# **International Journal of Research Studies in Education**

2024 Volume 13 Number 8, 27-50

# Career attractions and challenges among active seafarers

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Received: 9 June 2024

**Available Online**: 15 August 2024

**Revised**: 3 August 2024 **DOI**: 10.5861/ijrse.2024.24052 Accepted: 15 August 2024



ISSN: 2243-7703 Online ISSN: 2243-7711

OPEN ACCESS

#### Abstract

This study examines the attractions and challenges of a seafaring career, aiming to address difficulties and attract more individuals to pursue maritime professions. Using a quantitative descriptive research method with 120 respondents from Lyceum International Maritime Academy (LIMA), the research reveals that married individuals aged 31-40 with 16 or more years of seagoing experience dominate the sample. Most respondents agree on the attractions of seafaring, particularly its ability to provide for their families. While physical/environmental challenges are acknowledged, personal and social challenges are generally disagreed upon. Age influences attractions, personal and physical/environmental challenges; rank onboard affects responses to social challenges, and years of experience influence responses to physical/environmental challenges. However, no significant relationship is found between the attractions and challenges of a seafaring career. The study proposes strategies to enhance the appeal of seafaring careers and alleviate shipboard challenges.

Keywords: career attractions, challenges onboard, maritime industry, seafaring career, seafarer

# Career attractions and challenges among active seafarers

#### 1. Introduction

World of seafarers is one of the most international and global workforces, with individuals from geographically and culturally diverse regions such as Western Europe, Russia, India, South America, and the Philippines. (Manalo, et al., 2015). They work on a variety of vessels, performing multiple trades under a wide range of working conditions. Working at sea is a dangerous career because of the difficulties, working conditions, and occupational risk on board a ship. However, choosing to be a sailor generally relates to "calling" or "a sense of purpose in knowing that this is the work one was born to do". This profession is a "calling" because of the long history of sailing, the pride and promise associated with it, and the lifestyle it represents. These can be referred to as benefits of staying in this career. It is a tradition that includes a wide range of professions and ranks. Each of these ranks is important to the smooth running of a ship. The mariners are the world's first internationally recognized labor force. They are critical in ensuring that vessels and commodities are delivered securely and efficiently from point of origin to point of destination. It is a profession that requires physical work, expertise, and intellectual capacity across a range of disciplines.

Relatively, life at sea has its challenges that are experienced by every shipman throughout the career. Their seafaring experiences are divided into two distinct phases: being on board a ship and being at home. As a result, a seafarer's life is somewhat cyclical, with change, readjustment, and transition between the two phases taking place (Devereux, 2020). This is one of the challenges for the crew, their partners, and their families to keep up with the work patterns. As explained by Baylon & Santos (2015), regardless of the number of vacation days and the length of time on board, all seafarers share the same situation. Their job requires them to be away from home, family, and loved ones for an extended period of time. Working at sea, on the other hand, is unquestionably a personal choice made by the majority of sailors. Salaries in this profession are significantly higher than those earned on land. One of the most common reasons people travel to the sea is to make a good living. Many people consider this to be adequate compensation for the difficulties and risks associated with such a career path (Baum-Talmor, 2020).

Challenges affected the sailors differently depending on their age, civil status, rank onboard, and years of seagoing experience. Younger sailors were thought to be more vulnerable to challenges such as accidents, discrimination, and harassment than older sailors. Being married for sea duty is difficult because shipmen are separated from their families. According to Baylon & Santos (2015), for married seafarers, the transition from ship to shore was the most difficult part of the work cycle. Also, different ranks onboard have various challenges that can be encountered because it depend on the type of activity or work on board. Engine officers and ratings are more susceptible to noise and vibration, whereas deck officers and ratings are more vulnerable to inclement weather. Moreover, years of seagoing experience have influenced how seafarers perceive the challenges onboard. Seasoned seafarers are more susceptible to sickness as their bodies have been exposed to different physical constraints like noise and vibrations. Long-term noise exposure has been linked to the development of hypertension in seafarers (Jégaden & Lucas, 2020).

Furthermore, challenges onboard can be personal, social, and physical/environmental. Personal challenges are those difficulty in communicating with family, dealing with mental health and stress. Communication is essential for all seafarers because maintaining relationships with family and loved ones requires regular contact (Davies & Parfelt, 1998 as cited by Baylon & Santos, 2015). When it comes to social challenges, International Transport workers' Federation (2015) stated that discrimination, harassment, and depression due to social isolation are the common problems that seafarers encountered on board the vessel. Lastly, physical/environmental challenges are the oldest and most difficult among them. Seasickness, motion sickness, and other symptoms caused by oscillatory movements or whole-body vibration while onboard sea vessels, as

well as environmental factors such as various weather conditions, can have a significant impact on mariners' operational performance at sea, according to Sasirekha & Ramani (2014).

There are fewer incentives to pursue a seafaring career nowadays because the salaries and benefits offered by land-based jobs are just as competitive with fewer challenges. The aforementioned factors have contributed to dissatisfaction among in-service seafarers while decreasing seafaring's overall attractiveness. According to Iwanaga (2019), there are several negative perceptions of working on board seagoing vessels these days. Although there have been some advantages to being a seafarer, such as higher pay and longer vacations. This has had a huge impact on the development of the shipping industry, which is why the IMO launched the "Go to Sea" campaign. Its goal was to persuade young people that a career in the maritime industry could be rewarding, interesting, and long-lasting. It was also intended to make working at sea and in the maritime industry more appealing.

This study is conducted to provide a critical understanding of seafaring life. This can pave the way for the improvement of the different attractions of seafaring while also adapting to the changing challenges of this profession. More so, it will help those interested in this career realise that seafaring is not an easy job and prepare themselves to be mentally and physically fit for sea duties. It can help enhance the curriculum of every maritime institution on how to prepare their cadets in terms of the challenges they may encounter onboard and how life at sea really works. Further, the study can help the shipping company and shippard to improve and renovate the ship into a much better working and living environment for seafarers because they are the most important resource of shipping industries.

**Objectives of the Research** - The study's overarching goal is to address the challenges that seafarers face on board. Specifically, it answers the following objectives: To present the profile of the respondents in terms of age, civil status, rank on board, and years of seagoing experience; to identify the attractions of seafaring career; to determine the challenges in terms of personal, social, physical/environmental; to test the significant difference of the responses when grouped according to profile variables; to test the relationship between the attractions and challenges of the seafaring career; lastly, to propose strategies on how to improve the attractions of seafaring and remediate the shipboard challenges.

## 2. Literature Review

#### 2.1 Attractions of Seafaring Career

Seafaring can be a fascinating and rewarding profession. Approximately 92.5% of global trade is still carried out by sea. Many seafarers choose the profession because it provides lucrative returns in a short period of time; they also have the benefit of traveling to ports all over the world without having to worry about travel expenses or hotel accommodations. Some people enjoy the challenge and adventure that comes with their work. According to Sasirekha & Ramani (2014), the primary reason for choosing sailing is the good salary and tax breaks. Furthermore, a wider range of experiences are introduced into the life of a sailor, such as traveling abroad, adventure, and visiting different ports. However, Panganiban & Garcia (2017) stated that a merchant mariner would have to be strong to work long hours in order for their family to live comfortably, and as a result, mariners would have little time to enjoy their profession.

According to numerous studies on the appeal of a seafaring career, one of the most common reasons for going to sea is to make a lot of money. Many people consider this to be adequate compensation for the difficulties associated with such a career path. Additionally, seafarers from the Philippines, the United Kingdom, Ecuador, and Taiwan choose seafaring for the "good pay." This profession paid and provided more benefits than land-based jobs. The high wages in the shipping industry, according to seafarers, meant that jobs ashore could not compete in terms of pay, and the promise of a good salary was a significant reason for joining the merchant navy. The decision to become a sailor is not made solely for financial reasons. Individuals' geographical origins

are also mentioned as reasons for going to sea, with physical proximity to the sea cited as a reason for their career choice. Several times during interviews, seafarers mentioned coming from a nautical family, with their closest relatives pressuring them to pursue this career path. Other seafarers say they went to sea because it was a good way to get ahead in their careers, which could include fast-track opportunities for promotions. They also claim that the thrill of working at sea is what drew them in and kept them there (Baum-Talmor, 2020).

Furthermore, according to a study conducted among MAAP seafarers by Baylon & Santos (2015), money remains the most appealing aspect of a seafaring career. This is why many young people from countries such as the Philippines continue to want to work at sea. Working as a sailor is one of the best ways for Filipinos to financially escape poverty. Seafarers are also eligible for tax breaks and risk paying if they work on a tanker vessel. Married seafarers described their intense pleasure and happiness when they returned home feeling excited and happy, using the term "honeymoon" to describe their relationship during reunion. Another advantage of a seafaring career is the ability to travel and see the world for free. Training, airfare, and hotel accommodations at the company's expense are also mentioned. The nature of their work also affords them the flexibility and autonomy that they would not find in shore-based jobs.

