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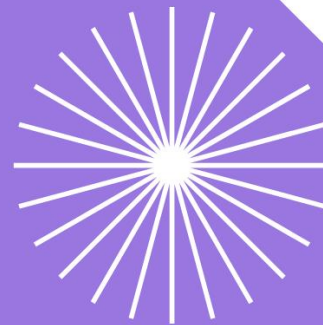
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Marines Is Like a  
Garment  
Without Buttons.”

-Adm. David Dixon Porter



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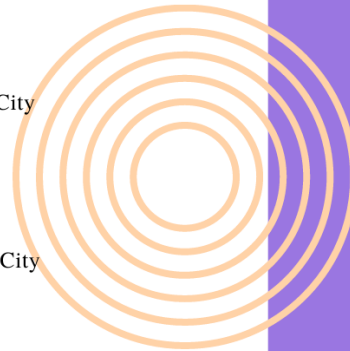
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**MARC (Maritime Research Cooperation) Journal**

### AIMS AND SCOPE

The Maritime Research Cooperation (MARC) Journal is a peer-reviewed journal which aims to publish for widest dissemination of new discoveries in the maritime field of knowledge. MARC journal provides a venue for scholars to publish their research findings for utilization and advocacy.

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The Maritime Research Cooperation (MARC) Journal is published by Women in Maritime Philippines-Western Visayas (WIMAPHIL-WV) in cooperation with St. Therese-MTC Colleges in Iloilo City, Philippines. MARC Journal is open to all maritime organizations and institutions' scholars who wish to have their original researches published in a peer-reviewed journal. The content of the journal covers the maritime discipline and competence.

Publication Frequency. Regular issues are published once a year (November). Special issues may be published separately in a particular year depending on the volume of articles received from contributors.

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## Satisfaction and Preferences on Student Publication

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**Abstract.** The students' satisfaction and expectations are a tool to re-invent and improve the student publication. The goals of this quantitative research are to discover the degree of satisfaction and the extent of preferences of the students of The Wheelhouse publication; hence, it utilized descriptive, correlational, and comparative methods to reveal the expectations of 270 student-readers. Results revealed that the students are satisfied with their school paper while they prefer the three journalistic styles. In terms of sex, the results showed that there is a significant difference between the male and the female. However, there is no significant difference when they are compared according to course. Finally, in the variable year level, there is a significant difference revealed in the technicalities among the second-year students. The outcome of this study was used as a guide in the composition of a campus journalism manual and a publishable dummy of a magazine.

**Keywords:** *Student Publication, Degree of Satisfaction, Extent of Preferences, Descriptive, Correlational, Comparative, Bacolod City, Philippines*

### INTRODUCTION

Student publication in the Philippines is a mandate of the law through Republic Act 7079 or also known as "Campus Journalism Act of 1991" that every academic institution, both secondary and tertiary in the country, is encouraged to establish and organize a student publication to uphold and protect the freedom of the press even in the campus level. In fact, the government is emphasizing the development of the students not only to learn inside their classrooms but also to think critically, develop their moral values, and strengthen the discipline of the Filipino youth through the articles they publish and as future leaders and members of the community.

The Wheelhouse is the official student publication of VMA Global College and Training Center, Inc. in Bacolod City, Negros Occidental. It is managed and run by the bona fide maritime and non-maritime students at the school through the selection process from the editorial policy set and approved by the school administration. The Wheelhouse publishes one printed material each semester annually depending on the designated publication funds yearly prepared by the moderator through the annual action plan submitted to the Vice President for Academic Affairs.

However, this student publication has a primary concern on its yearly evaluation because the students are not classified as the 'active audience' of their school paper. The students' degree of satisfaction on student publication has not been studied or explored and is important to address the students' needs and wants (Mokkala, 2010). Moreover, there are countless studies that measure the customer's degree of satisfaction in the field of business however, not in campus journalism (Schallom, 2012).

Likewise, in the extent of preferences on the journalistic articles on news, features, and opinion, the researcher has found Caparaz (2012) that his study has been similarly elucidated the results to determine the preferences of the students in terms of the three journalistic articles. It is important for the student publication to reveal the expectations and preferences of students to elucidate a higher degree of satisfaction.

Being the current moderator, the researcher sees the challenges to re-invent and improve the publication in terms of its journalistic content in order to satisfy the students' demand to be relevant and adequate with the trends, standards, and quality of articles the school paper wishes to publish. While it is really the discretion of the editorial board to decide the contents in all printed materials, they should also

consider the needs and wants of the studentry (Caparaz, 2012). Hence, this endeavor sought to determine what the students want to include and what they prefer to read in their school paper. The students are the campus press' clients; thus, the editorial board and staff of the student publication should meet the needs of the students by giving them higher level of satisfaction (Caparaz, 2012).

This study sought to address The Wheelhouse publication's concern on students' degree of satisfaction and extent of preference on journalistic contents of the printed material to improve the publication in wider aspects when it comes to content. Results of the study guided the researcher in composing a campus journalism manual and in designing a publishable dummy of a publication that corresponds to the needs and interests of the studentry.

### **Objectives of the Study**

This study aimed to determine the degree of satisfaction of students on the printed materials published by The Wheelhouse campus journalists of VMA Global College for Academic Year 2018-2019 in terms of content, technicalities, and ethics when they are taken as a whole and grouped according to sex, course, and year level.

Likewise, it investigated the extent of preferences of the students on the printed materials in terms of journalistic articles – news, features, and opinions when they are taken as a whole and grouped according to sex, course, and year level.

### **Framework of the Study**

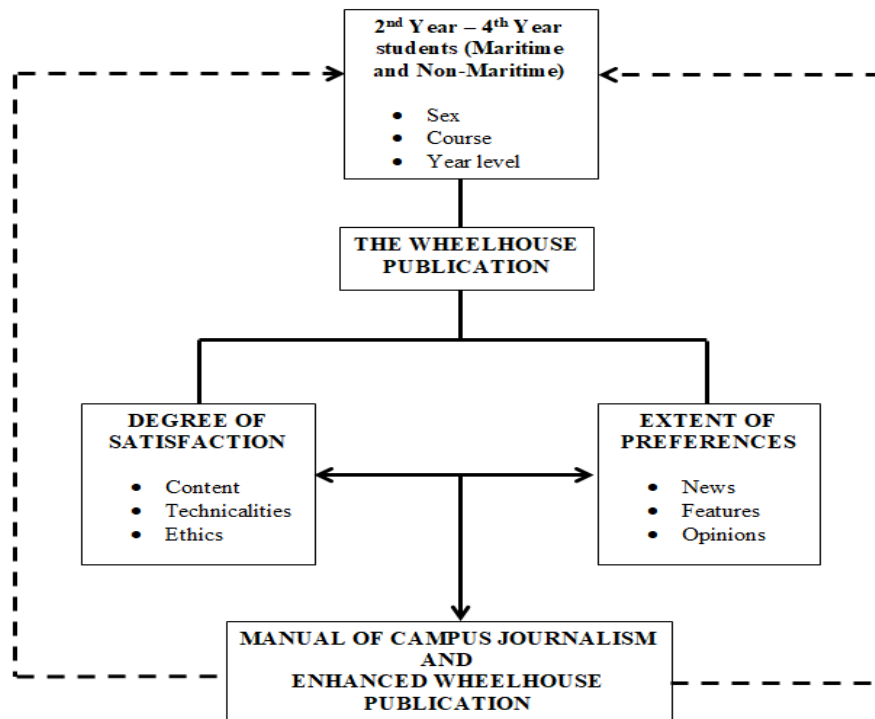
Uses Gratifications theory pioneered by Katz, Blumler, and Gurevitch (1974) answers why the students read the school paper because in mass communication, each media platform has gratifications or satisfaction one may achieve personally and that is what makes the students utilize/read the said school paper. Therefore, the theory emerged in response to the need for explanation as to why people use certain media and what are the benefits people get from them. On the other hand, Expectancy-Value theory, was used to uncover the extent of preferences from the college students when it comes to the journalistic styles namely: news, features, and opinions of the printed material because according to this theory, the students (readers) evaluate their extent of preferences based on their personal beliefs, experiences, and perceptions to make their choices to the said variables.

Fishbein (1974) emphasized in his theory that expectancy-value is a combination of beliefs and evaluations developed about a program, a program genre, the content, or a specific medium could be either positive or negative. If positive, it is likely that the individual would continue to use that media choice; if negative, then one would avoid it.

Furthermore, expectancy-value theory suggests that "people orient themselves to the world according to their expectations (beliefs) and evaluations."

Utilizing this theory focuses on behavior, behavioral intentions, or attitudes because they are seen as a function of an "expectancy or belief that the perceived probability that an object possesses a particular attribute or that a behavior will have a particular consequence and evaluation that determines the degree of affect, positive or negative, toward an attribute or behavioral outcome" (Palmgreen, 1984).

Furthermore, these theories bridged the gap between the students and the student publication in revealing the expectations, motivations, and beliefs that drive college students in making their choice of the student publication.



**Figure 1: Conceptual Model**

## METHODS

This study employed descriptive, comparative, and correlational designs of research to gather, quantify, and analyze the given data. The descriptive design was used to describe the degree of satisfaction and the extent of preference for student publication.

The comparative design was used to determine differences in the degree of satisfaction and extent of preference when the students are grouped according to the variables sex, course, and year level.

Meanwhile, the correlational was used to discover the relationship between the extent of preferences on journalistic styles of students and their degree of satisfaction. This research was conducted to 270 second to fourth Year college students from both maritime and non-maritime programs enrolled at VMA Global College during Academic Year 2018-2019. This study utilized the random sampling technique to ensure that every member has the same opportunity to be in the sample (Burns, 2014).

## RESULTS AND DISCUSSION

### *Degree of Satisfaction on the Printed Material published by the Wheelhouse Campus Journalists in terms of Content, Technicalities, and Ethics as a Whole*

Table 1 shows that as a whole, the respondents are satisfied with mean rating of 3.27 while its standard deviation is 0.43. In terms of the content, the students are satisfied with mean rating of 3.25 and standard deviation of 0.48 while the students are also satisfied with its technicalities with mean rating of 3.28 and standard deviation of 0.46. Moreover, the students are also satisfied with its ethics with mean rating of 3.27 and standard deviation of 0.49.



Through the statistical treatment of the data, the student-readers have determined their degree of satisfaction; it further shows that the students are satisfied with their school paper. Moreover, the results of the degree of satisfaction of students to their school paper as a whole have not been supported by any related studies since this study is new although the researcher has tried to search none has been discovered. However, the Uses and Gratifications theory further affirms that when the readers are satisfied, there are various gratifications from the said medium or printed material has been achieved and echoed to the students.

On the degree of satisfaction as to content, as a whole ( $M=3.25$ ,  $SD=0.48$ ) the respondents are satisfied with its content. When grouped by sex, male has higher satisfaction rating ( $M=3.29$ ,  $SD=0.47$ ) than females who read ( $M=3.16$ ,  $SD=3.16$ ). If grouped according to their course, maritime students have higher satisfaction rating with  $M=3.41$ ,  $SD=3.23$  than the non-maritime students. When grouped according to their year level, second year students ( $M=3.41$ ,  $SD=0.50$ ) are more satisfied than other year levels whereas, third year has  $M=3.23$ ,  $SD=0.44$  while fourth year students ( $M=3.21$ ,  $SD=0.52$ ) are less satisfied with The Wheelhouse publication content.

Results reveal that male respondents deliver a higher degree of satisfaction than female respondents; the researcher also assumes that male respondents have low expectancies in terms of their choices to their content choices in order to be satisfied. Meanwhile, female respondents tend to have more expectations on their school paper in terms of the content in order to be very satisfied. The variable sex is linked to their course since the maritime students are mostly male respondents; therefore, they have higher degree of satisfaction than the non-maritime wherein the majority of sex in the said program in female.

Furthermore, there are no related studies to anchor based on the results since this study is new. However, the Uses and Gratifications theory further affirms that when the readers are satisfied, there are various gratifications from the said medium or printed material has been achieved and echoed to the students.

On the degree of satisfaction as to the technicalities, as a whole ( $M=3.28$ ,  $SD=0.46$ ) the students are satisfied with The Wheelhouse publication technicalities. When grouped according to sex, again, male respondents got a higher satisfaction rating ( $M=3.30$ ,  $SD=0.46$ ) than female respondents ( $M=3.21$ ,  $SD=0.48$ ). When grouped according to their course, maritime ( $M=3.29$ ,  $SD=0.46$ ) is satisfied and the non-maritime ( $M=3.26$ ,  $SD=0.47$ ) is also satisfied. When grouped according to their year level, second year students ( $M=3.50$ ,  $SD=0.39$ ) are very satisfied with The Wheelhouse publication technicalities. Third year got  $M=3.22$ ,  $SD=0.45$  while fourth year students got  $M=3.27$ ,  $SD=0.48$  which they are also satisfied.

Male respondents again got a higher degree of satisfaction than the female respondents. This shows that both sexes, male and female, have various expectations, standards, ethos, and principles when it comes to their school paper as reflected in the results.

There are no related studies to anchor based on the results since this study is new. However, the Uses and Gratifications theory further affirms that when the readers are satisfied, there are various gratifications from the said medium or printed material has been achieved and echoed to the students.

On the degree of satisfaction of the respondents to ethics, as a whole ( $M=3.27$ ,  $SD=0.49$ ) they are satisfied. When grouped according to sex, male respondents ( $M=3.30$ ,  $SD=0.48$ ) are satisfied higher than female respondents ( $M=3.20$ ,  $SD=0.49$ ). When grouped according to their course, maritime ( $M=3.29$ ,  $SD=3.25$ ) are satisfied higher than the non-maritime ( $M=3.25$ ,  $SD=0.50$ ). When grouped according to their year level, second year ( $M=3.41$ ,  $SD=0.47$ ) has the highest satisfaction rating than the other year levels, whereas third year got  $M=3.25$ ,  $SD=0.47$  while fourth year got  $M=3.24$ ,  $SD=0.50$  are satisfied.

The ethical aspect of the school paper has been widely presented to be technical since it employs professionalism and in-depth study that those media practitioners and people who are mass communications

expert can determine accurately with regards to publication's ethical considerations when articles are published. The researcher assumes that since the ethical aspect of the student publication requires in-depth analysis and critical review, the respondents have answered and evaluated the questionnaire based on their beliefs, principles, schema, and understanding.

Furthermore, there are no related studies to anchor based on the results since this study is new. However, the Uses and Gratifications theory further affirms that when the readers are satisfied, it shows that there are various gratifications from the said medium or printed material has been achieved and echoed to the students.

The concept, satisfaction, covers several areas primarily the marketing-business field touching immensely on psychology and sociology and lastly, in the area of human communication down to the publication to be exact. The scope of published researches is focused on improving products to satisfy customers in the business aspect. This study is initiated since there are no related studies found by the researcher that can support the results of the findings, but there were foreign studies that are somewhat similar. The school paper is called the product; the students are labeled as consumers, and the student publication is the one that offers the services.

Anderson (1973) argued that satisfaction can be determined by subjective (e.g., customer needs, emotions) and objective factors (e.g., product and service features). Applying to the hospitality industry, there have been numerous studies that examine attributes that one may find important regarding customer satisfaction. Service quality and customer satisfaction are distinct concepts, although they are closely related.

The results of Jayasubramanian (2012) in his study did not coincide with the results since the study focused on the three major components of student publication: contents, technicalities, and ethics.

Ha (2016) in her master's thesis where she used the Hanoi People's Newspaper fan page. However, the study focused on finding a significant relationship between the reader's satisfaction and loyalty.

However, the study tested the demographic of reader related to satisfaction and loyalty, by using the t-test and ANOVA method, this study shows that there is no difference between male and female, education level and type of paper (online and hard copy) in terms of reader satisfaction and loyalty. However, the result shows the difference between the age of the reader and experience with HPN.

Furthermore, in this study, there is a significant difference between both sexes when it comes to the content of The Wheelhouse publication. It shows that the content, by the students' sex, there is various satisfaction level for each sex. There are contents that have to be included.

The study of Isyaku et al. (2015) on both traditional and online media explored the concept of satisfaction. Their study aimed to determine readers' satisfaction with online newspaper contents. Their study revealed that the findings revealed a moderate (Mean=3.36) level of readers' satisfaction with the contents of online newspapers.

It tells that Isyaku et al. (2015) has accepted the results of this study since the degree of satisfaction of The Wheelhouse publication as a whole is 3.27 while its standard deviation is 0.43 which means the readers are satisfied.

Xu (2012) has also conducted a study measuring readers' satisfaction. Her study has employed both quantitative and qualitative methods to drive out results. This master research has studied perceptions of Chinese readers towards the customer satisfaction of written mass media in Lisbon, Portugal. This study has four specific objectives: to understand customer satisfaction of content, customer satisfaction of delivery service, customer satisfaction of communicating with Journal Sino employees, and the last but not the least, the advertisement customer satisfaction. Journal Sino is the first Chinese language newspaper issued in Portugal. The results revealed that in general, customer satisfaction of Journal Sino is acceptable,

notwithstanding the results of The Wheelhouse publication that the degree of satisfaction as a whole is satisfied.

According to the theory, Uses and Gratifications theory examines, explains, and provides answers to why people use certain media and what benefits or gratifications they get after that. The basic assumption of this theory is that people use mass media for different reasons and seek to derive various gratifications (Gallion, 2010; Wimmer & Dominick cited in Asemah, 2011). The findings of this study, satisfaction on student publication have been accepted since satisfaction has been linked to gratification. The students see the student publication that it has to do with their needs.

**Table 1.** Degree of satisfaction of students on the printed material published by The Wheelhouse campus journalists in terms of content, technicalities, and ethics when taken as a whole

Variable	As a Whole			Content			Technicalities			Ethics		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
Course												
Maritime (n=174)	3.28	0.42	Sa	3.27	0.46	Sa	3.29	0.46	Sa	3.29	0.48	Sa
Non-Maritime (n=96)	3.24	0.45	Sa	3.21	0.51	Sa	3.26	0.47	Sa	3.25	0.50	Sa
Year Level												
2nd year (n=41)	3.44	0.40	Sa	3.41	0.50	Sa	3.50	0.39	VS	3.41	0.47	Sa
3rd year (n=136)	3.23	0.41	Sa	3.23	0.44	Sa	3.22	0.45	Sa	3.25	0.47	Sa
4th year (n=93)	3.24	0.45	Sa	3.21	0.52	Sa	3.27	0.48	Sa	3.24	0.50	Sa
Sex												
Male (n=195)	3.30	0.42	Sa	3.29	0.47	Sa	3.30	0.46	Sa	3.30	0.48	Sa
Female (n=75)	3.19	0.46	Sa	3.16	0.51	Sa	3.21	0.48	Sa	3.20	0.49	Sa
<b>As a Whole (n=270)</b>	<b>3.27</b>	<b>0.43</b>	<b>Sa</b>	<b>3.25</b>	<b>0.48</b>	<b>Sa</b>	<b>3.28</b>	<b>0.46</b>	<b>Sa</b>	<b>3.27</b>	<b>0.49</b>	<b>Sa</b>

Note: Sa=Satisfied, VS=Very Satisfied

### ***Extent of Preferences of students on journalistic styles in terms of news, features, and opinions as a whole***

Table 2 shows that as a whole, the respondents prefer the three journalistic styles: news, features, and opinions (M=3.31, SD=0.43). When grouped according to its indicators, the students have much preference with feature stories (M=3.33, SD=0.45), then followed by the opinion articles (M=3.30), and the news articles (M=3.29, SD=0.57).

Through the statistical treatment of the data, the student-readers have determined their extent of preferences on the three journalistic styles – news, feature, and opinion; it revealed that the students preferred the said three journalistic styles. These following preferences are the reflection of the gratifications sought by a consumer.

Moreover, the results of the extent of preferences of the three journalistic styles as a whole have been supported by Caparaz (2012); however, his study only differs in the methodology, objectives, and the way the results were presented. Caparaz (2012) also utilized the theory, Expectancy-Value, to validate his results. Meanwhile, according to his study, it at this moment affirmed the results of this study as it revealed the preferences of student-readers of The Wheelhouse publication that each student has their own criteria of choices, beliefs, and sentiments with regards to the three journalistic styles. Hence, the Expectancy-Value Theory has accepted the results.

**Table 2.** Extent of Preferences of students on journalistic styles in terms of news, features, and opinions as a whole

Variable	As a Whole			News			Feature			Opinion		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
Course												
Maritime (n=174)	3.29	0.44	Pr	3.29	0.61	Pr	3.30	0.45	Pr	3.27	0.57	Pr
Non-Maritime (n=96)	3.35	0.42	Pr	3.27	0.50	Pr	3.39	0.43	Pr	3.36	0.51	Pr
Year Level												
2nd year (n=41)	3.46	0.38	Pr	3.47	0.38	Pr	3.46	0.41	Pr	3.46	0.45	Pr
3rd year (n=136)	3.25	0.44	Pr	3.23	0.65	Pr	3.26	0.45	Pr	3.22	0.58	Pr
4th year (n=93)	3.35	0.42	Pr	3.28	0.51	Pr	3.39	0.44	Pr	3.35	0.52	Pr
Sex												
Male (n=195)	3.33	0.43	Pr	3.32	0.59	Pr	3.33	0.43	Pr	3.30	0.54	Pr
Female (n=75)	3.29	0.45	Pr	3.19	0.52	Pr	3.33	0.48	Pr	3.31	0.56	Pr
<b>As a Whole (n=270)</b>	<b>3.31</b>	<b>0.43</b>	<b>Pr</b>	<b>3.29</b>	<b>0.57</b>	<b>Pr</b>	<b>3.33</b>	<b>0.45</b>	<b>Pr</b>	<b>3.30</b>	<b>0.55</b>	<b>Pr</b>

Note: Pr=Preferred

Meanwhile, table 2A shows the results of mean sample of content descriptions of news articles: Local/Campus News (M=3.33, SD=0.68) most preferred, Political News (M=3.09, SD=0.74) preferred, International News (M=3.23, SD=0.68) preferred, National News (M=3.36, SD=0.66) most preferred, Business News (M=3.2, SD=0.67) preferred, and Sports News (M=3.4, SD=0.70) preferred.

The same table also shows the results of the extent of the preferences of students in terms of news articles as a whole (M=3.29, SD=0.57). When grouped according to sex, male respondents have high preference (M=3.32, SD=0.59) than female (M=3.19, SD=0.52). When grouped to course, maritime got M=3.29, SD=0.61 while the non-maritime got M=3.27, SD=0.50. When grouped to year level they preferred news articles, second year got M=3.47, SD=0.38, third year (M=3.23, SD=0.65), and lastly, the fourth year students who got the mean score of M=3.28, SD=0.51.

The students prefer to see national news in the publication. National news cover reports from the national level. It shows that the students in VMA Global College would want to read narratives from the campus journalists about the happenings in the Philippine government, issues on the society, and updates about their surroundings as what the local or campus news tells. However, this kind of content description could be integrated if done properly to other journalistic styles for example, societal discussions from the feature stories or the column sections since news stories could be a good source of peg as a basis of intellectual discussions and dialogues.

The scope of the campus news covers the events in the school or within the parameters of the school so that the students would be informed about the recent achievements of the school, accomplishments of the student organizations, and involvements of the students in or outside the schools. Usually, students wanted to see the involvement of all the stakeholders of the school starting with the school press releases from the school administration, the faculty & staff, students, and if there are programs to be spearheaded by the parents' council.

According to Caparaz (2012), most prefer to read and include news, opinion, feature, and science and technology sections in The Collegian, but there is a decline in the number of respondents who read its literary section. It can also be observed that if a respondent's frequency of readership of the Collegian is less, it is the entertainment and sports sections that he or she mostly prefers to see in the Collegian.

