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## Research Article

### Challenges and Coping Strategies of Maritime Instructors and Students in An Online Distance Learning (ODL) Environment

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#### ABSTRACT

The COVID-19 pandemic has forced Higher Education Institutions (HEIs), Teachers and students to move into Online Distance Learning in the Philippines to continue providing quality education. The study centers on two factors the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment of Dr. Carlos S. Lanting College. A total of 157 respondents were involved in the study and distribution of questionnaires was done thru online. The descriptive and quantitative method of research is used in this study. As a result both the students and teachers used smartphones and laptop in Online Distance Learning but majority of the students have postpaid subscription service (42.38%) with an unstable and slow internet connectivity. Furthermore, the Challenges of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment, the respondents generally answered "rarely" to the given statements as to academic requirements (M=2.08 and M=2.33), Learning Management System (M=1.96 and M=2.30), delivery of instructions (M=2.17 and 2.39) while data from learning environment (M=2.78 and M=2.73) is interpreted as "sometimes," inferring that the respondents perceived the learning environment as the biggest challenge out of the four. The coping strategies of Maritime Instructors and Students in ODL the students generally answered "sometimes" to the given scenarios while the instructors generally answered "often." Meanwhile, the results show that the instructors preferred utilizing the Internet to their advantage for researching lessons and similarly to the students, setting specific time to prepare for school work are the best coping strategies for them. There is no significant difference and relationship on the Challenges and Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment. Thus, to address the challenge regarding the learning environment and the poor internet connection, the findings of the study recommend that students and instructors must

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set time to prepare for schoolwork, create notes to better understand/deliver a lesson, and find another place for better learning/teaching and lesser distractions.

**Keywords:** *Coping strategies, Challenges, Academic Requirements, Learning Management System, Delivery of Instructions, Learning Environment*

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## Background

The COVID-19 pandemic has forced Higher Education Institutions (HEIs), Teachers and students to move into Online Distance Learning in the Philippines to continue providing quality education. Although, Teachers and students have been dramatically affected by the pandemic, coping strategies is an important part to solve the challenges encountered both teachers and students. Furthermore, some colleges have announced they will continue offering only online classes education due to high number of cases in Covid- 19. Today, the situation has changed significantly rapid adoption of Information and Communications Technologies (ICTs), Technology Enhanced Learning (TEL), Learning Management System (LMS) and different platforms in an Online Distance Learning as the main resources in the teaching-learning process.

### **Education and the COVID-19 Pandemic**

The entire education sector is one of the most affected fields brought about by the COVID-19 pandemic as schools have become one of the most vulnerability to security and safety (UNAI, 2020). Primarily, health concerns of school administration and personnel, parents, students and other stakeholders are at stake. To mitigate, contain the spread of the virus, and reduce the infection rate, temporary closure of schools was strictly enforced (UNESCO, 2020). The pandemic pushes the shift to online distance learning (ODL) via work from home among teachers and study from home among students (Crawford, 2020). Globally, many schools have adopted innovative flexible learning modalities to replace the traditional classroom settings. This shift has been found to have improved the students' set learning outcomes (Kim, 2020). In the Philippine setting, the educational setting faces challenges

relating to the alternative or adaptive learning delivery modalities. And up to now, flexible learning modality has been subjected to further evaluations especially in terms of inclusivity and equity in educational opportunities (Manalo & De Villa, 2020). E-learning, or sometimes referred to as online learning, is part of distance learning that specifically combines electronic technology (such as smartphones and computers) and Internet-based or online technologies (Tedja, 2020). Online courses are defined as a learning modality in which at least 80% of the course content is made available or upload online (Allen & Seaman, 2013). Main advantages of online learning include student flexibility in terms of learning time and venue (Fry, Ketteridge, & Marshall, 2015) and that the online media now supports a range of human interactions which creates or simulates engaging and interactive learning experiences (Pike, 2015). Google, particularly, is a popular Web 2.0 tool that offers many facilities and application conducive to teaching and learning. It has built-in functions offering technological, social and pedagogical affordances (Shaharane, Jamil, & Rodzi, 2016). **Shift of Maritime Education Industry to Online Distance Learning**

