MJSIR
Mountain Journal of Science and Interdisciplinary Research
PRINT ISSN: 2619-7855
ONLINE ISSN: 2651-7744
July-December 2022 • 82 (2) : 118-131

# Motivated Strategies for Learning and Online Learning Readiness of Students in Maritime Institution in Central Luzon, Philippines

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ARTICLE INFO
*Date Received: 03-20-2022*
*Date Last Revised: 06-13-2022*
*Date Accepted: 10-05-2022*

KEYWORDS
Motivated strategies for learning
Online learning readiness
Maritime Institutions
Central Luzon

**Abstract**

The study examined how motivated strategies for learning contribute to the online learning readiness of Maritime students in a Maritime institution in Central Luzon during the Pandemic School Year of 2021-2022. It also determined the differences in the motivated strategies for learning and online readiness of the respondents when grouped according to sociodemographic characteristics. The respondents of the study were 153 purposively-sampled 2nd year to 4th year maritime students enrolled in the BS Marine Engineering and BS Marine Transportation programs. The descriptive-correlational research design was used in the study. The respondents' age ranged from 17 to 20 years old, the typical age of students who are in 2nd, 3rd, and 4th years. Majority of the respondents were males because of the common notion that maritime courses are for males. Most were 4th year students enrolled in Bachelor of Science in Marine Engineering. Motivated strategies of the respondents such as rehearsal, elaboration, organization, critical thinking, and metacognition showed high significant relationship with online learning readiness. This finding tends to suggest that the more the respondents use the different motivated strategies for learning, the more they are ready for online learning.

## Introduction

Educational systems are faced with challenges brought about by the rapid changes and adjustments due to the COVID-19 Pandemic. Schools are temporarily closed, and stakeholders are required to innovate and adopt new techniques that can reduce the risk of exposing students to the virus. The global educational sector is now shifting to online learning platforms. During the peak of COVID-19, most parents were scared to go out and mingle with their friends and colleagues because of the global spread of COVID-19. Parents were in a dilemma regarding the studies of their children; others perceive that the suspension of classes until the global crisis ends is the best option. Parents were also discouraged to continue the studies of their sons and daughters. Educational systems need to adapt given these conditions.

In order to adapt to the paradigm shift in education brought about by the COVID-19 pandemic, educational institutions must find ways to increase the students' motivation toward learning. Improved motivation can change their

behavior, develop their competence and creativity, set their goals, increase their interest, boost their engagement, and develop their talents. Learners must develop their own motivated strategies to become fully adjusted and active participants in online learning. Motivation is one of the most integral components of learning because it influences the students in their rehearsal, elaboration on a particular topic, organization, critical thinking, metacognition, and environment (Tempski et al., 2021).

On the other hand, online learning readiness will evaluate students' misunderstanding and it is helpful for programs and institutions to consider the integration of online learning technologies amidst the pandemic for further elaboration (Du et al., 2020). Groups of experts in many parts of the globe elaborated on the advantages and benefits of using online learning, which is a shift away from the four walls of the classroom. Some wonder whether the adoption of online learning will continue to persist post-pandemic, and how such a shift would impact the worldwide education market (Li & Lalani, 2020).

A maritime institution in Central Luzon responded to the call for flexible learning per the Commission of Higher Education (CHED) COVID-19 advisories during the general community quarantine and observance of stringent social distancing measures in response to the COVID-19 pandemic. With this online learning platform, the organizational setup in terms of education is delivered at the comfort of wherever the maritime students may be. The bounds of online education for BS Marine Engineering and BS Marine Transportation students were explored. However, differences between Maritime students' responses were identified due to their discipline's curricular structure, students' study behaviors, and students' cognitive effort to think critically in the search, evaluation, and managing of digital information. Maritime students with a high level of metacognition and digital capabilities were able to keep focused and engaged during the lockdown period (Limniou, 2021).