*Table 2a. Mean sample of content description of News articles*

<b>Content Description</b>	<b>M</b>	<b>SD</b>	<b>Interpretation</b>
Local/Campus News	3.33	0.68	Most Preferred
Political News	3.09	0.74	Preferred
International News	3.23	0.68	Preferred
National News	3.36	0.66	Most Preferred
Business and Corporate News	3.2	0.67	Preferred
Sports News	3.4	0.70	Preferred
<b>Total (n=270)</b>			

Table 2B shows the results of mean sample of content description of feature stories – Articles on culture, arts, and heritage (M=3.43, SD=0.66) most preferred, Movie/Book Reviews & Entertainment (M=3.4, SD=0.66) most preferred, Photo Essays/Galleries (M=3.38, SD=0.67) most preferred, Sudoku, crossword, and other puzzles (M=3.15, SD=0.77) preferred, Campus Personalities Articles (M=3.28, SD=0.70) most preferred, Education (Science, Technology, and Health) Articles (M=3.49, SD=0.60) most preferred, Celebrity Gossips (M=3.1, SD=0.78) preferred, Sketchpads and comics (M=3.36, SD=0.67) most preferred, Literary Articles (poems, short stories, etc.) (M=3.35, SD=0.66) most preferred, Gender Sensitivity Articles (M=3.36, SD=0.70) preferred, and Inspirational/Career/Success stories (M=3.48, SD=0.65) most preferred.

This also presents the results of the extent of the preferences of students in terms of feature articles as a whole (M=3.33, SD=0.45). When grouped according to sex, both sexes got M=3.33 however, male respondents got an SD of 0.43 while female respondents got SD=0.48. When grouped according to course, maritime (M=3.30, SD=0.45) while non-maritime (M=3.39, SD=0.43). When grouped according to their year level, second year has the highest preferred mean score of M=3.46, SD=0.41, followed after the fourth-year students (M=3.39, SD=0.44) and the third year students (M=3.26, SD=0.45).

Feature articles are the so-called 'heart' of the publication because of the light and pleasure it brings to the readers. It exploits the human side of the story, and it reveals all the universalities of being human to the readers because it involves emotions and much connection from the writer to the readers. The students wanted to see articles about culture and arts. VMA Global College has this kind of culture wherein it promotes the school spirit and the students wanted to feel that kind of empowerment that the school's culture should not disappear – it regulates the culture of discipline as what the school mission provides to all students.

This also defines that the results revealed that the students wanted to see photo essays since this is now a visual era. However, the students wanted to see their faces included in the printed material. Campus personalities are feature stories of the faculty or staff in the campus who has made an impact on students or school profiles who have joined. These sections are the "Welcome Aboard" and new admin posts in the campus.

Education articles cover stories that are informative. It includes articles from the psychology, health, sciences, technology, and the "How-to" or "DIY" articles that can assist or can give tips to the readers. With this kind of articles, the student paper would be an aid to students to reinforce learning. Sketchpads are the illustrations prepared by the cartoonists. Doodles and comics are examples of this. It brings dynamism and artsy effect to the school paper.

Lastly, the inspirational and career success stories are the most preferred content description of the student readers. In the theory of Uses and Gratifications theory, this kind of content description could able to strengthen personal identity as it inspires the student readers to apply the values in life like the person who has been featured to give enlightenment and encouragement despite life struggles to the students. There are two sections to be covered, the maritime section wherein the highlights of the stories are the successful mariners in the industry while in the non-maritime are those individuals who worked abroad and represented



internationally in the field of tourism and business. Their stories underscore from "rags-to-riches" stories and how to become a better individual in surviving life.

Moreover, the results of the extent of preferences of the feature stories have been supported by Caparaz (2012), however, in his study only differs in the methodology, objectives, and the way the results were presented. Caparaz (2012) also utilized the theory, Expectancy-Value, to validate his results. Meanwhile, according to his study, it at this moment affirmed the results of this study as it revealed the preferences of student-readers of The Wheelhouse publication that each student has their own criteria of choices, beliefs, and sentiments with regards to the three journalistic styles. Hence, the theories, Uses and Gratifications and Expectancy-Value Theories, have accepted the results.

**Table 2B.** Mean sample of content description of Feature articles

<b>Content Description</b>	<b>M</b>	<b>SD</b>	<b>Interpretation</b>
Article on culture, arts, and heritage	3.43	0.66	Most Preferred
Movie and entertainment reviews	3.4	0.66	Most Preferred
Photo essays/Galleries	3.38	0.67	Most Preferred
Sudoku, crossword, and other puzzles	3.15	0.77	Preferred
Campus personalities	3.28	0.70	Most Preferred
Education (Science, Technology, and Health) articles	3.49	0.60	Most Preferred
Celebrity Gossips	3.1	0.78	Preferred
Sketchpads and comics	3.36	0.67	Most Preferred
Literary articles (poems, short stories, etc.)	3.35	0.66	Most Preferred
Gender sensitivity articles	3.36	0.70	Preferred
Inspirational and career success stories	3.48	0.65	Most Preferred
<b>Total (n=270)</b>			

Table 2C shows the results of mean sample of content description of Opinion articles – Editorial Article (M=3.37, SD=0.66) most preferred, Student ‘Shout Outs’ (M=3.29, SD=0.84) preferred, and Column Articles (M=3.25, SD=0.66) most preferred.

The table also presents the results of the extent of the preferences of students in terms of opinion articles. The extent of preference of students on opinion articles as a whole (M=3.30, SD=0.55). When grouped according to sex, male respondents have M=3.30, SD=0.31 while female respondents have M=3.31, SD=0.56. When grouped according to course, non-maritime (M=3.36, SD=0.51) has much preference with opinion articles than the maritime (M=3.27, SD=0.57). When grouped according to their year level, second year students got M=3.36, SD=0.45, third year students got M=3.22, SD=0.58, and fourth year students got M=3.35, SD=0.52.

Editorial articles are to be written by the members of the editorial board of the student publication. The students have mostly preferred this particular content description since it measures and determines the stand and the voice of the publication on a particular issue. Moreover, it expresses the opinion of the school when the school paper reaches outside the campus. Columns too are most preferred. It deliberately tells that students wanted to read opinion to challenge critical thinking skills and in-depth analysis of a certain issue to be influenced.

Moreover, the results of the extent of preferences of the opinion articles have been supported by Caparaz (2012), however, in his study only differs in the methodology, objectives, and the way the results were presented. Caparaz (2012) also utilized the theory, Expectancy-Value, to validate his results. Meanwhile, according to his study, it hereby affirmed the results of this study as it revealed the preferences of student-readers of The Wheelhouse publication that each student has their own criteria of choices, beliefs, and sentiments with regards to the three journalistic styles. Hence, the theories, Uses and Gratifications and Expectancy-Value Theories, have accepted the results.

**Table 2c. Mean sample of content description of Opinion articles**

Content Description	M	SD	Interpretation
Editorial	3.37	0.66	Most Preferred
Student 'Shout Outs'	3.29	0.84	Preferred
Column articles	3.25	0.66	Most Preferred
<b>Total (n=270)</b>			

***Difference on the degree of satisfaction of students in terms of content, technicalities, and ethics when grouped according to sex***

Table 3 shows the results that determine if there is a significant difference in the degree of satisfaction as to the content, technicalities, and ethics of The Wheelhouse publication when the respondents are grouped into their sex. The table shows the data results of a t-test sample. T-test sample was used to determine if there is a significant difference. According to the result, there is a significant difference as to the content [ $t(2.023)=268$ ,  $p=0.044$ ] from the variable: sex. The content differs from their sexes since male respondents have different perceptions and views than female respondents when it comes to their degree of satisfaction. The Uses and Gratifications theory affirms that each has their own means of gratification regardless of their sex or gender. The content of the publication varies according to their sex, and it appears and will be supported by their content preferences.

Moreover, there were no significant differences on the degree of satisfaction of students on The Wheelhouse publication when the students are grouped into sex to the following indicators in terms of technicalities, [ $t(1.538)=268$ ,  $p=0.125$ ], and in terms of ethics, [ $t(1.500)=268$ ,  $p=0.135$ ], therefore, the hypothesis for the degree of satisfaction in terms of content in the variable sex is rejected. There are no related studies that could support the results; hence, this study is new.

**Table 3. Difference on the degree of satisfaction of students on the printed material published by The Wheelhouse campus journalists in terms of content, technicalities, and ethics when grouped according to sex.**

Variable	Sex		t	df	p
	Male	Female			
Satisfaction	3.30 (0.42)	3.19 (0.46)	1.861	268	0.064
Content	3.29 (0.47)	3.16 (0.51)	2.023	268*	0.044
Technicalities	3.30 (0.46)	3.21 (0.48)	1.538	268	0.125
Ethics	3.30 (0.48)	3.20 (0.49)	1.500	268	0.135

Note: the difference in the means is significant when  $p \leq 0.05$

***Difference on the degree of satisfaction terms of content, technicalities, and ethics when grouped according to course***

Table 4 shows the results that determine if there is a significant difference in the degree of satisfaction as to the content, technicalities, and ethics of The Wheelhouse publication when the respondents are grouped into their course. The table shows the data results of a t-test sample. T-test sample was used to determine if there is a significant difference. There was no significant difference on the degree of satisfaction

of students on The Wheelhouse publication when the students are grouped into course. Furthermore, here are the results of the following indicators: in terms of the content, [ $t(1.090)=268, p=0.277$ ], in terms of technicalities, [ $t(0.463)=268, p=0.644$ ], and in terms of ethics, [ $t(0.633)=268, p=0.527$ ].

Moreover, it does not tell that the students' choice of their course whether maritime or non-maritime do not necessarily affect their degree of satisfaction in all indicators of the student publication. Therefore, the hypothesis for the degree of satisfaction in the variable course is accepted.

**Table 4.** *Difference in the degree of satisfaction of students on the printed material published by The Wheelhouse campus journalists in terms of content, technicalities, and ethics when grouped according to course.*

Variable	Course		t	df	p
	Maritime	Non-Maritime			
Satisfaction	3.28 (0.42)	3.24 (0.45)	0.797	268	0.426
Content	3.27 (0.46)	3.21 (0.51)	1.090	268	0.277
Technicalities	3.29 (0.46)	3.26 (0.47)	0.463	268	0.644
Ethics	3.29 (0.48)	3.25 (0.50)	0.633	268	0.527

*Note:* the difference in the means is significant when  $p \leq 0.05$

#### ***Difference in the degree of satisfaction of students in terms of content, technicalities, and ethics when grouped according to year level***

Table 5 shows the results that determine if there is a significant difference in the degree of satisfaction as to the content, technicalities, and ethics of The Wheelhouse publication when the respondents are grouped into their year level. The table shows the data results of an ANOVA sample. ANOVA sample was used to determine if there is a significant difference to these three year levels.

The results show that there is a significant difference in the technicalities of the student publication whereas [ $f(6.129^*)=2, 267, p=0.002$ ] from the three-year levels namely: second year, third year, and fourth year. Each year level has its own way of perceiving and evaluating the technicalities of their school paper. The technicalities involve how to organize and arrange the contents, how the photos and graphics be captioned and edited. Each year level has its own criteria on evaluating the rules of grammar on the articles being included. According to Expectancy-Value theory, each is governed by their previous learning and experiences and that affect how the students evaluate their school paper's technicalities. Each year level has its corresponding choice of personality on what they want to see and read in the school paper. Therefore, the hypothesis for the indicator content, technicalities, and ethics are rejected.

Furthermore, there were no significant differences on the degree of satisfaction of students on The Wheelhouse publication when the respondents are grouped into course in terms of the content, [ $f(2.900)=2, 267, p=0.057$ ] and in terms of ethics, [ $f(2.138)=2, 267, p=0.120$ ]. Moreover, it does not tell that the students' choice that accords to their year level whether what year level they did not necessarily affect their degree of satisfaction in all indicators of the student publication, therefore, the hypothesis for the degree of satisfaction in the variable year level to 3rd year and 4th year is not rejected.

**Table 5.** Difference in the degree of satisfaction of students on the printed material published by The Wheelhouse campus journalists in terms of content, technicalities, and ethics when grouped according to year level.

Variable	Year Level			F	df	p
	2nd year	3rd year	4th year			
Satisfaction	3.44 <sub>b</sub> (0.40)	3.23 <sub>a</sub> (0.41)	3.24 <sub>a</sub> (0.45)	4.273*	2, 267	0.015
Content	3.41 (0.50)	3.23 (0.44)	3.21 (0.52)	2.900	2, 267	0.057
Technicalities	3.50 <sub>b</sub> (0.39)	3.22 <sub>a</sub> (0.45)	3.27 <sub>a</sub> (0.48)	6.129*	2, 267	0.002
Ethics	3.41 (0.47)	3.25 (0.47)	3.24 (0.50)	2.138	2, 267	0.120

Note: \*the difference in the means is significant when  $p \leq 0.05$   
Means that share a letter are not significantly different

**Difference on the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to sex**

Table 6 shows the results that determine if there is a significant difference in the extent of preference as to the journalistic articles: news, feature, and opinion when the respondents are grouped according to their sex. The results show that there are no significant differences as to the three journalistic styles: news [ $t(1.769)=268, p=0.078$ ], features [ $t(0.008)=268, p=0.994$ ], and opinion [ $t(0.138)=268, p=0.891$ ] when they are grouped according to sex. Therefore, the theory, Expectancy-Value, hereby affirms that the variable sex has a significant difference, and their choices vary on the contents to be included especially to the three journalistic styles namely: news, features, and opinions.

Moreover, it does not tell that the students' choice of their sex whether male or female do not necessarily affect their extent of preferences on the three journalistic articles, therefore, the hypothesis for the extent of preference in the indicator news is not rejected.

**Table 6.** Difference in the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to sex

Variable	Sex		t	df	p
	Male	Female			
Preference	3.33 (0.43)	3.29 (0.45)	0.677	268	0.499
News	3.32 (0.59)	3.19 (0.52)	1.769	268	0.078
Feature	3.33 (0.43)	3.33 (0.48)	0.008	268	0.994
Opinion	3.30 (0.54)	3.31 (0.56)	0.138	268	0.891

Note: the difference in the means is significant when  $p \leq 0.05$

***Difference in the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to course***

Table 7 shows that there are no significant differences as to news [ $t(0.244)= 268, p=0.807$ ], feature [ $t(1.655)= 268, p=0.099$ ], and opinions [ $t(1.283)= 268, p=0.201$ ] when they are classified according to their course.

Moreover, it concludes that the students' course would not affect their choice whether maritime or non-maritime effect on the three journalistic articles - news, feature, and articles, therefore, the hypothesis has been rejected.

**Table 7.** *Difference on the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to course*

Variable	Course		t	df	p
	Maritime	Non-Maritime			
Preference	3.29 (0.44)	3.35 (0.42)	1.080	268	0.281
News	3.29 (0.61)	3.27 (0.50)	0.244	268	0.807
Feature	3.30 (0.45)	3.39 (0.43)	1.655	268	0.099
Opinion	3.27 (0.57)	3.36 (0.51)	1.283	268	0.201

Note: the difference in the means is significant when  $p \leq 0.05$

***Difference on the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to year level***

Table 8 that there is no significant difference as to the news [ $f(2.769)= 2, 267, p=0.065$ ] in the variable year level. There is no related study that can support the results; hence, this study is new.

However, in the journalistic styles, feature [ $f(4.340)=2, 267, p=0.014$ ], and opinions [ $f(3.527)=2, 267, p=0.031$ ], the ANOVA results show there is a significant difference in the variable year level.

Moreover, the statistical results confirm that the Expectancy-Value theory has been accepted since each year level has their own set of choices when it comes to the journalistic styles to be included in their school paper. There is no related study that can support the results; hence, this study is new.

**Table 8.** *Difference in the extent of preference as to the journalistic articles: news, features, and opinions when the students are grouped according to year level*

Variable	Year Level			F	df	p
	2nd year	3rd year	4th year			
Preference	3.46 (0.38)	3.25 (0.44)	3.35 (0.42)	4.557	2, 267	0.011
News	3.47 (0.38)	3.23 (0.65)	3.28 (0.51)	2.769	2, 267	0.065
Feature	3.46 (0.41)	3.26 (0.45)	3.39 (0.44)	4.340	2, 267	0.014
Opinion	3.46 (0.45)	3.22 (0.58)	3.35 (0.52)	3.527	2, 267	0.031

Note: the difference in the means is significant when  $p \leq 0.05$



### ***Relationship between the degree of satisfaction and extent of preferences on The Wheelhouse publication***

Table 9 shows that concepts satisfaction and preference [ $r(0.672^*)=268, p=0.000$ ] are significantly correlated to one another. It hereby affirms the theory and assumption of the researcher through this statistical result that the students (readers) will be satisfied if they can read and see their preferred journalistic articles that accord to their beliefs, views, and perceptions as what the Expectancy-Value theory has indicated. Moreover, the degree of satisfaction and the extent of preferences allow the researchers to focus on the audience and explains how individuals use mass communication to gratify their needs, discovers underlying motives for individuals' media use, and identifies the positive and the negative consequences of individual media use. On the other hand, the Expectancy-Value Theory connects the gratifications obtained by the student-readers to its expectancies, beliefs, and evaluation, which in turn affect their needs and wants.

**Table 9.** Relationship between the degree of satisfaction and extent of preferences on The Wheelhouse publication

Variable	r	df	p
Satisfaction x Preference	0.672*	268	0.000

*Note:* the Correlation is significant when  $p \leq 0.05$

This study further develops that the goal of the campus journalists is to make their readers understand that they are writing for them. What the editorial board includes in the student publication affects the degree of satisfaction of the students if they see their actual preferences. The students' sex has something to do with their choices as to the contents. The students' course has nothing to do with their choice with regards to the technicalities of the school paper. As to the content, preferences vary among year levels.

## **CONCLUSIONS**

This study may be crucial since the results depend on the kind of audience it has in that community. The researcher concludes that the kind of audience in VMA Global College prefers something that is informative, educational, entertaining, and developmental kind of student publication. The audience of the said community reflects the kind of school paper it publishes; hence, the school paper reflects the school or the institution.

However, the student-readers or the consumers vary from each phase of academic year and their tastes and perception change. The researcher assumes that after a year, the students' degree of satisfaction and content preferences will change since the respondents of this study are the actual readers of the student publication.

In the degree of satisfaction, the survey questionnaire being used was the criteria from a national basis in choosing the best school paper in the country that only media practitioners or seasoned journalists only employ the standards in terms of the content, technicalities, and ethics to determine the best. However, in this study, the student-readers have evaluated the said student publication that means the student-readers, or the consumers have extracted their perceptions, views, beliefs, and standards on the printed material they assessed, and it reveals that the student-readers are satisfied in terms of its content, technicalities, and ethics. It concludes that in generating the idea of this research, the researcher used a user-oriented instrument to determine the findings of this study. This also suggests that the students' needs and wants were achieved and have been highlighted that the members of the student publication have worked hard to meet their demands to satisfy their needs and wants.

In the extent of preferences on feature articles, the students seek soft news. It deals to be light, informative, inspiring, and entertaining kind of printed material that has an editorial and the so-called pulse from the students on relevant issues included from the national basis.

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## Students' Course Feedback Survey on Marine Engineering Professional Courses during AY 2018-2019

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**Abstract.** Higher education in the Philippines is continuously facing new demands and challenges, students' feedback is valuable in the sense that it has a significant effect on student learning and improves the curriculum as well as the instructions. The study aimed to determine the feedback of students of Marine Engineering of Academic Year 2018-2019 in terms of the relevance of professional courses taken; course organization and intended learning outcomes (ILOs), teachers and TLA's, assessment methods, the learning environment and counseling involved while taking the professional courses. Descriptive method was used to analyze the feedback of Marine Engineering students in their professional courses. The collected data were interpreted using different statistical tools such as percentage, ranking, and weighted mean and used based on the objectives of the study. One of the findings that needed much attention was the learning environment. Working area for machine shops should be spacious and comfortable to accommodate simultaneous sessions. By doing that, students will maximize their learning and skills. They can apply those skills on their shipboard training as well as on their future work at sea. The study implies that feedbacks given by student in; relevance of course, course organization and ILO, teacher and TLA, assessment, learning environment and counseling should be persistent. Continuous implementation of the practices benefits the student, faculty, the university and most specially the incoming student of the program.

**Keywords:** *Course feedback, Marine Engineering, evaluation, professional maritime courses*

### INTRODUCTION

Academic institutions are in the 21st Century's frontline that hones the student competencies through innovative strategies. With this, the best quality of education suitable for the requirements of the next generation will be served (Agena, et al., 2015). Lyceum of the Philippine University-Batangas never stops pursuing its lifelong mission and vision to continue making the Maritime Education curriculum responsive to the global community's needs.

Since higher education in the Philippines is continuously facing new demands and challenges, students' feedback is valuable. This will help meet those trends in education, resulting in an attentive enhancement of the curriculum from different colleges. A curriculum can serve as a guidepost in meeting the graduate learning skill. According to Mamoon-Al-Bashir, et. al. (2016), feedback is considered a problematic issue in the higher education arena. Besides, Oza, et. al.(2017) acknowledged it as an essential element of improving the students learning process. Feedback is the ultimate necessity to ensure effective learning. It helps the students to comprehend the subject being examined and gives a clear direction on the most proficient method to enhance their learning. The collection of student feedback is seen as a central strategy to monitor the quality and standards of teaching towards learning in higher education institutions (Jara & Mara 2010). Student evaluations of teaching and learning play an increasingly important role in the delivery of high-quality, student-centered education. Insights into student perceptions of their learning experience provide information that can be used to inform course design and development. The significance of student evaluation of teaching is to inform the educator' about the strengths and weaknesses of their teaching approaches (Huybers, 2014).

This study focused on Bachelor of Science in Marine Engineering; a four-year program designed to produce engine officers. In the study of Alcantara, et. al.(2015), aspirations of maritime students in one higher education in the Philippines indicated that maritime students belong to the determination category where they try their best to have high/good grades for future employment, to become a ship captain in the

future no matter how hard it was and to have their own set of objectives and direction to achieve their goals. Lyceum of the Philippines University –Batangas continues to develop and enhance student competence to attain excellence; they uplift the quality of education by engaging in curriculum development to improve the student's learning (Barcelona, et. al.,2015).

The Commission on Higher Education (CHED), Maritime Industry Authority (MARINA), and ISO 9001:2008 are accrediting and certifying agencies that annually visits and monitors the performance of the LPU-B. The Standards of Training, Certification, and Watchkeeping (STCW) for seafarers are the basis of compliances (Agena, et. al., 2015). School facilities, equipment, and teaching competence with the usage of good instructional materials shall be upgraded to meet the quality standards (Navarro, et. al., 2015).

This research answered some of the requirements of accrediting agencies and provided an in-depth understanding of the institution's need for improvement and curriculum development. This may serve as a considerable input for the enhancement of teaching and learning strategies, especially in professional subjects. This study is a part of the initiative in curriculum development of BS Marine Transportation and Marine Engineering in LPU-B which is also in line with quality management systems' objectives for continuous and further improvement.

### **Objectives of the Study**

This study aimed to determine the feedback of students of Marine Engineering of Assessment Year 2018-2019 in terms of the relevance of professional courses taken; course organization and Intended Learning Outcomes (ILOs), teachers and TLA's, assessment methods, the learning environment and counseling involved while taking the professional courses.

### **Literature Review**

#### **Student Course Feedback**

Feedback is a central element of the learning experience, yet few studies have focused directly on what students think about feedback (Rowee, 2011). Nowadays, higher education institutions have paid increasing attention to students views to obtain feedback on their experience of learning and teaching through internal surveys (Alderman, et. al., 2012).