The COVID-19 pandemic has not spared the need for a rapid transformation in maritime education, which has its traditional principles and methodologies. The maritime education system had to initiate this transformation in an effort to meet the needs for trained human power supply for the continuity of the industry (Nas, 2021). The tendency to preserve the traditional structure and principles of the maritime education has always been steadfast. Some trainers, in their traditional mindset, continue to argue that face-to-face modality of maritime vocational education should be preserved. This cannot be ignored especially with the concerns on

the attitude, behavior development and safety culture of seafarers. However, the pandemic shifted the face-to-face classroom methods to the use of technological infrastructures that enable learning to be delivered to the students' homes. In addition, through the utilization and development in communication technologies, simulated-supported training infrastructure started to be delivered and accessible to students staying at home (Nas, 2021).

As the transformation in traditional education methodologies became inevitable, it enables the maritime education industry to compare the traditional methods with new technology-based modalities. From this perspective, the pandemic has provided an opportunity to try untested alternatives with the help of technology, enabling anyone to learn remotely and safely given the right and appropriate infrastructure, technology, methodology, resources, and guidance. Consequently, it eliminates prejudices and paved the way towards many changes in the maritime education. A study by Ochavillo (2020) outlines a paradigm shift of learning in the way maritime education brought about by the current pandemic. The use of online learning triggered the reshaping the maritime educational landscape and has become the new model in the delivery of learning. His study also show that majority or 7 out of 10 of maritime students were not ready to cope with the paradigm shift to ODL; and 3 of 5 of them still preferred the traditional face-to-face learning. During the pandemic, distance learning is the main choice to deliver learning materials to students safely and cost-effectively. Online, offline (use of modules), and blended learning are the modalities in carrying out distance learning. The teachers or instructors have to package the distance learning materials and resources to be accessible to all students. In Dr Carlos S. Lanting College- College of Maritime Education (DCLC-CME), ODL has been the main mode of teaching as to not compromise and minimize the learning gap of students. Particularly in the Bachelor of Science in Marine Transportation (BSMT) course, Google Classroom and Cisco Webex (a video conference platform) have been adopted as the main Learning Management System (LMS).

### **Research Problem**

The Purpose of the Study is to determine the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment

Specifically, this study attempts to answer the following questions:

#### **For Students**

1. What is the demographic profile of the respondents in terms of:
  - 1.1 Age
  - 1.2 Gender
  - 1.3 Year Level
  - 1.4 Internet Connectivity
  - 1.5 Device/s used in Online Distance Learning

#### **For Instructors:**

2. What is the demographic profile of the respondents in terms of:
  - 2.1 Age
  - 2.2 Gender
  - 2.3 Civil Status
  - 2.4 Internet Connectivity
  - 2.5 Device/s used in Online Distance Learning
  - 2.6 Years of Service
  - 2.7 Number of child/children
  - 2.8 Spent most of your time during COVID-19 Pandemic
3. What is the level of assessment on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment of:
  - 3.1 Academic Requirements
  - 3.2 Learning Management System
  - 3.3 Delivery of Instructions
  - 3.4 Learning Environment
4. What are the coping strategies of Maritime Instructors and Students in Online Distance Learning (ODL) Environment?
5. Is there a significant difference on the level of assessment on the Challenges of Maritime Instructors and Students in Online Distance Learning (ODL) Environment?

6. Is there a significant difference on the coping strategies of Maritime Instructors and Students in Online Distance Learning (ODL) Environment?
7. Is there a significant relationship on the Challenges and Coping Strategies of Maritime Instructors and Students in Online Distance Learning (ODL) Environment?
8. What recommendations can be drawn based on the findings of the study?

## Methods

### *Research design*

This study utilized the descriptive method. It aims to answer of the stated problems by means of gathering necessary data. There is no variable that has been manipulated nor controlled. Descriptive research cannot make predictions or determine casually. It is simply describe existing phenomenon. According to Calderon and Gonzales (2008), a descriptive survey in fast finding studies with sufficient and accurate interpretations. The quantitative design is also structured in this study. The researchers gathered information which from the respondents and converted into numerical equivalents. These data will undergo several statistical analyses to determine the difference between the variables of the study. These mathematical treatments will help the researcher to draw a conclusion and recommendations that will answer the stated problems of this study. This method was adapted by the researchers because it fits the description given by several authors.