Maritime students at Maritime Institutions in Central Luzon, Philippines face many challenges in online readiness, one of which is internet connectivity, which may hinder the students' understanding of the content of the subject. Moving forward, the government, telecommunication companies, and universities need to invest in developing internet infrastructure across the country, as online learning may be the new norm in the foreseeable future in the educational sector (Chung, 2020). The online readiness of maritime students in terms of self-directed learning also plays a vital role because of the impacts of self-directed learning, technology readiness, and learning motivation on the strategies such as rehearsal, elaboration, organization, critical thinking, and metacognition among students undertaking subjects in online learning (Geng et al., 2019). The learning preferences of maritime students since the start of the COVID-19 Pandemic have focused on online learning as part of the alternative modes of delivery in instruction. Ronsisvalle and Watkins (2005) stated that assessing the technological skills that maritime students must possess is a crucial first step in online education. With this, the researcher determined the motivated strategies for learning and online learning readiness of the Maritime Students in a Maritime Institution in Central Luzon, Philippines. Specifically, the study tried to: (1) describe the sociodemographic characteristics of the respondents in terms of age, sex, program, and year level; (2) determine the motivated strategies for learning of the respondents such as rehearsal, elaboration, organization, critical thinking, and metacognition; (3) determine the online learning readiness of the respondents in terms of self-directed learning, learning preferences, self-study habits, technology skills, and computer-related equipment indicators; (4) find out the difference on the motivated strategies for learning of the respondents when grouped according to sociodemographic characteristics; (5) find out the difference on the online readiness of the respondents when grouped according to sociodemographic characteristics; and (6) find out the relationship between motivated strategies for learning and online readiness of the respondents.

## Methodology

The study was conducted in a Maritime Institution in Central Luzon, Philippines during the school year 2021-2022. The study respondents were 153 2$^{nd}$-year to 4$^{th}$-year maritime students enrolled in the Bachelor of

Science Marine Engineering (BSMARE) and BS Marine Transportation (BSMT) programs during the school year 2021-2022.

In choosing the respondents, a purposive sampling procedure was used. Purposive sampling enables researchers to squeeze a lot of information out of the data that they have collected. The main objective of a purposive sample is to produce a sample that can be logically assumed to be representative of the population reason (Battaglia, 2021). In this study, the second year, third year and fourth year students were selected because they are the ones who are using online learning. The first year students were not included in the study because they are using modular approach in the mode of flexible learning. There were 99 BSMARE students and 103 BSMT students who served as the respondents of the study by complete enumeration.

The research study used a descriptive-correlational research design. According to Shuttleworth (2008), a descriptive research design is a scientific method that involves observing and describing the behavior of the subject without influencing it in any way. Descriptive research was used in describing the sociodemographic characteristics, motivated learning strategies, and online learning readiness of the respondents. On the other hand, correlational research was used in measuring the relationship of the motivated learning strategies to online learning readiness. A correlation is a quantitative measure of the degree of correspondence between two or more variables (Kritsonis, 2009).

**Table 1**

*Distribution of the Respondents*

| *Group* | Level | Number of Students |
|---|---|---|
| BS Marine Engineering | 2nd Year | 28 |
| | 3rd Year | 30 |
| | 4th Year | 49 |
| BS Marine Transportation | 2nd Year | 30 |
| | 3rd Year | 30 |
| | 4th Year | 35 |
| Total | | 202 |

The study used a questionnaire consisting of three parts. Part I was researcher-developed, covering the respondent's sociodemographic characteristics. Part II measured the motivated strategies for learning, which include rehearsal, elaboration, organization, critical thinking, and metacognition. It was an adopted questionnaire from the study of Zoleta (2021) titled "Learning Strategies, Parental Attachment, and Academic Resilience of Wesleyan College of Manila Students during the Pandemic Crisis." Part III measured online learning readiness, which includes self-directed learning, learning preferences, self-study habits, technology skills, and hardware or software requirements. It was an adopted questionnaire from the study of Ferreira et al. (2011), titled "Measuring Online Learning Readiness among Students of University of Batangas-Graduate School: Summer Class Program". Permissions were sought to use the adopted questionnaires.

For data collection, the researcher took the necessary consent and permits to transact with the groups and organizations concerned: the researcher coordinated with the Senior Vice President and Director for Training, Research, and Extension to request permission to conduct research through email and video-meeting conferences. The researcher coordinated with the parents to explain the nature of the research and asked their informed consent as the respondents are considered minors. The instruments were administered using Google forms based on schedule. Answers were automatically registered and transcribed through Google spreadsheets. All data and questionnaires were screened and tabulated using Microsoft Excel.

