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Mitigating maritime unemployment in Georgia: an MET perspective

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MITIGATING MARITIME UNEMPLOYMENT IN GEORGIA:

An MET perspective

By

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Declaration

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

(Signature):

(Date): **20 September 2022**

Supervised by: **Professor Momoko Kitada**

Supervisor's affiliation**: World Maritime University**

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Of course, to all the seafarers who participated in my survey, who gave me not only fascinating and meaningful responses and their trust but also the responsibility of finally giving voice to the voiceless and the overwhelming belief that this research would be worthwhile.

Finally, thank you to Sweden for hosting me and for my unforgettable experiences while studying here.

Abstract

Title of Dissertation: **Mitigating maritime unemployment in Georgia:**

An MET perspective

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Despite the growing demand for seafarers in the global maritime market, the issue of a high volume of qualified seafarers failing to get employment in Georgia is vexing; the statistics themselves reveal a worsening situation that requires significant revision. The purpose of this paper is to investigate the potential causes of Georgian seafarers' unemployment at an institutional level, focusing on obtaining first-hand observations of a large number of graduates of the Batumi State Maritime Academy (BSMA). The research provides an analysis of current educational programs curricula from the perspective of the MET.

Georgian youth consistently demonstrate a high level of regard for maritime sciences; however, despite maritime professions' popularity, BSMA graduates have a relatively low employment rate. According to the BSMA's most recent survey (2020), the unemployment rate for graduates in electrical engineering appeared to be 91%, and maritime navigation and marine engineering statistics were even more disconcerting, with 73% and 77%, respectively.

The prospective employers reported that the graduates of the BSMA "lacked essential competencies", the capacity to apply theory in practice, and a poor understanding of foreign languages, which downgrades their prospects of finding gainful employment upon graduation. Graduates also face difficulties during their studies and significant challenges when finding appropriate employment.

The survey effectively catalogues the incompatibility of current academic curricula with modern requirements, insufficiently qualified personnel, the shortcomings with the applicability of BSMA's teaching methods to modern education techniques, and the lack of practical training, all against the backdrop of the main theme, employability. According to surveyed seafarers' frank accounts, finding employment also involved confronting unlawful practices such as nepotism, bribery, and corruption.

The study investigated these issues and suggested MET development solutions by establishing prerogatives for a possible way out so that once and for all, the tide can be turned so that BSMA cadets can thrive in their careers in the maritime industry and the prestige of Georgian seafarers reaches new standards of excellence.

KEYWORDS: Maritime Education and Training (MET); Georgia; unemployment; corruption; Higher Education (HE).

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List of Abbreviations

AB   Able Seafarer

BSMA   Batumi State Maritime Academy

ETO   Electro-Technical Officer

HE   Higher Education

HEI   Higher Education Institution

ILO   Intended learning outcome

IMO   International Maritime Organization

MET   Maritime Education and Training

METI   Maritime Education and Training Institution

MTA   Maritime Transport Agency of Georgia

ND   Normative Document

OS   Ordinary Seafarer

QAS   Quality Assurance Service

STCW Convention   The International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers, 1978, as amended

WMU   World Maritime University

Chapter 1 – Introduction

1.1 Background and context

Maritime education has existed in Georgia for many decades. The first evening naval classes were established at Batumi seaport in the 1920s, and they were transferred to Batumi Naval Technical School in 1929. Batumi Naval Academy was established in 1944 on the premises of the Naval Technical School. It was essential in improving nautical elements across the Soviet Union with its knowledgeable and experienced seafarers.

According to the Quality Manual ND 2-Q03 (see Appendix A), three laws govern maritime education in Georgia[1]:

- Law on Seafarer Education and Certification (as revised on March 16, 2021);
- Higher Education Law (as revised on December 14, 2021);
- Vocational Education Law (20/09/2018, as modified on 02/11/2021

The Georgian Maritime and Training System now consists of two Maritime High Educational Institutes, eight Maritime Training Centres, and five vocational education institutions (Maritime Transport Agency of Georgia, 2021). Enrolment in BSMA, like in the rest of Georgia's higher educational institutions, is done through a single national examination procedure administered by the National Assessment and Examinations Centre of Georgia's Ministry of Education and Science[2].