In the study of Carless & Boud (2018), student feedback literacy is dealing with understanding the capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies. The study reveals that the teachers are identified as essential roles in facilitating and promoting student feedback literacy through curriculum design, guidance, and coaching. According to Martin (2018), feedback is the single biggest driver of improvement, and it is the vital component of successful learning and development across fields. Nowadays, schools and universities are attempting to improve teacher quality or develop their staff without implementing a system for student feedback, which is considered one of the most potent and practical tools available. In addition, student perception surveys are reliable predictors of achievement gains. The study found that student surveys were better indicators of achievement.

The increasing use of student satisfaction as a measure of educational quality requires higher education institutions to have effective and robust student feedback and improvement framework (Nair & Shah, 2011). Quality is without a doubt that has significant concern for higher education institutions and government agencies. Over the last four decades, a much debated and researched topic has been the role of student feedback in the improvement of learning and teaching quality (Nair, 2011). Receiving feedback from students has become a regular part of life for teachers in universities worldwide. This puts pressure on them from several sides and may be an influential factor that makes them tailor their teaching to students' preferences (Flodén, 2017). On the other hand, despite the vital importance of feedback in helping students improved, there is much evidence to suggest that students do not utilize feedback very effectively. It is

argued that HEIs should focus more on the efficacy of the feedback they give to students by exploring how students use it and examining a more comprehensive range of feedback methods, such as group feedback and online feedback.

In that sense, academic institutions of higher learning must provide an updated curriculum, modern facilities, and efficient student services as a response to the needs of professional education and society, particularly in the maritime and shipping industries. Educators must also possess effective teaching techniques and strategies to ensure the maximum learning of the student's potential (Orense & Laguardo, 2013).

To reach out to all students, instructors need to be equipped to modify teaching methods and match students' learning abilities (Navallasca, et. al., 2017). In the study of Avena, et. al.(2015), Marine Engineering students have a significantly higher attitude towards their teachers in giving grades fairly compared to Marine Transportation. This study recommended that teachers give midterm grades and activities the most appropriate time to know their performance. This will provide students with an idea on what level of performance is still needed to obtain expected grades.

Above all, it was supported by the study of Mandal (2018) that reviewing and analyzing the importance of responding to student feedback through a survey considering student experience in attending on their learning outcomes and their satisfaction with various traditional and learner-centered course elements is beneficial. Assessing and evaluating data using student feedback evaluation is necessary to establish and apply interventions. The student experience survey data in every course signifies that students' satisfaction increased gradually for best-managed classes, indicating that rectification and appropriate responses to student feedback on their learning experience effectively enhance students' learning and fulfillment.

### **Marine Engineering Professional Courses**

**Maritime Drawing and Diagram (Draw 1).** The course includes letterings types of drawing, draw linework, pictorial projection, development of drawing, identifying and drawing or sketching screw threads and fasteners, locking and retaining devices, riveted type fastening, sketching welded connections, dimensioning, piping systems, sketching, and schematic diagramming of piping drawings(Yapici, & Koldemir, 2015) conducted a study entitled "Developing Innovative Applications of Technical Drawing Course at the Maritime Education" which aims to explain the importance of the technical drawing and computer-aided design for the maritime industry. Also, to find out deficiencies, develop, disseminate, and explain the solutions. The writers detailed in their research the importance of Maritime education and described the concept, development, and implementation of Technical Drawing in Maritime Education. The researchers also detailed a side-by-side comparison between Classic Technical Drawing and Computer-Aided Design (CAD) including their strengths and weaknesses. Researchers found that Computer-aided design programs continue to bring great convenience in production with new features.

Furthermore, computer technology training simulators will be used to help make parts in a virtual environment. The movement of the pieces with the help of technical drawing programs, forces suffered during the movement of materials, types of material, and help to all kinds of engineering calculations. Based on actual body measurements with laser technology, it has become well-done modeling. Despite the rapid development of the maritime industry, this use is heavy compared to other sectors. Market-driven product life cycle when new programs are getting longer, and more frequent use will be widespread in the marine market. Technical drawing software in innovation thanks to the drawn parts of the simulation performed, together with dimensional compliance of the parts can be controlled. The researchers concluded that drawing on maritime education has an important place. Shipowners' terms of trade are expected to ship propellers turning continually. During the ship's failure to address a fault that can occur toward defining the company or the manufacturer must provide the correct information. This is due to the combination of the technical picture with the easiest way to modern technology.

**Basic Electricity (Electro 1).** The course deals with the principles of different electrical equipment. It includes the study of electron theory, Ohm's Law, Power Law and Kirchhoff's Law, fundamentals of AC, and Circuit arrangements primarily. Besides, it deals with magnetism, electromagnetism and electromagnetic induction, power supplies, conductors, batteries, and electrical measuring instruments.

In the research of Taale and Mustapha, (2014) the significance of teacher-constructed electrical models in basic electricity academic achievement of students. The study engaged in a pre-test-post-test control group experimental design in which the subjects were given to the two groups by randomization. The target population of the research comprised 90 National Technical Certificate (NTC) Part III final year students of basic electricity in two technical colleges in Borno State, Nigeria. Data was gathered through the use of REDET or Researcher Developed Test instrument which is basic electricity Multiple Choice Achievement Test (MAT). The study was guided by comparing the pre-test mean rating of BE students in both experimental and control groups and the mean rating of students taught BE using teacher-constructed electrical models and those taught using another conventional method in MAT. A total of fifty (50) test questions were developed from the content of the NTC Part III basic electricity syllabus. The number of test items in each topic reflected the relative importance of the different activities highlighted in the objectives of the topics based on the NABTEB (2007) syllabus. The study revealed that there was a significant difference in the mean achievement of students taught basic electricity using teacher-constructed electrical models (experimental group) with a mean score of 49.77 in the posttest, with a minimum score of 30% and a maximum score of 78 % and the control group 41.56 mean scores with a minimum of 25 % and 57% maximum score respectively. The research revealed that if students in technical colleges were well exposed to practical work, their performance level will greatly improve, and the best way to make learning more concrete and concise in the absence of real objects was to make use of teacher-constructed models. The research emphasized the provision of the necessary and adequate basic electricity and electronics components and materials to construct models for effective teaching and learning in Borno State technical colleges and that there was need to find ways in motivating the inspectors in the field of electricity and electronics to show interest in visiting the technical colleges regularly to help in the implementation of the program.

**Engineering Materials (EMAT 1).** The course includes the properties and uses, basic metallurgy, and processes of metals. It also deals with the different classification of metals and non-metals and how these metals are heat-treated the different stresses that affect the material to avoid vibrations and the different adhesives and bonding applied when joining.

In the study of Hong (2011) describe autonomous learning as modern learning corresponding to the traditional acceptance learning as the active learning of students in the state of dominant position. According to the study of basic characteristics of independent learning and network course, students proposed a design process of network course which is based on independent learning and introduced the development and implementation. The practice showed that the network courses based on independent learning have built an openness, multi-level, three dimensional, and real-time space for learning where teachers guide students, students study independently and a variety of teaching methods and mediums are coexistent and interactive. They have mobilized the initiative, motivation, and participation of the autonomous learning fully, promoted quality training and innovation capacity of students favorably, and improved the teaching and learning greatly. The research included the concept of autonomous learning, web-based autonomous learning Network Course Construction including characteristics and composition of the network course, and network course design process based on autonomous learning, development of engineering materials, and thermal processing network course based on autonomous learning including learning content design, exploration activities support, online interaction support, evaluation feedback support, and navigation support. The research summarized that since the network course of Engineering Materials and Thermal Processing was completed and opened, it has been used in mechanical design and manufacturing and automation, mechanical and electrical integration, vehicle engineering, and other professional courses with good results. The practice showed that the network courses based on independent learning have built an openness, multi-

level, three dimensional, and real-time spaces for learning where teachers guide students, students study independently and a variety of teaching methods and mediums are coexistent and interactive. They have changed teachers from a simple knowledge transmitter and classroom manager into a provider of educational resources, the constructor of the learning environment and navigator of student learning, mobilized the initiative, motivation, and participation of the learner autonomous learning fully, promoted quality training and innovation capacity of students favorably and improved the teaching and learning greatly.

**Hand and Measuring Tools (Ma Shop 1).** The course includes safe working practices, hand tools, and measuring equipment for dismantling, maintenance, repair, and re-assembly of shipboard plant & equipment, fabrication, and repair.

According to the study of Jeremiah, et. al. (2015) evaluated the level of satisfaction of Marine Engineering Cadets on the LIMA Marine Engineering Workshop. Its purpose was to determine the level of satisfaction of Marine Engineering students in the area of safety, supervision, tools and equipment, and organization of the Marine Engineering Machine Shop; to identify problem encountered within the Machine shop, and to propose a plan of action to address the problem faced in the Machine Shop. The researchers emphasized that some subjects cannot be observed in any other way; for example, the case study of the level of satisfaction in the LIMA Marine Engineering workshop subject was a descriptive research design and allowed observation without affecting normal behavior. The participants in this research were the 42 Senior Nigerian Marine Engineering students who have utilized the LIMA Marine Engineering Machine Shop simply because the researchers believed that they could give their evaluation based on their experiences concerning Machine Shop training over the years in LIMA Marine Engineering Workshop. The researchers used the primary data collection system in the form of a questionnaire that was filled in by all Senior Nigerian Marine Engineering students. The questionnaire was divided into two parts. Part I include the questions to determine the Level of Satisfaction of Marine Students on the areas of the Machine Shop in terms of Safety, Supervision, Tools, and Equipment, Organization. Part II include the problems encountered by Marine Engineering Students in the machine workshop during training. After a thorough analysis, the result showed that Safety stickers in the shop were present and legible for the users in the Machine workshop. Another response presented the adequate ventilation spaces in the workshop and workshop personnel who monitors the safe working practices inside the shop, which indicated effective and proper workshop personnel monitor the safe working practices inside the shop. This should be an engineer to meet the demands of students. The researchers concluded that The Marine Engineering cadets were satisfied with the LIMA Marine Engineering Workshop. The ratio of machines to students was identified as the main problem in LIMA Marine Engineering Machine Workshop. An action plan was proposed to address problems encountered by the respondents in the Marine Engineering Machine Workshop. LIMA management may implement new programs that advance the maintenance skills, assembly skills, and electrical/electronic practice, use, and care of hand tools measuring equipment, drilling machines, center lathes, vertical milling machines, off-hand grinding machines, and welding equipment.

**Marine Electronics & Electrical Maintenance (Electro 2)** The course focuses on the study of principles of configuration and operation of electrical equipment such as generators, governors, motors, transformers, and AC power distribution system. It reviews magnetism and electromagnetic induction and other aspects of electronics common to all types of ships.

Asrizal (2018) conducted research to develop an authentic assessment that was suitable for the inquiry learning model and determine its validity, practicality, and effectiveness. The research used the research and development (R&D) method to develop and to test the effectiveness of a product used in a particular development model. The stages of the development model consisted of the primary study, development model, and model testing. The implementation of authentic assessment gave potency and benefit in the learning process. This assessment type was conducted comprehensively both process and outcome. For this reason, the integration of authentic assessment was important in a learning model. There were four products in this research: writing assessment of initial task, performance assessment, scientific



attitude assessment, and written report assessment. The quality criterion of authentic assessment included validity, practicality, and effectiveness. The instrument which was used to measure quality criteria consists of validation sheet experts, practicality sheets by lecturers and assistants, and achievement test sheets. Based on the objectives of research and discussion of research results can be stated three conclusions from this research. First, the validity value of writing assessment, performance assessment, scientific attitude assessment, and written report respectively be categorized into a high level. The average value of authentic assessment validity was also very high. Second, the use of authentic assessment was a practice in the inquiry learning model. The practicality value of writing skill assessment, performance assessment, scientific attitude assessment, and written report respectively was also high. Finally, the Integration of the authentic assessment including writing skill, performance, scientific attitude, and written report instrument was effective in the inquiry learning model. As a result of this research shows that: 1). the validity of authentic assessment for supporting the inquiry learning model was high with the average value of validity 2). the use of authentic assessment was practice and effective in the inquiry learning model.

**Machine Tools (Ma Shop 2).** The subject deals with the operation of lathe machine, milling machine, shaping machine, and drilling machine that covers the proper utilization, emphasizing dangerous practice in using that particular machine, problems encountered during the operations, and different safety precautions on handling the machines.

Stuckey& Archibald (2012) conducted research to introduce machines and processes of the modern machine shop to students. This instruction was achieved through hands-on experiential learning with an emphasis on correct procedure and safety. The lab took a project-oriented approach as each student fabricates, assembles, and tests a mechanical system. Through this approach, the students learn about the importance of tolerances, quality control, correct assembly, and testing procedures. They were also exposed to technical drawings and design limitations as seen in the machining processes and the materials used. The lab was developed for a class of 40-50 students. It takes place during the latter half of the fall semester over six weeks. The students are being split into five lab sections of 8- 10 students who meet on separate days of the school week. Each lab section lasts a total of three hours which includes 15 minutes for clean-up at the end. This gives each student a total of 16.5 hours to complete the project in the school machine shop. The machine shop contains several machines with which the students familiarize themselves through the course of the lab. There are two 3-axis milling machines, one manual lathe, three manual drill presses, one CNC mill, and one CNC lathe along with several smaller tools such as clamps and a hand press. For each lab, the shop is manned by an instructor, the shop machinist, and three upperclassmen shop assistants. This program introduces students to machining and assembly processes and qualifies students for working in the shop on design projects. For many years, this project involved constructing a model Stirling engine. In the 2012 fall semester, a new project was introduced to create a more formal learning environment based around a modular organization of the material. Students constructed a small car powered by a spring motor. The car consisted of an investment cast aluminum chassis requiring machining, wheels machined from aluminum stock, a machined aluminum base, and assembly. The pedagogical approach was improved through a more systematized presentation of machining processes along with frequent assessments. Students completed five modules – turning, milling, drilling and tapping, CNC introduction, and a miscellaneous operations module. Each module included specific instructions, supervised machining, and a quiz. In 2012, each student completed a pre- and post-assessment test of the material to assess the level of learning. Results indicated significant improvement in students' understanding of machine shop practice. The project successfully addressed safety and basic machining operations as seen in the high survey results (above 4.0) in the related survey statements. The modular design gave the students a focus for each lab session as well as provided the instructors with enhanced assessment capabilities compared to the Stirling engine lab. The design itself significantly reduced the preparation time for the shop mechanic by minimizing the need to pre-machine parts. The use of a simple hands-on project in conjunction with a modularly organized instruction booklet has improved the structure of the lab and assessment tools available to the professor. These improvements were hoped to positively affect knowledge retention in the students in preparation for their senior capstone design project and future careers.



**Naval Architecture for Marine Engineering (NA).** The course includes different types of ships, general knowledge on construction, working knowledge on stability and stresses, stress tables, a thorough discussion about the actions to be taken in case of partial loss on buoyancy, and the fundamental of watertight integrity of the ship.

Bell, (2019) conducted research to develop and simplify current test procedures through the delivery of current course content. This provided students a platform from which they could develop a solid understanding of the first principles of a ship and propeller design and efficiency. Two experimental suites were designed and modeled, a Stability and Metacentric Height Experiment, complete with pontoon prismatic reference hull, technical specification data, and measurement equipment, to facilitate students' understanding of the impacts of hull design on stability and metacentric height. The hull form was further designed with the inherent ability to test the free surface effect and its readiness for possible interoperability between tests. The second suite of testing included Propeller Design, Propeller Thrust, and Bollard Pull Experiments. This included designing a series of reference screw fixed pitch propellers using the Wageningen-B Series propeller curves. Propeller reference datum was established to support comparative testing against the thrust and pull efficiency parameters of student-designed propellers. Test platforms were designed and developed to determine the thrust efficiency and bollard pull of a propeller. Test procedures were also developed to support the developmental requirements of fourth-year engineering students undertaking Naval Architecture. The research focused its design on the simplification and interoperability of test equipment, current infrastructure, and the possibility of interoperability between modules in the future. Through the undertaking of this project, it was highlighted how important an understanding of first principles is in the fundamentals of ship characteristics including hull and propeller design. The design and development of the propeller practical application enabled for a greater understanding of the principles and mechanisms involved in propeller design. Further development of the thrust and pull test platform guided the learning experience by increasing understanding of the propeller mechanisms behind propeller behavior and in turn provided a greater appreciation for propeller design. The design and development of test platforms in support of student learning obtained a proof of concept that met the requirements specified in this project. The test platforms were confirmed experimentally through testing and subsequent procedures with recommendations presented below. The project conceptually, with testing, developed a series of new test platforms and test procedures to support the educational requirements of the Naval Architecture course and the possible introduction of a Marine Engineering stream and has established a set of conditions for further investigation. To improve student's understanding of hull characteristics further development of proposed prismatic hull forms, including round and vee-bottom was recommended.

**Thermodynamics (Thermo).** The course includes basic concepts in thermodynamics, forms of energy; properties of pure substances, phase diagrams & phase transitions. It deals also with work, heat, properties of substances and state equations, first law and the second law of thermodynamics, mass & energy balances in open & closed systems, processes of ideal gas and vapors, including problem formulation, analytic, and computational solutions.

Mulop, et. al. (2012) presents a review and analysis of the different approaches on supporting students learning of thermodynamics. The criteria for analysis were the characteristics of the learning system, the effectiveness based on students' performance; the skill developed using the learning system, and students' feedback. Thermodynamics is a subject that deals with energy and are one of the most advanced tools for understanding our physical universe. Engineering students' difficulties in learning thermodynamics occur globally as indicated by the literature. Various studies are reporting on efforts made to overcome the deficiencies and suggestions of teaching approaches to enhance students learning such as blended learning approach, active learning techniques, computer-based instruction, virtual lab – a web-based student learning tool for a thermodynamic concept related to multi-staging in compressors and turbines, TESTTM software in design projects and laboratory and so on. The researchers presented problems faced by students learning Thermodynamics, methods of enhancing the teaching and learning of Thermodynamics, analysis of the different methods of enhancement (characteristics of the methods of enhancement the teaching and learning

of thermodynamics without computer technology and characteristics of the methods of enhancement the teaching and learning of thermodynamics with computer technology), effectiveness of the learning systems (students' performance, skills development, and students' comments). After a thorough study, the researchers concluded that most of the engineering students globally face difficulties in learning basic or introductory thermodynamics. This difficulty led to numerous researches on developing and implementing various methods to enhance students' learning of thermodynamics. Most of the methods developed using computer technology and multimedia to give interactivity and visualization. The methods do improve students' performance and developed skills among students. The feedback and comments from students were positive and encouraging.

**Mechanics & Hydromechanics (Mech).** The course includes balancing of forces and moments including strength and elastic deflection of engineering materials due to loads applied axially, in torsion, in bending, and in shear, combined stresses, and principal stresses. It also covers fluid properties, fluid statics, fluid dynamics, including pipe flow, and turbomachinery. This stresses the control volume approach.

In the published research of Guo & Guo(2014), explored the hydromechanics teaching from the following aspects: illustration teaching methodology, heuristic teaching methodology, practice-oriented teaching methodology, and multimedia teaching methodology. The research emphasized hydromechanics as one of the important basic courses of engineering majors in universities, which is a course that mainly researches the flux balance and its movement rules. Because of its strong theory, and confusing, it has been difficult for teachers to teach and students to understand. So, it was very necessary to reform teaching, improve the teaching quality and students' innovation, and lay a good foundation for further study. In the illustration teaching method, teachers should prepare their teaching carefully to give a successful lesson and thus improve their teaching capability. Teachers should not only teach knowledge, but also the scientific methods, minds, and spirit and combine the two perfectly as much as possible. These methods emphasize that teachers should not only teach knowledge, but also the scientific methods, minds, and spirit and combine the two perfectly as much as possible. In heuristic teaching methodology, teachers should invent a concrete heuristic teaching method suitable for this course based on its content and students' study regularity. Because hydromechanics is a strong theoretical discipline and the abstract concept and equation can be found everywhere, in fluid mechanics classroom exercises training has become a necessary manner for college students to deepen their understanding and consolidate the knowledge. The most important thing is that at the end of the training teachers and the students had better get together to conclude the emphases and difficulties and key points of the training topic. In practice-oriented teaching methodology, teachers can introduce some famous scientists who have made great contributions to hydromechanics. It can not only inspire undergraduates and increase their study initiative but also can indirectly implement humanistic education and patriotism education. Lastly, multimedia teaching methodology is beneficial for students to understand and generate the flow of phenomenon by using multimedia teaching methods. Besides, it can improve their enthusiasm for learning. Multimedia teaching can save time compared to the traditional blackboard writing teaching need to increase the capacity of fluid mechanics teaching. But on the other hand, with the speeding of teaching, students may fail to understand and digest so much new knowledge. So, multimedia courseware should be control to a proper degree. The research concluded that the hydromechanics course in universities is strong theoretical and difficult to learn. It needs the effort of both teachers and students to make it a good principle. Teachers should create conditions to make every student release their potentials as much as possible. So, carrying out various forms of teaching methods can help students to cultivate their ability and arouse their learning initiative. At the same time, much attention should be paid to combine life with work experience, so that the students can understand how to apply the theory of fluid mechanics to the practice. Thus, the goal of learning can become more robust, and the teaching can yield twice the result with half the effort.

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## METHODS

### Research Design

This study used the descriptive method to analyze the feedback of BS Marine Engineering students in their professional courses.

Descriptive research is typically used to describe the characteristics of a population being studied. It does not answer how/when/why but addresses the "what" question (Caiga, et. al., 2018).

### Participants of the Study

The researchers included 119 BS Marine Engineering students who already have taken professional subjects in AY 2018-2019 out of the 167 who enrolled. The respondents were chosen by availability or convenience sampling due to the current pandemic.

### Instrument

The data required in this study were obtained through a standardized questionnaire available in the university to assess the course feedback. The first part of the questionnaire was the respondent's demographic profile including their academic program. The second part of the questionnaire covered the standardized instruments to measure students' feedback, including the relevance of professional courses taken, its organization, teaching strategy, assessment methods, and the learning environment. The researchers used Google Form to gather data, assuring the respondents that all of the information included was only for study purposes.

### Data Gathering Procedure

The researchers used the standardized questionnaire available in the university to assess the course feedback. The questionnaires were then given out to 167 Third-year Students of BSMarE during AY 218 - 2010 via Google Forms which were explained first to the respondents via messenger before answering. It took three weeks to end the retrieval, yielding 70 % rate finally

### Data Analysis

The collected data were interpreted using different statistical tools such as percentage, ranking, and weighted mean. These tools were used based on the objectives of the study.

### Ethical Considerations

To observe the highly confidential nature of the study, the researchers did not include any particular names on the report. The identities of the respondent were not revealed in the study. There was no personal opinion added or given by the researchers, only information and result based on the data gathered.