For data analysis, descriptive statistics were used such as frequency counts, percentages, standard deviation, and mean to describe the sociodemographic characteristics of the respondents, the motivated learning strategies, and the online learning readiness. A series of ANOVA (with post-hoc analysis) were used to find out the difference in the motivated strategies for learning and online readiness of the respondents when grouped according to sociodemographic characteristics. ANOVA was also used even with the two-group comparisons since variances were equal based on tests. Pearson Product Moment Correlation was used to determine the relationship between the independent and dependent variables.

All data were analyzed using the SPSS (Statistical Package for Social Science).

All questionnaires were kept confidential and proper protocol for disposing and disclosing data was followed. The data gathered were used for academic purposes only.

## Results and Discussion

### Sociodemographic Characteristics of Respondents

Table 2 presents the respondents' sociodemographic characteristics, including the age, sex, program, and year level of the respondents. The majority of the respondents have ages ranging from 17 to 20 years old due to the inclusion of the Senior High School Program and were males (65.84%) maybe because of the common notion that maritime course is intended for males. Technical Education and Skills Development Authority [TESDA] (2017) also reported that almost all enrollees in Maritime education are predominantly male, although the number of female enrollees has been slowly growing. Majority of the respondents in the Maritime Program were enrolled in BSMARE. To be admitted to the BSMT, the students are required to pass the Ishihara Test, a range of tasks involving symbols, markers, maps, and signals for navigation. Those who failed the test due to color blindness will be given a chance to be admitted to the BSMARE, which may explain why more students are enrolled in BSMARE. The result conforms with the Enrollment Statistical report between 2015 to 2019 that the majority of the students were admitted to the BSMARE program rather than the BSMT program because of Ishihara Admission test issues (Maritime Industry Authority [MARINA], 2019). This distribution of the students per year level conforms with the enrolment statistical report of the Central Luzon College of Science and Technology of School Year 2021-2022.

**Table 2**

*Respondents' Sociodemographic Profile*

| *Parameter* | Frequency n = 202 | Percentage % |
|---|---|---|
| **Age** | | |
| 17-20 | 137 | 67.82 |
| 21-24 | 55 | 27.23 |
| 25-28 | 27 | 13.37 |
| 29-32 | 4 | 1.98 |
| **Mean = 20.26 ~ 20; SD = 2.46** | | |
| **Sex** | | |
| Male | 133 | 65.84 |
| Female | 69 | 34.16 |
| **Program** | | |
| BSMT | 99 | 49.01 |
| BSMARE | 103 | 50.99 |
| **Year Level** | | |
| 2nd Year | 58 | 28.71 |
| 3rd Year | 60 | 29.70 |
| 4th Year | 84 | 41.58 |

### Motivated Strategies for Learning

Table 3 shows the motivated strategies for learning of the respondents, such as rehearsal, elaboration, organization, critical thinking, and metacognition. The overall mean is 4.66 with a standard deviation of 0.63 and described as "slightly true of me". This result may indicate that the respondents are somehow motivated to learn during online classes.

The rehearsal learning strategy obtained a pooled mean of 4.76 described as "slightly true of me". This finding suggests that respondents were determined to memorize important keywords using online learning because online learning has a function to notify them or give them real-time online interactions. Also, respondents were practicing the materials repeatedly due to their accessibility online. Usually, since the platform being used was online learning, the respondent used programs such as PowerPoint, PDF, and photos as modules and materials. Video presentations were also used as a mode of instruction for students. The result is similar to Go (2019) studies, in which Indonesian high school students considered memorization the most used strategy to recall concepts and practicing materials over and over is the least

practiced among the rehearsal strategy. Also, Alqahtani (2016) summarized that the most commonly used strategy of high school students in learning were memorization and application.

The study promotes growth mindset over fixed mindset. It will develop meaningful and respectful relationships with your students. It will also grow a community of learners in the four corners of your classroom and will establish high expectations and clear goals.

**Online Learning Readiness**

Table 4 shows the online learning readiness of the respondents in terms of self-directed learning, learning preferences, self-study habits, technology skills, and hardware/software requirements. Online learning readiness of the respondents had an overall mean of 2.94 and a standard deviation of 0.32 described as "Agree". This result suggests that respondents are implementing self-directed learning, learning preferences, self-study habits, technology skills, and hardware/software requirements probably because the majority of the students favor using online learning as part of the alternative mode during the pandemic situation since they are internet-savvy users. They preferred the online mode instead of the traditional face-to-face mode.

