people who provide no input and output should be considered and should go with people who are motivated and willing to collaborate. Student 2 brought up that those productions take time and should be planned because it is a process with many variables to consider and added that they had no trouble with their workflow because they had scheduled and planned the production.

With Student 5, time management was one of their realizations. Because of the various distractions that sometimes could not be resisted, time management plays a role in getting you back on track. Acquired knowledge from the pandemic was Student 3's insight because it helped them in terms of communicating better and had become more effective with the presence of other people. Seeking information is affected by having time management skills (Borgatti, 2003).

Therefore, the students realized their control and fully accepted the pandemic's influence in producing audio-visual materials. They realized that they can adapt to the situation by having active and clear communication, being flexible, and managing their opportunities to produce audio-visual materials.

The researchers saw how the research questions correspond to a certain stage in the Change Cycle Theory. The challenges in all three stages were under Stages 1-3, Loss, Doubt, and Discomfort. However, after identifying such experiences, the solutions to these challenges reflect Stages 4 and 5, wherein students of the Development Communication learn Discovery and Understanding as they address their challenges. Moreover, the insights acquired through the shift experience correspond to the cycle's last stage, Integration

(Stage 6). Given all the changes that happened to the students brought about by the pandemic, they integrated the insights they have learned through the shift into flexibility in producing audio-visual materials.

Conclusions and Recommendations

Based on the results, the Development Communication students had various challenges. During the pre-production, they faced challenges in content creation, group workflow and connectivity, virtual communication, and their learning environment. For the production phase, they had equipment issues, external factors, pandemic restrictions and protocols, virtual communication barriers, and shift of learning environment challenges. And in the post-production phase, they struggled with limitations in equipment and a lack of editing experience. Though they faced such challenges, they were still able to find solutions to address them and continue producing audio-visual materials to the best of their abilities during those trying times. With that said, they could also acquire new skills and general insights to help them in their field, like new strategies to communicate information, interpersonal communication, and technical skills like photography, editing, planning, management, and resource gathering. Due to their experiences producing audio-visual materials during the pandemic, the students recognized and enhanced the importance of flexibility, having active and clear communication, and managing the resources available, motivating them to finish the output.

The findings and inferences drawn from the study have led to the formulation of specific recommendations that may prove beneficial to pertinent the stakeholders with which the study is concerned. As output-based activities merge during the shift to online modality, this study suggests that DevCom teachers give students audio-visual learning materials as a guideline in the production process and prepare them for unexpected events like the pandemic. It is recommended that the students be allowed to share their experiences and learn from their peers. It will create a supportive learning environment that fosters collaboration and helps students overcome any obstacles they may encounter during their academic journey having the same circumstance as remote productions. This study recommends that parents utilize the insights from the research to understand their children's learning experiences better and provide the necessary support and equipment to help them succeed academically.

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ART & HUMANITIES

Communication Barriers, Sources of Information and Beliefs of Parents on COVID-19 Children's Vaccination

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Abstract

While vaccines are believed to be an effective tool to combat viruses, parents' acceptance of COVID-19 children's vaccination has been a challenge to public health. This descriptive-correlational study was intended to determine the communication barriers, sources of information, and beliefs of parents on COVID-19 children's vaccination and to investigate if there is a significant relationship among these variables. One-hundred seventy-four parents of children between the ages of 5 and 17 from Binan, Laguna consented to respond to the research questionnaires. The results revealed that individual communication barrier, interpersonal communication barrier and organizational communication barrier were of moderate extent. When it comes to sources of information, new media and interpersonal media were utilized more than traditional media. Parents indicated that they considered COVID-19 vaccination as slightly beneficial and efficient, yet they were also slightly threatened with its effects. Results also show that interpersonal communication barrier, organizational communication barrier, traditional media and new media have significant relationships with the perceived benefits of COVID-19 children's vaccination. Additionally, individual communication barrier has a significant relationship with the parents' perceived efficacy and threat of COVID-19 vaccine for children. These results imply that using reliable sources of information, understanding parental beliefs, and utilizing effective communication channels can help to increase vaccination rates and promote public health among practitioners. Furthermore, efforts should be made to ensure the provision of accurate and reliable information from various sources.

Keywords: *communication barriers, sources of information, health beliefs, parents, children's vaccination*

According to the World Health Organization (WHO, 2020), vaccination has been globally recognized as a cost-effective public health intervention for reducing childhood mortality and morbidity. However, the rapid development of the COVID-19 vaccines created vaccine hesitancy among some Filipinos in the Philippines (Landicho-Guevarra, 2021). Consequently, the Department of Health (DOH) encouraged the parents/guardians to vaccinate their children to get protection from COVID-19 and other emerging variants such as Delta and Omicron.

Inevitably, children are also susceptible to viruses like the viral disease infection COVID-19 which is why the Philippine government invested its time and money to avail the vaccines good for the younger population. Fortunately, the FDA authorized the PfizerBioNTech to be used for emergencies in the country for children 5 to 11 years old (FDA, 2021).

Roughly evaluated, the children population in the Philippines appeared to be 13.5 million. In the interview with the Health Secretary Francisco Duque, he estimated that the government would be inoculating 1.7 million children ages 5 through 11. As of February 26, 2022, Chief of National Vaccination Operation Center (NVOC) and DOH Undersecretary Myrna Cabotaje reported that the latest total number of vaccinated children ages 5 to 11 is 663, 384. The data indicates that only 5 percent of the group population has been vaccinated and 95 percent are not.

Several studies have been conducted to administer a research survey and an in-depth interview with parents to determine the factors and the barriers which constitute vaccine refusal or delay in receiving the vaccine for their child/children. Former NTF chief Secretary Carlito Galvez Jr. in one of his interviews said, "There is a need to address vaccine hesitancy as there are emerging variants of the coronavirus disease that will pose threats to the country's economic recovery" (Kabagani, 2021). Moreover, Dr. Philippe Duclos, WHO Senior Health Advisor for Immunization, Vaccines, and Biological Department and guest editor of the special issue, WHO Recommendations Regarding Vaccine Hesitancy, emphasized the need to act on the growing issue of vaccine hesitancy imposing a threat to the immunization programs (WHO, 2020).

Consequently, WHO (2020) referred to vaccine safety as one concern to many factors that constitute the hesitancy of the caregivers and other negative beliefs based on myths, e.g., vaccination of women leads to infertility, misinformation, and mistrust in the health care professional or health care system. Further, a study done in the UK focusing on measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA (Loomba et al, 2021) found that recent misinformation has caused a fall in intent among those who said they would certainly accept a vaccine. In contrast to other studies that focused on the relationship between exposure to misinformation regarding the COVID-19 vaccines, belief in and behavioral response to fake news proved based on their empirical evidence that it does not correlate or does not have any relationship to vaccine uptake among the participants.

In addition, misinformation about COVID-19 and vaccines has spread on social media platforms at a rate that has made the WHO coin the phrase infodemic. An infodemic is "too much information including false or misleading information in digital and physical environments during a disease outbreak" (Skaffle et al., 2022). Goldsteinet et al. (2015) stated that poor communication can compromise the delivery of vaccines and could weaken the confidence of people in vaccines. She reiterated communication being a neglected and unappreciated tool to its importance in the field of vaccination programs yet as a powerful tool for a successful vaccination drive. Shimp (2004) suggested that communication and vaccination must go hand in hand adhering to each other's components to achieve the public health goal.

Thus, communication in media and social conversation is primarily the medium that is dominated by a large amount and various information regarding vaccination. Nevertheless, response to vaccine hesitancy requires ceaseless efforts to combat misinformation in the media sphere and other platforms to strengthen positive perceptions on the issue by initiating strategic communication and other interventions to health programs. Ward et al. (2012) stated that good communication is part of a suite of measures needed to maintain high uptake of child vaccines.

In the Philippines, effective communication plays an important role to help the government and local government units (LGUs) close the immunization gap by addressing the concerns about vaccine

safety among the parents and determining the factors and the barriers that lower confidence in life-saving immunization. However, there is still a need to harness the relationship between healthcare providers and patients to cater to the needs of caregivers by providing reliable sources of information and securing trust and effective communication.

Nevertheless, the current study will be describing the characteristics of parents in terms of the following: communication barriers, sources of information, and their beliefs on children's COVID-19 vaccination. Thus, this study aims to answer the following questions:

1. How do the parents assessed the following communication barriers in relation to COVID-19 vaccination?
   a. Individual Communication Barriers
   b. Interpersonal Communication Barriers
   c. Organizational Communication Barriers
2. How do the parents utilize the following sources of information on COVID-19 children's vaccination?
   a. Interpersonal sources
   b. Traditional media sources
   c. New media sources
3. How do the parents assess their beliefs on COVID-19 children's vaccination in terms of the following?
   a. Benefits of COVID-19 children vaccination
   b. Efficacy of COVID-19 children vaccination
   c. Threat of COVID-19 children vaccination
4. Is there a significant relationship between the following variables:
   a. Communication barriers and beliefs on COVID-19 vaccination
   b. Sources of information and beliefs on COVID-19 Vaccination

Methodology

Research Design

This study used the descriptive-correlation research design. Descriptive design classifies the formation and describes what is truly present. It also estimates how frequently something occurs. By means of this, the design was applied to utilize the health belief model on variables such as communication barriers, sources of information, and beliefs of parents on COVID-19 children's vaccination. It described how the parents assessed the communication barriers, beliefs on COVID-19 children's vaccination, and how they utilized their sources of information. Correlational design is typically a cross-sectional study that entails the methodical exploration of the associations between and among variables. The design is used to determine if communication barriers and sources of information are related to the beliefs of parents' on COVID-19 children's vaccination.