## RESULTS AND DISCUSSIONS

**Table 1:** Summary of BSMarE Students' Feedback on the Professional Courses during the First Semester of AY 2018-2019

First Semester	Draw 1	E mat 1	Electro 1	Ma Shop 1	VI	Rank
I. Relevance of Course	3.58	3.65	3.62	3.61	SA	1
II. Course Organization and ILOs	3.47	3.60	3.42	3.58	SA	4
III. Teachers and TLAs	3.55	3.59	3.55	3.58	SA	2
IV. Assessment	3.51	3.57	3.50	3.57	SA	3
V. Learning Environment	3.37	3.51	3.49	3.51	SA	6
VI. Counseling	3.43	3.57	3.49	3.48	SA	5
<b>Grand Composite Mean</b>	<b>3.50</b>	<b>3.58</b>	<b>3.51</b>	<b>3.56</b>	<b>SA</b>	

### The Relevance of Professional Courses

Among all the professional courses, students strongly agreed that Engineering Materials (EMAT 1) and Machining Tools (Mach Shop 2) helped them to develop practical skills and develop relevant subject knowledge on the BSMarE program which gained the highest composite mean. Additionally, students develop a positive attitude on their program evinced with the combined mean gained by the Basic Electricity (Electro 1), 3.62. Meanwhile, Hand and Measuring Tools (Ma Shop 1) gained 3.51 which means that students strongly agreed to develop their leadership and communication skills. Maritime Drawing and Diagram (Draw 1) with 3.58 composite mean helped them also to develop teamwork skills. Above all the professional courses from the 1<sup>st</sup> semester of A.Y. 2018-2019, BSMarE students strongly agreed that courses that were relevant to their program. According to Stuckey et al., (2013), 'relevance' is one of the key terms related to reforms in the teaching and learning of science. It is often used by policymakers, curriculum developers, science education researchers, and science teachers.

### The Course Organization and Intended Learning Outcomes

The course organization in Engineering Materials (EMAT 1) gained the highest composite mean; the course was implemented according to the approved curriculum. Meanwhile, there was no overlapping of contents within a course in terms of Hand Measuring Tools (Ma Shop 1) with the composite mean of 3.58. However, in Maritime Drawing and Diagrams (Draw 1) 's intended learning outcomes (ILOs) were made known from the beginning. The total composite means of Basic Electricity (Electro 1), 3.42, implies that there was a high level of course organization, relevance, and clarity of ILOs of professional courses during the first semester. According to Callister (2010), all engineering structures and devices utilized materials that have been selected based on their properties. These properties along with design considerations enabled the desired performance level. Therefore, engineers of every type were well served in their careers by an understanding of the scientific foundations of materials that govern these properties. The course Engineering Materials (EMAT 1) was designed to introduce engineering materials with an emphasis on how atomic and molecular bonding, structure, composition, and processing influence material properties.

### Teachers and TLAs

In terms of teacher and their TLAs, students strongly agreed that Engineering Materials (E Mat) got the highest composite mean where they observed that their teachers motivated students to learn during its first semester. Aside from that, 3.58 composite mean from Hand and Measuring Tools (Ma Shop 1) indicated that students strongly agreed that their teachers and Teaching – Learning Activities (TLAs) were useful and

relevant. Students also strongly agreed that the TLAs within the said course were sequenced logically. Lastly, among the courses during the 1<sup>st</sup> semester, the Maritime Drawing and Diagram (Draw 1) and Basic Electricity (Electro 1) got similar composite mean; 3.55. The students strongly agreed that their teachers provided adequate opportunities for independent learning, adequate opportunities for teamwork. On the other side, both of the mentioned courses were strongly agreed by the students that their Independent Learning (ILs) activities such as journal reading, research work, projects, etc. were useful and relevant and team teaching was done as applicable. According to Klæijesen and Martens (2018), teachers' innovative behavior and professional development were important aspects of high-quality education. It is often thought that motivation influences teachers' innovative behavior and professional development. Paniagua & Istance (2018) stated that pedagogy was the heart of teaching and learning. Preparing young people to become lifelong learners with a deep knowledge of subject matter and a broad set of social skills requires a better understanding of how pedagogy influences learning. Focusing on pedagogies shifts the perception of teachers from technicians who strive to attain the education goals set by the curriculum to experts in the art and science of teaching. Seen through this lens, innovation in teaching becomes a problem-solving process rooted in teachers' professionalism, rather than an add-on applied by only some teachers in some schools"

### **Assessment**

Students strongly agreed that Engineering Materials (E Mat) and Hand and Measuring Tools (Ma Shop 1) provided feedback and the assessment methods of teachers used were told at the beginning of the course feedback were timely. This got the highest composite mean. However, Maritime Drawing and Diagrams (Draw 1) with its 3.51 composite mean, indicated that the number of assessments was appropriate and adequate as allocation of marks/grade among assessments was satisfactory based on the students. Basic Electricity (Electro 1) obtained the lowest mean indicating that assessment covered all main topics taught and distribution of assessments over a semester was appropriate and adequate. It implies that there was an extraordinary implementation of using the assessment method on the professional courses during the 1<sup>st</sup> semester. Tosuncuoglu (2018) stated that assessment has an important role in education, and it has a critical role in the teaching process. Through appropriate assessment, teachers can classify and grade their students, give feedback, and structure their teaching accordingly. According to Schneider (2017), competence in the evaluation has been identified as a key feature in teachers' professional success. However, assessment competence was a complex field, comprising capacity in both summative and formative assessment.

### **Learning Environment**

In terms of student feedback in their learning environment, students strongly agreed that the available laboratory, library facilities, recreation facilities were adequate, and access to computer facilities was sufficient. Engineering Materials (EMat) and Hand Measuring Tools (Ma Shop I) obtained the highest composite mean, 3.51. Maritime Drawing and Diagram (Draw 1), however, got the lowest mean of 3.37. Available facilities in the classrooms were satisfactory. Engineering Materials (EMat) and Hand Measuring Tools (Ma Shop 1) obtained the highest composite mean. Sufficient access to the internet and electronic databases obtained the lowest composite mean in Maritime Drawing and Diagram (Draw 1). Overall, the high composite mean in each course, implies that there was a high level of adequacy in terms of laboratory, library, and other facilities provided in the 2<sup>nd</sup> semester. According to Thuan (2018), classrooms should be equipped with compulsory tools and equipment, such as computers, projectors, available used tables, and chairs, to provide motivating learning environments for students to easily comprehend and digest the teaching materials. The design and procedures of the management of classrooms' space were also worthy of contributing to the convenient conditions for learning and teaching activities. Workshop rooms were expected to be equipped with tools and equipment both in quality and quantity to offer students the opportunity to perform well in practice.



## Counseling

In terms of counseling, teachers from Engineering Materials (E Mat) obtained the highest weighted mean, 3.57 while Maritime Drawing and Diagram (Draw 1) got the lowest during the 1<sup>st</sup> semester. Academic counseling was available when needed in terms of teachers of Engineering Materials (E Mat). Students strongly agreed that the teachers were available for consultation whenever needed in courses of Basic Electricity (Electro 1) and Hand Measuring Tools (Ma Shop 1). Meanwhile, the indicator "counseling on non-academic matters were available when needed" got the lowest weighted mean in Maritime Drawing and Diagram (Draw 1). In general, counseling obtained a 3.49 composite mean indicating a high-level counseling of all the teachers during its 1<sup>st</sup> semester. Akinade (2012) defined guidance and counseling as a process of helping an individual become fully aware of his/herself and how he was responding to the influences of his/her environment. It further assists him to establish some personal meaning for this behavior and to develop and classify a set of goals and values for future behavior. According to Egbo (2013), counseling was a learning process in which a counselor helps an individual or individuals learn, understand themselves and their environment, and be in a position to choose the right type of behaviors that will help them develop, grow, progress, ascend, mature and step up, educationally, vocationally and socio personally.

*Table 2: Summary of BSMarE Students' Feedback on the Professional Courses during the 2nd Semester of AY 2018-2019*

2nd Semester	Electro 2	Ma Shop 2	NA	Thermo	Mech	VI	Rank
I. Relevance of Course	3.69	3.76	3.67	3.71	3.67	SA	1
II. Course Organization and ILOs	3.55	3.58	3.60	3.62	3.65	SA	4
III. Teachers and TLAs	3.63	3.60	3.63	3.66	3.62	SA	3
IV. Assessment	3.60	3.59	3.56	3.61	3.56	SA	5
V. Learning Environment	3.53	3.57	3.52	3.57	3.56	SA	6
VI. Counseling	3.61	3.65	3.62	3.65	3.66	SA	2
<b>Grand Composite Mean</b>	<b>3.60</b>	<b>3.62</b>	<b>3.60</b>	<b>3.63</b>	<b>3.63</b>	<b>SA</b>	

## The Relevance of Professional Courses

During the 2<sup>nd</sup> semester of the same year, students strongly agreed that they developed related practical and teamwork skills in BSMarE while having a positive attitude on their program for Maritime Electronics and Electrical Maintenance (Electro 2) evinced with the composite mean of 3.69 and Thermodynamics (Thermo) with a 3.71 composite mean. Meanwhile, students developed a moderate level of leadership and communication skills in the course of Naval Architecture (NA) and Mechanics and Hydromechanics (Mech) that safely obtained the composite mean of 3.67. Rimal (2018) stated that "teachers can bridge existing gaps between national educational goals, social needs and the interest of people. But the current school curriculum development process takes place at the top where curriculum experts play a decisive role. These experts seek schoolteacher's contributions only at the review phase of the curriculum development process which is not enough to incorporate teacher's expertise. In this respect, teachers will be able to view curriculum not in terms of content to be covered, but as a transformative process."

## The Course Organization and Intended Learning Outcomes

The highest mean on course organization was obtained in Mechanics and Hydromechanics (Mech) with a 3.65 composite mean; course implementation according to the curriculum was strongly agreed while Maritime Electronics and Electrical Maintenance (Electro 2) course obtained the least composite mean during the 2<sup>nd</sup> semester. There was no overlapping of contents within the course of Thermodynamics (Thermo). Naval Architecture (Naval Arch) gained the highest score in informing students of its intended learning outcomes (ILOs) of the course from the beginning. Machining Tools (Ma Shop 2) and Marine



Electronics and Electrical Maintenance (Electro 2) obtained the highest mean on making the ILOs relevant and clear in all the professional courses during the Second Semester. In summary, BSMarE students strongly agreed that all the professional courses were relevant to their organization, ILOs, and TLAs.

### **Teachers and TLAs**

Thermodynamics (Thermo) obtained the highest mean on assessing their teacher and TLAs while Machining Tools (Ma Shop 2) obtained the least during the 2<sup>nd</sup> semester. Teaching-Learning Activities (TLAs) such as practical, educational tour, etc. were useful and relevant; this was strongly agreed by the students in Thermodynamics (Thermo). The same composite mean of Naval Architecture (Naval Arch) and Marine Electronics and Electrical Maintenance (Electro 2) with 3.63 indicated that students that their teachers TLAs within a course were sequenced logically while their Independent Learning (ILs) activities such as journal reading, research work, project, etc. were useful and relevant. Meanwhile, in terms of assessing how teachers motivated the students to learn and how they provide adequate opportunities for independent learning, it obtained a mean of 3.62 in Mechanics (Mech). But among courses during 2<sup>nd</sup> semester the lowest mean was obtained by Machining Tools (Ma Shop 2); it implies that teachers still provided adequate opportunities for teamwork and the teaching was done applicable. According to Mansfield, (2012), issues of teacher quality and effectiveness inform teacher education, policy, practice, and research and were connected with teacher resilience and retention. Effective teachers were strongly associated with resilient teachers, those who possess particular personality traits and maintain their commitment to the job despite the challenges they face (Gu, 2007).

### **Assessment**

Thermodynamics (Thermo) obtained the highest composite mean while Naval Arch (NA) and Mechanics (Mech) got the lowest. Students strongly agreed that the said least courses provided feedback, the number of assessments over the semester was appropriate and adequate. During the 2<sup>nd</sup> semester, students' feedback as assessment method to be informed by the instructor at the beginning of the course in Thermodynamics (Thermo). In terms of assessments, it covered all the main topics taught in the course, evinced with the composite mean of 3.60 in Marine Electronics and Electrical Maintenance (Electro 2). In the professional course, Machine Shop 2 (Ma Shop 2), students strongly agreed that their teachers provided timely feedback on student performance and the allocation of marks/grade among assessments was satisfactory. In conclusion, obtaining its 3.59 composite mean indicated that the implementation of giving assessment was extraordinary based on the feedbacks of the students. Climie & Henley (2016) stated that school-based practitioners were often called upon to provide assessment and recommendations for struggling students. These assessments open doors to specialized services or interventions and provide opportunities for students to build competencies in areas of need. According to Tosuncuoglu (2018), the assessment procedures relate to authenticity, practicality, reliability, validity, and washback, and were considered the basic principles of assessment in teaching and learning. The main value of these aforementioned principles was to distinguish the effects of assessment and review any classroom-based issues between the teacher and the student.

### **Learning Environment**

While during the 2<sup>nd</sup> semester, Machining Tools (Ma Shop 2) and Thermodynamics (Thermo) got the highest composite mean, 3.57. However, Naval Architecture (NA) got the lowest. Students altogether strongly agreed laboratory, library facilities, recreation facilities were adequate, and access to computer facilities was sufficient for the 1<sup>st</sup> semester.

In Machine Tools (Ma Shop 2) and Thermodynamics (Thermo), students' feedback on available facilities in the classrooms was satisfactory and gained the highest composite mean. Meanwhile, the indicator "sufficient access to the internet and electronic database" obtained the lowest mean in Naval Arch.

In conclusion, obtaining its 3.55 composite mean for the 2<sup>nd</sup> semester indicated that there was still a high level of adequacy in terms of laboratory, library, and other facilities, access to the internet, and electronic database provided in the whole academic year during AY 2018-2019. Audu (2013) emphasized the importance of training machines and other equipment related to workshop facilities on improving the practical skills and knowledge of students. Additionally, Jeffery (2002) defined that educational facilities were compulsory components of learning conditions, and educational facilities not only include materials, equipment, and information technology, but also various aspects of buildings and environments.

### **Counseling**

During the 2<sup>nd</sup> semester, consecutively counseling obtained a high composite mean indicating high-level counseling of all the teachers during its 1<sup>st</sup> semester with a 3.64 weighted mean. Mechanics obtained the highest mean while Marine Electronics and Electrical Maintenance (Electro 2) got the lowest. In assessing if teachers in Mechanics (Mech) academic counseling were available when needed got the highest weighted mean. While from the courses of Machining Tools (Ma Shop 2), Naval Architecture (NA), and Thermodynamics (Thermo) students strongly agreed that counseling on non-academic matters was available when needed. The teachers were available for consultation whenever needed in Marine Electronics and Electrical Maintenance (Electro 2) obtained the lowest weighted mean among the professional courses during the 2<sup>nd</sup> Semester. According to Oviogbodu (2015), counseling can be defined as several procedures in assisting an individual to solve his problems. Counseling was more involved emotionally in the affective realm personalized learning, that was, emotions, and feelings, values, attitudes. Egbo (2013) stated that the total development of a child can only take place in an environment conducive to teaching and learning. It was in the realization of the above that all educational services which can promote teaching and learning in schools were given prominent attention by educational planners.

In the summary of BSMarE Students' Feedback on the Professional Courses During AY 2018-2019, each component of both semesters was strongly agreed upon by the students indicating positive feedback. Both semesters show that all the courses that students took were relevant to their profession. But among all the components, the learning environment obtained the least score wherein the administration of LPU-Batangas especially in LIMA was continually working through providing adequate facilities and simulation laboratories in its growing number of enrollees.

## **CONCLUSIONS**

Based on the findings, the following conclusions were drawn:

1. Respondents of study are all BS Marine Engineering Students during AY 2018-2019 who were enrolled in all professional courses of the program.
2. The study concluded that the respondents are strongly agreed that all professional courses during AY 2018-2019 are relevant to their program.
3. The study reveals that the factors of counseling and learning environment were strongly agreed by the respondents that further needs to be improved.

## **RECOMMENDATIONS**

Based on the conclusions stated, the following recommendations are offered:

1. The study revealed that a learning environment was needed to give importance and recommendations. The Marine Engineering program was mainly composed of courses that provide technical and practical skills, and the school environment significantly affects their learning. The university must provide a working area during the practical assessment. The site should have spacious laboratories and be comfortable to use where equipment is in the proper location and consistently maintained.

2. Due to the growing demand of enrollees, providing additional equipment must be considered by the administration. It may impact how the students if there is a lack of equipment. Students will need to wait for their turn to do their practical assessment, and this may result in a limited time to do tasks and may lead to challenges in achieving the course learning outcome.
3. The study also revealed that counseling was needed to give importance and recommendations. The administration must provide pieces of training for all instructors for proper class management and counseling. This helps the teacher to advance their knowledge in different strategies in assisting the needs of their students.
4. Other studies relative to the current research should be conducted to support the present investigation by future researchers using different variables in assessing the course feedback.

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## Life Skills of Maritime Students in the Philippines: Responding to the Realities of Seafaring

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**Abstract.** This study aimed to determine the level of life skills of maritime students in the four dimensions that include interpersonal communication/human relations, problem-solving/decision making, physical fitness/health maintenance, and identity development/purpose in life when taken as a whole and when grouped according to academic classification, course choice, indulgence in smoking, and indulgence in drinking hard liquor. It also aimed to find out if a significant difference exists in the level of life skills of maritime students in the four dimensions when grouped according to the aforementioned variables, and to determine which among the four dimensions can best predict the life skills of maritime students. A descriptive comparative design using the survey method was used with a sample size of 1772 respondents from selected Maritime schools in the Philippines. A quantitative analysis of the data using the mean, Mann Whitney U Test, and Multiple Regression Analysis revealed a high level of life skills among the maritime students. Findings revealed that interpersonal communication/human relations had obtained the highest mean. Significant differences were noted in the following aspects: problem-solving/decision-making dimensions between scholars and non-scholars; physical fitness/health maintenance between groups who took the course as a personal choice and as their parents' choice; the life skills of students who smoke and do not smoke in all the four dimensions, and between drinkers and non-drinkers. The results of the Multiple Regression Analysis indicated that 91% of the variation in life skills can be attributed to interpersonal communication/human relations, making it the best predictor of life skills.

**Keywords:** Life skills, maritime students, life skills model, sea service, human factors

### INTRODUCTION

#### Background of the Study

Future seafarers need to be equipped with a reservoir of skills that can help them sustain themselves through life. They need to develop skills that can make them effectively manage the challenges and tough times of everyday shipboard life, not just on the personal and academic level but in their preparation for their career life ahead. Life skills are individual thoughts and actions used to deal with threatening and stressful situation (Brooks, 1984). These life skills, also called “coping skills,” are essential as they prepare to take their place in the industry as responsible officers. According to Mofrad (2013) and Packer (2006), today’s generation of future officers needs to develop optimum skills to easily adapt to the realities of seafaring.

Merchant seafaring is a unique occupation that has traditionally been associated with high risks of fatal accidents (Tomaszunus & Weclawik, 1997). Currently, the maritime industry is beset with perennial issues related to crewing. These issues include stress and fatigue, shortage of workforce, heavy workloads, increased demand in standards of training, homesickness anxieties, threats on safety and security, incidents of depression leading to suicidal behavior, work discrimination, and interpersonal conflicts on board such as bullying. While attractive financial rewards remain to be a major motivation for choosing the seafaring profession, a growing number of seafarers opt to take a land-based job after acquiring sufficient funds to support their families. The challenge now is how to mold and retain competent seafarers who are willing to

render longer sea service while remaining positive about reaching the peak of their career as Masters and Chief Engineers. According to Caesar, Cahoon, and Fei (2015), prolonging the number of years that seafarers spend at sea and their subsequent retention is, therefore, an important issue that requires further attention.

For the maritime industry to sustain itself in the years to come, it needs to have a stable fallback in terms of human resource by ensuring a steady supply of quality workforce. The industry needs to breed marine officers who do not only possess the technical competence and skills, but also the soft skills to enable them to cope and survive. Such expectations require more professional adequacy, not mentioning substantial preparation in a holistic sense. Yadav and Iqbal (2009) point out that equally important as with the acquisition of cognitive skills is the development of social and emotional coping skills or life skills that help promote the development of well-being and competence in young people as they face the challenges and realities of life. Unfortunately, as observed by Burns, Ruby, Seaman and Brannan (2015), with all the advances in technology and human expectations, the development of non-technical skills or “people skills” such as interpersonal and social skills, communication skills, leadership and teamwork, self-management and other life skills, have failed to keep pace and are deemed insufficient.

For maritime students, just like many others who train for other fields of profession, the expectations are immense. With the maritime industry providing for more than 50, 000 vessels worldwide and with an estimated 90% of the goods traded and transported by sea (International Labor Organization), a seafarer’s career is characterized by increasing stress. According to Oldenburg and Jensen (2012), a seafarer may be at least comfortable and sure of his position and skills and the expectations of others on board a vessel, but ashore, he may be seen as immature, carefree, and lacking social skills. Hence, putting a high premium on the human element, the International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), with its latest major revision in 2010, has strongly emphasized the importance of human factors in developing future seafarers. Behavioral competencies or the development of “soft skills” such as leadership and teamwork has become the latest talk in the maritime industry, giving premium on the importance of workforce and the need to provide future seafarers with life skills that can make them succeed through life.

A study on life skills among adolescents that promotes positive behavior was done by Nasheeda (2018), but so far, no study has been conducted relative to the life skills (four dimensions) among maritime students and the best predictors of life skills that will prepare them to be responsive to seafaring life. For this reason, the researchers opted to engage in this study to describe the life skills of maritime students which are vital in the life of seafarers.

### **Framework**

The World Health Organization (1997) reiterated that individuals with adequate life skills adapt and have positive behaviors in dealing with the challenges and demands of everyday life. Skilled young adults are able to form relationships with their social contexts necessary in widening their social spectrum and intimacy (Packer, 2006). Furthermore, the WHO (2009) singled-out low academic achievement, poor social competence, poverty, truancy, and impulsiveness as risk factors for violence among individuals. By developing life skills, their social and emotional skills can help young adults manage their life better (Mofrad, 2013).

Life skills, also called coping skills or strategies, refer to the individuals’ thoughts and actions and of how he uses these to deal with threatening or stressful situations. According to Flannery (2016) and the Center for Studies on Human Stress (2017), it can be positive or negative. Expectedly, future maritime officers are supposed to develop positive life skills or coping skills to survive in their profession.

The concept of this study is anchored on Brooks’ (1984) Taxonomy of Developmental Life Skills, which was classified generically by Picklesimer and Miller (1998) into four main categories: interpersonal communication/human relations, problem-solving/decision-making, physical fitness/health maintenance, and identity development/purpose in life.

*Interpersonal communication/human relation skills* comprise the development of certain psychosocial behaviors such as empathy, confrontation, warmth, genuineness, management of interpersonal intimacy, and clarity of expression (Brooks, 1984). The second category, *problem-solving/decision-making*, according to Fishoff (1980), is the life skill that involves problem identification, goal setting, information seeking, time management and conflict resolution. It is a task of illustrating decision, consequently, to provide an answer to any problematic situation that causes perplexity. Furthermore, the third category as identified by Picklesimer and Miller (1998) is *physical fitness/health maintenance*. One of the developmental tasks of adolescents is developing healthy habits and skills to cope with stress (Hurlock, 1982). According to Brooks (1984), the life of young adults comprises the maintenance of proper nutrition, stress management, coordination, selection of leisure activity inclusive of physiological health and sexuality. *Identity development/purpose in life* is the fourth skill, comprising of self-esteem, moral choices, self-monitoring, sex role development, and emotional expression. The development of “Persona” according to Jung (2014), a Swiss Psychiatrist, is the social face the individual presents to the world---a kind of mask designed to make a definite impression upon others and to conceal the true nature of the individual. The development of a variable “social persona” is a vital part of adapting to and preparing for adult life in the external social world. A strong ego is related to the outside world through a flexible persona.

From the perspective of Maritime Education and Training (MET), the development of life-skills is emphasized in Table A-VI/1-4 of Standards of Training, Certification and Watchkeeping for Seafarers (STCW 2010), stipulates the need of life skills which articulates a good human and working relationship onboard ship. This is vital among the seafarers to be competent and to establish an effective human relationship. Such mandate promotes the need for seafarers to undergo training and certification to equip themselves with the ability to maintain good human and working relationship, work in the spirit of teamwork, and deal with conflicts that they could experience onboard ship. Furthermore, the Maritime Labor Convention (2006) promotes healthy lifestyle and wellness among the seafarers.