The study tends to show that online learning

**Table 3**

*Motivated Strategies for Learning*

| Parameters | Mean | SD | DESCRIPTION |
|---|---|---|---|
| **Rehearsal** | | | |
| 1. When I study for this class, I practice saying the material to myself over and over | 4.61 | 0.99 | Slightly true to me |
| 2. When Studying for this course, I read my class notes and the course readings over and over again | 4.59 | 1.29 | Slightly true to me |
| 3. . I memorize key words to remind me of important concepts in this class | 4.96 | 1.08 | Slightly true to me |
| 4. I make lists of important items for this course and memorize the lists | 4.88 | 1.02 | Slightly true to me |
| **Pooled Mean** | **4.76** | **0.78** | **Slightly true to me** |
| **Elaboration** | | | |
| 5. When I study for this class, I pull together information from different sources, such as lectures, readings, and discussions | 4.80 | 1.05 | Slightly true to me |
| 6. I try to relate ideas in this subject to those in other subjects whenever possible. | 4.60 | 1.00 | Slightly true to me |
| 7. When reading for this class, I try to relate the material to what I already know | 4.79 | 0.95 | Slightly true to me |
| 8. When I study for this subject, I write brief summaries of the main ideas from the readings and my class notes | 4.71 | 0.96 | Slightly true to me |
| 9. I try to understand the material in this class by making connections between the readings and the concepts from the lectures. | 4.80 | 0.98 | Slightly true to me |
| 10. I try to apply ideas from subject readings in other class activities such as lecture and discussion. | 4.84 | 0.91 | Slightly true to me |
| **Pooled Mean** | **4.76** | **0.73** | **Slightly true to me** |

**Table 3** continuation...

| *Parameters* | Mean | SD | DESCRIPTION |
|---|---|---|---|
| **Organization** | | | |
| 11. When I study the readings for this subject, I outline the material to help me organize my thoughts | 4.73 | 0.99 | Slightly true of me |
| 12. When I study for this course, I go through the readings and my class notes and try to find the most important ideas | 4.92 | 0.96 | Slightly true of me |
| 13. I make simple charts, diagrams, or tables to help me organize subject material. | 4.17 | 1.26 | Neutral |
| 14. When I study for this subject, I go over my class notes and make an outline of important concepts. | 4.69 | 0.93 | Slightly true of me |
| **Pooled Mean** | **4.63** | **0.80** | **Slightly true of me** |
| **Critical Thinking** | | | |
| 15. I often find myself questioning things I hear or read in this subject to decide if I find them convincing | 4.67 | 0.98 | Slightly true of me |
| 16. When a theory, interpretation, or conclusion is presented in class or in the readings, I try to decide if there is good supporting evidence | 4.63 | 0.93 | Slightly true of me |
| 17. I treat the course material as a starting point and try to develop my own ideas about it. | 4.78 | 1.02 | Slightly true of me |
| 18. I try to play around with ideas of my own related to what I am learning in this course. | 4.62 | 1.02 | Slightly true of me |
| 19. Whenever I read or hear an assertion or conclusion in this class, I think about possible alternatives | 4.46 | 1.05 | Slightly true of me |
| **Pooled Mean** | **4.63** | **0.76** | **Slightly true of me** |
| **Meta-cognition** | | | |
| 20. During class time I often miss important points because I am thinking of other things. | 4.19 | 1.24 | Neutral |
| 21. When I become confused about something I'm reading for this class, I go back and try to figure it out. | 4.85 | 0.98 | Slightly true of me |
| 22. If course readings are difficult to understand, I change the way I read the material | 4.56 | 1.08 | Slightly true of me |
| 23. Before I study new course material thoroughly, I often skim it to see how it is organized. | 4.58 | 0.86 | Slightly true of me |
| 24. I ask myself questions to make sure I understand the material I have been studying in this class | 4.71 | 0.97 | Slightly true of me |
| 25. I often find that I have been reading for class but don't know what it was all about. | 4.01 | 1.23 | Neutral |
| 26. I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for this course. | 4.50 | 1.03 | Slightly true of me |
| 27. When studying for this course I try to determine which concepts I don't understand well | 4.71 | 0.91 | Slightly true of me |
| 28. When I study for this class, I set goals for myself in order to direct my activities in each study period. | 4.78 | 0.98 | Slightly true of me |