Population and Sampling Techniques

The researchers carried out the study in the City of Binan, Laguna. Participants of the study were Filipino parents with at least one child between the ages of 5 and 17. The total number of respondents who participated on the survey was 174.

Instrumentation

Self-administered questionnaires were used in this study to gather data regarding the respondents' communication barriers, sources of information, and beliefs about COVID-19 vaccination. The first part contains the demographic profile of the respondents including gender, age, educational attainment, number of children, and family income. The second part consists of a series of questions that determine how the parents assessed the communication barriers in terms of the individual communication barrier, interpersonal communication barrier, and organizational communication barrier. It was composed of 12 five-point Likert scale items with the numerical rating as follows: strongly disagree (1), disagree (2), slightly agree (3),

agree (4), and strongly agree (5). The third part determines how the parents utilized the different sources of information in terms of interpersonal, traditional, and new media sources. It has 11 items where the respondents rated their media use as follows: never (1), rarely (2), sometimes (3), often (4), and always (5). The last part measures how the parents assessed their beliefs on COVID-19 and vaccination for children. It has 15 items with the numerical rating as follows: strongly disagree (1), disagree (2), slightly agree (3), agree (4), and strongly agree (5). Excerpt of the questionnaire was adapted from the study of Mohammed, et al. (2022).

Table 1 shows the reliability of the questionnaires. Cronbach's alpha is a check reliability approach that requires only one test run to accurately predict the reliability of a certain test. Cronbach's alpha is the average of the reliability coefficients obtained for all feasible object mixes divided into half-tests. (Gliem & Gliem, 2003).

Table 1
Reliability Scale

Items	Number of Items	Cronbach's Alpha	Verbal Interpretation
Individual Communication Barrier	5	.929	Excellent
Interpersonal Communication Barrier	4	.964	Excellent
Organizational Communication Barrier	3	.862	Good
Traditional Media	3	.765	Acceptable
New Media	4	.766	Acceptable
Interpersonal Media	3	.712	Acceptable
Beliefs	5	.936	Excellent
Efficacy	4	.831	Excellent
Threat	6	.937	Excellent

Data Gathering Procedure

The researchers coordinated with the local government of the City of Binan, Laguna and distributed the questionnaires to the respondents from March to April 2023. The questionnaires were collected after a week or two. The participants were informed of the data that will be acquired from them and assured the complete anonymity of the respondents. Participants' rights were discussed with them as well as their option to decline to take part in the study if they find it uncomfortable.

Ethical Considerations

Before the beginning of the data collection, the researchers obtained the approval from the Ethics Review Board of the Adventist University of the Philippines (AUP) to ensure that the investigation complies with ethical standards. All information acquired for this study was totally treated privately and used exclusively for academic purposes.

Analysis of Data

The data gathered in this study were coded, classified, quantified, tabulated, and analyzed based on the study's objectives. Descriptive statistics particularly the mean and standard deviation were used to describe how parents assessed the communication barriers and their beliefs in relation to COVID-19 vaccination. It was also used to describe how parents utilized the sources of information in relation to COVID-19 vaccination. Spearman's rho correlation was used to determine the relationship between communication barriers, media use, and beliefs.

Results and Discussion

Communication Barriers

This section describes the parents' assessment of the communication barriers related to COVID-19 children's vaccination. Communication barriers were quantified in terms of individual communication barrier, interpersonal communication barrier, and organizational communication barrier.

Individual Communication Barriers

The individual communication barriers of the respondents were measured using four descriptive statements and these are presented in Table 2. The four statements were assessed by the respondents as "*slightly agree*" with a grand mean of 3.16 and an overall standard deviation of 1.058. Thus, the respondents have a "*moderate*" individual communication barrier.

Table 2

Descriptive Statistics for Individual Communication Barrier

	Mean	SD	Scaled Response	Verbal Interpretation
I know the benefits of the COVID-19 children's vaccine to children's health against Coronavirus disease.	3.27	1.108	Slightly agree	Moderate
I understand what I read about the COVID-19 children's vaccination information.	3.32	1.128	Slightly agree	Moderate
I have enough knowledge of the COVID-19 children's vaccination information.	3.14	1.237	Slightly agree	Moderate
I can draw insights from the information that I have read about COVID-19 children's vaccination.	2.96	1.150	Slightly agree	Moderate
Grand Mean	3.16	1.058	Slightly agree	Moderate

Scoring System: 1.00 – 1.49 Strongly Disagree/Very Low; 1.50 – 2.49 Disagree/Low; 2.50 – 3.49 Slightly Agree/ Moderate; 3.50 – 4.49 Agree/High; 4.50 – 5.00 Strongly Agree/Extremely High

According to Ruggiero et al. (2021), there is a significant barrier among the parents, and this includes the parents' understanding of the information on COVID-19 children's vaccination due to the lack of communication and information from the health providers. Likewise, Akgun et al. (2022) explored the attitudes and knowledge regarding the COVID-19 vaccine. The study found that parents did not have enough knowledge on COVID-19 children's vaccination due to a lack of COVID-19 children's vaccination information. The moderate regard to the individual communication barrier of the respondents indicates their moderate knowledge and information on COVID-19 children's vaccination.

Interpersonal Communication Barriers

The interpersonal communication barriers of the respondents were measured using four descriptive statements and these are presented in Table 3. The four statements are described by the respondents as "slightly agree" on each of the four statements. The grand mean is 3.32 and the overall standard deviation is 1.036. Thus, the respondents have a "moderate" interpersonal communication barrier.

Table 3
Descriptive Statistics for Interpersonal Communication Barrier

	Mean	SD	Scaled Response	Verbal Interpretation
I trust what my family members say about COVID-19 children's vaccination even without any factual basis.	3.43	1.087	Slightly agree	Moderate
I trust what my relatives say about COVID-19 children's vaccination even without any factual basis.	3.33	1.100	Slightly agree	Moderate
I trust what my friends say about COVID-19 children's vaccination even without any factual basis.	3.26	1.069	Slightly agree	Moderate
I trust what my neighbors say about COVID-19 children's vaccination even without any factual basis.	3.26	1.150	Slightly agree	Moderate
Grand Mean	3.32	1.036	Slightly agree	Moderate

Scoring System: 1.00 – 1.49 Strongly Disagree/Very Low; 1.50 – 2.49 Disagree/Low; 2.50 – 3.49 Slightly Agree/ Moderate; 3.50 – 4.49 Agree/High; 4.50 – 5.00 Strongly Agree/Extremely High

The moderate regard to the interpersonal communication barrier of the respondents indicates their moderate trust of information on the COVID-19 children's vaccination in terms of trusting social network. These results imply that the parents who participated in this study tend to be misinformed. Thus, intervention from the public health to educate more the individuals are crucial as a number of parents have somehow trusted their family, friends, and neighbors as their source of COVID-19 children's vaccination information.

The study of Wang et al. (2021) on COVID-19 children's vaccination among healthcare parents proved that interpersonal factors such as information exposure through interpersonal communication and peers' experiences with COVID-19 vaccination had a substantial impact on healthcare workers' acceptance of COVID-19 immunization for their children. Families and friends have a huge impact on a decision of an individual who hesitates to accept COVID-19 vaccines. According to Cochran et al. (1993), parents consider their social network (family, friends, and relatives) as social support being the source of information as they have impacts of the broader social context on the security of child-parent attachment.

Organizational Communication Barrier

The organizational communication barriers of the respondents were measured using three descriptive statements and these are presented in Table 4. The three statements were described by the respondents as "*slightly agree*" with a grand mean of 3.00 and an overall standard deviation of 0.846. Thus, the respondents have a "*moderate*" organizational communication barrier.

Table 4
Descriptive Statistics for Organizational Communication Barrier

	Mean	SD	Scaled Response	Verbal Interpretation
The healthcare workers are not well-trained communication personnel for COVID-19 children's vaccination roll outs in the local health offices.	2.93	0.912	Slightly agree	Moderate

{table continues on the next page}

The healthcare workers use specialized words or difficult vocabulary on COVID-19 children's vaccination information.	3.09	0.908	Slightly agree	Moderate
The healthcare providers couldn't communicate the intent of the COVID-19 children's vaccination.	2.99	1.026	Slightly agree	Moderate
Grand Mean	3.00	0.846	Slightly agree	Moderate

Scoring System: 1.00 – 1.49 Strongly Disagree/Very Low; 1.50 – 2.49 Disagree/Low; 2.50 – 3.49 Slightly Agree/ Moderate; 3.50 – 4.49 Agree/High; 4.50 – 5.00 Strongly Agree/Extremely High

The result explains that the healthcare providers' skills in communication and their use of difficult vocabulary or specialized words are moderate. Despite the outcome, a number of parents find it challenging to comprehend especially healthcare workers who lack communication skills.

The results also imply that the healthcare system lacked well-trained communication personnel at the local level and it was because health communication was funded inadequately in the healthcare system (Oku et al. , 2016). Garcia et al. (2014) concluded that to increase the demand for immunization services, a better understanding of communication immunization barriers is necessary to help the EPI or Expanded Program on Immunizations to adjust communication strategies. Healthcare professionals must start to see the need to build trust between themselves and the parents to increase vaccine acceptance.

Parents' assessment of communication barrier was interpreted as moderate as presented in Table 5. However, despite the low impediment the result does still show significant concern to the parents' perception on COVID-19 children's vaccination information. Therefore, the grand mean has a compelling result to draw the attention of public health professionals and address the communication barriers.