The present study is also anchored on the Social Learning Theory and Swanson’s System Model for Performance Improvement. This model relies on the integration of different items of the environment into a comprehensive frame of reference. In this study, the model is formed by integrating into its dimensions various concepts and constructs that were based on an extensive review of related literature on factors that bear upon the development of life skills among students.

### **Statement of the Problem**

The study aimed to determine the level of life skills of maritime students in selected Maritime Higher Education Institutions in the Philippines and to find out if such skills are influenced by selected variables. Specifically, it answers the following questions:

1. What is the level of life skills of maritime students in the four dimensions such as interpersonal communication/human relations, problem-solving/decision making, physical fitness/health maintenance, and identity development/purpose in life when taken as a whole and when grouped according to the following variables?
  - a. Academic Classification (scholar and non-scholar)
  - b. Course Choice (my choice and parents’ choice)
  - c. Indulgence in Smoking (smoker and non-smoker)
  - d. Indulgence in Drinking Hard Liquor (drinker and non-drinker)
2. Is there a significant difference in the level of life skills of maritime students in the four dimensions when grouped according to the aforementioned variables?
3. Which of the four dimensions can best predict the life skills of maritime students?

### Significance of the Study

This study is deemed significant to the maritime industry, the maritime institutions and the parents of the maritime students.

For **maritime school administrators**, results of this investigation can provide baseline data that could describe where the students are in terms of their life skills. By identifying areas of strengths and weaknesses, academic and co-curricular interventions can be made possible to hone their skills for the duration of their stay in school while preparing them for a more challenging life ahead as seafarers.

This effort will inform the **maritime industry** that maritime institutions are one with them in their goal to train and develop seafarers who are not just knowledgeable but also physically, morally, emotionally and socially prepared to face life in the real world. Moreover, as partners of the school in molding the character of maritime students, **parents** can provide their children a positive environment at home to enhance their morale and to encourage positive social adjustment as they associate themselves with other people.

Lastly, for **maritime students** who are trained to be future seafarers and marine officers, findings of this study could point them to the life skills that they need to develop while preparing themselves for the real world after their academic training.

### METHODS

A descriptive-comparative design was employed to compare variables and to determine if significant differences exist in students' life skills when these variables are considered.

This study involved a total sample of 1772 maritime students from all year levels enrolled in the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) programs for the school year 2017-2018 in selected maritime schools accredited by the Commission on Higher Education and the Maritime Industry Authority (MARINA) in the Philippines.

*Table 1. Distribution of respondents from participating MHEIs*

<b>Program</b>	<b>MHEI1</b>	<b>MHEI2</b>	<b>MHEI3</b>	<b>MHEI4</b>	<b>Total</b>
BSMT	378	383	151	328	1240
BSMarE	306	153	0	73	532
<b>Total</b>	<b>562</b>	<b>536</b>	<b>151</b>	<b>401</b>	<b>1772</b>

The research instrument used to find out the level of life skills of students was a modified Life Skills Inventory adapted from Picklesimer and Gasda (1996). Validity was established through Content Validity Ratio (CVR) with obtained an alpha result of 0.937. The CVR was conducted by engaging experts in the field of discipline. Reliability was obtained using Cronbach's alpha which yielded an alpha coefficient of 0.88. The level of life skills of these students was determined based on a four-point Likert Scale, interpreted as Very High (3.51-4.0), High (2.51-3.50), Low (1.51-2.50), and Very Low (1.0-1.50). The indicators and the description of the levels of life skills are shown in Table 2.

**Table 2. Mean Scale, Description, and Indicators**

Mean Scale	Description	Life Skills			
		Interpersonal Communication/ Human Relations	Problem-Solving/ Decision-Making	Physical Fitness/Health Maintenance	Identity Development/ Purpose in Life
3.51 – 4.0	Very High	Very easily relates with everyone in his immediate environment; Maintains a positive social relationship at all times	Very quick at identifying problems and seeking possible solutions; Very good at setting his goals; Very effective in managing and resolving conflicts that may arise	Very good at coping with stress and maintaining proper health and nutrition for a sound mind and body; Strongly adheres to good health habits	Possesses a very high self-esteem; Very effective in making moral choices and in expressing himself and his individuality to other people
2.51 – 3.50	High	Easily relates with people he trusts in his immediate environment; Maintains a positive social relationship most of the time	Can identify problems and possible solutions with a little help from others; Able to help manage and resolve conflicts	Able to cope with stress; Conscious of maintaining good health habits and practices most of the time	Possesses a high self-esteem; Able to make moral choices and express himself and his individuality to other people
1.51 – 2.50	Low	Has some difficulty in relating with people in his immediate environment; Occasionally isolates himself from others	Is slow at identifying problems and thinking of possible solutions; has difficulty in managing and resolving conflicts	Has a problem coping with stress; Often disregards the importance of maintaining good health habits and practices	Often regards himself as inferior to others; Has difficulty in making moral choices and in expressing himself and his individuality to other people
1.0 – 1.50	Very Low	Does not attempt to socialize with others; Most of the time isolates himself from the group	Lacks the ability to identify existing problems or think of possible solutions; Unable to manage or resolve conflicts	Does not know how to deal and cope with stress; Does not give importance to maintaining good health habits and practices	Has a very low opinion of himself; Cannot express himself and his individuality to others; Withdraws in the background when forced or compelled to work with other people

The four dimensions of life skills are classified as generic life skills (Picklesimer, 1991) and are considered in the Taxonomy of Developmental Life Skills formulated by Brooks (1984). Moreover, the indicators in the four dimensions of life skills are in consonance with the mandated soft skills by the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW, 2010).

The quantitative analysis of the data was done using the *Mean* to determine the level of life skills, the *Mann Whitney U test* to determine the significant difference, and *Multiple Regression Analysis* to determine the best predictor of life skills.

## RESULTS AND DISCUSSION

### Students' Level of Life Skills

Table 2 shows the level of life skills of maritime students when taken as a whole in the four dimensions. As shown in the table, *Interpersonal communication / Human relations* have the highest mean, which is 3.11, interpreted as high. This implies that the students can easily relate with people they trust in their immediate environment. Moreover, they can also maintain a positive social relationship most of the time. On the other hand, on the perspective of physical fitness/health maintenance, the result yielded a mean of 3.04. Although described as high numerically, it is the lowest among the four dimensions. This indicates that students are still able to possess a high self-esteem, make moral choices, and express themselves and their individuality to other people. This further implies that students possess the life skills that can make them effectively manage the challenges and tough situations in everyday shipboard life.

**Table 2.** Level of life skills of maritime students in the four dimensions when taken as a whole

Dimensions	Mean	Interpretation
Interpersonal Communication/Human Relations	3.11	High
Problem-Solving/Decision Making	3.07	High
Physical Fitness/Health Maintenance	3.04	High
Identity Development/Purpose in Life	3.07	High
<b>As a whole</b>	<b>3.07</b>	High

Table 3 shows the mean scores and verbal interpretations of the level of life skills of students in the four dimensions when the respondents are grouped according to academic classification. Students identified as scholars obtained a mean of 3.05, interpreted as high; while the non-scholars obtained a mean of 3.11, also interpreted as high in the dimension of interpersonal communication/ human relations. This was identified as the highest among the four dimensions. It can be noted that physical fitness/health maintenance indicated 3.01 to 3.05 for scholars and non-scholars respectively. Apparently, both scholars and non-scholars possess the life skills on managing their interpersonal intimacy which enables them to maintain a positive social relationship. Meanwhile, these students are able to cope with stress and maintain physical fitness and health.

**Table 3.** Level of life skills of maritime students in the four dimensions when grouped according to academic classification

Dimensions	Academic Classifications				Total (n=1772)	
	Scholars (n=258)		Non-Scholars (n=1514)		Mean	Interpretation
	Mean	Interpretation	Mean	Interpretation	Mean	Interpretation
Interpersonal Communication/ Human Relations	3.05	High	3.11	High	3.11	High
Problem-Solving/ Decision Making	3.00	High	3.08	High	3.07	High
Physical Fitness/ Health Maintenance	3.01	High	3.05	High	3.04	High
Identity Development/ Purpose in Life	3.04	High	3.08	High	3.07	High
<b>As a whole</b>	<b>3.02</b>	High	<b>3.08</b>	High	<b>3.07</b>	High



Table 4 presents the description of the mean obtained from the groupings of the respondents according to course choice. The data revealed that both groups of students who personally chose the course and whose parents chose the course for them have obtained a high level of life skills. Moreover, comparing the mean scores on the four dimensions, students who personally chose the course have obtained the highest mean on Interpersonal Communication/ Human Relations.

**Table 4.** *Level of life skills of maritime students in the four dimensions when grouped according to course choice*

Dimensions	Course Choice				Total (n=1772)	
	My Choice (n=1147)		Parents' Choice (n= 625)		Mean	Interpretation
	Mean	Interpretation	Mean	Interpretation		
Interpersonal Communication/ Human Relations	3.12	High	3.09	High	3.11	High
Problem-Solving/ Decision Making	3.08	High	3.04	High	3.07	High
Physical Fitness/ Health Maintenance	3.07	High	3.00	High	3.04	High
Identity Development/ Purpose in Life	3.08	High	3.06	High	3.07	High
<b>As a whole</b>	<b>3.09</b>	High	<b>3.05</b>	High	<b>3.07</b>	High

Presented in Table 5 is the result of the descriptive data on the level of life skills of the respondents when they are grouped according to indulgence in smoking. The results revealed a mean of 3.06, described as high for the smokers and 3.13, also high for the non-smokers on the dimension of interpersonal communication/human relations. The data further revealed a mean of 2.98 for smokers and 3.08 for non-smokers, both interpreted as high, on the dimension of physical fitness/health maintenance. It is noticeable that the data for both smokers and non-smokers are consistent as shown in the mean; that is, although described as high, the non-smokers have obtained a lower mean value on all the four dimensions. This implies that smokers are more vulnerable to health challenges, more specifically in maintaining good health habits. This may be attributed to the physiological effects of cigarette smoking like respiratory, circulatory, and other related illnesses on the human body (WHO, 2017).

**Table 5.** *Level of life skills of maritime students in the four dimensions when grouped according to indulgence in smoking*

Dimensions	Indulgence in Smoking				Total (n=1772)	
	Smokers (n=653)		Non-Smokers (n=1119)		Mean	Interpretation
	Mean	Interpretation	Mean	Interpretation		
Interpersonal Communication/ Human Relations	3.06	High	3.13	High	3.11	High
Problem-Solving/ Decision Making	3.03	High	3.09	High	3.07	High
Physical Fitness/ Health Maintenance	2.98	High	3.08	High	3.04	High
Identity Development/ Purpose in Life	3.03	High	3.10	High	3.07	High
<b>As a whole</b>	<b>3.03</b>	<b>High</b>	<b>3.10</b>	<b>High</b>	<b>3.07</b>	<b>High</b>

Table 6 shows the results when the respondents were grouped according to indulgence in drinking liquor. The data revealed that both groups of students who indulge in drinking and those who do not obtained the same mean of 3.11, interpreted as high, on the dimension of interpersonal communication/ human relations. Although interpreted as high, the lowest mean values were noted on Physical Fitness/Health Maintenance for both groups.

*Table 6. Level of life skills of maritime students in the four dimensions when grouped according to indulgence in drinking liquor*

Dimensions	Indulgence in Drinking Liquor				Total (n=1772)	
	Drinkers (n=600)		Non-Drinkers (n=1172)		Mean	Interpretation
	Mean	Interpretation	Mean	Interpretation		
Interpersonal Communication/ Human Relations	3.11	High	3.11	High	3.11	High
Problem-Solving/ Decision Making	3.09	High	3.12	High	3.07	High
Physical Fitness/ Health Maintenance	3.04	High	3.08	High	3.04	High
Identity Development/ Purpose in Life	3.08	High	3.10	High	3.07	High
<b>As a whole</b>	<b>3.08</b>	<b>High</b>	<b>3.10</b>	<b>High</b>	<b>3.07</b>	<b>High</b>

#### **Difference in the Students' Life Skills in the Four Dimensions When Grouped according to the Given Variables**

Table 7 shows the result of the test for significant difference in the students' life skills on the four dimensions. Based on academic qualifications, only the dimension of problem-solving/decision making shows a significant difference between scholars and non-scholars in favor of the non-scholars, while their level of life skills shows no significant difference on the rest of the dimensions.

Problem-solving and decision-making skills are anchored on the framework of Heuristics where satisfactory decisions are made with ease (Shah & Oppenheimer, 2008). The approach to problem solving or self-discovery that employs a practical method is not guaranteed to be optimal, perfect, logical or rational, but is sufficient enough for reaching an immediate goal (Gilovich, 2017). Differences in experience and exposure to Heuristics of these two groups of students have possibly influenced their skills in identifying problems and possible solutions (Juliuson, Karison, & Grling, 2005).

The result implies that both groups of students possess the skills on problem solving and decision-making in various and dynamic ways, considering their past experiences, cognitive biases, and belief in personal relevance. When people believe, what they decide matters most. They are likely to make better decisions (Acevedo & Kruger, 2004).

**Table 7. Mann-Whitney U Test Results on Students' Life Skills on the Four Dimensions Based on Academic Qualification**

<b>Interpersonal Communication/ Human Relations</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Scholars	258	854.28			
Non-Scholars	1514	891.41	186994.00	-1.079	0.281
<b>Problem-Solving/ Decision Making</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Scholars	258	841.82			
Non-Scholars	1514	893.53	183778.00	-2.53	0.01*
<b>Physical Fitness/ Health Maintenance</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Scholars	258	866.83			
Non-Scholars	1514	889.27	190230.50	-1.23	0.22
<b>Identity Development/ Purpose in Life</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Scholars	258	865.47			
Non-Scholars	1514	889.50	189881.00	-1.29	0.20
<b>As a Whole</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Scholars	258	860.13	188502.50	-1.81	0.07
Non-Scholars	1514	890.41			

\* $p < 0.05$ , significant @ 0.05 alpha level of significance

As a whole, Table 8 shows a significant difference in the level of life skills between students who personally chose their course and those whose parents chose the course for them. Specifically, significant differences were noted on the dimensions of problem-solving/decision making skills and Physical Fitness/Health Maintenance. With this result, it can be said that the development of life skills tends to be influenced when parents take the wheel in deciding what college course their children should take. A study in the Journal of Child and Family studies found that excessive involvement in their children's choice of career, despite the good intentions, tend to yield unfavorable results of depression, stress, anxiety, and negative coping mechanism. Health and Wellness is most affected in parallel with life skills development of the maritime students.

**Table 8. Mann-Whitney U Test Results in Students' Life Skills  
On the Four Dimensions Based on Course Choice**

<b>Interpersonal Communication/ Human Relations</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
My Choice	1139	902.900	341819.50	-1.81	0.07
My Parents' Choice	633	857.00			
<b>Problem-Solving/ Decision Making</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
My Choice	1139	909.19	344651.50	-2.507	0.01*
My Parents' Choice	633	845.68			
<b>Physical Fitness/ Health Maintenance</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
My Choice	1139	914.52			
My Parents' Choice	633	836.09	328581.50	-3.09	0.00*
<b>Identity Development/ Purpose in Life</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
My Choice	1139	897.00			
My Parents' Choice	633	867.62	348539.50	-1.16	0.25
<b>As a whole</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
My Choice	1139	907.31			
My Parents' Choice	633	849.05	336785	-2.297	0.02*

\* $p < 0.05$ , significant @ 0.05 alpha level of significance

Table 9 reveals significant differences on all dimensions of life skills when students are grouped according to indulgence in smoking. This difference can be attributed to the smoking behavior of a person which interplays with personality and environment influences and the physical and physiological effects of smoking which consequently affect behavioral and cognitive abilities. Previous studies have connected nicotine addiction with biological, psychological, behavioral, and cultural factors. Research has shown that nicotine increases the level of dopamine in the brain, a neurotransmitter that is responsible for the feeling of pleasure and well-being (Martin, Terry, 2019). Repetitive smoking activates a person's sense of pleasure, making him grow dependent on it. Indulgence in smoking, for some, is seen as a way to increase concentration, although this is a myth since the level of concentration declines with every smoke due to the increased carbon monoxide content in the blood which consequently reduces the oxygen supply in the vital organs including the brain (WHO, 2017).

**Table 9. Mann-Whitney U Test Results in Students' Life Skills on the Four Dimensions Based on Indulgence in Smoking**

<b>Interpersonal Communication/ Human Relations</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Smokers	652	828.46	327275.00	-3.65	0.00*
Non-Smokers	1120	920.29			
<b>Problem-Solving/ Decision Making</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Smokers	652	837.30	333039	-3.09	0.02*
Non-Smokers	1120	915.14			
<b>Physical Fitness/ Health Maintenance</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Smokers	652	810.96	315870.00	-4.75	0.00*
Non-Smokers	1120	930.47			
<b>Identity Development/ Purpose in Life</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Smokers	652	833.64	330656.50	-3.32	0.01*
Non-Smokers	1120	917.27			
<b>As a whole</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Smokers	652	823.48	324034.00	-3.96	0.00*
Non-Smokers	1120	923.18			

\* $p < 0.05$ , significant @ 0.05 alpha level of significance

Meanwhile, when the students were grouped according to indulgence in drinking hard liquor, Table 10 revealed a significant difference in the level of life skills between the drinkers and non-drinkers. Reflecting on the four dimensions of life skills which focus on the health and psychosocial dynamics of the human person, indulgence in liquor affects not only his physical aspect but also his normal personality traits. It was previously found that a person's normal behavior can disappear during intoxication of liquor (Casa Palmera, 2009).

Moreover, according to Paradis (2001), self-esteem is more fragile for liquor use. This means that there is a tendency for a person to be influenced by internally generated factors like psycho-active influence of liquor which causes him to experience instability or fluctuation on identity development or purpose in life, to mention a few, loss of motor coordination, good judgement, loss of focus, and the like. This implies that the life skills of these maritime students who will be future seafarers are distinct from each other as far as the various variables are concerned. They manifest these dimensions of life skills at a certain level and at a certain condition.

**Table 10. Mann-Whitney U Test Results on Students' Life Skills in the Four Dimensions Based on Indulgence in Drinking Liquor**

<b>Interpersonal Communication/ Human Relations</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Drinkers	596	877.47			
Non-Drinkers	1176	888.82	345067.50	0.16	0.03*
<b>Problem-Solving/ Decision Making</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Drinkers	596	901.34			
Non-Drinkers	1176	876.70	339816.50	1.03	0.04*
<b>Physical Fitness/ Health Maintenance</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Drinkers	596	871.23			
Non-Drinkers	1176	892.00	341348.50	0.67	0.01*
<b>Identity Development/ Purpose in Life</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Drinkers	596	890.38			
Non-Drinkers	1176	882.27	346349.50	-2.61	0.01*
<b>As a whole</b>	<b>n</b>	<b>Mean Rank</b>	<b>U</b>	<b>Z</b>	<b>p</b>
Drinkers	596	884.74			
Non-Drinkers	1176	885.13	349397.00	0.47	0.01*

*p*<0.05, significant @ 0.05 alpha level of significance

### Best Predictor of Students' Life Skills

The results of the Multiple Regression Analysis as shown in Table 11 revealed that 91% of the variation in life skills can be attributed to interpersonal communication/human relations, making it the best predictor of life skills. This means that the ability to relate with everyone in his immediate environment, as in the case of dealing with real-life situations onboard ship, plays a big role in the development of their life skills. Moreover, life skills can be best developed and established when maritime students can maintain a positive social relationship at all times and in all situations. Apparently, when the interpersonal dimension of a person's life skills is developed, all the other dimensions will follow through.

**Table 11. Results of the Multiple Regression Analysis for the Best Predictor of Students' Life Skills**

<b>Dimensions</b>	<b>Coefficient of Determination</b>	<b>df</b>	<b>F</b>	<b>p</b>
Interpersonal Communication/ Human Relations	91%			
Problem-Solving/Decision Making	6%	1767	5.30	0.00*
Physical Fitness/Health Maintenance	2%			
Identity Development/ Purpose in Life	1%			

\**p*<0.05, significant @ 0.05 alpha level of significance



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## CONCLUSION

Life skills help in developing positive and flexible attitude for life among the maritime students. Enhancing life skills enables them to adapt to various situations in a positive way. They might have inherent life skills, but to get the best out of them, students need to be trained and molded into developing proper life skills and to be responsible enough to successfully handle seafaring life.

Life skills can enable students to translate knowledge (what they know), their attitudes and values (what they believe and feel) into actual abilities and actions (what they should do and how they should do it). As part of their curricular training, life skills education is desirable for promoting positive social and mental health which plays an important role in strengthening their coping strategies, developing their self-confidence and emotional intelligence, and enhancing their critical thinking, problem-solving and decision-making skills.

Utilization of these research findings is relevant in the proper implementation of life skills education, which is one of the perspectives of maritime education and training. Engaging maritime students in a life skills enhancement training is helpful in addressing their needs, providing practical, cognitive, emotional, social, and self-management skills, and making them ready enough to encounter the real world of seafaring.

## RECOMMENDATIONS

The development of life skills among future seafarers is a critical factor that could determine their responsiveness to seafaring life. Hence, it is important that this should be prioritized as part of their training preparations. The following recommendations are advanced based on the findings of this study.

1. Enhancement of the curriculum and use of innovative pedagogic approaches and strategies to develop problem-solving and decision-making skills in all subjects
2. Collective involvement of parents, faculty, and the community in various extra-curricular activities to provide support to students in the development of their life skills.
3. More challenging activities in the classroom to develop teamwork and enhance the interpersonal and human relationships of students.
4. Strengthening the health programs of the school by integrating physical in the entry requirements.
5. Strict implementation of the health and wellness program that provides intensive activities for an improved health lifestyle of youth, young adults, and adults.
6. Compliance with the OHSAS and ISO 45001 in order to develop a preventive process, identify hazard risks, and provide remedial measures to prevent the occurrence of physical and psychosocial hazards/illness

All of these is proposed through a developmental process in the curricular training as instilled in the mental, physical, and psychosocial wellness of students, developing their life skills and making them more ready and responsive to seafaring life.

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## The Use of Blended Learning Approach to Improve the Students' Academic Performance in Information, Communication, and Technology (ICT)

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**Abstract.** This quasi-experimental study aimed at looking into the effectiveness of blended learning approach in improving the performance in Information, Communication, and Technology (ICT) Course of Bachelor of Science in Marine Transportation (BSMT) first year students at JBLFMU-Arevalo during the second semester of school year 2018-2019. The respondents of this research were the two sections comparable with each other who were enrolled in the subject ICT. There were 40 student respondents composed of 20 in the experimental group and 20 in the control group. A validated and reliability-tested 45 item researcher-made multiple-choice test was used as an instrument with a Cronbach index of 0.88. The statistical tools used were mean, standard deviation, Mann-Whitney test, and Wilcoxon-Signed ranks test set at .05 level of significance. The effect size was computed to determine the effectiveness of the blended learning approach in terms of students' performance in ICT. Results showed that in the pretest, though the experimental group had a higher mean score than the control group, the Mann-Whitney test showed that the mean scores of the two groups were comparable because the significant value was greater than .05. When the treatment was introduced, findings showed that there were significant differences in the ICT performance in the pretest and posttest of experimental and control groups as well as in the posttests of both groups. Results inferred that blended learning approach was more than a hundred percent effective showing significant results on the experimental group. It could also be inferred that the better performance of the control group could be attributed to the traditional method of teaching, the lecture method.