**Table 3** continuation...

| Parameters | Mean | SD | DESCRIPTION |
|---|---|---|---|
| 29. If I get confused taking notes in class, I make sure I sort it out afterwards. | 4.57 | 0.97 | Slightly true of me |
| **Pooled Mean** | **4.55** | **0.66** | **Slightly true of me** |
| **Over-all Mean** | **6.66** | **0.63** | **Slightly true of me** |

Legend:

| | | | |
|---|---|---|---|
| 1.00 -1.86 | Very not true of me | 4.45 - 5.30 | Slightly true of me |
| 1.87 -2.72 | Moderately not true of me | 5.31 - 6.16 | Moderately true of me |
| 2.73 - 3.58 | Slightly not true of me | 6.17 - 7.00 | Very true of me |
| 3.59 - 4.44 | Nuetral | | |

has varying effectiveness at all levels and types of education in this time of Pandemic. The student's readiness in online learning can be assessed comprehensively from the aspects of equipment capability, technology skills, self-directed learning skills, motivation, and perceived usefulness (Widodo et al., 2020). In the same way, these results of the study also corroborate with Kumari and Jayasinghe (2021) who found that students were also familiar and experienced with the required ICT such as basic and advanced computer skills, using online tools, and online communication. However, the overall readiness for online learning was found to be moderate because of the poor internet connection, high cost for data, and limited broadband data. Also, students were found to be well equipped with the use of technology in formal environments and were ready to use

**Table 4**

*Online Learning Readiness*

| ***Parameters*** | **Mean** | **SD** | **DESCRIPTION** |
|---|---|---|---|
| **Self-directed Learning Pooled Mean** | **3.21** | **0.46** | **Agree** |
| 1. I am good at setting goals and deadlines for myself. | 3.08 | 0.62 | Agree |
| 2. I have a really good reason for taking an online course. | 3.08 | 0.63 | Agree |
| 3. I finish the projects I start. | 3.22 | 0.57 | Agree |
| 4. I do not quit just because things get difficult. | 3.36 | 0.65 | Agree |
| 5. I can keep myself on track and on time. | 3.34 | 0.66 | Agree |
| **Learning Preferences** | | | |
| 6. I learn fairly easily | 3.06 | 0.57 | Agree |
| 7. I can learn from things I hear, like lectures, audio recordings, or podcasts | 2.80 | 0.59 | Agree |
| 8. I have to read something to learn it best. | 3.03 | 0.55 | Agree |
| 9. I have developed good ways to solve problems I run into. | 3.19 | 0.61 | Agree |
| 10. I learn best when I figure things out for myself. | 3.12 | 0.59 | Agree |
| 11. I like to learn equally well in a group or on my own. | 3.21 | 0.59 | Agree |
| 12. I am willing to send email to or have discussions with people I might never see. | 3.16 | 0.56 | Agree |
| **Pooled Mean** | **3.08** | **0.37** | **Agree** |

**Table 4** *continuation...*

| *Parameters* | Mean | SD | DESCRIPTION |
|---|---|---|---|
| **Self-study Habit** | | | |
| 13. I usually study in a place where I can read and work on assignments without distractions. | 2.80 | 0.66 | Agree |
| 14. I can ignore distractions around me when I study. | 3.30 | 0.61 | Agree |
| 15. I am willing to spend 10-20 hours each week on an online course. | 2.66 | 0.80 | Agree |
| 16. I keep a record of what my assignments are and when they are due. | 2.77 | 0.75 | Agree |
| 17. I plan my work in advance so that I can turn in my assignments on time. | 3.12 | 0.51 | Agree |
| 18. When I study, people around me will help me work and not try to distract me. | 3.14 | 0.60 | Agree |
| 19. I am willing to use e-mail and other online tools to ask my classmates and instructors questions. | 2.90 | 0.65 | Agree |
| **Pooled Mean** | **2.96** | **0.37** | **Agree** |
| **Technology Skills** | | | |
| 20. I am fairly good at using the computer. | 3.10 | 0.58 | Agree |
| 21. I am comfortable surfing the Internet. | 2.82 | 0.71 | Agree |
| 22. I am comfortable conducting searches, setting bookmarks, and downloading files. | 2.95 | 0.62 | Agree |
| 23. I am comfortable installing software and changing configuration settings on my computer. | 2.93 | 0.68 | Agree |
| 24. I know someone who can help me if I have computer problems. | 2.61 | 0.66 | Agree |
| **Pooled Mean** | **2.88** | **0.45** | **Agree** |
| **Computer Related Equipment Indicators** | | | |
| 25. My computer runs reliably on Windows 7/8/10 or on Mac OS higher | 2.91 | 0.67 | Agree |
| 25. My computer runs reliably on Windows 7/8/10 or on Mac OS higher | 2.56 | 0.86 | Agree |
| 27. I am connected to the Internet with a fairly fast, reliable connection such as DSL or cable modem. | 2.06 | 0.99 | Disagree |
| 28. I have virus protection software running on my computer. | 2.51 | 0.85 | Agree |
| 29. I have headphones or speakers and a microphone to use if a class has a video conference. | 2.46 | 0.90 | Disagree |
| 30. My browser will play several common multimedia (video and audio) formats. | 2.78 | 0.92 | Agree |
| **Pooled Mean** | **2.55** | **0.60** | **Agree** |
| **Over-all Mean** | **2.94** | **0.32** | **Agree** |