Table 5

Descriptive Statistics on Overall Grand Mean for Communication Barriers

	Mean	SD	Scaled Response	Verbal Interpretation
Individual Communication Barrier	3.16	1.058	Slightly agree	Moderate
Interpersonal Communication Barrier	3.32	1.036	Slightly agree	Moderate
Organizational Communication Barrier	3.00	0.846	Slightly agree	Moderate
Grand Mean	3.16	0.604	Slightly agree	Moderate

Scoring System: 1.00 – 1.49 Strongly Disagree/Very Low; 1.50 – 2.49 Disagree/Low; 2.50 – 3.49 Slightly Agree/ Moderate; 3.50 – 4.49 Agree/High; 4.50 – 5.00 Strongly Agree/Extremely High

Sources of Information

This section presents answers to research question 2. It describes how parents utilized the different sources of information on COVID-19 children's vaccination which were specified in terms of (1) traditional media; (2) new media; and (3) interpersonal sources.

Traditional Media

The traditional media sources of information on COVID-19 children's vaccination of the respondents are measured using three traditional media and these are presented in Table 6. The three media sources are described by the respondents as "sometimes" with a grand mean of 2.63 and an overall standard deviation of 0.929. Thus, the respondents have "slightly utilized" the traditional media sources.

Table 6

Descriptive Statistics for the Utilization of Traditional Media

	Mean	SD	Scaled Response	Verbal Interpretation
Radio	3.17	1.180	Sometimes	Slightly Utilized
Newspaper	2.60	1.106	Sometimes	Slightly Utilized
Magazines	2.11	1.047	Rarely	Least Utilized
Grand Mean	2.63	0.929	Sometimes	Slightly Utilized

Scoring System: 1.00 – 1.49 Never/Not Utilized; 1.50 – 2.49 Rarely/ Least Utilized; 2.50 – 3.49 Sometimes/Slightly Utilized; 3.50 – 4.49 Often/Utilized; 4.50 – 5.00 Always/Highly Utilized

According to Pitch et al. (2021), individuals (parents) who receive information via traditional media sources such as national and local newspapers, and radio were most likely to accept the COVID-19 vaccine for their children. In contrast, Puri et al. (2020) promote social media as a drive that allows individuals to rapidly create and share content like COVID-19 children's vaccination information widely with their own opinion without editorial oversight. The result could help the public health programs bridge the gap of knowledge about children's vaccination for viral infection and re-consider utilizing radio the respondents' most utilized traditional form of media to air educational message to the public especially those parents who do not have access to other media sources of COVID-19 vaccine information.

New Media

The new media sources of information on COVID-19 children's vaccination of the respondents are measured using four new media and these are presented in Table 7. The four media sources are utilized by the respondents as "often" with a grand mean of 3.50 and an overall standard deviation of 0.901 which indicates utilization.

Table 7

Descriptive Statistics for the Utilization of New Media

	Mean	SD	Scaled Response	Verbal Interpretation
Facebook	4.22	0.990	Often	Utilized
Instagram	3.05	1.199	Sometimes	Slightly utilized
TikTok	2.97	1.292	Sometimes	Slightly utilized
YouTube	3.76	1.170	Often	Utilized
Grand Mean	3.50	0.901	Often	Utilized

Scoring System: 1.00 – 1.49 Never/Not Utilized; 1.50 – 2.49 Rarely/ Least Utilized; 2.50 – 3.49 Sometimes/Slightly Utilized; 3.50 – 4.49 Often/Utilized; 4.50 – 5.00 Always/Highly Utilized

Chan et al. (2020) stated that social media could be a vehicle to promote and motivate the public to take up COVID-19 vaccination by dispersing appropriate data and updating information about the COVID-19 vaccination approach. However, Puri et al. (2020) said that social media has continued to be a vehicle for the spread of COVID-19 misinformation.

Social media being the most utilized sources of information of the respondents yet much fake news-prone media calls the attention of the professionals to help new media users especially the parents to learn the reliable sources of information and good enough to recognize misinformation that plagues media platform.

Interpersonal Sources

The interpersonal sources of information on COVID-19 children's vaccination of the respondents were measured using three interpersonal relationships and these are presented in Table 8. The three interpersonal sources of COVID-19 children's vaccination are described by the respondents as "often" with a grand mean of 3.92 and an overall standard deviation of 0.828. Thus, the respondents "utilized" interpersonal sources, which means they rely on friends, relatives, and healthcare professionals to obtain information.

Table 8

Descriptive Statistics for the Utilization of Interpersonal Sources of Information

	Mean	SD	Scaled Response	Verbal Interpretation
Friends	3.92	1.109	Often	Utilized
Relatives	3.97	0.985	Often	Utilized
Healthcare Professionals (Doctors, Nurses, etc.)	3.87	1.133	Often	Utilized
Grand Mean	3.92	0.828	Often	Utilized

Scoring System: 1.00 – 1.49 Never/Not Utilized; 1.50 – 2.49 Rarely/ Least Utilized; 2.50 – 3.49 Sometimes/Slightly Utilized; 3.50 – 4.49 Often/Utilized; 4.50 – 5.00 Always/Highly Utilized

The result illustrates that parents' sources of information in terms of interpersonal sources were higher in relatives and friends followed by the healthcare practitioners. In contrast, according to Latkin et al. (2021), many people have high trust in several sources of COVID-19 information, trust in certain information sources such as the CDC and the health care providers associated with being vaccinated. Li and Zhou (2022) said that opinion leaders are crucial sources for encouraging parents to vaccinate their children since they boost the vaccination and emphasize the focus of COVID-19 vaccination promotion to strengthen parent's trust in the authority publicizing the efficacy and side effects of vaccines. Despite the gigantic effort of the healthcare system to educate people about the vaccines, they must continue to strategize may it be traditional or novel way to reach people who do not have the access to hear accurate information about the issues and crisis that the community is facing.

Table 9 shows the grand mean of the overall utilization of the sources of information of the parents on COVID-19 children's vaccination as slightly utilized. The result interprets despite the low utilization to some sources of the media specifically in traditional sources parents find new media and interpersonal useful as these got scored the most. Public health professionals and other experts may reach these people in circles and build rapport and learn why these media have been most utilized as their sources of information and least on traditional media on COVID-19 children's vaccination information.

Table 9

Descriptive Statistics on the Sources of Information

	Mean	SD	Scaled Response	Verbal Interpretation
Traditional Media	2.63	0.929	Sometimes	Slightly Utilized
New Media	3.50	0.901	Often	Utilized
Interpersonal	3.92	0.828	Often	Utilized
Grand Mean	3.35	0.685	Often	Utilized

Scoring System: 1.00 – 1.49 Never/Not Utilized; 1.50 – 2.49 Rarely/ Least Utilized; 2.50 – 3.49 Sometimes/Slightly Utilized; 3.50 – 4.49 Often/Utilized; 4.50 – 5.00 Always/Highly Utilized

Beliefs of Parents on Covid-19 Children Vaccination

This section aims to answer research question 3, "*How do the parents assess their beliefs on COVID-19 children's vaccination?*" Beliefs of parents on COVID-19 children's vaccination were illustrated and quantified in terms of (1) benefits, (2) efficacy, and (3) threat. The mean, and standard deviation (SD) served as the basis to define beliefs of parents on COVID-19 children's vaccination.

Benefits

The respondents' beliefs on COVID-19 children's vaccination benefits were measured using five descriptive statements and these are presented in Table 10. The five statements are described by the respondents as "*slightly agree*" with a grand mean of 3.22 and an overall standard deviation of 1.117. Thus, the respondents believed that COVID-19 children's vaccination is "*slightly beneficial*".

Table 10

Descriptive Statistics for Benefits of COVID-19 Children's Vaccination

	Mean	SD	Scaled Response	Verbal Interpretation
COVID-19 vaccination helps protect my child/children from getting COVID-19 and other variants of the virus.	3.24	1.182	Slightly agree	Slightly beneficial
COVID-19 children vaccination helps protect the people who are not allowed to be vaccinated for some health conditions such as allergies and HIV.	3.16	1.152	Slightly agree	Slightly beneficial
COVID-19 children vaccination reduced the risk of spreading the disease among my family members, schoolmates or colleagues, friends, neighbors, and other people in my community.	3.28	1.204	Slightly agree	Slightly beneficial
COVID-19 children vaccination protects my child/ children who had COVID-19 and prevents them from being hospitalized from a new infection.	3.20	1.139	Slightly agree	Slightly beneficial
COVID-19 vaccination prevents my child/children from dying if they get infected with COVID-19 and other variants of the virus.	3.23	1.216	Slightly agree	Slightly beneficial
Grand Mean	3.22	1.117	Slightly agree	Slightly beneficial

Scoring System: 1.00 – 1.49 Strongly Disagree/Not Beneficial; 1.50 – 2.49 Disagree A Bit/Least Beneficial; 2.50 – 3.49 Slightly Agree/Slightly Beneficial; 3.50 – 4.49 Agree/ Beneficial; 4.50 – 5.00 Strongly Agree/Highly Beneficial

Specifically, the respondents described the protection benefit of the COVID-19 vaccine to their children against coronavirus as slightly beneficial (M = 3.24; SD = 1.182). The respondents' belief on the protection benefits of COVID-19 children's vaccine to other people who are not allowed to be vaccinated was slightly beneficial (M = 3.16; SD = 1.152). The beliefs on the benefits of COVID-19 children's vaccination that the vaccination can reduce the spreading of the coronavirus in their community, the respondents' response is slightly beneficial (M = 3.28; SD = 1.204). The respondents' beliefs that when they allow their kids who are not infected with coronavirus to be jabbed with COVID-19 vaccine could protect their kids from a new infection is described as slightly beneficial (M = 3.20; SD = 1.139). The respondents' benefits that COVID-19 vaccine could prevent their children from dying even if they get contracted with COVID-19 is slightly beneficial (M = 3.23; SD = 1.216).