Under public law, BSMA operates as a legal entity. The university's mission is to educate skilled employees to meet current standards for work in the maritime sector

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[1] See the web page: https://bsma.edu.ge/page/xarisxis-samsaxuri#1
[2] See the web page: www.naec.ge

with vocational, bachelor's and master's degree programs. BSMA's vision is to *"strive to transform the Batumi State Maritime Academy into a leading educational centre in the Black and Caspian Sea region in the maritime and related fields"*[3]. The three main faculties of BSMA are business and management, engineering, and navigation. To master educational programs, students have opportunities to use the material-technical basis of BSMA within certain circumstances established by the statute, internal and international regulations. Students are able to access the following areas:

- Free access to the computer centre connected to the internet;
- Free access to the reading hall of the BSMA library;
- Laboratories of physics, technical mechanism, and chemistry for conducting learning research types of works;
- Laboratories of the vessel structure, operation of energetic equipment of the vessel, electric facilities, pneumatics and hydraulics, electric technique, and automatic laboratories;

To attain the learning outcomes of those programs, BSMA is utilizing all available funds according to the normative documents. BSMA seeks to become the *'MET leader'* in the region through academic success and service. The BSMA's Poti branch, which is outfitted with the newest simulators and tools for supplying skilled seafarers for market demands, opened its doors in Poti in October 2020[4]. The BSMA, on June 25, 2021, with local and central government assistance, opened the *'Training pool'*[5] in accordance with IMO standards. As a result, we may conclude that the BSMA has complete infrastructure support and gets the most recent upgrades for education and training demands.

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[3] See the web page: https://bsma.edu.ge/page/akademiis-misia-xedva-girebulebebi
[4] See the web page:
http://www.moesd.gov.ge/?page=news&nw=1590&lang=en#:~:text=Poti%20branch%20of%20the%20Batumi,that%20fully%20meets%20modern%20requirements.
[5] See the web page: http://adjara.gov.ge/description.aspx?gtid=1052457#.YyjZknZBzMY
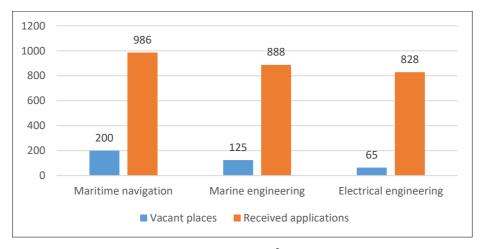
The number of people choosing to enrol at the academy is rising yearly. This is evidenced by the extremely high demand for enrolment in the Academy's faculties. Figure 1 displays the number of vacant places offered by the BSMA in 2022, as well as the number of applications received by applicants for the dedicated specializations. As seen below, the demand is very high. There were nearly five times as many applications for maritime navigation, more than seven times as many for marine engineering, and almost thirteen times as many for electrical engineering than vacant places in the BSMA in 2022. Based on the provided data, it is clear that a seafarer's career is highly regarded in the field and attracts a significant number of applicants.

Figure 1

Vacant Places vs Received Applications in BSMA in 2022

Note. Data is derived from www.naec.ge[6]

1.2 Problem statement

According to Drewry (2021), the global need for seafarers is increasing despite a declining interest in a profession at sea due to the continued growth of the global maritime fleet and shifting job circumstances for seafarers. As a result, the labour

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[6] See the web pages: https://naec.ge/#/ge/post/2801; https://naec.ge/#/ge/post/2361

market will become more competitive, and staffing costs will increase. For employers, managing a possible shortage of supply is crucial. Despite the high demand for seafarers globally, the BSMA faces certain difficulties in finding jobs for its graduates.