*Legend:* *1.00 -1.75 Strongly Disagree* *2.51 - 3.25 Agree*
*1.76 - 2.50 Disagree* *3.26 - 4.00 Strongly Agree*

these technologies to support and continue their learning (Mohalik & Sahoo, 2020). Majority of students accepted online learning as a better choice for learning during this Pandemic period because of its remote features that facilitate collaborative learning.

Self-Directed Learning obtained a mean of 3.21 with a standard deviation of 0.46, described as "Agree". This result denotes that the online learning readiness of the respondents in terms of self-directed learning is agreeable probably because most of the respondents are under Generation Z where most dominates online searches for information on the post-Millennial generation because they thrive when given a challenging, fully-immersive educational experience in which they can work through problems and really test their knowledge. The statement which obtained the highest mean is statement number 4 "I do not quit just because things get difficult." (M=3.36) and described as "Agree" by the respondents. This was followed by statement number 5 "I can keep myself on track and on time." (M=3.34), described as "Agree, and statement number 3 "I finish the projects I start." (M=3.22), described as "Agree". The statements which obtained the lowest mean 3.08 were statement number 1 "I am good at setting goals and deadlines for myself." and statement number 2 "I have a really good reason for taking an online course." which both had a mean of 3.08. The results tend to suggest that self-directed learning enhances independent practice in comprehension strategies because students tend to read with a question in mind and activate curiosities along the way; they also connect to their background knowledge and schema; they monitor their comprehension when evaluating texts they are interacting with. The result is similar to the finding of Lasfeto (2020) in which the students' self-directed learning was found to be important to the university because online learning is done in unlimited space and time. Through the online mode, the students do social interaction. The interaction in online learning is categorized into four dimensions namely the interaction between the teachers and students, students and students, teachers, and the topic. Also, the study revealed that students' self-directed learning abilities improved when a course adopts a personalized and collaborative learning system that enables the students to be more proactive in planning, organizing, and monitoring their course activities, (Kim et al., 2014). In summary, it can be said that students have self-directed learning skills and these skills are related to lifelong learning (Tekkol & Demirel, 2018).

**Difference in the Motivated Strategies for Learning of the Respondents when Grouped According to Sociodemographic Characteristics**

Table 5 presents the results of the ANOVA tests performed to differentiate the respondents' motivated strategies when grouped according to their sociodemographic characteristics in terms of age, sex, program, and year level. Preliminary assumption testing to check for normality and homogeneity of variance among others was conducted, and no serious violation was noted. Among the sociodemographic characteristics, significant difference in the motivated strategies of learning was found when respondents were grouped according to sex ($F= -2.51$, $p<0.05$). This result means that female students are more motivated and eager to learn than male students. Since maritime courses are perceived as courses intended for males, female students need to be motivated and stayed focused on their studies to prove that in their acceptance in the school, they can be as good as the male students. Having both male and female students in the maritime school will not make any difference. This result conforms with Yeung et al. (2011) and McGeown et al. (2012) that maritime institutions support gender equality and women empowerment through gender-specific fellowships by facilitating access to high-level technical training for women in the maritime sector in developing countries. In addition, the importance of a gender perspective is increasing in recognition, profile and application across the maritime environment (Human Rights at Sea, 2019). Accordingly, the focus on gender equality and non-discrimination in the workplace is globally well established, including within the maritime sector through the International Labour Organisation (ILO) and many other organizations.