Regarding the seafarer profession, half of Chinese respondents believe that the most appealing aspect of seafaring is the high salary, which is perceived to be a greater disparity between jobs on board and ashore. The respondents' reasons for choosing the maritime profession prior to attending university varied. The four self-motivating factors are higher pay, ease of finding work, a strong desire to work on board, and better prospects. As a result, when deciding whether or not to work on board, respondents are also concerned about their families (Jianzhong, 2014).

Similarly, Mathebekase (2018) observed that the primary motivation for becoming a sailor is financial gain, followed by travel opportunities and opportunities for growth and development. The majority of those interviewed also confirmed that their organizations use high pay to entice young people to join the maritime industry. Even though the results show that the majority of seafarers expect to make good money when they become seafarers, there are other factors that motivate them, such as meeting a certain milestone in a certain amount of time. If they do not reach that milestone, they may feel that seafaring has not met their expectations.

According to Gonzalez et al. (2014), the younger generation in Latvia who are interested in the seafaring profession are drawn in by the good salaries, but a good salary is not the most important aspect of the profession for them; stable employment and travel have now reached an even higher level of importance. They also believe that this is not a dangerous profession. Respondents associate this profession with discipline, responsibilities, and feeling like part of a team, but they also associate it with being cut off from the rest of the world and spending long periods of time on board. There are some regional and gender differences as well: Males are more drawn to the salary and prestige of the profession, whereas females are drawn to travel and are discouraged by health and safety concerns. Furthermore, modern ships provide numerous opportunities for relaxation, such as swimming pools, gyms, massive video libraries, and limitless communication options. On-board internet technologies are not as advanced as ashore technologies, and internet speeds are slower, but they are adequate for communicating with family and friends. Seafarers can now complete their studies while working on board, thanks to the popularity of distance learning educational programs.

Nonetheless, despite obvious attractions and benefits such as high wages and opportunities to sail internationally, pursuing a seafaring career can be unsatisfying (Fei & Lu, 2014). The prospects and enjoyment of visiting distant lands have been significantly reduced as a result of faster turnaround in ports as a result of efficient cargo-handling operations and increasing pressure from shipping companies to maximize profits (Fenstad, et al., 2016). As a result, there is a global shortage of seafarers. According to the new BIMCO (2021) and International Chamber of Shipping Seafarer Workforce Report, the maritime industry must significantly increase recruitment if it is to avoid a serious shortage in total supply of officers by 2026. It is widely acknowledged that the demand for seafarers is a derived demand, driven by the need for international trade to

take place. Given the growing demand for STCW certified officers, the Report predicts that by 2026, an additional 89,510 officers will be needed to operate the world merchant fleet. According to the report, there are currently 1.89 million seafarers serving the world merchant fleet, which operates over 74,000 vessels worldwide.

## 2.2 Challenges of seafaring career

As a result of the pressures of the world. Despite the hierarchical structure of work division and roles on board, attitudes toward the longevity of the seafaring career have shifted, and it is no longer considered a "job for life" for most individuals, as addressed by Baum-Talmor (2020). Even though being a seafarer is not an easy job, seafarers should be dedicated and committed to their work. There will be many challenges, and future seafarers must be prepared to face them in order to stay in their chosen career and earn more (Manalo et al., 2015). Working on a ship is a difficult task. A lack of social life, repetitive routines, and poor working and living conditions are just a few of the many challenges sailors face on board ships. These difficulties can be classified into three (3) types: personal, social, and physical/environmental.

Personal challenges - Some of the personal challenges faced by a seafarer onboard include the impact of children on family life and the intensity of the couple or family relationship. Furthermore, seafarers are parents, and the presence of children would disrupt their family life. Sailors struggled with leaving their children for extended periods of time and sometimes discovered changes in their children upon their return, as young children frequently did not recognize their seafaring parents, which could be upsetting for families. Birthdays, first communions, and school activities were also missed by the merchant marine. Transitions between ship and shore for married seafarers were reported to be the most difficult period of the work cycle as they struggled to adjust to shore life and their partners to being part of a "couple" again. Seafarers appear to have two lives: single (on their own) on board and married (with a partner) at home. Seafarers reported taking significant time to unwind and recover from the stress of shipboard life, and many reported difficulties adjusting their sleeping patterns to match those of their families. Returning home was difficult for the seafarers, as was returning to work, which was also stressful and sad. a difference in the way they compared to the world (Baylon & Santos, 2015).

Furthermore, according to Devereux (2020), the lives of seafarers are characterized by different temporal rhythms and two locations, one of which is home, and the other is a ship. While there are parallels with other occupations that require an individual to be away from home on a regular basis, the transition, readjustment, and change process that seafarers go through is somewhat unique. The transition process varies depending on where you are in the tour, with the early and late stages proving to be the most difficult for many seafarers. Readjustment must occur quickly and, in many cases, concurrently with recovery from long distance travel and jet lag. It is also important to recognize that many seafarers have no idea when they will return home, which affects not only them but also those who are waiting at home for the seafarer to return.

Besides that, there are some challenges that seafarers face onboard, such as a lack of exercise, social isolation, smoking, and excessive alcohol consumption, which can all have a negative impact on their health. Moreover, there are numerous diseases onboard that can harm seafarers' health. Malaria can affect seafarers. Malaria is a potentially fatal disease spread by the female Anopheles mosquito. HIV/AIDS and STIs are two other diseases (or transmitted diseases). It is a disease that is spread through direct contact with the source or carrier, such as having an affair or having sex. Depression is another issue that seafarers face. Access to medical care is a major issue for seafarers, who are among the world's most geographically isolated workers. Because of the severe physical demands and health needs of seafaring, as well as the apparent competitive nature of the employment market, many seafarers are hesitant to seek medical and psychological assistance. Some sailors find solace in heavy drinking while at sea. The perceived stress from the "interface between job and family/social life" was positively related to alcohol consumption and smoking. It is a factor that may have an impact on a seafarer's health as a result of other workplace issues such as harassment, discrimination, fatigue, homesickness, and onboard relationships (International Transport Workers' Federation 2015).

According to Swift (2015), despite being healthier than the general population (the "healthy worker effect" of seafarers' medical screenings), seafarers are more likely to suffer from mental health issues, particularly mild anxiety and depression, which are linked to increased workloads and working hours, decreased crewing levels, and high levels of monotony. The high levels of stress experienced by seafarers have also been linked to being away from home and family. Harassment and bullying, fatigue, alcohol and drug addiction, loneliness, the precarious nature of seafaring labor, piracy, criminalization of seafarers, and factors that contribute to social isolation, such as a lack of shore leave and a lack of social cohesion onboard, are all causes of poor mental health among seafarers. Furthermore, there are numerous factors that may be considered to be detrimental to seafarers' mental health and well-being. Some of these are generic to the occupation, while others are more specific to certain shipboard positions than others (Sampson & Ellis, 2019).

Social Challenges - In terms of social challenges, the fact that seafarers work on a ship has an impact on their normal social lives. People have said that being a seafarer is a lonely job because there is little direct contact with home, there are few shore leaves, there are few crew members, and most of the work is done by one person. Long-term separation from a parent or spouse can be detrimental to both the seafarer's and his family's mental health. Seafarers, in particular, frequently experience increased anxiety and depression just before leaving or returning home. Therefore, if the seafarers' families do not assist them, there may be issues (Yuen et al., 2018). Furthermore, the reduced crew number as a result of advanced technologies has resulted in increased workload in merchant seafaring in recent years. As turnaround ships have spent less time in port, workers' opportunities to mingle and build camaraderie have diminished. Furthermore, it has been illegal for mariners to visit shorelines near ships for many years. The International Ship and Port Facility Security (ISPS) Code went into effect in 2004 as a preventative measure against security issues affecting ships or port facilities used in international trade. In response to the potential threats to ships and port infrastructure in the aftermath of the 9/11 attacks in the United States, a comprehensive set of measures to increase security at sea and at ports was devised. Ships and port infrastructure must meet standards that require the tracking and control of both passengers and freight. As a result, passing through port safety barriers while a ship is docked can be a major hassle for sailors. For this reason, many sailors don't bother to spend time in welfare facilities, which are usually located a far away from the ports where their ships depart.

Furthermore, social isolation is an objective reality to which modern-day seafarers are particularly vulnerable. The reasons for this are well established: Crew numbers have decreased, while working hours, responsibility, and paperwork have increased. According to Swift (2015) journal, close friendships and discussions of emotional and personal subjects have never been common at sea, where social life is rigidly hierarchical and senior ranks (in particular) feel the need to maintain social distance. As more ships employ international crews, it has become increasingly difficult for crew members to bond with one another through shared experiences and language. Restrictive alcohol policies, a lack of communal eating and recreation spaces, and the segregation of these spaces based on rank can all contribute to increased feelings of isolation.

According to Hebding (2013), harassment and discrimination are some of the issues that crew members face onboard. Unwanted sexual advances are also common when there are only a few females on board and the males have no one to deal with except them. According to the International Transport Workers' Federation (2015), harassment is more common on women, despite the fact that women make up only about 2% of the world's maritime workforce. Similarly, discrimination is one of the five levels of negative action that draw our attention to the wide range of activities that can be caused by injustice. Discrimination is defined as any action in which members of a particular group are treated negatively because of their race, integrity, or religion (Manalo et al., 2015).