### *Research Respondents/Method of sampling*

The researchers were able to gather information of some selected Maritime students and Instructors at Dr. Carlos S. Lanting College. The Researchers used random sampling in determining the number of respondents. A total of 157 respondents were involved in the study and distribution of questionnaires was done thru online and social media. An electronic informed consent (see Annex B) containing information about the objectives of the study, procedures, benefit, and nature of the voluntary participation will be provided. The contact

information of the principal investigator will also be provided in case of concerns and withdrawal from the study. The online survey is open to all DCLC instructors and students provided they satisfy the following inclusion and exclusion criteria:

### *Inclusion Criteria*

Currently employed as an instructor, assistant or associate professor or professor of BS Marine Transportation (BSMT) of DCLC; or

Currently enrolled as a student of BSMT of DCLC, aged 18 and above, regardless of academic load, if transferee, or irregular.

### *Exclusion Criteria*

BSMT instructor, assistant or associate professor or professor of BSMT of DCLC that is on without official leave (AWOL), or leave of absence (LOA) for more than half of the current semester; or

BSMT student that is on absence without official leave (AWOL), leave of absence (LOA) or dropped for most of the semester.

### *Research Instrument and Data Gathering Procedure*

Review of relevant literature and consultations with an independent researcher on the challenges and coping strategies of educators and students during the current COVID-19 pandemic were done. Using these background data, a 20-item survey instrument was constructed using Google Forms. The instrument is designed to collect the (a) demographic profile, (b) challenges and (c) coping strategies used by the target respondents in ODL using multiple choice and Likert-scale.

Data on the challenges and coping strategies on the use of ODL will be evaluated by the respondents using a 5-point Likert scale self-assessment. The items on these sections are pre-determined by the primary investigator on the challenges and coping strategies both the educators and students may have faced were provided. The researchers drafted the survey instrument. Revisions will be done after the technical review for face and/or content validity by the research director, professor/s (experts) and/or independent researcher to en-

sure relevance, intelligibility, and appropriateness. Any critical review from the co-researcher, research director and/or an independent researcher/consultant will be evaluated to incorporate in the survey tool. The validated survey instrument will be pilot tested for reliability or internal consistency using the same sampling technique ( $n \geq 20$ ) prior to full implementation. The reliability will be tested using Cronbach alpha test and  $\alpha \geq 0.7$  will be considered acceptable to be used in the target population.

The link to the electronic survey tool will be distributed through the current ODL employed by the college and through social media. The survey will be made available to all College of Maritime Education (CME) BSMT teaching

faculty and students from 8 to 13 November 2021. The informed consent form (ICF) at the first page of the online survey indicated the study objectives, the qualifications of the respondents, the voluntary nature of the participation, benefits, risk and rights of the participants. Participation will be voluntary, privacy and confidentiality will be guaranteed, and informed consent will be obtained. Participants will be invited to share the survey link via social media platforms with other DCLC BSMT students through a snowball sampling method to fast track the data collection. The researchers will provide questionnaire that will surely aid the data needed for the study to be done and become successful research.

### Reliability Analysis

Table 1. Reliability Test Result of the Research Instrument

Scales	Cronbach's Alpha	N of Items	Internal Consistency
Challenges and Coping Strategies in ODL Environment	0.7860	27	Good and Acceptable

Table 1 shows the reliability test result of the research instrument. The researchers made questionnaires for the Challenges and Coping Strategies in ODL Environment as perceived by the respondents a total of 27 items (Alpha=0.7860) with an internal consistency of "Good and Acceptable Reliability".

### Statistical Analyses

Given in the statement of the problem, the researchers aim to determine the Challenges and Coping Strategies of the Maritime Instructors and Students in an ODL Environment. After collecting the survey from the respondents,

the researchers will group the questionnaires according to the demographic profile checked by the respondent and the levels of assessment in each indicator. The study employed Frequency Percentage distribution since it used to get the percentage equivalent of a given frequency and sample size. Weighted Arithmetic Mean is a statistical tool used to determine the average of the data gathered considering the weight given to each quantitative data with the use of Likert Scale, Pearson- r for the significant relationship and t-test Two sample for significant difference.