According to Olanrewaju (2007) and Hondo (2006), the attitude towards vaccination benefits shows the orientation and response of the person on the information he or she received. This is acquired through learning and educational process. It is also therefore seen as a tendency to react to certain situations leading to the expression of values with social groups that share similar values. A study done in Israel on parental perception of COVID-19 children vaccination testing the mediating role of the perceived COVID-19 vaccine benefits found that parents' willingness to vaccinate their children was extremely high and assumed that the general adult population level of knowledge regarding COVID-19 vaccination was also high with higher compliance with childhood vaccination, and higher perception of vaccination benefits such as to be able to resume children's pre-COVID-19 routine (Gallè et al., 2021).

Efficacy

The respondents' beliefs on COVID-19 children's vaccination efficacy are measured using four descriptive statements and these are presented in Table 11. The four statements are described by the respondents as "*slightly agree*" with a grand mean of 3.16 and an overall standard deviation of 1.074. Thus, the respondents believed that COVID-19 children's vaccination is "*slightly efficient*".

Table 11

Descriptive Statistics for Efficacy of COVID-19 Children's Vaccination

	Mean	SD	Scaled Response	Verbal Interpretation
COVID-19 children vaccination is an effective tool to prevent my child/children from getting infected with COVID-19.	3.22	1.192	Slightly agree	Slightly beneficial
Getting a single dose of the COVID-19 children's vaccine is enough to protect my child/children from getting COVID-19.	3.04	1.119	Slightly agree	Slightly beneficial
Getting a second dose of the COVID-19 children's vaccine could provide full protection to the child's/children's well-being against COVID-19.	3.22	1.137	Slightly agree	Slightly beneficial
Getting a COVID-19 booster shot for my child/children could give my child/children full protection against COVID-19.	3.16	1.126	Slightly agree	Slightly beneficial
Grand Mean	3.16	1.074	Slightly agree	Slightly beneficial

Scoring System: 1.00 – 1.49 Strongly Disagree/Not Efficient; 1.50 – 2.49 Disagree A Bit/Least Efficient; 2.50 – 3.49 Slightly Agree/Slightly Efficient; 3.50 – 4.49 Agree/Efficient; 4.50 – 5.00 Strongly Agree/Highly Efficient

Distinctively, the respondents' trust on the efficacy of COVID-19 vaccine to their children that the vaccine prevents their children from contracting COVID-19 is described as slightly efficient (M = 3.22; SD = 1.192). The belief of the respondents of getting only a single dose of Covid-19 vaccine is enough to protect their child/children from coronavirus is described as slightly efficient (M = 3.04; SD = 1.119). The respondents' response on the efficacy of getting a second dose of COVID-19 vaccine for their child/children is also described as slightly efficient (M = 3.22; SD = 1.137). Moreover, the respondents' response on the efficacy of the vaccine for children is described as slightly efficient (M = 3.16; SD = 1.126).

All the mean results were verbally interpreted as "Slightly Efficient". This expresses the beliefs of parents on the efficacy of COVID-19 children's vaccines as slightly effective and competent for their children according to the data's result.

Threat

The respondents' beliefs on the threat of COVID-19 children's vaccination were measured using six descriptive statements and these are presented in Table 12. The six statements were described by the respondents as "slightly agree" with a grand mean of 2.74 and an overall standard deviation of 1.042. Thus, the parents are "slightly threatened" on COVID-19 children's vaccination.

Table 12

Descriptive Statistics for Threat of COVID-19 Children's Vaccination

	Mean	SD	Scaled Response	Verbal Interpretation
Getting a COVID-19 children vaccine will cause my child/children to test positive for COVID-19.	2.89	2.89	Slightly agree	Slightly beneficial
Getting the COVID-19 vaccine could alter my child/ children's DNA.	2.64	2.64	Slightly agree	Slightly beneficial
Getting the COVID-19 children vaccine for my child/ children is dangerous to his/her/their health.	2.86	2.86	Slightly agree	Slightly beneficial
Getting the COVID-19 children's vaccine could make my child/children sick.	2.70	2.70	Slightly agree	Slightly beneficial
COVID-19 children vaccine could cause autism in my child/children.	2.59	2.59	Slightly agree	Slightly beneficial
COVID-19 children's vaccine contains toxic ingredients.	2.62	2.62	Slightly agree	Slightly beneficial
Grand Mean	2.74	1.042	Slightly agree	Slightly beneficial

Scoring System: 1.00 – 1.49 Strongly Disagree/Not Threatened; 1.50 – 2.49 Disagree A Bit/Least Threatened; 2.50 – 3.49 Slightly Agree/Slightly Threatened; 3.50 – 4.49 Agree/ Threatened; 4.50 – 5.00 Strongly Agree/Highly Threatened

Specifically, parents are slightly threatened that getting COVID-19 vaccine for their children will cause them to be positive for COVID-19 infection (M = 2.89; SD = 1.094). They are also slightly threatened that COVID-19 vaccine for children would alter children's DNA (M = 2.64; SD = 1.059). They are also slightly threatened that vaccines are dangerous to their children's health (M = 2.86; SD = 1.111). Likewise, they are slightly threatened that when a child gets vaccinated with COVID-19 vaccine, the kid would get sick (M = 2.70; SD = 1.144). There is also a slight threat that the COVID-19 vaccine for children could cause autism to children (M = 2.59; SD = 1.543) Lastly, parents are slightly threatened that COVID-19 vaccine for children contains toxic ingredients, with the respondents' response as slightly threatened (M = 2.62; SD = 1.204).

The overall results for the belief on COVID-19 vaccination for children is presented in Table 13. It was verbally interpreted as "slightly threatened" which leads to parents' doubt about the vaccines.

Table 13

Descriptive Statistics on Beliefs on Covid-19 Vaccination for Children

	Mean	SD	Scaled Response	Verbal Interpretation
Beliefs	3.22	1.117	Slightly agree	Slightly Beneficial
Efficacy	3.16	1.074	Slightly agree	Slightly Efficient
Threat*	2.26	1.042	Slightly agree	Slightly Threatened
Grand Mean	2.88	0.998	Slightly agree	Slight Beliefs

The respondents' confidence in the vaccine was dropping due to the fear and feeling threatened of the possible side effects of the COVID-19 vaccines for their children. However, in a study on COVID-19 Vaccination Intention, Fernandes et al., (2021) explained that parents perceived the threat of COVID-19 to their children as lower and the advantages of receiving vaccines are inferior to the vaccine's potential adverse side effects to their children.

The results indicate that the beliefs of parents on COVID-19 children vaccination's benefits, efficacy, and threat were slightly beneficial, slightly efficient, and slightly threatening. Belief of the parents' overall score interprets that their confidence to COVID-19 vaccine for children was low. The result signifies that vaccine providers and other health professionals' efforts were insufficient to elevate the confidence of parents on COVID-19 vaccine for children.

Relationship of Communication Barriers and Utilization of Sources of Information to the Beliefs on COVID-19 Vaccination

This section determines the answer to research question 4, "*Do communication barrier and sources of information have a significant relationship on the beliefs of parents on COVID-19 children's vaccination?*" using Spearman's rho correlation. The result of the analysis is shown in Table 14.

Table 14

Relationship of Communication Barrier and Sources of Information to Beliefs of Parents on COVID-19 Children's Vaccination

		1	2	3	4	5	6	7	8
1. Individual Communication Barrier	r	—							
	df	—							
	p	—							
Interpersonal Communication Barrier	r	0.077	—						
	df	170	—						
	p	0.317	—						
Organizational Communication Barrier	r	-0.006	0.288	—					
	df	172	170	—					
	p	0.940	<.001	—					
Traditional Media	r	0.174	0.110	0.124	—				
	df	172	170	172	—				
	p	0.022	0.151	0.104	—				
New Media	r	0.134	0.375	0.236	0.306	—			
	df	166	164	166	166	—			
	p	0.082	<.001	0.002	<.001	—			
Interpersonal Sources	r	0.100	0.465	0.387	0.437	0.595	—		
	df	172	170	172	172	166	—		
	p	0.190	<.001	<.001	<.001	<.001	—		

{table continues on the next page}

Benefits	r	0.708	0.137	-0.071	0.044	0.023	0.053	—	
	df	171	169	171	171	166	171	—	
	p	<.001	0.074	0.352	0.566	0.771	0.487	—	
Efficacy	r	0.690	0.168	0.038	0.083	0.019	0.093	—	—
	df	172	170	172	172	166	172	171	—
	p	<.001	0.028	0.623	0.273	0.807	0.222	<.001	—
Threat	r	-0.655	-0.024	0.203	0.044	0.048	0.040	-0.728	-0.730
	df	172	170	172	172	166	172	171	172
	p	<.001	0.753	0.007	0.561	0.540	0.597	<.001	<.001

Table 14 shows that the respondents' individual communication barrier has a significant relationship with the respondents' beliefs on COVID-19 children's vaccination. This implies that parents' perceptions of the benefits, efficacy, and threat of COVID-19 vaccines for children were affected by their knowledge and understanding.