In 2020, the BSMA surveyed graduates' employment status in bachelor's educational programs. The results of this study are shown in Table 1. The unemployment level of graduates (among those who participated) in electrical engineering appeared to be 93%, which is already preoccupying given the crewing companies' issues with supplies. Alarmingly, the maritime navigation and marine engineering statistics were 73% and 77%, respectively (see Appendix A)[7].

Table 1

Employment Data of BSMA Graduates of 2020

Specialization	Graduates	Participated graduates	Employed	Unemployed	Unemployment percentage
Maritime navigation	156	79	22	58	73%
Marine engineering	95	47	11	36	77%
Electrical engineering	29	15	1	14	93%

Note. Data is derived from the survey.

In short, there is a gap between the current global maritime employment demand for seafarers and the BSMA's ability to secure viable employment opportunities for their graduates.

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[7] See the web page: https://bsma.edu.ge/page/xarisxis-samsaxuri#3

1.3 Research aims and objectives

The aim of this research is to begin the constrictive critical opinion-based feedback process to make significant changes to the employment opportunities of Georgian seafarers. This is particularly challenging, as the current educational framework appears to be unsuccessful in delivering gainful employment. To achieve this aim, transparency is essential so that the Georgian cadets are given what they are initially offered by comparing the opinions of qualified seafarers against the current unemployment statistics. The objectives of the research are:

1. To analyze the need of Georgian seafarers in education and how they think Georgian MET can be improved;
2. To identify the employment challenges faced by fully-qualified cadets in Georgia;
3. To address the issue of oversaturation of unemployed Georgian seafarers in the current market and identify why this is the case;
4. To present possible solutions from a MET perspective in order to foster a more cohesive holistic lifelong learning approach for Georgian seafarers throughout their career journey.

1.4 Research questions

The research aims to give comprehensive and full answers to the following questions:

1. To what extent are Georgian seafarers restricted in their entrance to the global seafarers' job market, and why?
2. How far are the current BSMA curricula in alignment with global standards?
3. What can be done in order to secure employment for BSMA cadets and, at the same time to secure the prestige of the BSMA as a METI?

4. How have BSMA graduates evaluated their academic experience and the BSMA's responsibility to provide a cohesive career journey for all cadets?

1.5 Research methodology and methods

The research employs mixed-method research as its primary approach, allowing the researcher to simultaneously gather two different forms of data through triangulation according to the Triangulation Design: *Validating Quantitative Data Model*.

In the quantitative approach, 137 Georgian seafarers participated in the survey, with 135 replies that qualified as relevant and valid based on the research requirements. In order to allow those questioned the freedom to explore why Georgian seafarers were unemployed, the seafarers were initially asked to select from a list of closed-ended replies the choices that best suited described their needs.

In a qualitative approach, the researcher utilized open-ended questions that allowed the responder more freedom to refine their own opinions and express their perspective on a specific issue sincerely in order to communicate their first-hand candid accounts on the causes of unemployment among Georgian seafarers. Careful attention was given to the wording of the questions to improve the scope of the given responses; the answers were detailed and extensive and can be treated as interviews based on the quality of the answers and the informativeness of the submitted replies.

The study then employed the second process of triangulation, which combined data from BSMA alumni with employment surveys, BSMA normative papers, and educational program curriculum synthesis, all of which were evaluated through the lens of MET perspectives and seafarers' employment issues.

Prior to submitting the survey, the WMU Research Ethics Committee reviewed and approved the data collection methods. The research method is discussed in further depth in Chapter 3 of the dissertation.

1.6 Structure of dissertation

The second chapter of the dissertation investigates the relevance of a dynamic, ever-evolving approach to teaching in the twenty-first century, the value and impacts of education on society, employment concerns and challenges in MET from a global viewpoint. Chapter 3 outlines the study's methodology, rationale, data-gathering techniques, and procedures. Chapter 4 covers the research findings, the critical observations for investigating Georgian seafarers' unemployment issues, and the academic experience at BSMA. Chapter 5 investigates the overall analysis of BSMA curricula from the perspective of MET, and Chapter 6 summarizes the study's findings, highlights the key concerns and challenges related to Georgian seafarers' unemployment, and offers recommendations for the academy's future improvement and development.