*Physical/Environmental challenges* - When it comes to physical/environmental challenges at work, working on a ship presents numerous challenges. These challenges are mainly attributed to poor working and living conditions. The scarcity of seafarers, combined with the prevailing minimalist manning level on merchant ships, has significantly increased the workload of seafarers, who are now facing tighter and longer work

schedules. Because of the high job demands and long working hours that are common in two-watch systems, the officer and crew become tired. Long working days, especially when making multiple port turnarounds, are the leading cause of fatigue and exhaustion among crew members. According to reports, time spent on board a ship is either spent working or resting (Ellis & Sampson 2013). According to Yuen et al. (2018), only 23% of seafarers get enough sleep, which is exacerbated by noise and vibration in their cabins. Furthermore, fatigue at sea is a persistent issue. Combating pirates has fared better for the industry than addressing sleep deprivation, stress, and burnout. Fatigue is a well-known and serious medical issue, not a hazy concept. It is also known as tiredness, exhaustion, lethargy, and listlessness. It all boils down to being tired and weak, both physically and mentally ("How to Tackle Fatigue," 2016 as cited by Panganiban & Garcia, 2017).

As stated in Gonzalez et al. (2014) study, respondents were very concerned about working in confined spaces. This is referred to as "ship prisonering." Some were also concerned about the potential negative impact of seafarer work on health. It is obvious that life on board can have an impact on health, and seafarers can become ill or injured while on the job. According to insurance company information, the underlying causes of seafarers' injury and accident are poor lighting, broken "cat walks" and grating while loading and unloading, equipment that is not ready for sea, failure to obtain work permits and risk assessments, or failure to follow them, and taking shortcuts. Nonetheless, as Sasirekha & Ramani (2014) explain, one of the most serious challenges that seafarers face is the threat of piracy. Piracy has become a common occurrence, with pirates hijacking numerous ships and vessels in Somalia. According to the most recent figures, over 732 cases of kidnapping have been reported to date, with the average ransom demanded by pirates ranging from 3.5 to 5 million US dollars. Furthermore, the decreasing number of crew is exacerbating the problem for many. As a result, many mariners are leaving the profession, and only a few remain. The reasons given include a bad onboard experience, family conflict, the loss of a family member, homesickness, a lack of family support, and other job/business opportunities.

Furthermore, according to Panganiban & Garcia (2017), everyday seafarers face a unique physical work environment. They work aboard a ship on the ocean's deep surface, thousands of miles from land. For many days, the ship was at sea, and all the seafarer could see was the deep body of water and the sky above. Aside from this context, a typical day for a seafarer consists of working 12 hours, often in extreme heat or cold, as the ship travels across the open ocean. A sailor's life on board the ship can be jeopardized by a variety of natural and man-made hazards, such as bad weather, accidents, and other catastrophic events. Furthermore, severe weather, a lack of safety knowledge, a failure to use PPE, and a lack of expertise are frequently cited as major contributors to workplace fatalities. Many fatal occupational accidents involving deck ratings and deck officers involve falling into or inside cargo holds, falling overboard, or being struck by severe seas on deck.

Finally, seasickness is the most common physical challenge onboard, particularly for first-time seafarers. This is due to the ship's constant motion through rough seas and dealing with seasickness is a miserable experience. According to Gupta et al. (2021), sea sickness is a variant of motion sickness caused by the ship's roll and pitch movement and is a set of symptoms that occur in association with the motion of a person or his or her surroundings, triggering a stress reaction that results in autonomic symptoms. It has been observed that sea sickness is a problem for seafarers onboard, particularly young sailors who are getting their first taste of sailing. Sea sickness is a frequently overlooked pathology that can significantly disrupt activities onboard and contribute to the difficulties of working and living on a ship (Lucas et al., 2020).

## 3. Methods

**Research Design** - The study used a descriptive design integrating quantitative analysis of data. The researcher first obtained quantitative results through data collection. For data collection, researcher used a survey questionnaire and sources from the internet. Instead of discovering the results, the researcher utilized the descriptive method to understand the information collected from the respondents and to measure the results. The aforementioned method, which is the most common and widely used in gathering data regarding the point of

view of a group of people, provided the researcher with all of the information they required and will be used in determining the relationships between the attractions and challenges of the seafaring career. After the researcher finished the study, they interpreted it and provided a better understanding of the attractions and challenges of the seafaring career.

Respondents of the Study - The participants of the study are active seafarers, who are graduates of Lyceum International Maritime Academy (LIMA). Since, Lyceum has not had the total population number of graduates who are still actively sailing on merchant vessels around the world. Therefore, with convenience sampling technique, since it was pandemic during the time of data gathering and with the approval of the experts, the researcher looked for the one hundred twenty (120) active seafarers who graduated from LIMA. These active seafarers were those who were easily reached and were willing to participate. The respondents was selected through the convenience of purposive sampling techniques. It is a non-probability sample selection technique in which the researcher gets to pick the parameters for the sample population based on their best judgment. Non-probability samples, according to Lamm & Lamm (2019), have produced results that are as good as, if not better than, probability-based samples when appropriate techniques are used to overcome their limitations. For example, Ali et al. (2018) investigated the concept of personal norms and their impact on water conservation among the general public using non-probability techniques. The participants were distinguished using a purposive sampling technique with the following criteria: (1) graduates of LIMA's BSMT and BSmarE programs; (2) has at least 3 years of seagoing experience on merchant vessel; and (3) actively sails on an international voyage. The researcher excluded the respondent with the following criteria: (1) one year of inactivity on an international voyage; (2) sail only on cruise lines, coastal vessels, military vessels, and offshore support vessels; and (3) other nationalities that graduated from Lyceum International Maritime Academy aside from Filipino.

Data Gathering Instrument - The researcher utilized an adapted and modified questionnaire to acquire information regarding the attractions and challenges of the career in seafaring. The content of the survey questionnaire was derived from the study of Baylon & Santos (2015) entitled "Attractions, Problems, Challenges, Issues and Coping Strategies of the Seafaring Career: MAAP Seafarers Perspectives". The instrument used to gather data was the primary source, which is a questionnaire, which consisted of three parts. The first part is the demographic profile of the respondents, which asked for their age, civil status, rank onboard, and year of seagoing experience. The second part will be the attractions of the seafaring career. The last part will be the challenges of the seafaring career in terms of personal, social and physical/environmental. These will be measured through a 4-point Likert scale using strongly disagree as 1 to strongly agree as 4, the highest. The instrument has been subjected to content validation and pilot testing. To assess the instrument's reliability, the Cronbach's Alpha Reliability Coefficient Test was used. According to Bonett & Wright, Cronbach's alpha is one of the most widely used measures of reliability in the social and organizational sciences (2015). Furthermore, Diedenhofen & Musch (2016) state that coefficient alpha is by far the most widely used measure of reliability in the social sciences, and its computation has become standard procedure whenever multiple-item scales are used to measure a single construct. One of the main reasons for this popularity is that calculating coefficient alpha has several advantages over other methods for estimating a scale's reliability.

Table 1 shows that the attractions of seafaring career (0.924) and social challenges (0.916) have an excellent value of Cronbach's alpha higher than 0.90. Personal challenges (0.805) has a good value and lastly the physical/environmental challenges (0.751) has an acceptable value. All of the Cronbach's alpha coefficients were higher than 0.7, which shows that the questionnaire was reliable and could be used for question analysis.

Indicators	N of Items	Cronbach's Alpha	Interpretation
Attraction of seafaring career	10	0.924	Excellent
Challenges: Personal	5	0.805	Good
Challenges: Social	5	0.916	Excellent
Challenges: Physical/Environmental	5	0.751	Acceptable

*Note:* George and Mallery (2003) provide the following rules of thumb: "\_ > .9 - Excellent, \_ > .8 - Good\_ > .7 - Acceptable, \_ > .6 - Questionable, > .5 - Poor, and < .5 - Unacceptable"

Data Gathering Procedure - The initial step of the researcher before the conduct of data gathering was to look for a questionnaire that can be adapted and modified based on the study's objectives. The researcher created the survey questionnaire using the online platform Google Form. After that the adviser validated the questionnaire, the researcher was advised for the reliability test of the questionnaire to check and test whether the content was accurate and reliable. Then researcher looked for 20 seafarer's who graduated in LIMA as a sample data for reliability test of the questionnaire. With the assistance of statistician using "Cronbach's Alpha Reliability Coefficient Test" the results of the test show that the questionnaire was reliable and could be used for question analysis. Then, the researcher gathered the information regarding the active seafarer who graduated from LIMA through the Onboard Training Office (OBTO) and also through friends and acquaintances. The researcher also sought assistance from friends to disseminate the survey forms to maximize the time gathering data and responses from qualified respondents. The questionnaire was distributed to each seafarer through Facebook messenger and Email which can be answered with gadgets such as phones, tablets, and personal computers and asked them to fill it out carefully. Also, the respondents were assisted with any queries or concerns that needed to be addressed. The data gathering started last August and continued until October 2022. Finally, with a 100% retrieval rate, the data have been collated, tabulated, interpreted, and analyzed with the statistician's help. Then, all information has been treated with care, honesty, and utmost confidentiality. The researcher collected the inputs, comments, and recommendations for enhancing the tool and sought suggestions and approval from the research adviser, the panelist, and the statistician. Then, the manuscript has been forwarded to Thesis Adviser for approval.