Table 2. Likert Scale Weighted Mean Interpretation for the level of assessment on the Challenges and Coping Strategies of the Maritime Instructors and Students in an ODL Environment

Scale	Weighted Mean	Interpretation
5	4.21-5.00	Always
4	3.41-4.20	Often
3	2.61-3.40	Sometimes
2	1.81-2.60	Rarely
1	1.00-1.80	Never

Table 3. Size of correlation coefficient and its interpretation (Hinkle et al., 2003)

Size of Correlation	Weighted Mean
0.90-1.00 (-0.90 to -1.00)	Very High positive (negative) correlation
0.70- 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50-0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30-0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00-0.30 (0.00 to -0.30)	Negligible correlation

**Conflict of Interest**

The researchers declare no potential conflict of interest in any form (authorship, financial, proprietary, or professional) with the school, or the study.

tabular and graphical form of presentation. The data will undergo through different statistical analysis that yields mathematical results will be as basis in answering the stated problems of this study.

**Result and Discussion**

This section deals with the discussion of the data that has been gathered from the respondents of this research by means of textual,

**The Demographic Profile of Respondents**

The following are the quantitative of demographic profile of the respondents of this study.

Table 4. Frequency and Percentage Distribution of the Profile of Maritime Students

Sample Characteristics	n	%
<b>Age</b>		
18- 19 years old	51	33.77
20- 21 years old	87	57.62
22- above years old	13	8.61
<b>Gender</b>		
Male	147	97.35
Female	4	2.65
<b>Year Level</b>		
First Year	62	41.06
Second Year	50	33.11
Third Year	39	25.83
<b>Internet Connectivity</b>		
No internet access inside the household/look for access to the internet at different place	4	2.65
Postpaid subscription service with a stable and fast internet connectivity	32	21.19
Postpaid subscription service with an unstable and slow internet connectivity	64	42.38
Prepaid mobile data	51	33.77
<b>Device/s Used in an Online Distance Learning</b>		
Smartphone	86	56.95
Desktop Computer	4	2.65
Laptop	13	8.61
iPad or Tablet	2	1.32
Smartphone, Laptop	28	18.54
Smartphone, Desktop Computer	12	7.95
Smartphone, iPad or Tablet	1	0.66
Smartphone, iPad or Tablet, Laptop	1	0.66

Sample Characteristics	n	%
Smartphone, iPad or Tablet, Laptop, Desktop Computer	1	0.66
Smartphone, Laptop, Desktop Computer	3	1.99

Note. N=151

Table 4 shows the Frequency and Percentage Distribution of the Profile of Respondents (Maritime Students). As presented on the table, In terms of Age of, 51 respondents (33.77%) are 18 – 19 years old; 87 respondents (57.62%) are 20 – 21 years old and 13 respondents (8.61%) are 22 – above years old. Thus, majority of the respondents for Maritime Students are 20 – 21 years old. In terms of gender majority of the respondents are male 147 (97.35%) while 4 (2.65%) female respondents. Based on Year Level there are 62 (41.06%) first year respondents followed by 50 (33.11%) second year respondents and 39 (25.83%) third year respondents. There are 4 respondents (2.65%) stated that they do not have any access to the internet and must go somewhere else to get access, 32 respondents (21.19%) stated that they have a postpaid subscription service with a fast and stable internet connectivity, 64 respondents (42.38%) stated that they have a postpaid subscription service with an unstable and slow internet connectivity. Lastly, fifty-one 51 respondents (33.77%) stated that they have prepaid mobile data. This either means the respondents have a pocket Wi-Fi connection or mobile internet. Majority of Maritime students have a postpaid subscription service with unstable and slow internet connectivity. “A