Additionally, the respondents' interpersonal communication barrier influences their beliefs about the efficacy of the COVID-19 vaccine for children therefore, the result indicates that their social relationships with family, relatives, friends, and neighbors affect the respondents' beliefs on the efficiency of COVID-19 vaccination for children. However, the respondents' beliefs in the benefits and threats of COVID-19 vaccines are not affected by their trust in the people around them. Moreover, the respondents' organizational communication barrier impacts their beliefs on the threat of the COVID-19 vaccine for children, nevertheless, their beliefs on the benefits and efficacy of COVID-19 vaccine for children do not affect their organizational communication barrier. Consequently, the respondents' sources of information for COVID-19 vaccination do not affect their beliefs in the benefits, efficacy, and threat of COVID-19 vaccines for children.

Conclusions and Recommendations

Communication barriers, sources of information, and beliefs of parents play significant roles in determining the acceptance of COVID-19 vaccination for children. Clear and effective communication is necessary to provide accurate and accessible information about vaccine safety, efficacy, and benefits. The findings reveal that there is a significant relationship between individual communication barriers and parents' beliefs in the benefits, efficacy, and threat of COVID-19 children's vaccination. Moreover, organizational barriers do not significantly affect parents' beliefs. However, there is no significant relationship between sources of information and parents' beliefs in the benefits, efficacy, and threat of the vaccine. These findings suggest that addressing individual communication barriers may be important in improving parents' beliefs in COVID-19 children's vaccination. Additionally, efforts should be made to improve access to accurate and trustworthy information about the vaccine for all families, particularly those with lower incomes.

Development communication is used to support social development addressing the needs of the vulnerable ones through the service of quality communication. To conclude, working best on educating and empowering parents to be knowledgeable and making informed decisions about their children's health, touching every disparity in communication channels would help the government close the gaps in the immunization programs. Thus, development communication practitioners should take a holistic approach to their efforts, addressing both the communication barriers and the beliefs of parents regarding COVID-19 children vaccination. By using reliable sources of information, understanding parental beliefs, and using effective communication channels, practitioners can help to increase vaccination rates and promote public health. Furthermore, efforts should be made to ensure the provision of accurate and reliable information from various sources.

Furthermore, it is important for health centers to communicate effectively with parents about the COVID-19 vaccine. By addressing communication barriers, using culturally appropriate materials, providing accurate information, partnering with community organizations, conducting outreach activities, addressing concerns about side effects, and encouraging parent involvement, health centers can help to build trust and increase vaccination rates among children. It is important to continue monitoring the evolving landscape of media consumption and information sources of the parents. While the study did not find a significant relationship between information sources and parents' beliefs, it is crucial to stay vigilant and adapt communication strategies accordingly. Understanding how parents access and interpret information is essential for designing effective communication campaigns.

Further research and monitoring are recommended to track the effectiveness of these strategies and identify any additional factors that may influence parents' beliefs in different socio-demographic contexts. By continuously evaluating and adapting our approaches, we can foster better communication and overcome barriers to vaccination, ensuring the health and well-being of all children in our communities. A further suggestion to future research is to conduct a regression to identify predictors of beliefs on Covid-19 vaccination for children.

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ART & HUMANITIES

School Publication Processes and College Student Journalist' Efficacy

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Abstract

The study examined Adventist University of the Philippines student journalists' perceptions of publication processes and their correlation with efficacy. Results showed positive perceptions of training, budget allocation, and advisership. The efficacy of student journalists was high, with positive perceptions towards their own abilities and organization. Strong correlations were found between collective efficacy and training, and between means efficacy and budget allocation. The researchers recommend that student journalists deepen their understanding of publication processes, seek guidance from experienced journalists, and collaborate with other student journalists. Publication advisers should equip themselves with knowledge. Further research using qualitative methods is needed. The study provides insights into the perceptions and efficacy of student journalists, highlighting the importance of effective publication processes and the need for ongoing support and resources. Adequate programs and processes are necessary for student-run publications to fulfill their responsibilities effectively. Effective publication processes are positively related to different types of efficacies, which has implications for journalism education and training. With this study, valuable knowledge on the effectiveness of publication processes and the role they play in the efficacy of student journalists was established. Overall, the study emphasizes the importance of support and resources for student journalists and the need for ongoing research to better understand and enhance their efficacy.

Keywords: *school newspaper, school publication, student journalists, perception, self-efficacy, correlational*

School publications are generally run by students. Without proper programs or processes to support and build their efficacy, school publications are at risk of not performing the due tasks and responsibilities expected of them which is to serve as the voice of the student body and be the platform for it. The publication of student media plays a significant role in schools. They nurture the skills of student journalists inside the publication and provide the students a platform to express their merriments and grievances (Natividad & Gapasin, 2021). However, it's been reported that campus journalism lacks the ability to actively play advocacy, information, and educational roles in the community due to outdated course materials and modules crucial for school publications, specifically in schools and universities in developing countries such as Pakistan and India (Dernbach & Illg, 2020).

The importance of school publications is also greatly supported and strengthened by Republic Act No. 7079 (Phil), the Campus Journalism Act of 1991, which states that school publications and their journalists are to enhance the ethical and moral values, and critical and creative thinking of the Filipino youth.

In the Philippines, current school publications loosely operate based on the provisions of the Campus Journalism Act. Recent studies reveal four processes in school publications in the Philippines: (1) Training; (2) Budget Allocation; (3) Advisership; and (4) Publishing Procedures. Research by Natividad and Gapasin (2021) revealed that most school publications have no budget for training seminars for student journalists. Research by Dela Rosa et al. (2021) revealed that students face difficulty in editorial/journalistic endeavors such as news writing, feature writing, and editorial copy reading. Additionally, publishing procedures are slow and lack motivational support from the school and administration, leading to a decrease in readership.

Efficacy is the ability to complete a task successfully. There are currently three known types of efficacies: self-efficacy, collective efficacy, and means efficacy (Yaakobi, 2018). These types of efficacies have the power to affect people's course of action, the amount of effort they put forth, their tenacity, and their resilience in the face of challenges (Beatson, et al., 2019). Training factors have a role in boosting students' beliefs about their capacity to execute journalism tasks in the industry. There are numerous studies conducted about journalists and publications; however, these studies often focus on the spectrum of journalists who are already in the professional working force. Related literature and studies also reveal that there is a notable lack of research centered around schools.

This study generally aims to find an association between the processes of school publications and student journalists' efficacy. Utilizing a correlational research design, this study will seek answers to the following questions:

1. How do the respondents perceive publication processes in terms of:
   a. trainings
   b. budget allocation
   c. advisership and
   d. publishing procedures
2. What is the level of the respondent's efficacy in terms of:
   a. self-efficacy
   b. collective efficacy and
   c. mean efficacy?
3. Is there a significant relationship between the processes inside the publication and student journalists' efficacy?
4. Is there a significant difference in their efficacy when their sex is considered?

Methodology

Research Design

This descriptive-correlational quantitative study measures two variables and evaluates the correlation between them. This was used to determine the association between school publication processes and student journalists.

Population and Sampling Technique

The respondents to the study were media and literary student journalists who have been part of school publications or have had journalistic experience during their stay at a faith-based university. Specifically, these include students who have been staff in the yearbook publication and the broadcasting team. A total of 50 student journalists were drawn as samples for this study. Purposive sampling technique was used to gather responses.

Instrumentation

Online surveys made using Google Forms, composed of a total of three close-ended matrix questions that were measured using the Likert scale, were used to gather data. Through online surveys, geographical and economic concerns for both participants and researchers are easily resolved (Braun et al., 2020). The online survey questionnaires were sent directly through the email and Messenger accounts of school publication advisers, editors-in-chief, and student journalists. There were three parts to the questionnaire. Part 1 of the questionnaire focused on the demographic profile of students. Part 2 consisted of questions about students' perceptions of publication processes and was measured with the use of a 5-Point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questions in the publication processes were partially adapted from studies conducted by Natividad & Gapasin (2021) and Estella (2018). Part 3 consisted of questions about the three types of efficacies of the students: self-efficacy, collective efficacy, and means efficacy, which were also measured with the use of a 5-Point Likert scale ranging from 1 (strongly disagree) to 5 (Strongly Agree). The questions about efficacy were adapted from a study done by Yaakobi (2018).

Table 1 below presents the reliability of each subscale of the instruments used and determined through Cronbach's Alpha. According to Barbera et al., (2020), a score of 0.7 is good and acceptable while 0.8 and higher is excellent.

Table 1

Reliability Test Result of Publication Process and Efficacy

Variables	Number of Items	Cronbach's Alpha	Verbal Interpretation
Publication Processes			
Training	6	0.860	Good
Budget Allocation	8	0.856	Good
Advisership	4	0.786	Acceptable
Publication Procedures	6	0.763	Acceptable
Efficacy			
Self-Efficacy	4	0.885	Good
Collective Efficacy	3	0.872	Good
Means Efficacy	5	0.755	Acceptable

Data Gathering Procedures

The researchers submitted a request letter to the school heads of the respondents. This letter outlined the purpose of the study, its goals, and the confirmation of the non-disclosure of the responses of student journalists. Additionally, a cover letter outlining the study's objectives, voluntary participation, and participants' right to withdraw from it whenever they want was included with the online survey. Through social media accounts and the study's respondent's subject's email, a link to a Google Form containing the questionnaire was provided.