**Table 5**

*Difference in the Motivated Strategies for Learning of the Respondents when Grouped According to Sociodemographic Characteristics*

| Sociodemographic Characteristics | Mean | SD | df | F | P |
|---|---|---|---|---|---|
| **Age** | | | | | |
| Less than the mean age | 4.87 | 0.13 | 1,200 | -1.044$^{ns}$ | 0.302 |
| Greater than or Equal the mean age | 4.64 | 0.16 | | | |
| **Sex** | | | | | |
| Male | 4.59 | 0.65 | 1,200 | -2.51* | 0.013 |
| Female | 4.82 | 0.57 | | | |
| **Program** | | | | | |
| BSMT | 4.65 | 0.65 | 1,200 | -0.32$^{ns}$ | 0.747 |
| BSMAR-E | 4.62 | 0.62 | | | |
| **Year Level** | | | | | |
| 1st Year | 0.00 | 0.00 | 2,199 | 0.080 $^{ns}$ | 0.923 |
| 2nd Year | 4.63 | 0.62 | | | |
| 3rd Year | 4.68 | 0.54 | | | |
| 4th Year | 4.67 | 0.71 | | | |

*Note: ns - not significant*

### Difference in the Online Readiness of the Respondents when Grouped According to Sociodemographic Characteristics

Table 6 presents the ANOVA results performed to differentiate the respondents' online readiness when grouped according to their sociodemographic characteristics. Preliminary assumption testing was done to check for normality and homogeneity of variance, among others, and no serious violation was noted. Significant difference in the respondents' online readiness was found only when respondents were grouped according to age (F= -1.04, p<0). This result suggests that younger maritime respondents are more ready for online learning compared to older respondents. These younger respondents belong to the Generation Z Group, who spend most of their time on their cellphones and other technology devices for their everyday activities like accessing their class textbooks or manuals online remotely. These respondents from the younger generation also prefer education that utilizes digital media and is interactive, engaging, flexible, and relatable (Miranda, 2020) rather than the older respondents who prefer to offer direct/immediate communication (emails and phones) or incorporate technology when possible (Roesch, 2019).

### Relationship Between the Respondents' Motivated Strategies for Learning and Online Learning Readiness

Results revealed that all the sub-areas of motivated strategies showed a highly significant relationship with online learning readiness (Table 7). Studying intently the data, elaboration showed highly positive correlation to online learning readiness (r= .349, p<0.01). This result suggests that the more the respondents use elaboration motivational strategies for learning, the more they are ready for online learning. Since the respondents were using elaboration strategies, their adeptness in using internet surfing for online resources contributed to making elaboration possible.

**Table 6**

*Difference in the Online Readiness of the Respondents when Grouped According to Sociodemographic Characteristics*

| Sociodemographic Characteristics | Mean | SD | df | F | P |
|---|---|---|---|---|---|
| **Age** | | | | | |
| Less than the mean age | 3.13 | 0.24 | 1,200 | -1.04* | 0.023 |
| Greater than or Equal the mean age | 2.75 | 0.39 | | | |
| **Sex** | | | | | |
| Male | 2.92 | 0.30 | 1,200 | -1.06 ns | 0.290 |
| Female | 2.97 | 0.35 | | | |
| **Program** | | | | | |
| BSMT | 2.92 | 0.31 | 1,200 | -0.66 ns | 0.512 |
| BSMAR-E | 2.95 | 0.32 | | | |
| **Year Level** | | | | | |
| 1st Year | 0.00 | 0.00 | 2,190 | 0.162 ns | 0.513 |
| 2nd Year | 2.91 | 0.51 | | | |
| 3rd Year | 2.95 | 0.29 | | | |
| 4th Year | 2.93 | 0.52 | | | |

*Note: ns - not significant*

**Table 7**

*Relationship Between the Respondents' Motivated Strategies and Online Learning Readiness*

| Motivated Strategies | Online Learning Readiness | |
|---|---|---|
| | r | p-value |
| Rehearsal | 0.349** | 0.000 |
| Elaboration | 0.392** | 0.000 |
| Organization | 0.300** | 0.000 |
| Critical Thinking | 0.333** | 0.000 |
| Metacognition | 0.300** | 0.000 |