Data Analysis - The collected data was utilized to present, analyze, and interpret the data gathered through tables, graphs, and charts using different statistical tools. Frequency distribution and percentage mean were used to describe information about the profile of the respondents. For the first part, the percentage was used and weighted mean formula was applied for parts II and III. The required data was counted, encoded, and interpreted using various statistical tools such as frequency distribution and weighted mean. Furthermore, the Kruskal-Wallis Test has been used as a non-parametric method for determining the significance of differences in responses when they are grouped by profile variables. Spearman rho was also used as a statistical tool to test the significance of the relationship between the two variables. These statistical tools were chosen based on the study's objectives. In addition, to learn more about the study results, all of the collected data was analyzed using statistical software, PASW version 18.

Ethical Consideration - Ethical consideration for research projects is required because all researchers have moral and legal obligations. The researchers ensured that they communicated with the participants in a personal manner, that they did not violate their privacy without their permission, that the analysis did not negatively impact their feelings, and that all information obtained from them was acknowledged and accurately represented for this study. These were part of the research process to protect and preserve the rights of those who participated. The protocols were submitted to and approved by the Lyceum of the Philippines University – Batangas (Research Ethics Review Committee). The following ethical principles were observed in this research: The privacy of the participants is intended to be safeguarded. They were not obliged to provide their names or any identification that could be linked to them. This provided a pressure-free environment to allow the participants. Throughout the data collection and analysis phase, the anonymity of respondents was maintained. Reporting all the data honestly and without altering or manipulating the respondents' answers to satisfy specific predictions or interest groups was also guaranteed. With this, the researchers ensured that accurate and valid results were provided.

## 4. Result and Discussion

Table 2 below mainly investigates various data of the respondents and presents the percentage distribution of the respondent's profile. The 120 respondents were all active seafarers who had graduated from LIMA and were on international voyages. The Lyceum International Maritime Academy is one of the best maritime institutions in the Philippines, and according to Gonzales (2019), the Philippines has been identified as the world's manning

capital, supplying more than 25% of the world's maritime flees. There is no other business or job in the country that can say it is the best because when it comes to sailing on the sea, the Philippines is number one in the world.

Table 2

Demographic Profile according to age

Profile Variables	frequency	percentage
1.1 Age		
21 - 30	32	26.7
31 - 40	50	41.7
41 and above	38	31.7

When it comes to age, the majority of respondents in this table are between the ages of 31 and 40, with a frequency of 50 or 41.7%. According to Oldenburg & Jensen (2019), the average age of the seafarers in their study was 38.3 years, with 122 officers and 201 ratings. Furthermore, Oldenburg et al. (2020) discovered that the average age of crew members on board was 35.4 years old, with the study consisting of 19 nautical officers, 51 deck ratings, and 34 engine room employees. According to the findings of this study, most middle-aged seafarers are more active and motivated than younger and older crew because they have goals for their families, and many of them are married and have their own houses, cars, and other mortgages.

Demographic Profile according to civil status

Profile Variables	frequency	percentage
1.2 Civil Status		
Single	35	29.2
Married	85	70.8

This is because most seafarers who work at sea do it to make money, especially if they are married and have a family to feed. Sailors get into the seafaring business for the reason that they want to make a lot of money because salaries on ships are higher than salaries on land. According to Panganiban & Garcia (2017) research, people marry at various ages, but there are clear trends that differ across demographic groups. When they are professionally and financially stable enough to provide for their family's needs, the majority of seafarers on international voyages prefer to settle down or marry. Also, due to their training and other financial considerations, seafarers tend to put marriage on hold during their first years of vessel work, focusing instead on their career and saving for the future.

**1 able 4**Demographic Profile according to rank onboard

Profile Variables	frequency	percentage
1.3 Rank onboard		
Master	14	11.7
Chief Engineer	5	4.2
Deck Officers	51	42.5
Engine Officers	16	13.3
Deck Rating	21	17.5
Engine Rating	13	10.8

Table 4 depicts that Deck officers are the most respondents in the study with the frequency of 51 or 41.5% followed by the Deck ratings with the frequency of 21 or 17.5%. Then, Engine officers, Masters, Engine ratings with 16/13.3%, 14/11.7%, and 13/10.8% respectively. Chief engineers are the least respondents with the frequency of 5 or 4.2%. Also, the table shows that Masters, Deck officers, and ratings have a total of eighty-six (86) respondents, and they are all BSMT degree holder when they graduated in LIMA, while BSMarE has thirty-four (34) respondents, which are composed of Chief engineers, Engine officers and ratings. This implies that BSMT graduates in LIMA are more dominant in numbers than the BSMarE graduates. Furthermore, when it comes to seafarers graduated from maritime institutions, BSMT graduates outnumber BSMarE graduates not only in LIMA but throughout the country. Gonzales (2019) discovered that BS Marine Transportation outnumbered Marine Engineering by 89% to 11%. The obvious explanation is that there are more BSMT

graduates than BSMarE graduates.

**Table 5**Demographic Profile according to the years of international seagoing experience

Profile Variables	frequency	percentage
1.4 Years of International Seagoing Experience		
3-5 years	24	20.0
6-10 years	28	23.3
11-15 years	31	25.8
16 years and above	37	30.8

With regard to seafarer's years of international seagoing experience, most of them were those 16 years and above with frequency of 37 or 30.8%. It was followed by 11-15 years with the frequency of 31 or 25.8%, then 6-10 years with 28 frequency or 23.3% and the least were those 3-5 years with 24 or 20% of respondent. The results implied that the questionnaire for this research was answered by the most experienced and seasoned seafarers in the industry. It can also be denoted that respondents tend to spend more time at sea because of their family needs, even though there are many challenges and sacrifices that need to be overcome onboard the ship. According to Panganiban & Garcia (2017), in terms of length of employment in the maritime industry, 42 percent of respondents have worked for 16 years or more, while only 17 percent have been in the profession for 6-10 years. For them, the seafaring profession is a source of income, and they will continue to work as long as they can, or their physical bodies allow. Aside from that, they enjoy their job because it allows them to travel the world for free.

**Table 6**Attractions of Seafaring Career

Indicators	Mean	Interpretation	Rank
The salary is high and attractive.	3.38	Agree	4
I can provide for my family needs.	3.58	Strongly Agree	1
I have tax benefits as a seafarer.	3.13	Agree	8
I can travel the world for free.	3.43	Agree	3
I enjoy the adventures and adversity onboard.	3.33	Agree	6
I admire the social stature of being a seafarer.	3.29	Agree	7
I will have job-security for long period of time.	2.83	Agree	10
I have freedom and flexibility at work.	3.04	Agree	9
My seafaring job has high demand in current job markets.	3.34	Agree	5
I like the sense of discipline and responsibility onboard.	3.52	Strongly Agree	2
Composite Mean	3.29	Agree	•

Legend: 1.00 - 1.49 (Strongly Disagree), 1.50 - 2.49 (Disagree), 2.50 - 3.49 (Agree), 3.50 - 4.00 (Strongly Agree)

Table 6 shows the that the respondent's generally agree on the listed attractions of the seafaring career with a composite mean of 3.29 because these are the most common attractions in seafaring business and the most reason why seafarers go to sea. Indicators like "The salary is high and attractive", "I can provide for my family needs", "I have tax benefits as a seafarer " and "I will have job-security for long period of time" are all about the money sailors can get while working onboard. There are many studies about how money is the main reason why people are attracted to working on a vessel even though it is a high-risk job. Furthermore, there are examples from the above-mentioned related literature on why money is the top attraction of a seafaring career. One example is the study by Baylon & Santos (2015), which clearly demonstrated that money was the most appealing aspect of a seafaring career, with a mean of 4.26. Money was mentioned as the most common reason for working onboard. Salaries are significantly higher than what one could earn on the mainland. Financial security with money that goes directly into the bank; a comfortable and nice house; a nice car; paying debts and mortgages; education for children; brothers, sisters, and other relatives were also mentioned.