**Keywords:** blended learning approach, academic performance, Information, Communication, and Technology (ICT), JBLFMU-Arevalo

### INTRODUCTION

According to Horton (2011), a blended learning approach utilizes electronic technologies to create learning experiences. A common definition is also shared by Clark and Mayer (2016) as to which blended learning approach is delivered through digital devices to support learning itself. In this nexus of the modern age where technology is delivering education across the globe befits the emergence of the blended learning approach. Also cost reduction in training, education, and transformed higher education is assured (Garrison, 2011; Clark and Mayer, 2016). On the contrary, the blended learning approach also poses several pitfalls. First, the limited cognitive system and instructional fall down (Coherence Principle). Second, degraded engagement on the method or boring approach or even less interactive. Lastly, losing sight of the intended learning outcome (Clark and Meyer, 2016).

In the Philippines, the blended learning approach is synonymous with online learning (Pena-Bandalaria, 2009). However, Moore, Dickeon – Deane, and Galyen (2011) differently defined online learning from the blended learning approach as well as distance learning. They also added that the implicit definition of the term relies on the author's explicit definition. In addition; they also stated that uncertainties of the definition become the characteristics of the term "blended learning approach" and it may be of any form as long as it can provide a learning opportunity for an individual (Sangra, Vlachopoulos, and Cabrera, 2012). For a blended learning approach experience to be authentic, Herrington, Reeves, and Oliver (2009) state that it must follow the foundation in the theory of situated cognition or situated learning with the application of technology associated pedagogical approaches to

blend the course (Clark and Meyer, 2016). Esteves (2012) even ventured the application of social media for the enhancement of learning.

For the blended learning approach experience to be effective, it must follow the four key processes outlined by Clark and Mayer (2016). In addition, they also added the three blended learning approach architectures - Receptive, directive and guided discovery. However, there are fewer papers for each individual architecture which in turn be an opening for more studies to be conducted. To fill in some interesting parts, Hrastinski (2008) stated that there are two types of blended learning approaches namely: asynchronous (Adrian, 2013) and synchronous (Hyder, Kwinn, Miazga, and Murray, 2007). In addition, Horton (2011) also stated his different varieties of blended learning approach which includes: standalone course, learning games and simulations, mobile learning, social learning, and virtual classroom courses.

Modern Philippine educational instruction, especially focused on higher education systems are slowly pacing for blended learning approach ventures. Interestingly, the University of the Philippines Open University (UPOU) ventures for mobile learning approach (Horton, 2011) to tap excluded sectors of the Filipino society to reach their online learning programs (Pena-Bandalaria, 2009). Access to technology as indeed been a challenge in implementing a blended learning approach for developing countries like the Philippines (Anderson and Gronlund, 2009). Further challenges include technological awareness, curriculum design, motivation, and learner's behavior (Bhuasiri, Xaymoungkhoun, Zo, Rho, and Ciganek, 2012).

The rapid growth of computers and network communication systems with the upbringing of modern educational instructions has made Information, Communication, and Technology (ICT) a superb media in transforming education. ICT also reaches far out to technology as much as cloud computing. Nowadays, many are venturing for the application of cloud computing in delivering a blended learning approach namely: blended learning approach cloud (Masud and Huang, 2012). To add, ICT has been proven to create a paradigm shift of Philippine educational instruction methods and thus blended learning approach has been embraced as a means of delivering efficient and low-cost quality education (Acosta, 2016). ICT and blended learning approaches have proven to address educational development effectively as stated by Button, Harrington, and Belan (2014) for a blended learning approach in nursing education.

This study comes with several critical reasons. First and foremost is the introduction of blended learning approach for maritime education systems especially in the course of ICT. Second, the challenge for modern instruction parallel to the rise of technology. Third, the challenge to deliver quality, low cost and effective education for the maritime workforce. Fourth, the assessment of effectiveness of blended learning approach course to the maritime students. Lastly, to address the challenges of modern shipping in a way of technological education with the help of modern pedagogy as well as the rapid assimilation of education to the leading maritime workforce supplier of the world.

### **Statement of the Problem**

Generally, this study aimed to determine the effectiveness of blended learning approach to improve the students' academic performance in ICT.

Specifically, this study sought to answer the following questions:

1. What are the pretest scores of the experimental and control groups?
2. What are the posttest scores of the experimental and control groups?
3. Is there a significant difference on the pretest performance between experimental and control groups?
4. Is there a significant difference of the posttest performance between experimental and control

- groups?
5. Is there a significant difference on the pretest and posttest performance of the experimental group?
  6. Is there a significant difference on the pretest and posttest performance of the control group?
  7. What are the mean gains of the experimental and control groups?
  8. Is there a significant difference in the mean gains of the experimental and control groups?
  9. How effective is blended learning approach in terms of student performance on ICT?

## METHODS

### Research Design

The quasi-experimental method of research was utilized to effectively answer the questions relating to the effectiveness of blended learning approach in improving the student performance in ICT. According to David (2005), quasi-experimental design is nearly the same as true experimental designs, except that the former does not have restrictions of random assignment.

The study is a quasi-experimental in structure since it uses two comparable groups of respondents. The first group was the “Experimental Group” where the intervention was applied and the other was the “Control Group” where the traditional instruction method is to be applied. In this case, the experimental group shall receive the blended learning approach intervention. Furthermore, in line with the objectives of this research, a pretest-posttest method is to be employed. The idea is to assess the respondents’ initial and final performances. At the same time, assess their growth after the intervention. This is done as to solely isolate the effectiveness of the intervention with negligible factors affecting the results.

This pretest-posttest quasi-experimental research design determines the effectiveness of blended learning approach in improving the student performance in ICT among first year BSMT students during the first semester of school year 2019–2020.

### Participants of the Study

The respondents of this research were two sections relatively comparable first year BS Marine Transportation sections of the JBLFMU-Arevalo in Iloilo City, who were enrolled in the course ICT during the second semester of school year 2019-2020. They were selected through match-group design using their General Weighted Average (GWA) in the second semester, school year 2018-2019. There was a total of 40 students composed of 20 in the experimental group and 20 in the control group.

### Instrument

A 45-item researcher-made multiple choice that comprises topics from prelim to final topics was used in this study.

The topics were taken from the prelim, midterm, and final lessons which included the following: Introduction to Computer Concept, Windows and Desktop, Word Processor and Application Spreadsheet and Application, Main Features of Data Processing System Software and Management, Hardware and System Technology Basic Construction and Use of Computer Networks on Ships, Bridge-Based and Shipboard Computer Application, and Basic Hardware, Software and Network Troubleshooting.

The study was conducted from June to October 2019 of the school year 2019-2020. The questionnaire had undergone validity and reliability-testing of 0.88 using Cronbach alpha set at .05 level of significance.



## Data Collection

The data needed for this study were gathered through the use of achievement tests in pretest and posttest. The pretest was submitted for preliminary validation to a panel of jurors selected for their expertise in terms of content and appropriateness of instrument.

Pre-and post-tests were administered to both experimental and control groups. The tossing of coin was used to determine the experimental and control group. The head was assigned for experimental group and the tail for control group.

During the first-class session, the researcher administered the pretest to the experimental and the control group. This set of data was tagged as the “pre-course” data.

The experimental group and control group were handled by 2/M Karl Danielle Sira, an ICT Instructor. The experimental group who are the section Polaris 1A was taught according to blended learning approach. On the other hand, section Bowline the control group was taught the course employing only the traditional lecture-class discussion method. The intervention lasted for two months, i.e., 8 weeks during the first semester of school year 2019-2020.

## Data Analysis

The statistical tools used in this study were the following:

Mean – used to determine the students’ performance in the pretest and posttest. The mean scale and description for interpreting the pretest and posttest scores is shown below:

Mean Scale	Description
36.04 – 45.0	Excellent
27.03 – 36.03	Very Good
18.02 – 27.02	Good
9.01 – 18.01	Fair
1.0 – 9.0	Poor

Standard deviation – used to determine the level of the students’ homogeneity in their ICT course performance.

Mann-Whitney test – used to determine the significant differences in the pretests and posttests of two groups in ICT and for the significant difference in the mean gain of the pretest and posttest of the experimental and control groups set at .05 level of significance.

Wilcoxon-Signed ranks test – used to determine the significant differences in the pretest and posttest of two groups in ICT set at .05 level of significance.

Effect size – used to determine the effectiveness of the blended learning approach in terms of students’ performance in ICT. This is done by using the means and standard deviation in the posttest among the experimental and the control groups.

## RESULTS AND DISCUSSION

### Pretest Score Performance of the Experimental and Control Groups

The pretest was initially conducted to determine the comparableness between the experimental and the control groups in terms of cognitive levels. The posttest was given to the respondents after the experiment.

Table 1 shows the pretest scores among the experimental and control groups. Twenty students composed the experimental group and 20 for the control group.

The experimental group's pretest mean score is 19.15 described as "Good" while the controls group's mean score is 17.95 described as "Fair".

It is noted that the experimental and control groups registered comparably the same mean scores in the pretest, indicating their almost identical cognitive levels before the experiment.

*Table 1. Pretest Score Performance in ICT of the Experimental and Control Groups*

Compared Group	N	M	Description	SD
Experimental	20	19.15	Good	2.30
Control	20	17.95	Fair	3.14

### Posttest Score Performance of the Experimental and Control Groups

Table 2 shows the posttest scores among the experimental and the control groups. The experimental group's posttest mean score is 29.95 while that of the control group is 27.05. Both means scores are described as "Very Good".

On the other hand, the experimental group manifested a higher mean score in the posttest than the control group, implying that the experimental group has better performance in ICT after the experiment.

*Table 2. Posttest Score Performance in ICT of the Experimental and Control Groups*

Compared Group	N	M	Description	SD
Experimental	20	29.95	Very Good	2.84
Control	20	27.05	Very Good	2.68

### Significant Difference in the Pretest Score Performance in ICT between the Experimental and Control Groups

Table 3 reveals that there is no significant difference in the pretest scores of experimental and control groups,  $U = 164.50$ ,  $p = .331$ . This means that both groups possess the same knowledge in ICT.

**Table 3.** Mann-Whitney Test Result for the Significant Difference in the Pretest Score Performance in ICT between the Experimental and Control Groups

Compared Group	U	W	Z	Asymp. Sig. (2-tailed)
Experimental	164.50 <sup>ns</sup>	374.50	-.971	.331
Control				

Note. ns means not significant at .05 level of probability.

### Significant Difference in the Posttest Score Performance in ICT between the Experimental and Control Groups

Table 4 reveals that there is a significant difference in the posttest scores of experimental and control groups,  $U = 93.50$ ,  $p = .004$ .

The experimental group is better than the control group. This can be supported by the larger mean scores (see Tables 1 and 2) as compared to the control group as well as the higher mean gain that can be gleaned later in Table 7. This simply implies that blended learning is an effective intervention.

**Table 4.** Mann-Whitney Test Result for the Significant Difference in the Posttest Score Performance in ICT between the Experimental and Control Groups

Compared Group	U	W	Z	Asymp. Sig. (2-tailed)
Experimental				
Control	93.50*	303.50	-2.90	.004

Note. Asterisk (\*) means significant at .05 level of probability.

### Significant Difference in the Pretest and Posttest Score Performance in ICT of the Experimental Group

The students' pretest and posttest mean scores were compared to determine their significant difference.

Table 5 reveals that there is a significant difference in the pretest and posttest scores of the experimental group,  $Z = -3.93$ ,  $p = .000$ . This means that the experimental group's performance after the intervention is significantly better than before the intervention.

**Table 5.** Wilcoxon-Signed Ranks Test Result for the Significant Difference in the Pretest and Posttest Score Performance in ICT of the Experimental Group

Compared Test	Z	Asymp. Sig. (2-tailed)
Pretest		
Posttest	-3.93*	.000

Note. Asterisk (\*) means significant at .05 level of probability.

### Significant Difference in the Pretest and Posttest Score Performance in ICT of the Control Group

Table 6 reveals that there is a significant difference in the pretest and posttest scores of control group,  $Z = -3.94$ ,  $p = .000$ . This simply shows that the control group's posttest performance is significantly better than their pretest performance.

**Table 6.** Wilcoxon-Signed Ranks Test Result for the Significant Difference in the Pretest and Posttest Score Performance in ICT of the Control Group

Compared Test	Z	Asymp. Sig. (2-tailed)
Pretest		
Posttest	-3.94*	.000

Note. Asterisk (\*) means significant at .05 level of probability.

### Mean Gains of the Experimental and Control Groups

Table 7 shows the mean gains of the experimental and control groups. It shows that the mean gain in their scores in ICT of the experimental group is higher than the control group.

**Table 7.** Mean Gains Between the Experimental and Control Groups

Compared Group	Pretest	Posttest	Mean Gain
Experimental	19.15	29.95	10.80
Control	17.95	27.05	9.10

### Significant Difference in the Mean Gains of the Experimental and Control Groups

Table 8 reveals that there is no significant difference in the mean gains of experimental and control groups,  $U = -155.50$ ,  $p = .004$ .

For mean gains, the experimental group is better as compared to the control group as showed on the mean gain of scores. However, there is no significant difference with each other. It can be inferred that the intervention was effective as the traditional method, however, slightly more effective than the traditional ones.

The mean gains are not significant for both groups, but the posttests of both groups are significantly different. With this, despite the absence of significance on both groups' mean gains, the experimental group which is the blended learning approach is significantly better than the control group.

**Table 8.** Mann-Whitney Test for the Significant Difference in the Mean Gains of the Experimental and Control Groups

Compared Group	U	W	Z	Asymp. Sig. (2-tailed)
Experimental				
Control	155.50 <sup>ns</sup>	365.50	-1.21	.226

Note. ns means not significant at .05 level of probability.

The effectiveness of the blended learning approach in terms of students' performance in ICT was quantified using the effect size. Using the means and standard deviation in the posttest among the experimental and the control groups, the value of the effect size is 1.05. This means that the effect size was large, and the intervention was more than a hundred percent effective (Bartolucci, Tendra, and Howard, 2011; Carson, 2012; and Coe, 2002) as compared to lecture method.

## CONCLUSION

The experimental group appeared to have learned significantly better in their ICT lessons after having been subjected to the blended learning approach than the control group. It was shown that the blended learning approach was an effective teaching styles in teaching ICT course.

In modern pedagogy where student centered approach is widely applied, the means of learning of students greatly attribute as to how the subject matter is thoroughly delivered. Through and through, modern technology is affecting basic education and replacing traditional teaching methods. In effect, technology is harnessed to be a guiding tool for efficient learning by assimilating tools and methods of orderly fashioned learning resource techniques that stimulates cognitive absorption of knowledge and thus enabling continuous and smooth learning output and retention and that is blended learning approach.

However, learning may have barriers as to the nature of a 21<sup>st</sup> century learner. Despite this, being traditional and modern instruction may be way separate in delivering learning. Attitudes and epistemology of a learner are also believed to be a factor. Nonetheless, triumph to modern and classic pedagogy is attributed to the bond shared between a teacher and a learner with trust as a key despite the difference of instructional medium.

## RECOMMENDATIONS

Certain recommendations were advanced on the basis of the findings, conclusions and implications.

1. Blended learning approach is highly recommended for ICT course.
2. In view of the significant effectiveness of blended learning approach in teaching, it is highly recommended for use among teachers not only in ICT but of other subjects as well.
3. In venture of modern pedagogy, utilization of blended learning approach to its outmost must be kept in place as homework and activities which can be performed on the classroom be submitted via blended learning approach sites.
4. Further or follow-up studies may be conducted to verify long term learning applications of blended learning approach and its effects as an intervention. This study also encouraged the application of PBL and OBTL on blended learning approach modules and its entirety as to assist the cognitive functions of learner centered pedagogy.
5. Maritime schools, such as the JBLFMU-Arevalo, and other educational institutions should conduct seminar-workshops to introduce to the instructors to blended learning approach and should include the methods of assistance in introducing blended learning approach to students.

Entry of blended learning approach must be made on gradual transitions as to let the learners adjust from traditional methods to blended learning approach. Various studies suggest that abrupt transitions may hinder learning as a result.

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## Factors Influencing the Level of Burnout among Ilonggo Seafarers

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**Abstract.** Seafarers are amongst the occupational groups with the highest risk for stress, a factor known to impact on mental health. Job burnout is a state of physical or emotional exhaustion as a result of prolonged stress and frustration leading to feelings of depression or stress. This study sought to determine the factors influencing the level of burnout among Ilonggo seafarers. This descriptive study was participated by 70 Ilonggo seafarers who have experience onboard international seagoing vessels. The study employed a researcher-made instrument validated and pilot tested. The research instrument was administered through a Google Form and data were analyzed employing mean, one-way ANOVA and multiple regression. The results showed that age, years of experience, and rank are contributing factors to the level of burnout of the Ilonggo seafarers. As to age, older seafarers have higher level of burnout as compared to the young ones. As to years of experience, those with longer years of experience have higher level of burnout as compared to those with shorter years of experience. As to rank, Ilonggo seafarers with higher ranks have higher level of burnout as compared to those with lower ranks. Furthermore, work pressure is a predictor of the level of burnout among the Ilonggo seafarers. Specifically, the higher the work pressure, the higher the level of burnout. The researchers recommend that policies and guidelines on how to cope with burnout shall be given attention in the school level so that maritime graduates should be aware of it. Maritime companies should also come up with programs on how to cope with stress and burnout for the seafarers onboard.

**Keywords:** *Job Burnout, influencing factors, Ilonggo seafarers, multiple regression*

### INTRODUCTION

Seafarers' health and well-being has long been a concern in the shipping industry because of the unique characteristics of working at sea (Chung, Lee & Lee, 2017). Seafaring is undeniably a tough profession. A seafarer, being away from family has to endure limited social life, monotonous routines, and different working environment which lead to different kinds of stress. Stress and fatigue hinder the maritime professional to perform effectively (Raunek, 2016). Seafarers are amongst occupational groups with the highest risk for stress, a factor known to impact on mental health. Psychological issues such as depression, anxiety, suicide, and alcohol or drug dependence are recognized health problems within the maritime sector (McVeigh, MacLachlan, Vallières, Hyland, Stilz, Cox & Fraser, 2019).

Emotional problem, physical work and psychological problem are some factors that a seafarer might face every day, which correlate the nature of burnout among seafarer onboard. Burnout is defined as a state of emotional, physical, and mental exhaustion caused by excessive and prolonged stress (Montero-Marin et al., 2009). As Chung, Lee, and Lee (2017) underscored in their study on burnout among seafarers and its antecedents and effects on incidents at sea the mutual effects of personal and work-related burnout but the latter plays a significant role on incidents at sea.

Job burnout is a state of physical or emotional exhaustion as a result of prolonged stress and frustration leading to feelings of depression or stress. Challenging factors that contribute to job burn out include unsupported work environments, feeling isolated at work, task monotony, unclear job requirements, role ambiguity, intense workloads, negative social relationships and negative organizational culture and poor leadership. Every job carries varying degrees of stress and frustration, but seafaring can be overwhelming and challenging by complexities intrinsic to the profession that include long separation periods away from family and friends, deep sea voyages, rough weather conditions, multicultural working environment, limited recreational opportunities, all of which can add to the onset of burnout. Burnout is characterized by signs and symptoms that exist along a continuum and the difference between burnout and

stress is a matter of degree and individual characteristics. Recognizing the red flags of burnout can allow you to address the issue early on and prevent further mental or physical decline.

A study on burnout and job satisfaction by Maslach et. al. investigated the relationship of job satisfaction with burnout; and have found burnout to be a strongly related to job dissatisfaction. Within three phases of burnout, emotional exhaustion is found to be more significant cause of job dissatisfaction than cynicism.

This study aimed to determine the factors influencing the level of burnout among Ilonggo seafarers. The results of this investigation may also be communicated to the different maritime training centers or even to the maritime schools so that in case the respondents experience high level of burnout on board, something can be done to aspiring seafarers while they are still on land. Thus, the results of this investigation will be a great contribution for the effective seafaring training program.

## **Framework**

This research was anchored on the Multidimensional theory of Burnout (Assessment) developed by Maslach (1998). The assessment covers three core dimensions: (1) emotional exhaustion, (2) depersonalization, (3) and reduced personal accomplishment. Emotional exhaustion is the central quality of burnout and the most obvious manifestation of this complex syndrome. When people describe themselves or others as experiencing burnout, they are most often referring to the experience of exhaustion. Of the three aspects of burnout, exhaustion is the most widely reported and the most thoroughly analyzed. The strong identification of exhaustion with burnout has led some to argue that the other two aspects of the syndrome are incidental or unnecessary (Leiter, 2017).

However, the fact that exhaustion is a necessary criterion for burnout does not mean it is sufficient. If one were to look at burnout out of context, and simply focus on the individual exhaustion component, one would lose sight of the phenomenon entirely. Exhaustion is not something that is simply experienced—rather, it prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with the work overload. Within the human services, the emotional demands of the work can exhaust a service provider's capacity to be involved with, and responsive to, the needs of service recipients.

Depersonalization, on the other hand, is an attempt to put distance between oneself and service recipients by actively ignoring the qualities that make them unique and engaging people. Their demands are more manageable when they are considered impersonal objects of one's work. Outside of the human services, people use cognitive distancing by developing an indifference or cynical attitude when they are exhausted and discouraged. Distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to cynicism (depersonalization) is found consistently in burnout research, across a wide range of organizational and occupational settings.

The relationship of inefficacy (reduced personal accomplishment) to the other two aspects of burnout is somewhat more complex. In some instances, it appears to be a function, to some degree, of either exhaustion, cynicism, or a combination of the two (Cropanzano, Rupp & Byrne, 2003). A work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode one's sense of effectiveness. Further, exhaustion or depersonalization interfere with effectiveness: It is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom one is indifferent. However, in other job contexts, inefficacy appears to develop in parallel with the other two burnout aspects, rather than sequentially (Leiter, 1993). The lack of efficacy seems to arise more clearly from a lack of relevant resources, whereas exhaustion and cynicism emerge from the presence of work overload and social conflict.

### Statement of the Problem

This study aimed to determine the factors influencing the level of burnout among Ilonggo seafarers.

1. What is the level of burnout among the Ilonggo seafarers in general and when grouped according to:
  - 1.1. age;
  - 1.2. rank; and
  - 1.3. years of experience?
2. What is the degree of factors influencing level of burnout among the Ilonggo seafarers in terms of the following aspects:
  - 2.1. work pressure;
  - 2.2. interpersonal communication;
  - 2.3. financial obligations;
  - 2.4. untoward incidents; and
  - 2.5. emotional-psychological?
3. Is there a significant difference in the level of burnout among the Ilonggo seafarers when grouped according to:
  - 3.1. age;
  - 3.2. rank; and
  - 3.3. years of experience?
4. Which of the factors influence the level of burnout of Ilonggo seafarers:
  - 4.1. work pressure;
  - 4.2. interpersonal communication;
  - 4.3. financial obligations;
  - 4.4. untoward incidents; and
  - 4.5. emotional-psychological?

### Significance of the Study

The study is deemed beneficial to the maritime students, the parents of the maritime students, the maritime instructors, the maritime administrators, and the maritime industry partners.

**Maritime Students.** The findings of this study may help maritime students to know the factors that influence burnout and can be apprehended of these factors so that they can start coping with these factors once they encounter them in their life.

**Maritime Teachers.** They can be reminded of their teaching strategies, most probably to make them more exciting and to integrate in their lessons tips on how to cope with stress that can lead to burnout so that maritime students, as young as they are, can be aware of the factors that cause burnout.

**Parents/Guardians.** The results of this study may benefit parents and guardians for they will know the factors that influence the level of burnout among seafarers—the future career of their children. By knowing this, parents can remind their children from time to time on the things that could lead to stress and eventually burnout.