member of the House of Representatives said that the Philippines ranked the “second slowest” in internet speed among the 10-member Association of Southeast Asian Nations (ASEAN), and 110th among 139 countries,” (Porcallana, 2020). There are multiple reasons as to why internet connectivity in the Philippines is relatively slow and unstable, such cases stated by the Globe Telecom Chief Maria Yolando Crisanto, “Before 2020, it took 29 to 35 permits to build one cell tower.” The device/s used in Online Distance Learning by the respondents was surveyed. Thus, 86 (56.95%) of the respondents answered ‘Smartphone’, 4 (2.65%) of the respondents answered ‘Desktop Computer’, 13 (8.61%) of the respondents answered ‘Laptop’, 2 (1.32%) of the respondents answered ‘iPad or Tablet’, 28 (18.54%) ‘Smartphone, Laptop’, 12 (7.95%) of the respondents answered ‘Smartphone, Desktop Computer’, 1 (0.66%) of the respondents answered ‘Smartphone, iPad or Tablet’, 1 (0.66%) of the respondents answered ‘Smartphone, iPad or Tablet, Laptop’, 1 (0.66%) of the respondents answered ‘Smartphone, iPad or Tablet, Laptop, Desktop Computer’. Lastly, 3 (1.99%) of the respondents answered ‘Smartphone, Laptop, Desktop Computer’.

Table 5. Frequency and Percentage Distribution of the Profile of Maritime Instructors

Sample Characteristics	n	%
<b>Age</b>		
30 years old or below	2	33.33
31-50 years old	1	16.67
51-70 years old	3	50
<b>Gender</b>		
Male	6	100
Female	0	0
<b>Civil Status</b>		
Married or partnered in a long - term relationship	4	66.67
Single	2	33.33
<b>Internet Connectivity</b>		

Sample Characteristics	n	%
Postpaid subscription service (e.g., broadband, DSL, Fiber...)	4	66.67
Prepaid mobile data (e.g., phone/data, pocket Wi-Fi...).	2	33.33
<b>Device/s Used In Online Distance Learning</b>		
Desktop, Laptop, Smartphone	1	16.67
Laptop	1	16.67
Smartphone	2	33.33
Desktop	2	33.33
<b>Years of Service</b>		
Less than 5 years	3	50
5 or more years	3	50
<b>Number of child/children</b>		
Have, under my care	4	66.67
None	2	33.33
<b>Spent most of your time during the COVID-19 pandemic</b>		
Home with family	6	100

Note. N = 6

Table 5 shows the Frequency and Percentage Distribution of the Profile of the Respondents (Maritime Instructors). As presented on the table, In terms of Age majority of the respondents are 51-70 years old comprise of 3 respondents 50%, followed by 30 years old and below with 2 respondents (33.3%), and lastly the group with the age 31 – 50 years old with 1 respondent 16.7%. It is noted that all of the respondents were male comprise of 6 respondents (100%) and respondents with the civil status of Married or partnered in a long-term relationship compromise of 4 respondents (66.7%) while the single compromise of 2 respondents (33.3%). Based on internet connectivity respondents who have Postpaid subscription

service comprise of 4 respondents (66.7 %) while 2 respondents have Prepaid mobile data (33.3%). Moreover, 1 (16.7 %) used desktop computer, laptop and smart phone the same as using laptop only while 2 (33.3%) used pure smart phone and pure desktop computer. In years of service there are 3 (50%) respondents rendered less than 5 years and there are 3 (50%) respondents with 5 or more years. Aside from that, there are 4(66.67%) respondents with child/children under their care while 2 (33.33%) respondents without child/children. During the Covid- 19 pandemic all of the respondents 6 (100%) spent their time at home and with their family.

Table 6. The Level of assessment on the Challenges of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment

Statement Items	Instructors		Students	
	Mean	Annotation	Mean	Annotation
<b>Academic Requirements</b>				
I am unable to submit or access certain requirements (lab equipment, school works) on time due to COVID restrictions	2.17	Rarely	2.34	Rarely
I am unable to manage my time (assignments of other subjects, etc.)	1.83	Rarely	2.40	Rarely
I am unfamiliar with sending/ opening/ receiving emails/ forms	2.17	Rarely	2.17	Rarely