Moreover, it is not only seafarers who are attracted to the money that a seafaring career provides but also the young adult who is inspired to become a sailor. According to Jianzhong's (2014) study, one of the reasons Chinese students chose maritime degrees before enrolling in college was the high salary, which served as an incentive to study well in order to become seafarers in the future. However, prospective students in Latvia responded that a high wage is crucial, but that job stability is the most appealing aspect of seafaring. This

occurred after the global financial crisis, when a number of Latvians lost their jobs (Gonzalez et al., 2014). Expectedly, the respondents strongly agreed that the main attraction of their chosen career is being able to provide for their family's needs, which ranked first with a weighted mean of 3.58. Most Filipino seafarers looked after their families first because the majority of them came from the poor maritime areas of Luzon, Visayas, and Mindanao. Their parents were either fishermen, farmers, or self-employed workers. Financially, seafaring was one of the best ways out of poverty for most Filipino families. Parents forewent their income to pay tuition and other schooling costs for a four-year program, and even brothers, sisters, and other relatives chipped in.

According to Aguado et al. (2015), students from middle-class or lower-income families, as well as those from public schools, have realized the importance of holding on to their dreams in order to live the life they want and start a good family. They were convinced that the maritime profession would take these students all over the world to meet the needs of their families as seafarers. That is their primary motivation for pursuing a career at sea. If they can start working immediately after graduation and are eager to make their dreams come true, they will be able to meet the needs of their family. Moreover, based on the study of Baylon & Santos (2015), a seafarer who is a breadwinner will send all the hard earned money onboard to help the family and pay all the mortgages for the property and house. In Philippine culture, a breadwinner always provide food on the table, cover household expenses, and earn a decent income to meet the needs of the family. Breadwinner always make sacrifices for the sake of his kin and always prioritize them over himself. Filipino's takes pride in looking after their loved ones and it is a duty that arises not out of force but by habit. The sense of familial love instilled at the young age especially to a poor Filipino who strive extra hard when it comes to finances.

Interestingly, the findings in Table 6 also revealed that there was a strong agreement also on liking the sense of discipline and responsibility onboard which ranked second with a weighted mean of 3.52. Third among the statements is their agreement on being able to travel the world for free then it was followed by the salary is high and attractive which rank fourth with 3.43 and 3.38 weighted mean respectively. This implies that having a high salary is important in seafaring but being able to provide for the family needs first, then having a sense of discipline and responsibility onboard, and being able to travel the world for free following that, are considered the most attractive factors of a seafaring career than earning more money while at sea. Additionally, like any other person, seafarers also seek a job that can provide for their family, an environment that is safe because workers are disciplined and responsible, and lastly, a career that they can enjoy. The sense of discipline and responsibility onboard is ranked second among the attraction of seafaring because sailors wanted to be safe while working on ship. Having all crew members disciplined and responsible while onboard is an indication that the ship is safe. According to the Salazar et al. (2019) study, when it comes to coping mechanisms as personality traits of a seafarer, the indicators "I am disciplined and obedient to follow the procedures and standards in seafaring" ranked second among the respondents with a weighted mean of 3.88. According to the study, personality traits of seafarers are a critical factor in surviving life at sea. This is how they can survive at sea by using their natural traits and behaviors. This is the reason why maritime institutions like LIMA include in their curriculum how to discipline their cadets and teach them how to be responsible for their duty.

According to the study of Pratam et al. (2018), among the 17 character values of a mariner, the discipline and responsibility get the highest scores and are ranked first and second, respectively. The study concluded that the character values of seafarers that have been effectively developed for cadets in Indonesian Maritime Colleges (IMC) have a result of 100%. However, responsibility has been implemented 89.58% through learning and 97.92% through campus culture, with an average of 93.75%, implying that responsibility cannot be taught 100% in school because responsibilities onboard the vessel are much higher than in the academy. Future seafarers must also be professional, with ethical behavior, discipline, and responsibility (Cicek et al., 2019). One of the known perks of being a sailor is to travel the world for free and to this day it is one of the main attractions of seafaring career and table 6 shows that it is ranked third with a weighted mean of 3.43. Today's trends where social media is a large part of life for every individual. Being able to tell the story about travels and adventure around the world for free is an opportunity to grab for young people nowadays. According to Gonzalez et al. (2014), sailors of all ranks have the opportunity to explore and familiarize themselves with a variety of cultures, including those

as exotic as Japan, Kenya, Argentina, etc. In addition, one of the study's findings indicates that students are more interested in traveling and seeing new locations. Some universities and institutions for seagoing officers still promote a romanticized vision of seafaring in their recruitment materials, giving individuals a "unique opportunity" to "see the world" (Baum-Talmor, 2021).

According to the survey by Petrola & Isidro (2018), International Chamber of Shipping (ICS), opportunities to travel the world remained at the top of their list of reasons why individuals wish to work at sea. Despite the fact that the majority of sailors spend less time in ports, they nevertheless believe that a career in shipping affords them the opportunity to travel. Even though most of the respondents agree with all the attractions of seafaring, there are some aspects that get low ratings, like "I have tax benefits as a seafarer." Since the respondent of the study is a resident of the Philippines, where the excise and luxury taxes for all commodities are high, for this reason the tax benefits that seafarers get during their sea time cannot truly felt. However, there are studies that have discovered that tax breaks rank first among the attractions of seafaring. According to Sasireka & Ramani (2014), the primary reasons for choosing sailing are a high salary and a tax break. Even in the study conducted by Baylon & Santos (2015), tax benefits were shown to be the second most appealing component of maritime employment. Second to the lowest regarding the attractions of seafaring is "I have freedom and flexibility at work," with which the respondents agree with a computed mean of 3.04. Hence, in the study of Baylon & Santos (2015), it was one of the most attractive components of a seafaring career, as it was ranked third among them. This only implies that nowadays there is plenty of work on ships as the documentation process has increased a lot, and navigation is faster because of the new engine and advanced equipment used. Moreover, according to Kurt et al. (2016), current trends indicate a decrease in the number of crew members on board ships due to automation, which increased paperwork and workload on board. As a result, crew fatigue and tiredness increased dramatically, while the freedom and flexibility of seafarers at work decreased.

Lastly, the lowest rank among the attractions of a seafaring career is stating they would have job-security for a long period of time, which they agreed to with a weighted mean of 2.83. This implies that seafarers in the Philippines are not that attracted to the system of employment in the maritime industry. Most of the agencies here in the Philippines are still using per ship contracts as a means of sending crew members to their respective ships. This only means that seafarers are employed for the duration of their stay onboard, and there is no security or certainty if the agency will again hire the same seafarer for another contract on another vessel. There is also a chance that the crew will not be able to sign another contract again because of the crew's bad health record.

Regarding the employment contract of Filipino seaman, it has unfavorable conditions compared to other nationalities like European, Japanese, and Indian. As mentioned by Baylon & Santos (2015), on the global seafarer's labor market, seafarers from developing nations like the Philippines, with less economic power and weaker economic situations, often have less favorable employment contracts and power work circumstances than their western European counterparts. In addition, it was claimed that job contracts may vary from permanent employment with paid vacation time and other linked contracts to single contracts with no income during leave periods and no employment guarantee if the seafarer decides to return to sea.

**Table 7**Challenges of Seafaring Career in terms of personal aspect

Charlenges of Seafaring Cureer in terms of personal aspect			
Personal Challenges	Mean	Interpretation	Rank
I have difficulty communicating with my family.	2.47	Disagree	2
I have difficulty sleeping onboard.	2.58	Agree	1
Home sickness always makes me want to give up seafaring.	2.35	Disagree	3
I am always stress and thinking that the ship is in danger.	2.16	Disagree	4
I have difficulty in dealing with my mental health issue onboard	2.04	Disagree	5
Composite Mean	2.32	Disagree	

Legend: 1.00 - 1.49 (Strongly Disagree), 1.50 - 2.49 (Disagree), 2.50 - 3.49 (Agree), 3.50 - 4.00 (Strongly Agree)

Table 7 reveals that the respondent's generally disagree on the listed personal challenges of the seafaring career with a composite mean of 2.32, and among the listed items, the respondents agreed that the main personal

challenge of their chosen career is having difficulty sleeping onboard, which ranked the highest with a weighted mean of 2.58. Numerous elements, such as vibrations, noise, trade routes, time zone crossing, port calls, cargo operations, and other activities, can make it impossible for sailors to get a good night's rest, even on their day off. Sleeping and sleep deprivation are frequently associated with fatigue and the occurrence of accidents.

Recent research of Fuentes (2021) has indicated that long workdays and unpredictable sleep schedules caused by fluctuating watch lists, understaffed personnel, hectic onboard routines, and a high operating tempo have resulted in sleepless crew. At sea, there is limited time for rest, as well as noise and bright lights, which make it difficult to sleep. Sleep deprivation is an issue that has long plagued sailors at sea. Insomnia and general weariness are frequently blamed for deadly errors, mishaps, and crashes at sea. Furthermore, Baygi et al. (2022) stated that all seafarers reported that sleep difficulties are a widespread issue on board. According to the majority of respondents, their work environment and working conditions have a detrimental impact on their sleep patterns and quality. Sleep quality was also correlated with the fact that mariners had minimal communication with their families, primarily via the internet, during loading and unloading operations in various ports. On board, there was no Internet access. The majority of respondents stated that being physically separated from relatives without communication was emotionally stressful. In addition, participants cited the following as additional causes of sleep disturbances: ship's movement in harsh weather conditions (rolling); the noise caused by the elevator and the phone in the cabin during rest time; increasing responsibilities at upper level and key officers; heavy workloads in high temperature during operations; and receiving negative family news.