*Note: **correlation is significant at 0.01 level (2-tailed)*

In addition, rehearsal, critical thinking, and metacognition strategies showed highly positive correlations to online learning readiness. The null hypothesis stating that there is no significant relationship between motivated strategies and online learning readiness of the respondents is rejected. This result may suggest that the more the students use rehearsal, critical thinking, and metacognition strategies, the higher their online learning readiness is because respondents in rehearsal strategy are mostly interested in repeating the words over and over to themselves to help them recall information. In contrast, critical thinking provides an opportunity for

learners to apply knowledge through practical applications such as using virtual reality and augmented reality. Metacognition strategy empowers respondents to think about their own thinking. This awareness of the online learning process enhances their control over their own learning. It also enhances personal self-regulation capacity and manages one's own motivation for learning. These results conform to Karatas and Arpaci (2021b) who revealed that enhancing prospective students' elaboration skills, metacognitive awareness, and 21st-century skills and competencies may promote their readiness for online learning.

Furthermore, the organization as motivated strategy also showed a highly positive correlation ($r = .300$, $p<0.01$) to online learning readiness. The result suggests that students who use the organization as motivational strategy tend to be more ready because organizations are articulate and clearly can communicate their philosophy, perspective, and expectations for online course structure and design of online learning, which includes the navigational interface, visual design of materials and information, as well as the communication tools to facilitate learning that can affect students, teachers, programs, and educational organizations in various ways. The most common organizational strategy for online learning is where high-level objectives and supporting policies and plans are set centrally, but the responsibility for implementing these plans is at the faculty or departmental level.

Moreover, organizational strategy for online learning is more likely to succeed when supported by institutional strategies, policies, plans, monitoring, and evaluation (Javier, 2020). Hence the motivation toward online learning readiness is another predictor of motivational strategies for learning (Torun, 2020).

## Conclusions

The online learning readiness of the respondents was described as "Agree" which may suggest that respondents are implementing self-directed learning, learning preferences, self-study habits, technology skills, and computer-related equipment indicators probably because the majority of the students are in favor of using online learning as part of the alternative mode during the pandemic situation since they are internet-savvy users. They appear to prefer this mode instead of the traditional face-to-face mode. Younger maritime respondents are more ready for online learning compared to older respondents. These younger respondents belong to the Generation Z Group which spends most of their time on their cellphones and other technology devices for their everyday activities like accessing their class textbooks or manuals online remotely. The motivated strategies showed a highly significant relationship to online learning readiness. This conclusion tends to suggest that the more the respondents use elaboration motivational strategies for learning, the more they are ready for online learning. The higher the results of the motivational strategies, the more chances the students are ready.

## Recommendations

Stronger marketing and promotion for gender equality for male and female students is recommended to promote the importance of women's voices and leadership. It is also strongly recommended to promote gender-fair policy, such as accepting more female students and introducing GAD policies in the maritime schools. Maritime schools must find ways to increase the motivation of the respondents towards learning as well as to develop their skills in using the different motivational strategies because these can help change their behavior, develop their competence and creativity, set their goals, increase their interest, boost their engagement, and develop their talents. The online learning readiness of the respondents were within the average level, so it is recommended that support programs are provided such as online orientation, webinars, or online training that will involve students to persevere and be comfortable in seeking help or assistance. An online channel on which there are available tutors and counselors for students to reach during difficulties is recommended.

A series of webinars related to online learning may be provided which can develop and enrich student skills in doing different online learning activities. Teachers must constantly motivate them by giving interactive online quizzes and challenging online activities, and encourage

learning collaboration. Maritime students must create realistic goals to have something to keep them going to achieve those goals. Also, visualizing the outcome of all their hard work will motivate them to continue with strong determination. Creating a sensible schedule to better accomplish the deadline can help the students learn to prioritize what is more important than what can be done later after finishing the ones with a deadline. Students should maintain a balance in all aspects, not get overwhelmed in one area. The self-pacing aspect of online courses makes it easier for busy people to be tangled in their studies which sometimes make them neglect some areas of their lives, taking occasional recess time or a halt or breaks to refresh for a while and be ready to focus again to stay motivated.

## Acknowledgment

The authors thank the Distance Open and Transnational University of the Central Luzon State University, Rosario F. Quicho, Leila Collantes, Irene Bustos, Edwin Ibanez, and Florante Ibarra for their comments during the conduct and writing of the study.

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