Statement Items	Instructors		Students	
	Mean	Annotation	Mean	Annotation
<b>Academic Requirements</b>				
Lack of technical skills (use of PDF editors, simulation programs, Google Suite/Services, Microsoft Office, etc)	2.17	Rarely	2.40	Rarely
<b>Composite Mean</b>	<b>2.08</b>	<b>Rarely</b>	<b>2.33</b>	<b>Rarely</b>
<b>Learning Management System</b>				
I am unable to attend online meeting classes due to technical problems (LMS server update, power interruption, etc.)	2.17	Rarely	2.35	Rarely
The LMS (Google Suite, Cisco Webex) present at school is insufficient for online classes	1.67	Never	2.41	Rarely
The device/s I use are incompatible with the LMS	1.67	Never	2.25	Rarely
I am unfamiliar with the use of LMS or its tools.	2.33	Rarely	2.20	Rarely
<b>Composite Mean</b>	<b>1.96</b>	<b>Rarely</b>	<b>2.30</b>	<b>Rarely</b>
<b>Delivery of Instructions</b>				
Poor communication or lack of clear direction to students (delayed announcements, etc.)	2.33	Rarely	2.42	Rarely
Inability to adjust learning/teaching style (change from traditional to online, etc.)	2.33	Rarely	2.50	Rarely
Instructors do not follow up/ reply with the students work	2.00	Rarely	2.28	Rarely
Students fail to keep up with the instructions (instructions are too fast and too little time to understand)	2.00	Rarely	2.40	Rarely
Teachers have limited resources and skills necessary to teach the courses online	2.17	Rarely	2.32	Rarely
<b>Composite mean</b>	<b>2.17</b>	<b>Rarely</b>	<b>2.39</b>	<b>Rarely</b>
<b>Learning Environment</b>				
I am unable to balance school/ lesson commitments and my free time.	1.83	Rarely	2.51	Rarely
Limited physical space for online learning.	2.67	Sometimes	2.58	Rarely
Learning environment is uncomfortable/ unsuitable for online classes (unnecessary noise, outside disturbance, etc.)	2.83	Sometimes	2.78	Sometimes
Need to work for extra income	3.67	Often	2.59	Rarely

Statement Items	Instructors		Students	
	Mean	Annotation	Mean	Annotation
<b>Academic Requirements</b>				
Fatigue/tiredness and lack of sleep during an online class	2.50	Rarely	2.75	Sometimes
Need to fulfill responsibilities at home (include taking care of family members, house chores and errands)	3.17	Sometimes	3.17	Sometimes
<b>Composite Mean</b>	<b>2.78</b>	<b>Sometimes</b>	<b>2.73</b>	<b>Sometimes</b>

Table 6 shows The Level of assessment on the Challenges of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment. In terms of challenges on the academic requirements majority of the Maritime Instructors rarely unable to manage their time (assignments or other subjects, etc." with a mean of (M=1.83). While majority of the Maritime Students rarely unfamiliar with sending/opening/receiving emails/forms" with a mean of (M=2.17). Moreover, in terms of Learning management system majority of the Maritime Instructors rarely unfamiliar with the use of LMS or its tools (M=2.33). On the other hand maritime students have rarely challenge on the LMS (Google Suite, Cisco Webex) present at school is insufficient for online classes (M=

2.41). In terms of Delivery of Instructions maritime instructors rarely Poor communication or lack of clear direction to students (delayed announcements, etc.) and Inability to adjust learning/teaching style (change from traditional to online, etc. (M=2.33). Whereas maritime students have rarely Inability to adjust learning/teaching style (change from traditional to online, etc. (M=2.50). Lastly, in terms of Learning Environment majority of the instructors often need to work for extra income due to Covid-19 pandemic (M= 3.67) while maritime students sometimes need to fulfil responsibilities at home (include taking care of family members, house chores and errands (M=3.17).

Table 7. The Level of assessment on the Coping Strategies of Maritime Instructors and Students in an Online Distance Learning Environment (ODL) Environment

Coping Strategies Statement Items	Instructors		Students	
	Mean	Annotation	Mean	Annotation
I set specific time to prepare for school work (such as activities, requirements and exams)	4.50	Always	3.76	Often
Ask help from others (classmates, colleagues, etc) on matters regarding school work)	3.00	Sometimes	3.34	Sometimes
Conduct a meeting to discuss specific school work	3.83	Often	3.01	Sometimes
Creating notes to better understand/ deliver a lesson	3.83	Often	3.57	Often
Utilizing the Internet to my advantage for researching lessons (google, youtube, etc)	4.50	Always	3.56	Often
Borrow devices to be used for online class, passing requirements, etc)	2.67	Sometimes	2.67	Sometimes