Data Analysis

Descriptive and inferential statistics were used to analyze the data collected in this study. Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize and describe the characteristics of the sample and the variables of interest. These were used to interpret the extent of AUP student journalists' perceptions of publication processes and their level of efficacy. Furthermore, Pearson r correlation was used to determine the relationship between perception of publication processes and efficacy. Lastly, a t-Test was used to determine whether there was a significant difference in their efficacy if sex was considered.

Results and Discussion

Perception on Publication Processes

Perception on Publication Processes in Terms of Training

Table 2 shows how the respondents perceived publication processes in terms of training. The grand mean is 4.45 with a standard deviation of 0.511, which means that respondents have positive perceptions of the training that is provided for them.

Table 2

Descriptive Statistics on Perceptions Toward Publication Processes in Terms of Training

	Mean	SD	Scaled Response	Verbal Interpretation
1.) Training, such as writing, photography, and design workshops help with my confidence in writing.	4.40	0.700	Agree	Positive
2.) Journalistic training has given me confidence in the quality of my work.	4.26	0.723	Agree	Positive
3.) Attending workshops with my fellow journalists makes me have confidence in them.	4.46	0.676	Agree	Positive
4.) Attending training increases the quality of my team's work.	4.60	0.606	Strongly Agree	Highly Positive
5.) Journalism training, seminars, and workshops are necessary to nurture me as a journalist.	4.58	0.609	Agree	Positive
6.) Journalism training, seminars and workshops make me feel like the school publication has sufficient resources.	4.42	0.673	Agree	Positive
Grand Mean	4.45	0.511	Agree	Positive

Legend: 1-1.49 = Strongly Disagree/Negative; 1.50-2.49 = Disagree/Slightly Negative; 2.50-3.49 = Moderately Agree/Moderately Positive; 3.50-4.49 = Agree/Positive; 4.50-5 = Strongly Agree/Highly Positive

Results show that respondents agree that training helps with their confidence in their writing (mean = 4.40; SD = 0.700), and the quality of their work (mean = 4.26; SD = 0.723); this means that receiving training makes the respondents write with greater confidence and produce higher-quality works. Respondents *agree* that they develop a greater sense of trust and respect for their fellow journalists' abilities when they participate in workshops together (mean = 4.46; SD = 0.676). AUP journalists also *strongly agree* that training is necessary to nurture them as journalists (mean = 4.58; SD = 0.609) as well as increase the quality of their team's work (mean = 4.60; SD = 0.606). Respondents *agree* that training and workshops are an indication of sufficient resources (mean = 4.42; SD = 0.673).

A study by Poluekhtova et al. (2020) revealed that student journalists greatly benefit from journalistic training, stating that it provides "professional competencies, social cognitive, and behavioral components"

that further their development as student journalists. Additionally, according to Bui & Moran (2020), increasing the assimilation of journalistic training, specifically production and consumption, and the technical skills of student journalists are important to training successful journalists.

Perception on Publication Processes in Terms of Budget Allocation

Table 3 shows how the respondents perceived publication processes in terms of budget allocation. The grand mean is 4.52 with a standard deviation of 0.488, which means that respondents have a highly positive perception of the budget allocation that is given to them.

Table 3

Descriptive Statistics on Perceptions Toward Publication Processes in Terms of Budget Allocation

	Mean	SD	Scaled Response	Verbal Interpretation
1.) I feel like I can be an effective journalist when tools such as computers, cameras, and design programs and financial assurance are provided	4.54	0.676	Strongly Agree	Highly Positive
2.) Having enough budget allocated for publishing increases my chances of gaining opportunities for workshops and competitions as a journalist.	4.58	0.575	Strongly Agree	Highly Positive
3.) My team is motivated to produce more work when there is financial assurance.	4.42	0.731	Agree	Positive
4.) I feel like my team can deal with any journalistic situation effectively when tools and financial assurance are provided	4.48	0.707	Agree	Positive
5.) Enough funds for the publication increase the journalistic opportunities, such as workshops and competitions my team can gain.	4.60	0.606	Strongly Agree	Highly Positive
6.) Sufficient budget enables student journalists in the publication to work more effectively.	4.50	0.614	Strongly Agree	Highly Positive
7.) Sufficient budget for publications gives me confidence in the school publication's resources	4.40	0.756	Agree	Positive
8.) Having enough budget allows student journalists to have more opportunities to enhance their skills in journalism, such as writing, photography, and graphic design.	4.76	0.431	Strongly Agree	Highly Positive
Grand Mean	4.52	0.488	Strongly Agree	Highly Positive

Legend: 1-1.49 = Strongly Disagree/Negative; 1.50-2.49 = Disagree/Slightly Negative; 2.50-3.49 = Moderately Agree/Moderately Positive; 3.50-4.49 = Agree/Positive; 4.50-5 = Strongly Agree/Highly Positive

It reveals that respondents *strongly agree* that with a sufficient budget, they can gain more opportunities as journalists (mean = 4.58; SD = 0.575) and be more effective if sufficient tools and financial assurance are provided (mean = 4.54; SD = 0.676). They also *agree* that financial assurance motivates their team (mean = 4.42; SD = 0.731), helps them better deal with journalistic situations when tools and financial assurance are provided (mean = 4.48; SD = 0.707), and makes them feel secure in the resources of the publication (mean = 4.40; SD = 0.756). Respondents *strongly agree* that sufficient funds help journalists work more effectively as a collective (mean = 4.50; SD = 0.614) and increase journalistic opportunities (mean = 4.60; SD = 0.606) and pursuits to improve (mean = 4.76; SD = 0.431).

A study by Natividad and Gapasin (2021) revealed that student trainees are not afforded the necessary budget to effectively become student journalists, stating that proper allocation of funds for the training of advisers and student journalists is essential in ensuring the success of student journalists. Additionally, according to Espadero (2022), proper budget allocation ensures that student journalists and publications are provided with the necessary resources, such as printing costs, training, and photo supplies for journalistic activities.

Perception on Publication Processes in Terms of Advisership

Table 4 shows how the respondents perceived publication processes in terms of advisership. The grand mean is 4.58 with a standard deviation of 0.480, which means that respondents have a highly positive perception of the experiences provided to them by their advisers.

Table 4

Descriptive Statistics on Perceptions Toward Publication Processes in Terms of Advisership

	Mean	SD	Scaled Response	Verbal Interpretation
1.) A skilled publication adviser makes me confident in pursuing journalism within the publication.	4.70	0.505	Strongly Agree	Highly Positive
2.) A capable publication adviser increases my team's confidence in journalistic pursuits inside the publication.	4.48	0.762	Agree	Positive
3.) A knowledgeable publication adviser gives me the impression that the school publication has the necessary resources to operate effectively.	4.68	0.513	Strongly Agree	Highly Positive
4.) A publication adviser with many connections makes me feel confident in the school publication's sources and tools.	4.46	0.646	Agree	Positive
Grand Mean	4.58	0.480	Strongly Agree	Highly Positive

Legend: 1-1.49 = Strongly Disagree/Negative; 1.50-2.49 = Disagree/Slightly Negative; 2.50-3.49 = Moderately Agree/Moderately Positive; 3.50-4.49 = Agree/Positive; 4.50-5 = Strongly Agree/Highly Positive

Table 4 shows that respondents agree that advisers with many connections give them confidence in the publication's resources (mean = 4.46; SD = 0.646), and a capable adviser makes their team confident in pursuing journalism (mean = 4.48; SD = 0.762). There is a strong agreement from the respondents that skilled advisers make them feel personally confident in pursuing journalistic activities (mean = 4.70; SD = 0.505), as well as security in the resources needed for the operation of the publication when the adviser is knowledgeable (mean = 4.68; SD = 0.513).

According to Estella (2018), some student publication advisers do not have the necessary journalistic experience to handle student journalists; they are not provided with sufficient training or seminars to handle their advisory, and they are overworked on top of their 40-hour work schedule and the non-reduction of their class or subject load. This in turn reduced the number of student journalists in the school and greatly affected student journalists' effectiveness in journalistic activities.

Perception on Publication Processes in Terms of Publishing Procedures

Table 5 shows how the respondents perceived publication processes in terms of publishing procedures. The grand mean is 3.46 with a standard deviation of 0.698, which means that respondents have a moderately positive perception of the publishing procedures that they have undergone.

Table 5

Descriptive Statistics on Perceptions Toward Publication Processes in Terms of Publishing Procedures

	Mean	SD	Scaled Response	Verbal Interpretation
1.) Negative technical feedback on my work makes me doubt my writing ability.	3.12	1.118	Moderately Agree	Moderately Positive
2.) Censorship restricts my ability to enhance my skills in journalistic writing and broadcasting.	3.56	1.053	Agree	Positive
3.) Delays in approving my submitted works make me feel discouraged.	3.44	1.091	Moderately Agree	Moderately Positive
4.) Rejected works discourage our team from making more publication content.	3.08	0.944	Moderately Agree	Moderately Positive
5.) Censorship restricts my team's ability to enhance their skills in journalistic writing and broadcasting.	3.52	1.015	Agree	Positive
6.) The quality of the resources I use (cameras, computers, software) affect my ability to produce publication materials.	4.02	0.958	Agree	Positive
Grand Mean	3.46	0.698	Moderately Agree	Moderately Positive

Legend: 1-1.49 = Strongly Disagree/Negative; 1.50-2.49 = Disagree/Slightly Negative; 2.50-3.49 = Moderately Agree/Moderately Positive; 3.50-4.49 = Agree/Positive; 4.50-5 = Strongly Agree/Highly Positive

The results of the study in Table 5 show that respondents moderately agree that negative technical feedback (mean = 3.12; SD = 1.118), delays in approving submissions (mean = 3.44; SD = 1.091), and rejection of works (mean = 3.08; SD = 0.944) make them feel discouraged. On the other hand, respondents agree that censorship restricts their personal (mean = 3.56; SD = 1.053) and team (mean = 3.52; SD = 1.015) growth as journalists. They also agree that the quality of resources affects their ability to produce content for the publication (mean = 4.02; SD = 0.958).