**School Administrators.** They can make use the findings of this study as basis in conducting symposiums or open forums for maritime students on how to cope with stress and burnout, especially on factors that influence the level of burnout in maritime industry.

**Maritime Industry Partners/Shipping Company.** The result of this study can serve as a guide for the industry partners/shipping companies to assist the seafarers especially on the things that would cause them stress and burnout. A mental health program can also be designed to help seafarers who experience burnout.

### METHODS

A descriptive correlational design was employed to find out the factors influencing the level of burnout and to determine if which of the factors significantly influence level of burnout among Ilonggo seafarers.

This study involved 70 Ilonggo seafarers who have been onboard in international seagoing vessels. The research instrument on the Factors of Burnout, is composed of 15-item statement that would determine the factors of burnout. These factors are: (1) Work Pressure (items 2, 8, and 12); (2) Interpersonal Relationship (items 3, 5, and 13); (3) Financial Obligations (items 4, 9, and 15); (4) Untoward Incidents (items 6, 10, and 14); and (5) Emotional and Psychological (items 1, 7, and 11). There are three (3) statements for each factor.

The quantitative analysis of the data was done using the *Mean* to determine the level of level of burnout, the *Kruskal Wallis H test* to determine the significant difference, and *Multiple Regression Analysis* to determine the best predictor of burnout.

## RESULTS AND DISCUSSION

### *Level of Burnout among Ilonggo Seafarers*

This study aimed to determine the factors influencing the level of burnout among Ilonggo seafarers, school year 2020-2021. Thus, the table of the level burnout among Ilonggo seafarers of the respondents in general and when grouped according to the different characteristics considered in the study is presented in Table 1.

The results showed that in general the level of burnout and its factors among Ilonggo seafarers was described as moderate level of burnout ( $M=2.74$ ,  $SD= 1.41$ ). This means that most of the Ilonggo seafarers experienced moderate level of burnout. The results implied that there was some level of burnout and its predictors among Ilonggo seafarers but only limited to some Ilonggo seafarers because it was enough to generate a moderate level of burnout.

In terms of age, 25 years old and below ( $M=1.94$ ,  $SD=.91$ ) had the lowest mean score described as “low” while 26-35 years old below ( $M=2.01$ ,  $SD=1.00$ ) had “low” level of burnout too, and 36 years old and above ( $M=3.82$ ,  $SD=1.25$ ) had the highest burnout level described as “high”.

In terms of experience, the results showed that the respondents with 8-15 years of experience on board ( $M=2.39$ ,  $SD=1.30$ ) had “moderate” level of burnout while those with the experience of 1-7 years ( $M=1.92$ ,  $SD=.87$ ) had “low” level of burnout and those with more than 15 years on board ( $M =4.00$ ,  $SD=1.12$ ) had “high” level of burnout.

In terms of rank, the results showed that officers ( $M=4.00$ ,  $SD=1.12$ ) had the highest level of burnout that is described as “high” followed by OS/AB ( $M=2.31$ ,  $SD=1.24$ ) with “low” level of burnout and Cadet ( $M=1.94$ ,  $SD=.921$ ) with the lowest mean score that is described as “low”.

**Table 1.** Level of Burnout among Ilonggo Seafarers as a Whole and when grouped according to age, years of experience, and rank

Category	N	Mean	SD	Description
Overall	70	2.74	1.41	Moderate
Age				
25 years old and below	20	1.94	.91	Low
26-35 years old	21	2.01	1.00	Low
36 years old and above	29	3.82	1.25	High
Years of Experience				
1-7 years	23	1.92	.87	Low
8-15 years	25	2.39	1.30	Moderate
more than 15 years	22	4.00	1.12	High
Rank				
Cadet	19	1.94	.92	Low
OS/AB	29	2.31	1.24	Low
Officer	22	4.00	1.12	High

Note: The range below was used to describe the mean results for the level of burnout: very low (1.00-1.50); low (1.51-2.50); moderate (2.51-3.50); high (3.51-4.50); and very high (4.51-5.00).

### **Degree of Factors of Burnout**

This study also aimed to determine the factors of burnout among Ilonggo seafarers, school year 2020-2021. Thus, the table on the degree of factors of burnout among Ilonggo seafarers are shown as in Table 2.

The table shows that among the factors of burnout, “works pressure” (M=3.18, SD= 1.50) had the highest mean score that is described as “moderate” degree of factors of burnout, followed by “emotional-psychological” (M=2.53, SD= 1.21) that is also described as “moderate” degree of factors of burnout, “untoward incidents” (M=2.46, SD= 1.09), “financial obligations” (M=2.23, SD= 1.07), and “interpersonal communication” (M=2.23, SD= 0.91) that are described as “low” degree of factors of burnout.

**Table 2.** Factors of burnout

Factors	Mean	SD	Description
Work Pressure	3.18	1.50	Moderate
Interpersonal Communication	2.23	0.91	Low
Financial Obligations	2.23	1.07	Low
Untoward Incidents	2.46	1.09	Low
Emotional-Psychological	2.53	1.21	Moderate

Note: The range below was used to describe the mean results for the degree of factors: very low (1.00-1.50); low (1.51-2.50); moderate (2.51-3.50); high (3.51-4.50); and very high (4.51-5.00)

### **Differences in the level of burnout**

The study also aimed to determine the significance of age, years of experience, and rank in terms of the level of burnout.

In terms of age shown in Table 4, the Kruskal-Wallis test result showed that there was a statistically significant difference in the level of burnout between the different age groups,  $\chi^2(2) = 19.58$ ,  $p = .000$ , with a mean rank level of 26.15 for younger than 26 years old, 26.79 for 26-35 years old 48.26 for older than 35 years old. This means that age is a factor in the burnout level of the Ilonggo seafarers. Specifically, this means that older seafarers are more burnt out than the younger ones.

In terms of years of experience as also shown in Table 4, the Kruskal-Wallis test result showed that there was a statistically significant difference in the level of burnout between the different groups in terms



of their experience,  $\chi^2(2) = 16.85$ ,  $p = .000$ , with a mean rank level of 25.87 for 1-7 years of experience, 31.82 for 8-15 years of experience, 49.75 for more than 15 years of experience. This means that years or experience is a factor in the burnout level of the Ilonggo seafarers. Specifically, this means that seafarers with longer years of experience are more burnt out than those with shorter experience.

Meanwhile, in terms of rank that is also shown in Table 3, the Kruskal-Wallis test result showed that there was a statistically significant difference in the level of burnout between the different groups in terms of their position,  $\chi^2(2) = 15.69$ ,  $p = .000$ , with a mean rank level of 26.18 for cadet, 31.07 for OS/AB 49.39 for officer. This means that rank is a factor in the burnout level of the Ilonggo seafarers. Specifically, this means that seafarers with higher rank are more burnt out than those with lower rank.

**Table 3.** *Kruskal-Wallis test of the difference in the level of burnout in terms of age, years of experience, and rank*

Category	N	Mean Rank	df	$\chi^2$	P
Age					
<26 years old	20	26.15	2	19.58	.000*
26-35 years old	21	26.79			
>35 years old	29	48.26			
Years of Experience					
<8 years	23	25.87	2	16.85	.000*
8-15 years	25	31.82			
>15 years	22	49.75			
Rank					
cadet	19	26.18	2	15.69	.000*
OS/AB	29	31.07			
Officer	22	49.39			

\*significant at  $p = \leq .001$

#### **Predictors of Level of Burnout**

The combined results in Table 4 show that “work pressure” predicted level of burnout,  $b = .498$ ,  $t(69) = 6.009$ ,  $p < .01$ . Work pressure also explained a significant proportion of variance in the level of burnout,  $R = .903$ ,  $F(5,69) = 56.82$ ,  $p < .01$ .

**Table 4.** *Results of the Multiple Regression Analysis for the Predictor of the Level of Burnout of Ilonggo Seafarers*

Dimensions	Coefficient of Determination	df	t	Sig.
Work Pressure	.47	68	6.01	.000*
Financial Obligations	.22			
Emotional-Psychological	.20			
Interpersonal Relationships	.16			
Untoward Incidents	.07			

\*significant at  $p = \leq .001$

The results further mean that out of the five factors, only work pressure can predict the level of burnout of Ilonggo seafarers. Specifically, it means that the significant change in the level of burnout of Ilonggo seafarers is due to work pressure, because of the sig. value is 0.000, which is less than the acceptable

value of 0.05. With a 1% increase in the work pressure, the level of burnout will increase by 0.47% (B-value).

## CONCLUSION

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

1. Age, years of experience, and rank are contributing factors to the level of burnout of the Ilonggo seafarers. As to age, older seafarers have higher level of burnout as compared to the young ones. As to years of experience, those with longer years of experience have higher level of burnout as compared to those with shorter years of experience. As to rank, Ilonggo seafarers with higher ranks have higher level of burnout as compared to those with lower ranks.

2. Work pressure is a predictor of the level of burnout among the Ilonggo seafarers. Specifically, the higher the work pressure, the higher the level of burnout.

## RECOMMENDATIONS

Based on the results and conclusions drawn from the study, the following recommendations were forwarded:

For the students in general, that they must know the physical and mental struggles that their father faces onboard. They should understand the hardship of their father as a seafarer and must know how to value the sacrifices of their father just to give them a better future.

For the Ilonggo seafarers, they must know and understand their burnout level and to avoid the factors that contribute to their burnout condition onboard.

For the maritime students, they must be aware of the factors that contribute to the burnout level of a seafarer onboard ship, and to make them ready enough dealing with it.

For the future researchers, they must try to widen their scope of this study if they want to pursue study like this, they must increase the number of seafarers since the number of respondents depends on the richness on the result of the study. They must also try to use different method in order to have better results in their study.

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***In the midst of the unthinkable: Phenomenological Life-world Approach to the Experiences of the Survivors during a Sea Tragedy***

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**Abstract.** The aim of this study was to highlight the different experiences of survivors during the Iloilo-Guimaras Strait tragedy, Philippines last August 3, 2019. The researchers used qualitative research design by employing narrative inquiry through the questionnaire, interviews, and documents from testimonies, social media, newspapers, and radio reports of the survivors. A phenomenological life-world approach, inspired by the French philosopher Maurice Merleau-Ponty, was chosen for the theoretical framework. The findings showed three main features: *the motion*, *the stillness* (events before the tragedy), and the *change in perspective* (event during and after the tragedy in the middle of the sea). The motion comprised the motion of the wave caused by the sudden hurl of the wind, the locals call as “pugada” (tornado in the sea) and the action it caused the passengers. When the sudden force of the wind and the waves withdrew, it was followed by stillness. The feeling of the unthinkable was present, accompanied by anxiousness and endless waiting. Another prominent feature was the passengers’ incapacity to answer “how long” they had suffered before being rescued. The Iloilo-Guimaras Strait tragedy seemed to be a timeless event. Thinking about their loved ones and praying intently meant a change in perspective in one’s own shattered world to that of another person. The shift between focus and struggle, contributed to the making of life-saving decisions among the survivors themselves and for other survivors. The findings derived from the study were the realizations and experiences of the survivors during these times of uncertainty.

**Keywords:** *typhoon, tragedy, suffering, phenomenology, life world*

## INTRODUCTION

The August 3, 2019, Iloilo- Guimaras Strait mishap wherein three boats capsized and claimed the lives of 31 people has been the focus of the spotlight as the need to clarify and strengthen protocols of the suspension of motorboats as well as emergency response coordination have been pointed out as being the cause of the casualties.

A catastrophe strikes suddenly, is unpredictable and out of control and its effects transcend the time of its exposure. A catastrophe is also known by the massive amount of human suffering it causes as well as the vast amount of material damage and its threat to human identity, dignity, and security (Dyregrov, 2002). Three paradigms that define a catastrophe can be discerned: it erupts from an outer event, the vulnerability of the society and the insecurity (Gilbert, 1998). According to APA (2000), a trauma is defined as: “An extreme stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threats to one’s physical integrity” (p. 463). Dyregrov (2002) described some acute and normal reactions to disaster, e.g., dissociation where the individual creates a mental distance to the situation. Time was experienced as passing by in slow motion thus allowing time for a more or less conscious discerning of life-saving alternatives to the threat.

The experiences of the survivors were those of shock and disbelief. Uncertainty, grief, and loss as well as hope of meaning were present. During these times, Dyregrov and Straume (2003) emphasized the importance of a collective approach (group settings) towards helping disaster-bereaved families.

Psychologists assert the possibility of researching suffering. In this study, this is relevant in the present study since it is assumed that the experience of being in the midst of the unthinkable is a very complex and overwhelming experience.

In this regard, conducting research when the pattern of life is shattered and life itself is at stake needs to be considered. To research this experience might mean going beyond the taken for granted, seeking the shattered which could contain the reflective experience of the sea tragedy. Thus, the aim of this study was to underscore the sudden experience tragedy and relieved suffering by those who experienced the Guimaras-Iloilo Sea tragedy, 3 August 2019. The research questions were: What is the meaning of the experience of the tragedy and relieved experience of the victims before and after the Guimaras-Iloilo sea tragedy?

### Research Questions

This study explored the situation before and during the sea tragedy, it was deemed that through this investigation, the roles of certain government agencies like PCG (Philippine Coast Guard) and MARINA are implied in the context of sea mishaps that happen such as Iloilo-Guimaras Strait tragedy.

In order to give light to the situation, the specific questions were stated in the following:

- (1) What is the situation before the tragedy?
- (2) What is the situation during and after the tragedy?
- (3) What strategies have been utilized during the sea tragedy?
- (4) What insights or lessons have been learned from the tragedy?

## METHODS

### Research design and setting

An exploratory study design, inspired by the phenomenology of Merleau-Ponty (1962) and Dahlberg, Dahlberg and Nystro 'm (2008), was chosen. A distinction was made between the "fundamental description" of a phenomenon based upon qualitative data, and the "fundamental structure" as influenced by Merleau-Ponty's philosophy and the notion of structure (Colaizzi, 1973, 1978). Interviews were conducted by the researchers among the survivors of the sea tragedy. A short questionnaire containing the open-ended items and document analysis from the television and radio news reports were used in this study. Triangulation of the different data was utilized to validate the experiences of the survivors. Figure 1 shows the triangulation process.

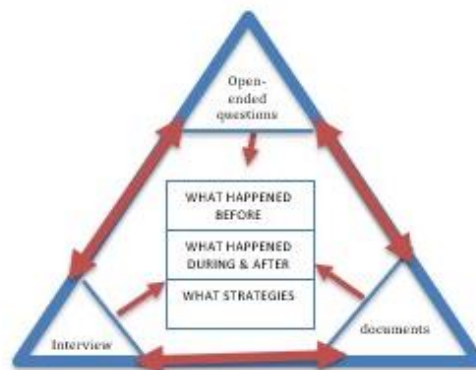


Figure 1. The Triangulation Process



### **Data collection and selection procedure**

The data collected was analyzed using the three (3) sources: (1) data from the open-ended questionnaire, (2) testimonies from the survivors' interview, and (3) documents derived from the media reports. These data were taken to determine the first-hand experiences of the survivors during the Guimaras-Iloilo Strait sea tragedy. In terms of documents from media, both television and the radio programs were used as possible data sources. Television was used as one of the sources of data because it provides visual encounters of the survivors and because of the frequent reporting of the Iloilo-Guimaras Strait catastrophe. Social media were also utilized. Selected interviews were also done to provide depth and a closer encounter with the survivors. A total number of 15 short interviews were included in the study. The criteria of inclusion were: (1) The program should pertain to the phenomenon before and after the Iloilo-Guimaras Strait catastrophe; (2) The interview should contain personal experiences of the catastrophe when it took place.

Data collection started with a questionnaire containing the specific questions as stated in the statement of the problem. For the interview, it was done by using key words, feelings before and after the sea tragedy. These key words were the survivors' experiences with Guimaras-Iloilo sea tragedy. The length of interview was 30 minutes or more. Interviews were done upon the signing of the "letter of consent" by the informants and recorded using cellphones (Sayre & Halling, 2007).

The next step after the interview was to transcribe the selected video recordings verbatim, including pauses, intonation and emotional as well as physical expressions. According to Sayre and Halling (2007), video recordings capture a remarkable amount of embodied expressions. The richness of videotaped material could be profoundly evocative. The face, in its openness and vulnerability, expresses who the person is (Levinas, 1969). When reading the transcribed data, it was possible to recall the memory of the actual interview. The process of interview allows the interviewees to go back to their experiences and connect to the scene of the Guimaras-Iloilo Strait sea tragedy. Moreover, an individual can only look within himself or herself metaphorically (Sayre & Halling, 2007). These same experts also emphasized that another advantage with this data source was that the 'methodological problem of bridling one's pre-understanding during the interview had to be faced by the interviewer.' And that, to deal with one's pre-understanding is an issue of reflection. This is done by reflecting upon the relationship between the researcher and the video data and between the interviewer and the interviewee. This also shows how these relationships influenced the understanding of the phenomenon. Phenomenological research often addresses relational phenomena in terms of individual experience, rather than the relationship itself (Sayre & Halling, 2007).

The researchers also used social media reports and testimonies from the survivors and their families. This includes reports of different reporters or writers who gave their insights and opinions about the event and their effects to families during the Guimaras-Iloilo Strait Sea tragedy. To tell and retell one's story about a traumatic event is one way of psychologically dealing with a trauma (Michel, Lundin & Otto, 2002).

### **Data analysis**

The analysis was inspired by phenomenology in accordance with the ideas of Dahlberg et al. (cf. 2008). The reason for this choice was that the research data contained the survivors' experiences of the sea tragedy, which was suitable for an understanding of their lifeworld. Moreover, Merleau-Ponty's (1962, 1968) notion of embodiment as foundational to man's personal and social existence and the body as the vehicle for the human understanding of the world and of other people, were of special significance to the study. In this study, Colaizzi's (1973) view of phenomenological studies was also subscribed to. He describes two layers of "phenomenological" understanding. The human subject has more or less immediate and conscious and also suggests that this methodological aim was to explicate the latent and primordial level in order to reflect on and reach a deeper level of understanding of the research phenomenon. The analysis started with several readings of the transcribed data in order to get acquainted with it and to get a sense of the whole of the text. Researchers consider this not to be a simple task as there were many interviews of different types.

The essence is what makes the phenomenon what it is and the way it is (cf. Husserl, 1999; Dahlberg, 2006b). The next phase of the analysis was to divide the text into smaller units where each unit was described with a preliminary meaning. A process of critical reflection was started at the same time as the patterns in the inductive analysis emerged. This critical reflecting attitude was held as long as possible in order to retain an open mind to the meaning of the text, i.e., not to make definite the indefinite (Dahlberg & Dahlberg, 2004). Then, the emerging patterns or clusters were now analyzed in order to describe the essential structure of the phenomenon. The essential structure was then critically reflected on against the text, the meaning units, and the clusters. The researchers may have few expectations about exactly what can be found but they have great expectations in terms of what the phenomenon might contain, i.e., there was a high level of curiosity towards the phenomenon. Thus, it was easier to let the indefinite be indefinite (cf. Dahlberg & Dahlberg, 2004) until a reflected view of the phenomenon emerged.

### **Ethical considerations**

Performing research where individual agony is concerned always includes a risk of exploiting the vulnerability of a person. This risk was reduced throughout the research process by considering the risk of violating the integrity of the survivors who were the informants. The informants had agreed to be interviewed. An objection can be raised at any time the interviewees feel during their participation in the research study.

## **RESULTS**

The description of the findings begins with a short summary of the situation, i.e., versions of what happened before and after the sea tragedy. It starts with an explication of the immediate experiences before the catastrophe followed by the three prominent features: The motion; the stillness; and the change of perspective.

### **The situation and the phenomenon (before the tragedy)**

The meaning of the experiences of pain and agony during the Iloilo-Guimaras Strait disaster emerges as a drama and a tragedy. The first and shortest act of the drama lasts for a few seconds up to a few days. This limited period was described by the victims as an ordinary experience, a sense of urgency in everyday life. The need to go to the city and the need to go home is the primary reason for most of the victims.

It was a normal day. The sun was up, and nobody did not have an inkling that there is something that is going to happen. It was a sort of a drama. In this drama, there was a sudden blow of the wind in the middle of the waves, it was a big and strong blow. The victims did not know where it came from. As what the survivors have described, it was so sudden and there was no sign of the impending danger. There was no more time to seek for protection and no time to bid good-bye. It was like Hamlet's decision to be or not to be, rather to die or not to die. That was the question. It was not a long time. The motion of the wave is followed by a deep silence, like a frozen moment. In this act the feeling of not having been there experiencing the catastrophe is prominent. Even time is frozen; none of the victims seem to know how long the sea tragedy lasted and how long it took before they were rescued. Time seems to be a non-existing phenomenon and the catastrophe a timeless event.

This act is followed by a strong drive to restore order so as to alleviate the uncertainty following the wave. The victims try to grasp the ungraspable by putting themselves together, i.e. trying to interweave their own world with the world of the disaster. The lost ones are searched for and no efforts seem too demanding in the hope of finding them, alive or dead. The searches take place at the port, under water and reached up to Dumangas, Iloilo and the nearby bodies of water. There was a commotion in the pier as everyone wants to know what really happened. Those with family members on board and were on the capsized boat were eager to find out whether their loved were still alive. The victims seem to find some

relief by continuously changing perspective. This means for example staying focused while rescuing others but also keeping a distance in order to comprehend the situation. By changing perspective, the victims seem to absorb the experience of suffering and the attempts to relieve suffering by creating a more complete picture of the Guimaras-Iloilo tragedy. The essence of the phenomenon is explicated by the following constituents: The motion, the silence, and a change in perspective.

### **The motion (during the tragedy)**

The motion includes the motion of the boat, the waves, and the motion it causes among passengers. Early in the morning of August 3, 2019, when one of the boats plying the Guimaras-Iloilo Strait capsized. There was rain but there was no typhoon signal. So, the boats were allowed to sail. It was a usual Saturday morning; people move back and forth from Guimaras to Iloilo and vice versa. The weather was fine, and the passengers were all set to cross the strait. "I took one of the boats, like the way I regularly do." It was a smooth trip, I may say. All of a sudden while we were almost near Iloilo, a strong wind drew closer to the boat and in an instant turn it upside down. There was a huge ball of wind which toppled the boat over. The scenes that took place were frightening; "There have been chaos all over, passengers have been tossed up in every direction. When the waves came, the passengers were left in great confusion. The disaster was seen as a beast that devoured all that it passed, leaving nothing behind to save; "it was so sudden it was only a second, this strong wind just swept in, and everything was in chaos." The passengers were disoriented, and experiences of inner and outer disarray were obvious. Passengers and their things were not where they should be, passengers' cries were heard everywhere, parents were looking for their children; "then I lost him [the son] and could not find him a few minutes later," "Yes, it that strong wind just beat in and the boat toppled, while the passengers disappeared, it was a devastation."

"The passengers suffered physically as well as mentally, crying and screaming out of despair when not being able to find their next of kin." They were trapped in confusion, "the incident was a severe nightmare." Everyone was just shouting and shouting as they find helplessness and hopelessness because of the impending death'.

The victims looked for a ray of hope to find rescue. The fact that there was no time to consider what to do or not to do made them act spontaneously: "I had no time to think", "I just took the rope and started praying." Another passenger was interviewed as early as the same day the catastrophe took place. The wave caught him, and his wife and they struggled to survive; and "I got hold of my wife who then slipped, and we were floating on the water and the rest was history."