Coping Strategies Statement Items	Instructors		Students	
	Mean	Annotation	Mean	Annotation
I will go to another place where I can learn better for lesser distraction	2.17	Rarely	3.04	Sometimes
Replay, rewatch, and review the recorded lessons sent to the class	2.83	Sometimes	3.28	Sometimes
<b>COMPOSITE MEAN</b>	<b>3.42</b>	<b>Often</b>	<b>3.28</b>	<b>Sometimes</b>

Table 7 shows the Level of assessment on the Coping Strategies of Maritime Instructors and Students in an Online Distance Learning Environment (ODL) Environment. Majority of the maritime students often set specific time to prepare for school work such as activities, requirements and exams with (M=3.76) this indicates that many maritime students have different strategies in the new mode of learning. In connection to that sometimes maritime students borrow devices to be used for online class, passing requirements, etc. with (M=2.67). Since, the composite mean is (M=3.28) it shows that all indicated coping strategies are used sometimes by the students. According to Evie Sellers (2012), approximately 65 percent of college students have taken an online course. The benefits to online learning include flexibility and practicing 21st-century skills, but some issues can impede effective online learning. One of the biggest issues that impacts online

learners is poor time management. Lack of a schedule, too many distractions and multitasking can lead to poor time management. On the other hand maritime instructors always set specific time to prepare for school work (such as activities, requirements and exams) and utilize the Internet to take advantage for researching lessons (google, YouTube, etc.) with a (M=4.50). They often conduct a meeting to discuss specific school work and create notes to better understand/ deliver a lesson with a (M=3.83). Sometimes they ask help from others and replay, re-watch, and review the recorded lessons sent to the class with a (M=3.00), Borrow devices to be used for online class with a (M=2.67). Going to another place to learn better for lesser distraction got the lowest (M=2.17) rarely. The computed composite mean is 3.42. Thus, the instructor/educator is often conducting and creating a lesson to better understand the school works.

Table 8. The significant difference on the level of assessment on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment

Challenges	N	df	Mean	t-value	$\eta^2$	p-value
Students	157	155	2.2982	0.6074	0.05	0.5444
Instructors			2.4650			
<b>Coping strategies</b>						
Students	157	155	3.2319	-0.5407	0.05	0.5895
Instructors			3.6227			

**Note.**

N- Sample size, df- degrees of freedom, t- computed value, .sig- significant level  
 $\alpha$ - level of significance

Table 8 shows the significant difference on the level of assessment on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment. The level of assessment on the Challenges of Maritime Instructors and

Students in Online Distance Learning (ODL) Environment from the data obtained, the sample size of the study is comprise of 157 respondents randomly selected where in the level of assessment on the mean challenges of Maritime Instructors is 2. 2982(sometimes)

which is less than the mean challenges of students 2.4650(rarely) with the degrees of freedom of 155 and the t- computed value is equal to 0.6074. Since, the probability value is equal to 0.5444 and it is greater than the level of significant 0.05. Therefore, do not reject the null hypothesis and it implies that there is no significant difference on the level of assessment on the Challenges of Maritime Instructors and Students in Online Distance Learning (ODL) Environment. According to Alea, L. A., Fabrea, M. F., Roldan, R. D. A., & Farooqi, A. Z. (2020), such problems would be easily solved if adequately addressed. The school should carefully plan how they will offer an online distance learning education to students. Also, continued monitoring and evaluation of the program would significantly help enhance the system of distance learning education. However, the level of

assessment on the Coping Strategies of Maritime Instructors and Students in Online Distance Learning (ODL) Environment from the data obtained, the sample size of the study is comprise of 157 respondents randomly selected where in the level of assessment on the mean coping strategies of Maritime Instructors is 3.6227(often) which is greater than the mean coping strategies of students 3.3219(sometimes) with the degrees of freedom of 155 and the t- computed value is equal to -0.5407. Since, the probability value is equal to 0.5895 and it is greater than the level of significant 0.05. Therefore, do not reject the null hypothesis and it implies that there is no significant difference on the level of assessment on the Coping strategies of Maritime Instructors and Students in Online Distance Learning (ODL) Environment.