School newspapers can be a tremendous source of information and entertainment for high school and college communities, but they are frequently not taken seriously. This could be because some school newspapers do not adhere to proper school publication processes like training, editing, and proofreading, allocating resources, and choosing a qualified newspaper team. According to Dadayan (2022), publishing processes such as editorial procedures, adviser feedback, censorship, and the use of equipment act as a guide for student journalists to further their efficiency as journalists. Studies argue that policies, procedures, resources, and advisership further support the management of campus journalism (Dadayan, 2022). Furthermore, research by Dela Rosa et al. (2021) concludes that issues in publishing processes negatively affect the readership of student journalists' outputs.

Level of Efficacy

Level of Efficacy in Terms of Self-Efficacy

Self-efficacy refers to an individual's belief in their ability to successfully perform a specific task or behavior to achieve a desired outcome. It is a key concept in social cognitive theory, which emphasizes the role of self-beliefs, including self-efficacy, in shaping behavior and performance (Javed et al., 2021). Table 6 shows the level of the respondent's self-efficacy. The grand mean is 4.29 with a standard deviation of 0.598, which is interpreted as high.

Table 6
Descriptive Statistics on Level of Efficacy in Terms of Self-Efficacy

	Mean	SD	Scaled Response	Verbal Interpretation
1.) I will be able to achieve the goals that I have set for myself.	4.30	0.647	Agree	High
2.) I believe I can succeed in any endeavor to which I set my mind.	4.26	0.723	Agree	High
3.) I think that I can obtain outcomes that are important to me.	4.36	0.663	Agree	High
4.) I am confident that I can perform effectively on different tasks.	4.22	0.737	Agree	High
Grand Mean	4.29	0.598	Agree	High

Legend: 1-1.49 = Strongly Disagree/Very Low; 1.50-2.49 = Disagree/Low; 2.50-3.49 = Moderately Agree/Moderate; 3.50-4.49 = Agree/High; 4.50-5 = Strongly Agree/Very High

Table 6 shows that participants' ability to achieve goals is high (mean = 4.3; SD = 0.647). They also had a high level of self-efficacy when it came to success (mean = 4.26; SD = 0.723). The same goes for obtaining important outcomes (mean = 4.36; SD = 0.663). Lastly, data shows that respondents had a high level of self-efficacy when it came to their ability to perform different tasks (mean = 4.22; SD = 0.737). This means that they have a strong belief in their own abilities to successfully complete various tasks or activities.

According to Voica et al. (2020), self-efficacy is closely related to concepts such as confidence, competence, and motivation, and it can have a powerful impact on a person's ability to achieve their goals and succeed in various domains of life.

Level of Efficacy in Terms of Collective Efficacy

Collective efficacy involves not just the belief in one's own abilities but also the belief in the abilities of other group members and the belief in the group's ability to work together effectively. This shared belief in the group's ability to succeed can lead to increased motivation and effort, as well as greater resilience in the face of challenges (Meyer et al., 2020). Table 7 shows the level of the respondents' collective efficacy. The grand mean is 4.29 with a standard deviation of 0.699, which is interpreted as high.

Table 7
Descriptive Statistics on Level of Efficacy in Terms of Collective Efficacy

	Mean	SD	Scaled Response	Verbal Interpretation
1.) I am confident in my team's ability to work effectively	4.30	0.678	Agree	High
2.) I am confident in my team's ability to learn and develop new skills	4.36	0.693	Agree	High
3.) I am confident in my team's ability to prioritize tasks and manage time effectively	4.22	0.864	Agree	High
Grand Mean	4.29	0.669	Agree	High

Legend: 1-1.49 = Strongly Disagree/Very Low; 1.50-2.49 = Disagree/Low; 2.50-3.49 = Moderately Agree/Moderate; 3.50-4.49 = Agree/High; 4.50-5 = Strongly Agree/Very High

Table 7 shows that AUP journalists have a high level of trust and confidence in their team's ability to do, accomplish, and produce content. This means that they believe in their team's capabilities to achieve their goals and create quality work. Their team's ability to learn skills (mean = 4.36; SD = 0.693), manage tasks (mean = 4.22; SD = 0.864), and work effectively (mean = 4.30; SD = 0.678) are the things in which they have a high level of collective efficacy.

In a study by Vassilev et al. (2019), collective efficacy can be seen in a variety of settings, including workplaces, schools, sports teams, and communities. When a group has a strong sense of collective efficacy, members tend to feel more connected to one another and are more likely to work together cooperatively to achieve their goals.

Level of Efficacy in Terms of Means Efficacy

A high level of belief in the effectiveness of tools or resources available at one's disposal is called means efficacy (Yaakobi, 2018). Table 8 shows the level of the respondent's means efficacy. The grand mean is 4.34 with a standard deviation of 0.745, which is interpreted as high.

Table 8

Descriptive Statistics on Level of Efficacy in Terms of Means Efficacy

	Mean	SD	Scaled Response	Verbal Interpretation
1.) Having access to the necessary resources is important in achieving a goal.	4.54	0.613	Strongly Agree	Very High
2.) Not having enough resources decreases my motivation and slows down progress towards achieving a goal.	3.60	0.904	Agree	High
3.) Adequate resources are essential in effectively working on tasks.	4.36	0.693	Agree	High
4.) The availability of essential resources greatly influences the likelihood of success in any endeavor.	4.46	0.676	Agree	High
5 .) Without proper resources, it can be challenging to accomplish my objectives.	4.34	0.745	Agree	High

Legend: 1-1.49 = Strongly Disagree/Very Low; 1.50-2.49 = Disagree/Low; 2.50-3.49 = Moderately Agree/ Moderate; 3.50-4.49 = Agree/High; 4.50-5 = Strongly Agree/Very High

Participants generally agreed that having access to necessary resources is important in achieving a goal, as indicated by a mean score of 4.54 (SD = 0.613), which corresponds to a very high level of agreement. Participants also agreed that not having enough resources decreases their motivation and slows down progress towards achieving a goal, with a mean score of 3.60 (SD = 0.904) indicating a positive response. The mean score of 4.36 (SD = 0.693) indicated that adequate resources are essential to effectively working on tasks. Similarly, participants strongly agreed that the availability of essential resources greatly influences the likelihood of success in any endeavor, with a mean score of 4.46 (SD = 0.676). Finally, the mean score of 4.34 (SD = 0.745) showed that respondents agreed that without proper resources, it can be challenging to accomplish objectives.

Efficacy is important because it can influence a person's motivation to engage in a task or achieve a goal. If someone believes that they have the means necessary to complete a task successfully, they are more likely to feel confident and motivated to engage in the task (Petzsche et al., 2022).

Efficacy beliefs can have a significant impact on an individual's behavior and emotional well-being. High levels of efficacy are associated with better performance, increased motivation, and greater resilience

in the face of adversity. Conversely, low levels of efficacy can lead to feelings of helplessness, decreased effort, and a greater likelihood of giving up when faced with obstacles. Efficacy is a key concept in psychology and has important implications for growth, achievement, and well-being (Singh et al., 2019).

Relationship Between Publication Processes and Efficacy

Table 9 summarizes the study's findings. There is a substantial correlation between some variables and the participants' perceptions of publication processes and their efficacy. Training had a correlation coefficient of 0.440 for self-efficacy, 0.565 for collective efficacy, and 0.425 for means efficacy. Budget allocation had a coefficient of 0.158 for self-efficacy, 0.173 for collective efficacy, and 0.600 for means efficacy. Furthermore, advisership had a correlation coefficient of 0.470 for self-efficacy, 0.365 for collective efficacy, and 0.250 for means efficacy. Lastly, publishing procedures garnered a correlation coefficient of 0.077 for self-efficacy, 0.023 for collective efficacy, and 0.288 for means efficacy.

Table 9

Correlation Between Perceptions in Publication Processes and Efficacy

	Training		Budget Allocation		Advisership		Publishing Procedures	
Self-Efficacy	0.440	**	0.158		0.470	***	0.077	
Collective Efficacy	0.565	***	0.173		0.365	**	0.023	
Means Efficacy	0.425	**	0.600	***	0.250		0.288	*

*Note. * $p < .05$, ** $p < .01$, *** $p < .001$*

There is a moderate positive correlation between training and self-efficacy ($r = 0.440$, $p < .01$), indicating that respondents who perceived training to be an important factor in publication processes also tended to have a positive perception of their own ability to perform in the field of journalism. There is a weak positive correlation between budget allocation and self-efficacy ($r = 0.158$, $p < .05$), indicating that respondents who perceived proper funding and resources to be important factors in publication processes also tended to have a slightly more positive perception of their own ability in journalism. There is a strong positive correlation between budget allocation and collective efficacy ($r = 0.470$, $p < .001$), indicating that respondents who perceived proper funding and resources to be important factors in publication processes also tended to have a highly positive perception of the ability of their team in journalism. There is a weak positive correlation between advisership and collective Efficacy ($r = 0.077$, $p < .05$), indicating that respondents who perceived having capable journalism advisers to be important factors in publication processes also tended to have a slightly more positive perception of the ability of their team in journalism. There is a moderate positive correlation between publishing procedures and collective efficacy ($r = 0.365$, $p < .01$), indicating that respondents who perceived publication procedures to be effective factors in publication processes also tended to have a positive perception of the ability of their team in journalism. There is a weak positive correlation between publishing procedures and means efficacy ($r = 0.288$, $p < .05$), indicating that respondents who perceived publication procedures to be effective factors in publication processes also tended to have a slightly more positive perception of the average ability of their team members in journalism.