Table 7 also demonstrates that study participants have difficulty communicating with family, as indicated by the computed mean of 2.47, which ranks second among the social challenges onboard. Working at sea and sailing the world's seven seas present different challenges, and one of the oldest is the difficulty in communicating. Seeking an internet connection to communicate with the family when staying at a port is not that easy. Moreover, purchasing internet data is expensive for most of the ratings, as their salaries are not that competitive compared to officers'. As noted by Pan (2021), communication service for seafarers on board is very important, which can enhance the connection with family and friends and have a positive effect on mental relaxation. Today, the shipping company was installing internet connectivity onboard the ship, and it was the most significant gift they made for their seafarers. Internet connectivity onboard the ship was the only thing that would make the sailors' lives at sea more enjoyable (Sampson & Ellis, 2019).

Consequently, internet use onboard can add to the tiredness and fatigue of sailors because they are using their rest time to communicate with their families. For example, during port operations after berthing or unberthing, crew tend to stay up and use their time speaking to their family until they notice that there is little time for sleeping and resting. This circumstance is vital to the ship's safe operation. Additionally, reciprocity influences the feeling of social support from internet and online conversations and social networking sites with family and friends at home. Negative impacts of under reciprocal exchanges on the well-being of crew are severe (Radic, et al., 2020). The findings in the table 7 have pointed out that the lowest indicator in personal challenges of a seafaring career is having difficulty dealing with the mental health issue onboard, with a weighted mean of 2.04 and most of the respondents disagreeing. This means that shipping companies already have a wide-ranging plan to improve mariners' mental health awareness and well-being while they are at sea. In fact, the company's ongoing support of mariners is good for their physical and emotional health (Pan, 2021).

Furthermore, according to the research of Sampson & Ellis (2019), some companies have adopted a comprehensive strategy to enhancing the mental health and wellbeing of seafarers on board, which includes proactive adjustments to work terms and conditions as well as enhancements to the quality of shipboard life. The focus of mental health promotion strategies must be proactive shipboard enhancements that encourage positive social interaction and increase opportunities for seafarers to relax, recharge, and improve their mood. A variety of shipboard tactics were described by seafarers to counteract depression, including recreational and interactional activities. 55% of employer respondents, however, claimed that their organizations had not implemented any policies or practices aimed at addressing the mental health of seafarers in the past decade.

According to Mellbye & Carter (2017), the length of the contract can have a significant impact on the seafarer's family life, with wives reporting loneliness and difficulty maintaining intimate and emotional relationships during the seafarer's absence, and longer contract terms exacerbating such issues. Their findings imply that long durations at sea and away from home can negatively affect the mental health of sailors. Being on a ship and exposed to a high-risk situation is incredibly stressful on every individual on board. Even though the shipping industry has evolved, being a seafarer is still a difficult, risky, and demanding occupation that can negatively impact a person's physical and mental health (Slikovi, & Juranko, 2019).

 Table 8

 Challenges of Seafaring Career in terms of social aspect

Social Challenges	Mean	Interpretation	Rank
I always feel inferior to other nationality.	2.09	Disagree	2
I feel harassed at work.	1.91	Disagree	4
I always feel the social prejudice among the crew	2.16	Disagree	1
I feel discriminated at work all the time.	1.88	Disagree	5
I feel the social isolation during the duration of my time onboard.	2.08	Disagree	3
Composite Mean	2.02	Disagree	

Legend: 1.00 - 1.49 (Strongly Disagree), 1.50 - 2.49 (Disagree), 2.50 - 3.49 (Agree), 3.50 - 4.00 (Strongly Agree)

Table 8 depicts that the respondent's generally disagree on the listed social challenges of the seafaring career with a composite mean of 2.02, and among the listed items, "I always feel the social prejudice among the crew" ranks first with a weighted mean of 2.16. This result implies that more shipping companies are educating their crews about the proper way of respecting other nationalities, and even today in other countries they are learning how to respect one another. But still, there are some small accounts of racism and prejudice by white officers towards both officers and ratings of other ethnicities and occasional discrimination (Kahveci, et al., n.d.).

Prejudice is not only a multinational or multicultural issue; it can also be gendered, as seen in the case of female seafarers. According to Mellbye & Carter (2017), employers that believe it is better for crew morale not to have women on board because they may cause sexual tension and envy are often prejudiced against female seafarers and make it difficult for them to find and maintain employment. In addition, a hierarchical working environment with diverse cultures, prejudice towards nations, genders, and ages, leads to segregation in salary, promotion chance, social protection, and social echelon (Kim, 2017). Thus, Salleh et al. (2019) highlighted that bias happens when an uncomfortable emotion is present or when one has bad thoughts about other people. Unbeknownst to them, crew can be prejudiced towards other shipmates, such as when someone has a foul body odor; instead of alerting the person, they avoid them, making working together awkward.

Inferiority to other nationalities is an issue among the seafarers onboard, and it was very evident among multinational crew members. According to Wangari (2017), the psychological condition of inferiority complex develops when a person's emotions of inadequacy interfere with daily functioning. However, respondents in this study appear to disagree, and it ranked second among the social challenges onboard with weighted mean of 2.09. This only implies that Filipino seafarers nowadays do not feel inferior to other nationalities, as they know that they can compete with them in terms of sailing and working on ships. However, when it comes to black seafarers, Mazibuko (2017), They have always been at the bottom of the marine business, developing and reinforcing perceptions of incompetence, inferiority, and racial discrimination, and depriving them of academics and the opportunity to obtain experience in higher positions. Additionally, there is a racial inferiority mentality among non-white people, which presents a disadvantage for historically inferior individuals working on ships. In addition, there was a clear demarcation between officers and ratings, creating a caste system in which those in the lower ranks were treated as second class citizens.

Lowest indicator among social challenges which the respondents disagree is "I feel discriminated at work all the time" where the weighted mean of 1.88. This only shows that seafarers nowadays are educated on how to respect their colleagues onboard the vessel. The findings of this study only implies that discrimination at the present is not much of an obstacle for the crew onboard. In contrast, according to the study of Manalo et al. (2015) it was found out that the common social challenge onboard is discrimination. Also, International

Transport workers' Federation (2015), states that one of the social challenges encountered by the seafarers discrimination. Moreover, according to the findings of Hebding (2013), discrimination is one of the difficulties that Filipino seafarers may face onboard. It was characteristic of persons with strong preconceptions, such as those from first-world countries. It may emerge from societal or cultural norms, traditions, or legislation. A foreign Chief Mate, for instance, may not have personal enmity or malice against Filipino seafarers, but he may refuse to work with them if he believes their presence will harm them.

Mellbye & Carter (2017) observe that female sailors frequently face prejudice; one could expect a greater rate of depression and suicide among female mariners than among women in less male-dominated sectors. For this reason company should not tolerate this kind behavior among seafarer and trained them to be more respectful toward other nationality. There are many forms of cultural discrimination that occur within shipping companies. One example is that seafarers from developing countries are subjected to several discriminatory and unfair labor practices, and do not dare to complain due to fear of losing their jobs (Parlak and Yildirim, 2011, as cited by Cahoon, et al., 2014).

**Table 9**Challenges of Seafaring Career in terms of physical/environmental aspect

Physical/Environmental Challenges	Mean	Interpretation	Rank
I have to do a repetitive and monotonous activities for long period of	2.78	Agree	2
times			
My exposure to accident is high onboard while working	2.74	Agree	3
I am always tired during operation due to unpredictable working hours.	2.69	Agree	4
Bad weather makes my work onboard very difficult.	3.02	Agree	1
Seasickness makes me anxious to continue my seafaring career.	2.42	Disagree	5
Composite Mean	2.73	Agree	

Legend: 1.00 - 1.49 (Strongly Disagree), 1.50 - 2.49 (Disagree), 2.50 - 3.49 (Agree), 3.50 - 4.00 (Strongly Agree)

Table 9 shows that most respondents agree with the listed physical/environmental challenges of a seafaring career, with a composite mean of 2.73, and that bad weather, which makes their work onboard very hard, is the top physical/environmental challenge of their chosen career, with a weighted mean of 3.02. This finding only shows that the main challenge of a sailor at sea is bad weather, even before this was always makes working at sea really difficult. There are individuals, particularly young sailors, who are extremely susceptible to seasickness as a result of poor weather conditions at sea, which makes their work onboard exceedingly challenging (Petrola & Isidro 2018). According to Huang (2015), some companies often do not consider the weather, forcing captain to make adventurous voyage through the bad weather. Hence, in poor weather circumstances, equipment, especially power equipment, is susceptible to failure, risking the safety of the crew. The ship's influential elements are mirrored in the ship's numerous shapes, and the ship's own factors play a significant part in navigation and crew safety. In addition, the complex navigational environment and severe weather conditions enhance the possibility of mishaps, posing a substantial threat to the safety of the ship and its passengers. This has been the challenge for all navigators since they started sailing through the open seas. Navigating through rough weather is really the toughest trial that needs to be overcome by one individual for them to be called "Sailor".