Table 9. The significant relationship on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment

VARIABLE	N	df	r-value	α	p-value
Challenges (X) and Coping Strategies (Y) of Maritime Teachers and Students	157	156	-0.03	0.05	0.74

**Note.** N- sample size, df- degrees of freedom, r- correlation of value, p- probability value, α - level of significanc

Table 9 shows the significant relationship on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment. According to Babicka-Wirkus, A. (2021, July 26), the University students' strategies of coping with stress during the corona virus pandemic: Data from Poland, one of the challenges that students were facing is the stress, and according to the research, the dominant coping strategies among Polish students were: acceptance, planning, and seeking emotional support. The researchers insist that the challenges teachers face are that they miss the interaction with their students, the problem of signals and gadgets. Moreover, on how they will give a learning experience through virtual and the coping strategies of the teachers are being ready and accepting the situation. From the data obtained, the study's sample size comprised 157

respondents with a degree of freedom of 156. Furthermore, the r-computed value is equal to -0.03 (Negligible Correlation), the probability value is equal to 0.74, which is greater than the level of significance 0.05 therefore, accepting the null hypothesis, which implies that there is no significant relationship between the Challenges and Coping Strategies of Maritime Teachers and Students in Flexible Learning. The researchers noticed that Challenges seem to have nothing to do with the Coping strategies developed by students and teachers in an Online Distance Learning (ODL) Environment.

**Conclusion**

Based on the above findings, the stated problems of this study can now be answered by drawing conclusions supported by the evidence gathered from the respondents and

reviewed literature. The following conclusions were drawn:

1. In terms of the demographic profile, majority of the maritime students are 20 years old, male, and in their first year level. Moreover, the majority of the students have postpaid subscription service with an unstable and slow internet connectivity. Furthermore, majority of the students use smartphones in Online Distance Learning.
2. In terms of the demographic profile, the majority of the instructors are 51 to 70 years old, male, and are married or partnered in a long-term relationship. Moreover, the majority of the instructors have postpaid subscription service and use smartphones and desktops in Online Distance Learning. Furthermore, half of the number of instructors have been teaching for less than 5 years, while the other half have been teaching for 5 or more years. Lastly, the majority of the instructors have children under their care and have spent most of their time during the COVID-19 pandemic at home with their family.
3. When it comes to the level of assessment on the Challenges and Coping Strategies of Maritime Instructors and Students in an Online Distance Learning (ODL) Environment, the respondents generally answered "rarely" to the given statements as to academic requirements, Learning Management System, delivery of instructions, and learning environment. Generally, the data from the Learning Environment table is interpreted as "sometimes," inferring that the respondents perceived the learning environment as the biggest challenge out of the four.
4. When it comes to the coping strategies of Maritime Teachers and Students in Flexible Learning, the students generally answered "sometimes" to the given scenarios while the instructors generally answered "often." Moreover, from the findings of the study, it can be inferred that the students deemed setting specific time to prepare for school work was the best coping strategy for them. Meanwhile, the results show that the instructors preferred utilizing the Internet to their advantage for researching lessons and

similarly to the students, setting specific time to prepare for school work are the best coping strategies for them.

5. There is no significant difference between the level of assessment on the challenges of Maritime teachers and students in flexible learning.
6. There is no significant difference between the coping strategies of Maritime teachers and students in flexible learning.
7. There is no significant relationship between the challenges and coping strategies of Maritime teachers and students in flexible learning.

### Recommendations

To shed light about the findings and conclusions of this study, the following recommendations are offered:

1. **To students and instructors during ODL.** To address the challenge regarding the learning environment and the poor internet connection, the findings of the study recommend that students and instructors must set time to prepare for schoolwork, create notes to better understand/deliver a lesson, and find another place for better learning/teaching and lesser distractions.
2. **To school administrations/institutions and other stakeholders.** As the second place next to home, it is recommended for schools/academies/campus/other academic institutions to assess the challenges faced by both of their students and instructors to take action and address these issues in order to provide a better quality of education and wellbeing.
3. **To internet providers.** Reviewed literature in the present study displays evidence that the Philippines is suffering from very slow internet connectivity. Having an upgrade for a faster internet connection is a must for better delivery of teaching in Online Distance Learning.
4. **To future researchers.** This study can provide baseline data for future researchers; therefore, they may conduct a similar study under a different factors/variables or a wider group of respondents for more generalized and accurate results. Given that

this study is a quantitative research, future researchers may use both quantitative and qualitative methods to deeper understand the challenges and coping strategies of both instructors and students during Online Distance Learning.

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