Chapter 2 – Literature review

This chapter discusses the purpose of modern education in the 21st century, its conceptual benefits, aims and outcomes. The chapter explores the role of higher education against its contribution to nations' economic development, taking into account the importance of globalization and its impact on the evolution of competencies and expectations of modern graduates' employability. The discussion takes off from employment issues among graduates and the dichotomy related to employers' requirements versus higher education outcomes, defining the barriers in the recruitment process of seafarers, emphasizing the challenges in METIs and Maritime unemployment in Georgia. In addressing these issues, the aim is to analyse why seafarer supply and eventual employment do not match the current global demand.

2.1 The role of education in society

The desire to comprehend the environment around us, the meaning of existence and our concept of the world have always persisted among humans: teaching and learning have always been seen as essential for mental and social development (Edgar, 2021). Oxford dictionary defines *'education'* as *"a process of teaching, training, and learning, especially in schools, colleges or universities, to improve knowledge and develop skills"*[8]. What is the purpose of education in this day and age? What is education in the 21st century truly aiming for?

Malan (2000), in presenting a new paradigm of OBE (outcome-based education), states that education targets meaningful changes in learners by providing appropriate learning and teaching settings to affect mindsets positively. Manuel (2017) argues that education might be an instrument for social change or upholding the current

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[8] Education noun - Definition, pictures, pronunciation and usage notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com https://www.oxfordlearnersdictionaries.com/definition/english/education

established order (status quo). The author also makes connections between the micro and macro versions of the education perspective that has been evolving in society. Hence, it significantly influences how members of society perceive education and how they will use it in the future.
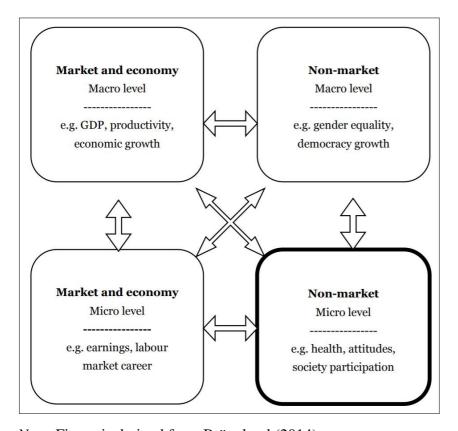
Macro education plays an important function and critical role in achieving a country's goals – advancing social and national progress to face the challenges of modern society and, at the same time, maintains authentic values and attributes (Rusdin, 2020). Hanushek and Woessmann (2010) summarize the impact of education on the growth of national economies according to three aspects:

- Education can have a vital impact on the development of human resources, which subsequently affects any country's labour potential;
- Education is fundamentally aimed at the development of economies in the direction of introducing cutting-edge technologies and increasing productivity;
- Education balances and promotes the appropriate use of knowledge, which subsequently complements the assimilation of new information.

Benos and Zotou (2014) explain that education and training are critical factors in developing human skills, knowledge and competencies. Therefore, education is considered the most fundamental element of economic growth, as evidenced by the research offered by numerous authors - to show the directly proportional relationship between education and economic development. Becker (1993) assumes that education benefits economic development by generating knowledge, cognitive abilities and innovations, creating a more competitive workforce. Brännlund (2014) demonstrated (Figure 2) the various contexts (i.e., market and non-market) and analytical levels at which educational results may be assessed (i.e., macro and micro).