On the high seas, a sailor always hopes for "fair wind and quiet waves," but nature has its ups and downs, and severe weather might strike a ship in the open ocean without warning according to Anish (2021). Bad weather can be encountered when there is a nearby tropical storm, squalls, a low pressure area, and a monsoon. Heavy weather combined with improper maneuvering of the ship can cause damage to a vessel, endangering the cargo, the environment, or, worst of all, human life. However, there are always warnings about severe weather, and information is available many days in advance (Zina, 2021). Furthermore, based on the weather and the ship's motion through the rough seas, it can be extremely difficult and stressful. Severe seasickness can significantly impair the well-being of a crew onboard, and seafarers who suffer from it are unable to change their condition if they do not respond to treatment or if no medication is available. Also, bad weather is regarded as one of the causes of fatal work-related injuries onboard; for example, deck ratings and deck officers are falling overboard or being hit by heavy seas on deck. Seafaring continues to be a difficult occupation that necessitates

enduring extreme weather and working conditions, as well as keeping up with technological advancements onboard. according to Yuen et al., (2018).

Another physical/environmental challenge in the study is the repetitive and monotonous activity on board, which most of the respondents agree ranks second with a computed mean of 2.78. This implies that seafarers are getting bored of doing the same thing for a long period of time. Additionally, seafarers typically endure boredom due to their repeated tasks and dull lifestyle. Boredom and monotony, mixed with the traditional problems of separation from family, confinement in a limited area, and poor connections with individuals onboard, contribute to the unpleasantness of long-distance travel, result in challenging circumstances for seafarers (Faraou, 2019). According to Huang (2020) research, the monotonous repetition of labor might contribute to sadness and a lack of motivation. As a result of long-term accumulation, workers will also exhibit physiological and psychological detrimental effects, which will be reflected in a deterioration in the crew's output efficiency. Seafarers spend a considerable amount of time at sea, and their contracts typically last nine months. Therefore, the boring labor and alone existence of every person onboard are extremely challenging to endure. Since ships are constantly at sea for extended periods of time, repetitious job and life are tedious. If they lack adequate mental and physical health, it is simple for people to develop a fear of their employment, develop a depressive disposition, and lose excitement for life (Wang, 2014).

The table also find out that the indicator "Seasickness makes me anxious to continue my seafaring career" is the least physical/environmental challenge of seafaring career and most of the respondents chose to disagree. This implies that there are now several medications and techniques that can be used to deal with the seasickness on board. Like, avoiding enclosed spaces, getting some fresh sea air, and drinking a cup of ginger tea, which can help calm the stomach and relieve nausea (Jones, 2021). Nonetheless, Mishra (2018) states that some individuals are more susceptible to motion sickness and will undoubtedly suffer more in rough seas. Scientific studies have shown that some people become seasick simply by thinking about being seasick. They simply believe that being on a ship will make them sick. On the other hand, it's often smooth sailing for those who can forget about it. Besides, research shows that nearly 95% of trainees vomit in rough seas, whereas only 65% of them suffer from sea sickness at work.

According to Lucas et al. (2020), seasickness have an impact on workability both directly and indirectly. When sick, onboard workers went on deck or stayed in their cabin, and their daily work time decreased. Indeed, the vast majority of crew members stated that seasickness affects their work duties, concentration at work, and mood. However, seasickness has been treated nowadays and the most widely used conventional treatments were dimenhydrinate and cinnarizine. That is the reason why most of the respondents disagree that seasickness makes them quit their profession as a seafarer. Furthermore, Sha (2020) explained that seasickness affects seafarers. In comparison to the inability to adapt to diet, seasickness is a common occurrence for seafarers. When ships are moored at the seashore, people experience abnormal stimuli in the vestibulum auris internae as a result of chaotic shaking and vibration caused by strong winds and waves. More so, the mental states of the captain and officers are preoccupied with the intensity of seasickness, tension, and tiredness. During the rough voyage, the ship sways severely, and the crew suffers from seasickness and depression (Huang, 2015).

**Table 10**Difference of Responses on Attractions and Challenges of Seafaring Career when grouped according to Profile

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	Attraction	of Seafaring	Challenge	s in Seafaring	Career			
Demographic Profile	Career		Personal		Social		Physical/Env	ironmental
	Kruskal	P-value	Kruskal	P-value	Kruskal	P-value	Kruskal	P-value
Age	6.659	.036	8.981	.011	5.283	.071	8.353	.015
Civil Status	4.354	.113	3.337	.188	1.310	.519	.391	.822
Rank Onboard	3.979	.552	3.381	.641	11.185	.048	7.566	.182
Years of Experience	1.821	.610	6.871	.076	7.471	.058	9.285	.026

Note: Difference is significant at 0.05 alpha level, Those highlighted in green is considered significant

Upon testing for normality, it has been found that the dataset for this research is not normally distributed as proven by computed p-values which were all lower than .05, hence the use of non-parametric statistical tools

(Kruskal Wallis) in testing for differences. Upon further analysis, results indicate that among the respondent's profile, age significantly influence how the respondents perceived or agreed on the different attractions of the seafaring career. It was shown that sailors tend to remain in the trade for an extended period of time, primarily due to the necessity to provide for their family, which is ranked first among the advantages of a seafaring career. The maritime profession is a source of revenue for the old heads, and they will continue to work as long as they are able or their bodies permit. According to the survey, they also appreciate their jobs since they are able to travel the world for free (Panganiban & Garcia, 2017).

In terms of challenges, age is found to significantly influence personal and physical/environmental. This implies that when it comes to challenges seafarers changes their perception about the difficulties of seafaring as they grow older. According to the research of Baylon & Santos (2015), sailors were previously unable to communicate with their loved ones unless their ship was equipped with an expensive satellite phone, and social isolation was a big issue for them. However, modern sailors have access to the internet onboard, which mitigates obstacles such as communication difficulties and social isolation at sea. Employers could make the most important contribution to the enhancement of mental health and wellbeing on board by providing free internet access (Sampson & Ellis, 2019). Nevertheless, while there are many positive aspects to utilizing the internet and social media, there are also some negatives that must be considered, which have a significant influence on its users' ages. Additionally, it was stated by Davies (2022) that the Internet and social media have various effects on young children, adolescents, adults, and even the elderly. It is necessary to impose certain restrictions on the usage of this platform in order to protect the mental health of individuals. In this research, the age of the respondents has a significant influence on their personal challenges onboard the ship because older seafarers only use internet connectivity to communicate with their families to ease homesickness. However, younger ones are using the internet to connect on social media, which can affect their mental health in a negative way.

Rank onboard also produced significant differences in their responses to the challenges of seafaring career, specifically to social. Onboard, there is an organizational hierarchy in which the authority is based on the ranks of the seafarers. Organizational hierarchy is defined as the order of members based on authority, and it can influence communication, productivity, and project success (Indeed editorial team, 2021). The vessel's crew has a different group or person to work with onboard, such as a departmental group like the engine and deck, as well as a faction of officers and ratings. Therefore, depending on their rank, everyone on board has different social difficulties to deal with. Furthermore, Iris (2020) stated that rank on a ship is part of how life onboard works. Ship ranks are a huge factor in determining how crew members will be treated. In some ways, the rank structure on a ship is similar to that of most large corporations, hotels, or businesses. The higher the rank, the more responsibility and benefits there are. In contrast, the lower the rank on the career ladder, the less responsibility there is and the fewer perks there are. In addition, a common finding is that the obstacles faced by various subgroups of the maritime population vary significantly. Much emphasis has been placed on the role of social isolation, and when combined with related changes associated with social status, this appears to be significant (Mellbye & Carter 2017). For instance, ratings who go on deep-sea cruises are more likely to endure long-term stress and isolation than officers who receive more shore leave and only work at sea for brief, concentrated periods.

Lastly, this table also found out that the age and years of experience of the seaman influence their responses to their experience with physical/environmental challenges. For example, in bad weather, first-time sailors are susceptible to seasickness as they cannot adapt to the motion of the vessel in the water, while older crew can easily manage how to find their balance when the vessel is rolling through rough seas. Hence, the aged seadog has already been tired due to the accumulated fatigue from repetitive and monotonous ship operation, while novice shipmen are still eager to learn and develop their skill in seafaring. Additionally, Noise, vibration, and heat provide ongoing physical problems for the crew of a ship throughout a voyage at sea (Oldenburg et al., 2020). Clearly, sleep quality can be negatively impacted by the ship's environment, which includes things like noise, vibration, and bad weather. The effects of noise on mariners' sleep may range from mild to severe, depending on factors including their age and years of seagoing experience. According to SAFETY4SEA

Editorial team (2019), seafarers spend months at a time at sea, enduring some of the most difficult working circumstances of any occupation, including isolation, cramped living quarters, noise, heat, and storms on board. In addition, regarding the relationship between ship noise and shipmen's health, Jégaden & Lucas (2020) discovered that the occurrence of hypertension was associated, on the one hand, to a high level of noise and, on the other hand, to a long period of exposure to noise, which is more than 20 years on ship. This implies that older and more experienced sailors are more vulnerable to health risks such as hypertension because they have been exposed to ship noise for a longer period of time than younger sailors. More than 70% of the seamen had experienced stress as a result of the physical challenges on board, such as harsh weather, vibration, and noise. Ship employees have physical problems 24 hours a day, seven days a week, as every person on board is exposed to noise and vibration even during their free and sleeping time (Oldenburg et al., 2020).