A study by Lee et al., (2021) reveals that high levels of efficacy have a positive effect on learners' knowledge, decision-making, and confidence. Additionally, a study by Bobkowski and Rosentahl (2021) stated that students, not limited to student journalists, who are provided with a positive school climate see an increase in their efficacy.

This is supported by this study's data, which suggests four things: First, the study found that training has a substantial relationship with all three types of efficacy: self-efficacy, collective efficacy, and means efficacy. This means that when student journalists are provided with training such as writing and design

workshops, they are more likely to feel confident in their abilities to perform their journalistic duties and to work effectively as part of a team. Additionally, the study suggests that providing training can also increase student journalists' access to the resources they need to succeed, which can further enhance their efficacy.

Secondly, the study found that budget allocation alone has a significant relationship with means efficacy. This means that when proper funding and resources are readily available to student journalists, they are more likely to feel that they can effectively perform their journalistic duties. However, budget allocation does not appear to impact self-efficacy or collective efficacy.

Thirdly, the study found that advisership has a significant relationship with two types of efficacies: self-efficacy and collective efficacy. This means that when student journalists have access to capable journalism advisers who can provide guidance and support, they are more likely to feel confident in their abilities and to work effectively as part of a team. Effective advisership can also help increase student journalists' access to resources, which can further enhance their efficacy.

Additionally, publishing procedures have a substantial relationship with means efficacy, which means that student journalists' perceptions of publication procedures' effectiveness are largely dependent on the resources available to them. If they have access to the resources they need, their means efficacy is positively impacted, which can enhance their perception of the effectiveness of the publication procedures. The study found a significant relationship between four variables - training, budget allocation, advisership, and publishing procedures—and three types of efficacies—self efficacy, collective efficacy, and means efficacy. Specifically, the data shows that training has a significant relationship with all three types of efficacies, with higher levels of training being associated with higher levels of efficacy. Similarly, advisership has a significant relationship with self-efficacy and collective efficacy, with higher levels of advisership being associated with higher levels of efficacy in these areas. Budget allocation, on the other hand, appears to have a significant relationship with means efficacy only, with higher levels of budget allocation being associated with higher levels of means efficacy.

Finally, publishing procedures have a significant relationship with means efficacy, with higher levels of publishing procedures being associated with higher levels of means efficacy. It's important to note that the study used statistical significance levels ($p < .05$, $p < .01$, $p < .001$) to determine the strength of the relationships between the variables, indicating the probability that the relationship is not just due to chance. Overall, these findings suggest that providing training, effective advisership, adequate budget allocation, and efficient publishing procedures can all help enhance the efficacy of student journalists.

Difference in Efficacy when Sex is Considered

As shown in table 10, males had a mean of 4.08 (SD = 0.632) for the variable self-efficacy, 4.02 (SD = 0.781) for collective efficacy, and 4.15 (SD = 0.593) for means efficacy, and females had a mean of 4.37 (SD = 0.570) for self-efficacy, 4.41 (SD = 0.589) for collective efficacy, and 4.31 (SD = 0.488) for means efficacy. The result of the study indicates that there is no significant difference in participants' efficacy when grouped according to sex, with a value of p higher than 0.1 according to Levene's homogeneity of variances test.

Table 10

Difference in Efficacy When Sex is Considered

	Group	N	Mean	SD	p	Verbal Interpretation
Self-Efficacy	Male	15	4.08	0.632	0.933	Not Significant
		35	4.37	0.570		
Collective Efficacy	Male	15	4.02	0.781	0.884	Not Significant
		35	4.41	0.589		
Means Efficacy	Male	15	4.15	0.593	0.494	Not Significant
		35	4.31	0.488		

The result shows that males and females have the same level of efficacy. However, according to a study by Dela Rosa et al. (2021), school publications tend to have a higher proportion of female student staff when it comes to sex. The results showed that female respondents were more involved in writing features, news, and opinion articles, while male members were more involved in visual media. Their study also found that female students are more likely to join the school publication and take up high editorial roles with greater responsibilities compared to their male peers.

Conclusions and Recommendations

Student journalists who participated in the study have a positive perception of publication processes, which include training, budget allocation, advisership, and publishing procedures. They view training such as art and writing workshops as integral parts of improving as student journalists. It was also concluded that budget allocation is essential to gaining more journalistic opportunities and resources. Additionally, data shows that advisership plays an important role in their effectiveness. On the other hand, it was revealed that publishing procedures such as criticism, censorship, and bureaucratic processes in the school are not as big a factor in student journalists' perceptions of publication processes. Likewise, their efficacy is also high, which means that student journalists have a high perception of their own abilities, the abilities of their organization, and the effectiveness of their journalistic endeavors.

The results indicate that there is a positive correlation between publication processes and efficacy. The strongest correlations were found between collective efficacy and training, and between means efficacy and budget allocation. The results suggest that effective publication processes are positively related to different types of efficacies, which could have implications for journalism education and training. Lastly, there is no significant difference in student journalists' efficacy when their sex is considered.

Based on the results, it is highly recommended that student journalists deepen their understanding of publication processes to increase their self-efficacy, seek feedback and guidance from experienced journalists and publication advisers, and seek to collaborate more often with other student journalists in and outside student publications. Moreover, advisers should better equip the student journalist with general knowledge regarding journalism, such as writing and graphic skills, editorial capabilities, and proofreading capabilities, to further nurture the skills of student journalists.

Researchers may do further studies on the difference between student journalists' perceptions of publication processes and their association with efficacy by further probing the differences between college and high school student journalists. Further, researchers may consider using a qualitative study to allow respondents to express their feelings about publication processes and efficacy, as well as other types of journalistic involvement, to broaden the scope of the study. It is also recommended to have an equal ratio of male and female respondents to show better and more accurate results in finding the difference between their efficacies.

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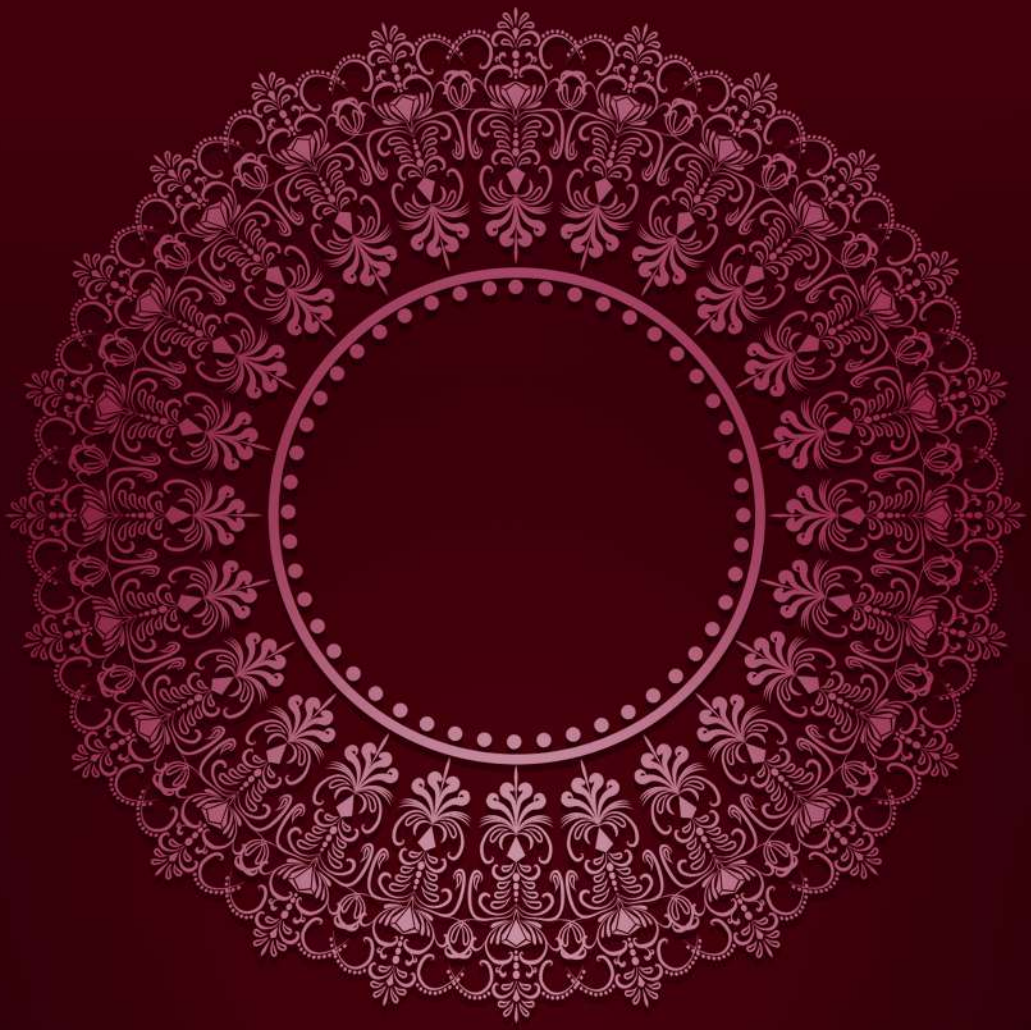

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