Figure 2

Arenas of Macro- and Micro-Level Educational Returns

Market and economy	Non-market
Market and economy Macro level ---------------- e.g. GDP, productivity, economic growth	**Non-market** Macro level ---------------- e.g. gender equality, democracy growth
Market and economy Micro level ---------------- e.g. earnings, labour market career	**Non-market** Micro level ---------------- e.g. health, attitudes, society participation
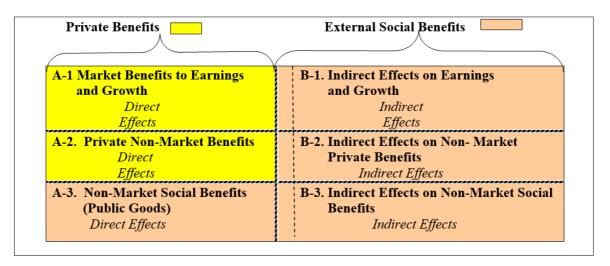
Note. Figure is derived from Brännlund (2014).

McMahon (2010) summarized the benefits of education to the market (Figure 3) by grouping private and external social benefits. The author highlighted that investing more in education increases the national income, which finally leads to demonstrable growth in GDP (the advancement in per capita economic growth).

Figure 3

Total benefits of Education

Private Benefits ▢	External Social Benefits ▢
A-1 Market Benefits to Earnings and Growth *Direct Effects*	**B-1. Indirect Effects on Earnings and Growth** *Indirect Effects*
A-2. Private Non-Market Benefits *Direct Effects*	**B-2. Indirect Effects on Non- Market Private Benefits** *Indirect Effects*
A-3. Non-Market Social Benefits (Public Goods) *Direct Effects*	**B-3. Indirect Effects on Non-Market Social Benefits** *Indirect Effects*

Note. Figure is derived from McMahon (2010).

2.2 Higher education

Higher education institutions (HEIs) play a critical role in a fast-globalizing world since they create and distribute information to a rapidly globalizing society (Mainardes et al., 2011). According to the Sustainable Development Goals of the United Nations, quality education is one of the most critical issues that should be accessible to all for the better development of society (Goal 4 | Department of Economic and Social Affairs, n.d.). Sachs et al. (2019) highlight the relevance of higher education, particularly the contribution that universities provide to sustainable development. Haigh and Clifford (2011) believe that the generation raised by HEIs will change the structure of society with the different specialities they have mastered in specific fields.

Modern higher education plays a vital role for a country that largely depends on the success rate of the next generation. Concretely, the graduate's skills, knowledge and relevant practical experience in the chosen profession contribute to meeting new challenges and changes in the socio-economic, technological and international market

(Fallows & Steven, 2000). However, HE should also take into account the fact of what globalization demands from today's students. Bakar and Ismail (2019) argue that higher education institutions must reconsider and reframe their vision and mission in light of globalization to meet those challenges. To remain resilient and sustainable in the global market, HEIs, more than ever, need to consider both the internal and external components of internationalization in their ongoing planning and strategies.

Despite being one of the most significant sectors in the world, HEIs operate differently than other businesses. They have a sophisticated, multi-level organization to accomplish the purpose of generating and sharing information (Birnbaum, 1988). According to Mainardes et al. (2011), universities have various and ambiguous aims and goals, unclear job descriptions for graduates, political concerns, and an imbalance in the power of the administrative staff.

Higher education institutions could be characterized as complex entities with diverse professionals tackling problematic situations with diverse talents: education-engaged personnel with substantial knowledge and practical experience in a particular area (Baldridge et al., 1983). Scott (2002) described HEIs as environments in which professors and academic personnel share different backgrounds and interact with many cultural concepts, ideologies or intellectual perspectives. The author praised diversity as a virtue, but it primarily leads to 'sluggish' decision-making, bureaucracy, corporate, and incompetent management carried out by individuals who may lack the necessary skills.

HEIs should be considered complex organizations due to the following factors:

- Diversity of aims;
- Shortfalls in systems of monitoring students' achievements;
- Flexibility of experts who serve as the organization's basis;
- Over-dispersal of responsibilities, formation and internal separation (Lockwood and Davies, 1985).

Most universities operate with their team of academics who investigate and disseminate information within a flexible educational environment and a heightened level of organizational and personal independence (Pollock & Cornford, 2004). Universities fulfil different stakeholders' requirements (Wagner and Newell, 2006) in achieving their desires, establishing objectives, analysing strategic points, and improving management procedures (Bok, 2003).