**Table 11** *Relationship between Attractions and Challenges of seafaring career* 

	Challenges					
	Personal Social Physical/Environmental			vironmental		
	rs	P-value	$r_s$	P-value	rs	P-value
Attraction of Seafaring Career	.055	.554	010	.916	.094	.305

Note: Correlation is significant at 0.05 alpha level

Since the data for this research is not normal in distribution, non-parametric test for correlation, Spearman-rho was utilized. Results above show that relationship exists between the respondents rating on attractions and challenges of seafaring career. Findings indicate that there is no significant relationship on the stated variables. Seeing that the respondents of this study are all Filipino seafarers, there is a possibility that there is no correlation between the attraction and challenges of seafaring career. Because Filipinos have the will and character to overcome any difficulties and obstacles to give their families a better life. For this reason, Filipinos tend to overlook all the challenges ahead of the job as long as it can provide for their family needs and uplift their standard of living. According to Aquavir International Incorporated (2022), due to the culturally ingrained quality of filial obligation, Filipinos always exhibit a strong tolerance for pressure conditions and are accustomed to giving their utmost. Numerous Filipinos choose to work at sea despite the fact that it requires them to be away from their homes and families due to the lucrative nature of the seafaring profession (Wilson, 2021).

According to the study "Challenges of Filipino Seafarers onboard" by Manalo et al. (2015), some Filipino crew members opt to work in the maritime business because they have heard that being a sailor is financially rewarding. Even if they are unaware of the hardships they will experience on board, this indicates that Filipino seafarers are unconcerned as long as they are able to earn money. In addition, their research revealed that there is no correlation between the demographic profile of the respondents and the difficulties encountered by Filipino seafarers on board.

## 5. Proposed Strategies

The table below proposes precise strategies to enhance the attractions and remediate the shipboard challenges in terms of personal, social, and physical/environmental aspects. The key result areas listed in the following column are the attractions with the lowest composite mean and the challenges with which the most of respondents agree. The strategies in this study are based on the researcher's point of view as a seafarer to improve the life at sea for future generation of sailors. The strategy's success is listed, as are the parties involved, so that they know how they will coordinate and collaborate for the improvement of seafaring careers.

**Table 12**Proposed strategies to improve the attractions and mitigate the shipboard challenges

Key Result Area	Strategies	Success Indicator	Person/s Responsible
Attraction of seafaring			
	implementing permanent employment	it will entice more seafarers	Shipping
having job-security for long	contract on regular seafarer with 6 months	into the company	Company
period of time.	on and 3 months off rotation.		POEA
		regular rotation of onboard and	Agencies

having freedom and flexibility at work.  giving more time for the reporting of all documents needed because port operation really tiring and fatigue comes after the operation.	more seaman will stay in the company  Having freedom and flexibility to work really give every ship crew time to rest and recharge after every operation.	Shipping company
flexibility at work.  documents needed because port operation really tiring and fatigue comes after the operation.	Having freedom and flexibility is to work really give every ship crew time to rest and recharge	
TT : 1 C C C 1 1		Cargo owner Captain Officer Crew
Having tax benefits as a seafarer. implementing less tax for seafarer while in the Philippines because excise tax for all the commodity makes it really hard for seafare to save money for the family.  including to the slogan of every MHEI asic having a high salary, seafarer can have the best tax benefits among any other worker of employee.	he excise tax in the Philippines er will make every seafarer a better life and lifestyle.  de improving it was perceived among young cadet that	Philippine government MHEI Seafarer Shipping company
Challenges of seafaring		
Personal installing a tool that can reduce sound and vibration in the crew's living quarters and working place.  onboard.	Crew will have good sleep and will not be disturbed during their rest period and day off	Shipping company Shipyard
Having difficulty communicating with the family.  providing high speed internet connectivity where the crew can use it to communicate with their families and update themselves current events even when the ship is at dee sea.  implementing a day off for the crew to	relationship with the family on even when the seafarer is working at sea, and the detachment issue between the seafarer and his children and loved ones will be mitigated.	Shipping Company Captain Officer Crew
attend special family events via video call, like birthdays, anniversaries, and graduations.	developed awareness of current news and keep themselves socially up to date.	
Social Challenges involving all crew in participating community enhancement program onboard or onshore and be themselves around other prejudice among the crew. crew regardless of their ranks.		Shipping company Captain Officer Crew
sponsoring counselling and shore leave during the port stay.	Eased the social prejudice, refresh their minds, and released all the stress that has accumulated during their time at sea.	Cie.
always feeling inferior to other nationality.  attending a seminar on how to interact with all persons onboard, regardless of nationality.	h Improved communication between crew members and company management.	Shipping company Captain Officer
providing workshop for the crew and officers on the ability to act and communicate together toward a common	Enhanced leadership skill of every crew	Crew Training center
goal	Became knowledgeable on dealing with different racial people and their culture	
Physical/Environmental implementing stabilizing systems on ships Challenges reduce rolling under disturbances like wav and swell.  Bad weather makes work		Shipping company Shipyard
onboard very difficult.		
- having to do a repetitive and monotonous activities rotating the duties and responsibilities of every person on board to avoid the repetiti	Eased the boredom among ive seafarer in doing their duties	Captain Officer
for long period of times and monotonous activities of the crew on board.	and avoid the unsafe routine due to repetitive work	Crew
- exposure to accident is improving PPE and working tools to make them much safer to use while working in hazardous environments, such as a ship engine, in the air, or with heavy machinery	unsafe environment which always present on a high risk	Ship equipment supplier Shipping company MHEI
enhancing the curriculum in maritime institutions to include more safety-related subjects in accordance with the manual and good practice onboard.	d	Captain Officer Crew
- always tired during increasing the number of crew onboard.	Reduced the workload of every	Shipping

operation due to unpredictable working	preparing a planned crew rotation during	crew onboard	Company Captain
hours.	port operation	Increase the productivity of the	Officer
	rr	crew	Crew
	managing time of sleep during rest period in		
	operation	Faster and safe ship operation	

#### 6. Conclusion

Most of the respondents belong to the middle-aged seafarer, between 31–40 years old, are married, have a rank of Deck Officer onboard, and have seagoing experience of 16 years and above. Participants generally agreed to all the listed attractions of a seafaring career. Among them, the most important attraction of a seafaring career is being able to provide for their family's needs, followed by liking the sense of discipline and responsibility on board, and the lowest, having job security for a long period of time. Except for one indicator, the difficulty in sleeping onboard, respondents generally disagreed about the personal and social challenges onboard. Also, apart from one indicator, seasickness makes me anxious to continue my seafaring career, they generally agreed on physical/environmental challenges onboard. Ages 31 to 40 have a significant influence on how they perceive or agree on the various attractions of a seafaring career, as well as on both personal and physical/environmental challenges. Deck Officers also demonstrated significant differences in their responses to social challenges, and their responses to physical/environmental challenges were influenced by their experience of 16 years or more. Regarding the relationship between respondents' ratings of the attraction and challenges of a seafaring career. According to the results, there is no significant association between the mentioned variables. The researcher proposed strategies to improve the attractions of seafaring and mitigate the shipboard challenges that can enhance the knowledge of those concerned with the maritime industry.

#### 6.1 Recommendation

The shipping companies may continuously improve the attractions of a seafaring career to entice more aspiring seafarers into the maritime industry and remediate the challenges brought by sailing at sea. Aspiring seafarer must be equipped with knowledge about seafaring not only the positive side and benefits of being a sailor but also let them know the difficulties and challenges of sailing through the seven seas of the world. Shipping companies must not reduce the number of people on board as a result of automation, but rather increase it. Because automation does not reduce the workload of the seafarer; rather, it tends to increase it. By increasing the crew, it will decrease the workload and fatigue of seafarer during operation because being on ship is already taxing for most seafarers. Being a seafarer is not easy, but it does not mean sailors should not give 110% to their jobs. As a result, aspiring mariners need to be mentally and physically prepared for a plethora of difficulties and obstacle if they hope to succeed in their chosen profession and advance in their professional life. MHEI may include in their curriculum an enhancement to develop the awareness of maritime students about the challenges on board and how life at sea works. Prior to boarding the ship, students must hone their physical and mental power in order to withstand and surpass any future obstacles. There was a limitation in every study. This research found that there is no correlation between the attractions and challenges of seafaring career. Therefore, the researcher strongly recommends that future studies include other psychographic profiles related to family, work-life balance, coping mechanism, and other social and physical activities of seafarers.

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