### **The stillness (after the tragedy)**

When the strong wind "pugada" was over and leaving everything in disarray, a deep stillness fell over the area; "it was a very shocked, silent, and terrifying situation". The feeling of being unreal was prominent. It was as if everything went back to normal. It was as if the passengers had never been there and had never experienced the catastrophe; "then this strong wind that toppled the boat cannot be felt anymore." It was as if no catastrophe had taken place. Together with the feeling of being unreal, the passengers had struggles in trying to figure out what happened. They tried to come to terms with the situation in different ways. Words as "abnormal" were used to describe a life-event impossible to understand. The catastrophe also left the victims with a memory loss of the traumatic event; "and then everything has happened so quickly from us feeling the strong wind, one does not remember that part very well". The sense of unusual situation was also increased by a lack of information about the catastrophe, which was soon replaced by stories that were mostly not true and lacking hope. Altogether the stories and lack of information enhanced the feelings of being trapped in a hopeless situation and of only having little information and no comprehension of the whole situation; 'there were a lot of stories going around that the 'pugada' and why it happened that sudden.'

The passengers were able to relate their testimonies of what happened to them during the Iloilo-Guimaras Strait tragedy. There was, however, one detail that none of them was able to relate and that was

how long they had suffered before being rescued. The encounter of the disaster seemed to be an endless experience: “I don’t know, I lost my sense of time, how long I was hanging in....a few hours or two to three hours I think it was, but I do not know exactly.”

The experience of the tragedy showed some other features of the stillness, i.e. (1) inevitability; (2) inadequacy; and (3) holding on. The inevitability of the situation shows a scenario of struggling without any chances of succeeding. Facing death, realizing that time and life had come to an end, was a definite experience. This experience was without any identifiable emergency exits; “we were not sure if we will be saved”, “I had begun to swallow water and had nearly given up”, “I was so scared, I remember my family and everyone I love.” One passenger described the experience of facing death as a heroic moment; “but I was not afraid under the water, I know how to swim but I was trapped down there, then I thought I was going to die.” The passengers also expressed feelings of inadequacy and guilt in connection with efforts to rescue other passengers.” For many of the passengers, the agony after the tragedy was endless and the long wait to be rescued. This wait also meant either success or failure. The passengers were waiting and could not be found as they have spread all over. Stillness was present during this waiting. The passengers did not know how long the waiting might last, if and how they were to be rescued and if their fragile haven was stable enough to carry them through the catastrophe. The endlessness of such waiting could mean despair and hopelessness; “we did not know how long time we would be floating in there,” “I was floating for more than three hours but was intently praying.”

#### **A change in perspective (strategies used during the tragedy).**

In this distressing situation, some of the passengers managed to stay determined by doing life-saving decisions, not only for themselves but for others too. There was however difficulty on the passengers’ part to reckon why the tragedy took place. The situation was a lot more problematic as many of the passengers were not informed of certain mechanisms about what to do during these situations. There was uncertainty on the part of the passengers of what to do. One way of understanding the situation was to remain calm and persistent; “I was just thinking deeply but keeping on and trying to pray for a sign of hope.”

The ‘inability’ to look at the situation seemed to make it possible to focus on what, when and how to cope with the situation at hand. Through such decisions, the lives of the passengers and the lives of others were saved. The change in perspective has been instrumental for other passengers to address the devastating incident. Their rejection of the fact that they will not be saved, by thinking about their loved ones, and by figuring out what is the next step to be done promised and assured them of hope.

With that, some survivors said they mentally rejected the situation, First, “one way of coping with the agony was to change my thinking, I let my fear overturned by my courage.” This means that, the thought of dying is there but thinking otherwise made a difference. Second, during the rescue, the survivors focused on their loved ones; “I saw that one survivor in front of me was calling for her son, I heard her voice all the time.”

Third, in the act of interweaving the chaotic experience the suffering was relieved by rethinking about the situation at hand. The survivors kept on trying creative ways to find rescue. One passenger said, “I kept on holding on to the piece of bamboo under the boat until I saw a streak of light.” By comprehending what is going on, some survivors were able to save themselves and also were able to save the lives of others “I was motionless below the toppled boat, but as I was trying to move my feet, I felt bodies that are cold and soft. I was looking for signs and I because I can swim, I started to find my way out of the boat.”

#### **Philosophical reflections (insights and lessons learned)**

The experiences of agony and its relief during the sea tragedy revealed three main features: motion, stillness, and a change in perspective. The essence of the human suffering of the sea tragedy is shown by the motion of the floating and shouting and chaos as well as the stillness of the endless waiting, the feeling of inadequacy and inevitability. The descriptions indicated the uncertainty of the incident, both motion and

stillness as well as a change in perspective. It is, according to Merleau-Ponty (1962), between these converging experiences of the world that meaning is established. This in between encapsulates a profound quality of meaning. Thus, the change in perspective is neither the perspective of being close or of being distant, but both (cf. Dahlberg, 2006b).

Insights derived from the survivors' testimonies revealed that "intently praying," "shielding oneself," "resilience" and "thinking of their loved ones" ushered hope. When one is on the verge of hopelessness, he/she needs to stay focused. In the face of disaster, any passenger may be rescued or not at all. With this, there is an element of developing a coping strategy like resilience to be able to gain strength amidst uncertainty. In a devastated world of the sea tragedy, survivors can creatively react to address the suffering that they have at hand. The tragedy may be referred to an act of God. It may be unjust but how a survivor can address such tribulation depends solely on themselves. This becomes a game of chance. Their survival may be closed to zero, but they are the sole determiner of such a chance. Others may only be just instrumental to their rescue. Creating ways to establish order to their predicament, each survivor is able to realize change in their lives. This change in their lives makes them see the whole in the fragmented pieces of their life situation and vice versa, just as for the survivors of the August 3, 2019, Guimaras-Iloilo Strait tragedy. In the words of Merleau-Ponty (1962), the body is a lived body that encapsulates time and place. Time is now. In every moment of a movement, a person is conscious of what happened the moment before. This before is, however, encapsulated in the now. In the light of Merleau-Ponty's (1962) philosophy the tragedy experience is only forgotten in its 'chronological but not in its phenomenological sense.' This might explain why the survivors are able to answer the question "what happened" but not "for how long" the experience of the tragedy lasted. It might also be assumed that since time is a lived time the future experience of the sea mishap will 'remain as it was experienced.' The tragedy and 'religious vision has in common is that they are intensely lived, at the edge of our very existence.' The survivors' suffering from the sea tragedy can be a wakeup call. The sea tragedy might be seen as impersonal but, in the survivors', 'struggle to find their loved ones a glimpse of the struggle for and fulfilment of love is revealed.' This struggle is also the lived personalization of the sea catastrophe being as 'anonymous corpses are loved persons, who are loved and cared for.' The consolation in this struggle is the presence of human love (cf. Roxberg, 2005; Roxberg et al., 2008). This is especially projected in situations when survivors are 'struggling to preserve the dignity of the deceased person in the catastrophe.' The uncertainty of the experience of a tragedy seems to encapsulate their love for their family and for others. This love seems to bring humanity to a dehumanized world, to the individual in the sea tragedy world and to the world in the individual as experienced during the tragic sea incident.

## CONCLUSIONS AND IMPLICATIONS

The findings of the study show that the essence of agony and its relief during the Guimaras-Iloilo Strait tragedy on August 3, 2019. It was a complex of converging experiences, between motion and stillness and between changes in perspective. The chosen theoretical framework and methodology made it possible to some extent reveal the invisible threads between the world of the survivors and the world of the sea tragedy. The context of the survivors' sea tragedy experience is in its phenomenological sense a break in the 'threads that link to the ordinary life and to the world that is taken for granted.' This has shown 'some kind of order among the pieces of the world of the disaster the world of the individual is also to some extent brought together.'

Based on the findings of the study, the implications for concern are first to acknowledge the survivors' sense of time as now. This means that the experience of the sea tragedy will be a faithful follower of the survivors as an 'embedded and lived experience that can be recalled and relived throughout their lives.' Second, in the midst of the dehumanization of the tragedy "a trend" of humanity and fulfilment of love zooms in. This dimension includes part of the very complicated encounter of the tragedy that is most important for local government officials, survivors, agencies concerned, and other individuals and even educators to recognize and reflect upon the consequences of the tragedy.



Then, by coming closer, taking a step back and reflecting, meaning can be created, which can generate relief of what individuals suffer. It is assumed that this change in perspective for the survivors, can, also be a way of decreasing their suffering when they in the future work on the memories of the tragedy. This may also provide a suggestion for further research, i.e., scrutinizing how agony and its relief is experienced and confronted in the passage of time.

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## Lived Experiences of Bisexuals in a Maritime School

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**Abstract.** This study documented the maritime students' lived experiences related to their concept of bisexuals, their feelings, experiences and their coping mechanisms aboard international passenger vessels. The study design used is a qualitative narrative inquiry. Data was collected through in-depth interviews among maritime students who claimed to be bisexuals enrolled at St. Therese-MTC Colleges. There was a total of 5 men bisexuals included in this study. The informants defined bisexuality as a type of gender categories having relationship with both male and female, the feeling of an individual who is a bisexual was incomplete, they long for attention, acceptance and belongingness. They experienced being discriminated and bullied since environment and their peers do not accept them. Bisexuals encountered different experiences that eventually mold them into either good or bad person depending on how they view their situation. Accordingly, if they feel that their gender is not accepted, they treat it as a simple challenge to overcome, being part of a bisexual community can be a reason for development, and eventually success. These experiences molded them to become strong and independent. They had different experiences, but they had succeeded to reach the same path of life, to study hard and hope for the betterment of the future and experiences that eventually produced different feelings and realizations that guided them to all the things they were going to do. The experiences of the bisexuals resulted to different feelings that became the foundation of what they would become. Some of them became motivated to show their worth because of their gender situation. They became strong in order to face their situation and the challenges to come. They gained strength that they can use in their everyday living. They focused their perspectives and narrowed their sights to their ultimate goal: studies. It had been proven that attention, acceptance, and belongingness in the community had a great effect in their lives, The acceptance and attention of the peers were irreplaceable in their lives. To recover from the experiences of growing up in a gender problem it is important to understand difficulties that may be experienced in such areas. Understanding difficulties with denial and expressing feelings are important but are necessary to understand their positive counterparts.

**Keywords:** *bisexual, lived experiences, maritime school, narrative inquiry*

### INTRODUCTION

Many researchers have already been made to better understand the different gender in our society and to eliminate the discrimination they had experience.

Sexual orientation is an enduring emotional, romantic, sexual, or affectional attraction toward others. It is distinguished from other components of sexuality including biological sex, gender identity (the psychological sense of being male or female), and the social gender role (adherence to cultural norms for feminine and masculine behavior).

According to Hammond (2016), human rights at sea is a strong supporter of right as part of our charity's drive to increase awareness of all human rights provisions applicable in the maritime environment. For too long this issue has been ignored in the maritime sector with seafarers and fishers being persecuted simply for their sexual orientation. It is time to address it.

Being a bisexual in a maritime school is not easy. Seafaring profession is known for all to be a man's world. Students wanted to be recognized that being bisexuals is not a hindrance to work onboard.

Thus, this study was conducted to find out the influence and coping mechanisms of maritime students in being bisexuals in a maritime school.

## Literature Review

Coping mechanisms are ways where an individual deal with stress or problematic situations. Some of these are not really meant by people, but others learned to identify some ways or practices in order to cope with their situations on some emotional problems like depression.

However, not all coping mechanisms are beneficial. Some of these can also harm the person. In some situation, a person would turn to drugs, cigarettes or alcoholic drinks in order to forget. In these cases, the person's way of coping develops a harmful effect to his own self.

Coping mechanism can be described as the sum total of ways in which people deal with minor to major stress and trauma. Some of these processes are unconscious ones; others are learned behavior; and still others are skills that people consciously master in order to reduce stresses and other intense emotions like depression. It must be noted that not all coping mechanisms are equally beneficial: some can actually detrimental. Other unconscious coping strategies can include the way the mind deal with a couple of stress or problems. People in the psychiatric field suggest that mental illness tend to be coping mechanisms that evolve from certain stressors. Coping mechanisms progress through life. Some people choose coping mechanisms that are helpful; while others choose some defense mechanisms that can sometimes increase stress. The person who uses stress as a reason to exercise is learning and expressing a healthy and good coping mechanism. Lazarus and Folkman post that the stress/coping process occurs in a three-stages. First, person's environmental factors influence the perception of stress; second, an appraisal process mediates individual responses to existing stressors; third, the appraisal influences the individuals coping response, and indirectly, the outcome of the experience. Influencing factors are the personal and situational attributes that influence the perception of stressful conditions and associated coping responses (Lazarus and Folkman, 1984). It is proposed that influencing factors have a direct effect upon both the appraisal of stress and coping responses that follow. Lazarus and Folkman define appraisal as the personal evaluation of particular conditions as stressful (i. e. harmful, threatening, challenging, or benign.)

## Research Questions

1. What is the respondents' concept of bisexuals?
2. What are the feelings of the maritime students on bisexuality?
3. What are the experiences of the bisexuals in a maritime institution?
4. What are the coping mechanisms of the bisexuals in this type of gender?

## METHODS

The purpose of this study was to narrate and describe the influence and coping mechanisms of maritime students with their being bisexuals. Narrative Inquiry is the method used in this study. Narrative inquiry was the researchers' way of understanding experiences. Aware of the limitations of the study, the researchers always maintained objectivity, as much as possible while encouraging and assuring the respondents that the narrative was told using their (the respondents') perspectives.

The participants of the study were five male maritime students who claimed to be bisexuals. The survey was done by distributing a survey sheet which needed the students' approval if he/she was willing to submit his/herself in the study. They were of varied ages from 18-20 years old.

A researcher-made interview guide duly validated by experts included questions that elicited detailed personal experiences to ascertain the influence and coping mechanisms of maritime students who claimed to be bisexuals. With the consent of the respondents, audio tape recording was done during the one-on-one interview with an agreement not to publicize through audio broadcast the said recording but only to validate what they said.

The researchers initially discussed with their adviser the topic for research which focused on the experiences and coping mechanism of the maritime student who claimed to be bisexuals. The bisexuals' maritime students were identified through a survey and were given an option whether or not they were willing to be part of the study. They agreed to participate in the condition that they could use assumed names to make their stories interesting and to keep their identity secret. The agreements as well as the venue for interview with the researchers and the participants themselves were readily available. The in-depth interview was conducted. Additional information from the participants was gathered. Meanings from the notes written were classified, divided, and certain impressions the researchers gained through observations were also taken into consideration. The whole event was a recollection of their stories which were confirmed through the individual interviews. Some short interviews were also conducted after the main interview was finished to clarify some issues and events. Rapport was established with the participants by starting with non-threatening questions. Smooth and spontaneous reactions were facilitated as researchers and participants knew each other well due to their being together in the pre-service teaching program. Mutual respect and trust were still the core of the individual interview. Disclosure of sensitive experiences was also enhanced through behavioral questions. The participants were given the opportunity to disclose themselves during the course of the interview. This led to a comprehensive storytelling of their experiences as a bisexual.

Narrative Inquiry data analysis involved synthesis of information gathered from the results of interview. The interviews of respondents were transcribed to the actual language used which a mix of local language, Hiligaynon, Filipino (based on Tagalog), and English. The respondents basically used code-switching all throughout the data gathering phase. The transcribed interviews were also translated to English. As soon as all the recorded data had been transcribed, line-by-line analysis of respondents' responses was made, collaborating them with field notes and personal anecdotal accounts.

The exercise produced at first a seemingly in comprehensible mixture of data. To make sense of this, themes were identified, formed, reformed, rejected, revisited, and reassessed until a set of themes emerged which all the members of the research team agreed upon. The themes and concepts were formed having in mind the questions that the study wanted to answer.

## RESULTS

**King Anna** is 22 years old student taking BS Marine Transportation. He decided to take up maritime degree to cover up his identity and to survive of the bullying of his classmates from high school.

**Kim's Smile.** Kim was 5'1'' in height, brown hair and fair complexion. He was a twenty-three years old girl who admired to become a seafarer someday. Kim came from a poor family. He decided to study maritime education because his dream was to help his siblings and mother. He is currently taking up Bachelor of Science in Marine Engineering (BSMarE).

**Janine the Poker Face.** Beauty blended with brains is my first impression of him. Who is he? He is Janine, a 19 year old who stands for about 5'6''. he is now currently taking up Bachelor of Science in Marine Transportation (BSMT) as a Third year student. His white skin and appropriately molded nose show it all. And according to him he was an honor student when he was in elementary and high school to make it a package. However, nothing is perfect because if we go deeper into his story, we will discover his imperfect life.

**Shamcey: The Boy Next Door.** The cold wind was blowing. It was 7:00 am in the morning. A boy was rushing for his first subject in his Monday and Wednesday classes. He passed through the stairs and when reaching his room, he just sat down. The teacher arrived and started talking, the boy takes out his notebook and started writing. That was the usual scene in Shamcey's college life. Shamcey is a 19-yearold third year college student taking up Bachelor of Science in Marine Transportation (BSMT). He is about 5'4'' in height and tan in color. He is a native resident of Anilao, but he manages to stay in one of the boarding houses near his school. Shamcey is one of the top performing students in his school. He doesn't

have any “barkada” like the other boys in their school that after class would go to computer shops and play computer games. He is a well-rounded person that you will never think that he is suffering from identity crisis.

### **Concept of Bisexuality**

The respondents considered bisexuality as a type of gender categories having relationship with both male and female. They considered that being a bisexual means they are discriminated and bullied since environment and their peers do not accept them.

### **Feelings of being a bisexual**

The feeling of an individual who is a bisexual was incomplete. They were longing for their attention, acceptance and belongingness. Some of them would feel unlucky having such type of gender. However, after surpassing the pain brought by their situation, they learned to become strong and independent in facing life’s challenges.

### ***Experiences***

The experiences of an individual who is a bisexual varied depending on their situation. For others, the discrimination was being overshadowed by the individual’s ability to accept his sexuality and situation.

### ***Coping Mechanism***

The coping mechanisms of students who were bisexuals was by focusing on his or her studies. For them, it was the best way to forget the problem they had. Another was by entrusting everything to God. They prayed that God would bless and guide them in their daily lives. Lastly, they made their families as their inspiration in aiming for success.

## **CONCLUSIONS**

*First*, bisexuality refers to a type of gender who has relationships to both male and female. A bisexual is not totally considered a non-productive type of gender though, because some of it shows the ability to excel in all endeavors and can be accepted and feel to belong. In the story of the five students who claim to be bisexuals in general, one of their parents left them to the care of the other parent. That certain parent carried all the responsibilities of taking care of his/her children and giving their needs. Negligence of responsibility of one of the parents was observed. In this situation, the children tried to work or had sidelines in order to help their parent support their family needs most especially in their studies. One of the respondents did tutorials to have earn money while the other respondent was working as a student assistant, he/she could help his/her family.

*Second*, bisexuals encountered different experiences that eventually mold them into either good or bad person depending on how they view their situation. If someone would take his/her situation negatively, misfortunes and more complicated problems would rise. But if treated as a simple challenge to overcome, being part of a bisexual can be a reason for development, and eventually success. The bisexuals encountered different experiences in their lives. Experiences, that happened because of their gender situation. These experiences molded them to become strong and independent. They had different experiences, but they had succeeded to reach the same path of life, to study hard and hope for the betterment of the future.

*Third*, the experiences of an individual in bisexuality situation eventually produced different feelings and realizations that guided them to all the things they were going to do. The experiences of the bisexuals resulted to different feelings that became the foundation of what they would become. Some of them became motivated to show their worth because of their gender situation. They became strong in order to face their situation and the challenges to come. They gained strength that they can use in their everyday

living. However, we cannot eliminate the negative feelings that a person could feel in this certain type of gender. At first, there was a feeling of incompleteness and longing but of course eventually, through time and guidance from other people around them, they overcame the feeling of being unhappy and hurt.

*Fourth*, being a bisexual, one needed great courage to deal with the constant discrimination and acceptance problems. A person in this kind of gender learned to become strong and independent to effectively overcome the problems in his/her gender. There were the bisexuals in this type of gender eventually did. Armed with the undying faith to God, and the intense will to survive the drama, they focused their perspectives and narrowed their sights to their ultimate goal: studies.

*Lastly*, it had been proven that attention, acceptance, and belongingness in the family had a great effect in the growth of each child. Even if the subject students had a same mind to make decisions in their lives, it is more appropriate to have been accepted them to do the right things. The acceptance and attention of the peers were irreplaceable in their lives.

### RECOMMENDATIONS

From the findings and subsequent conclusions, the researchers would like to offer the recommendations or suggestions that may benefit the following:

*First*, the teachers should give appropriate attention to those students that were identified as bisexuals. They should show respect to these individuals most especially with regards to their personal choice and decisions. The teacher should put into mind that some students are sensitive with their lives, others could easily get hurt and discourage so in some instances that the teacher has a remark or comment to be given to the student. The teacher should make it the way he will not be hurt. The teachers should always put into mind that these individuals are sensitive most especially in issues regarding gender issues.

*Second*, the guidance counselors must be aware of the feelings and emotions of the above-mentioned students. They should be aware of their experiences to better understand the students and to deal with their behavior.

*Third*, bisexuals should treat their sexuality experience as self-esteem building, and must enjoy every process of it in order to add up and experience spice in their student's life. They must make this experience the most extra ordinary experience they ever had. They should not forget their goals in life though, for them to set boundaries or limitations that would serve as a reminder of their real objective in life. They must not let their family situation hinder their way to success.

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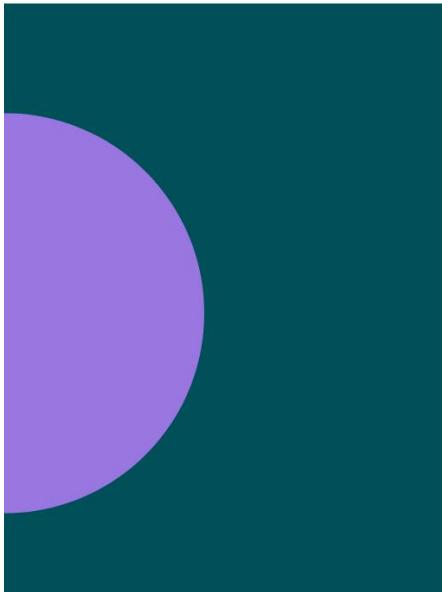
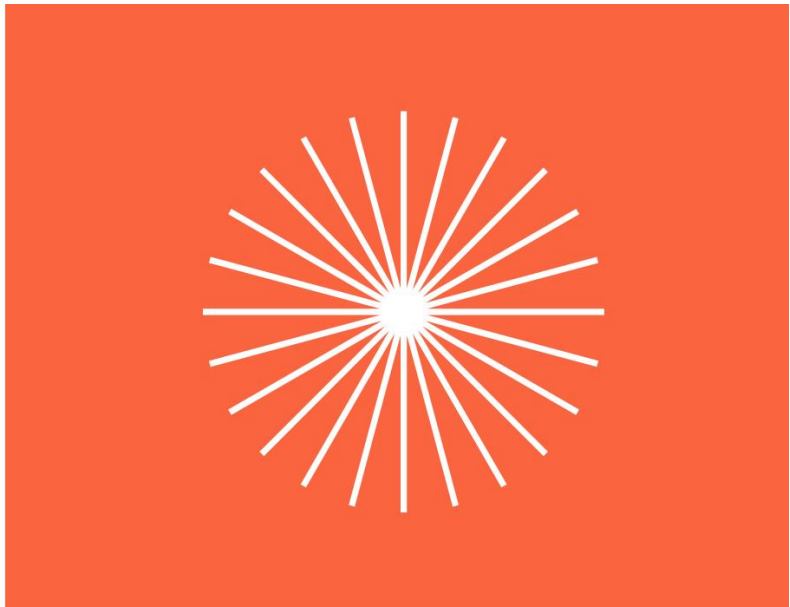
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