2.3 Employability as an outcome

The digital revolution has been enormously significant for higher education, especially in the university sector, where tremendous transformations have taken place. Some scholars describe it as the time when economic capital penetrated university education, where GDP (Gross Domestic Product) and acquisition of higher education titles became paramount (Marginson & Considine, 2000). Most institutions have chosen to emphasize employability as a critical element of their objective in response to demands from the state, the public, and businesses; therefore, higher education is directly linked with civil aspirations for economic development and social harmony (Andrewartha & Harvey, 2017).

Employability is frequently used to refer to a person's potential to get and maintain gainful employment and thrive in a professional setting (Yorke, 2006). Employers want behavioural traits, adaptability, creativity, charisma, and a proclivity to keep extended employment in graduates, which may or may not be a realistic consequence of their HEIs (Bennett et al., 2016). Employability is the competence to contribute positively to society and the economy via the convergence of practically focused skills, subject-matter expertise, and personal qualities (Yorke, 2006). Diverse stakeholders' requirements incorporate employability skills through educational activities and enabling opportunities for the development of personality and the capacity for innovation (Speight et al., 2013).

The curriculum for higher education should continuously and systematically include instruction on employability skills, traits, and behaviours (Jollands et al., 2016). According to Tran (2016), businesses, groups, and governmental organizations must all participate actively in education for employability – this may give a comprehensive solution for unemployment, and fewer criticisms will be addressed toward the universities. Universities are obliged to support the employability agenda, which has given rise to various choices for planning and constructing experiences to improve employment prospects (Jackson & Oliver, 2018).

Students can get relevant work experience through institute employment, on-campus programs, student organizations, cooperatives, societies, and entities (Andrewartha & Harvey, 2017). Most institutions have formalized job programs for their students and offer various volunteer opportunities (Caspersz & Olaru, 2017). However, as types of work are constantly evolving, students must forecast the new *'job'* opportunities emerging in the economy with the direct assistance of the chosen HEIs (Oliver, 2015).

In today's international market, university graduates' competencies, talents, and skills are essential for long-term financial enlargement and elaboration (Sianesi & Van Reenen, 2003). Harvey (2000) assumed that the majority of university graduates' skills were below expectations and the required standards from the industry at large. This, as a result, made it difficult for graduates to obtain acceptable employment, negatively affected recruiting organizations, and, therefore, negatively influenced the whole economy. The author believed that the appropriate reaction to tackle this problem was to request more extensive curricula revisions to ensure improved *'job readiness'* levels.
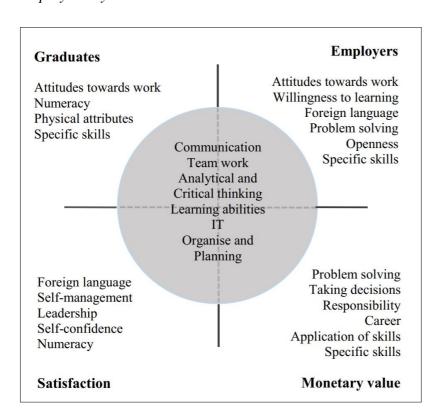
Suleman (2018) assumes that individuals start studying in higher institutions because education and training provide them with various talents and marketable abilities that boost their productivity and, as a result, their wages. The author summarized market employability with graduates' skills and abilities as follows:

1. As work performance is dependent on the given job or industry, both supply and demand are essential;
2. *'The level of matching'* is unclear until graduates find employment;
3. The previous work experience provides added value;
4. Not all academic knowledge and talents are satisfactory.

The author also summarized the perspectives of graduates and employers and demonstrated a fundamental convergence in analytical, technical and cognitive skills in connection to modern market requirements (Figure 4).

Figure 4

Employability Skills

Note. Figure is derived from Suleman (2018).

García-Aracil and Velden (2008) assumed that the most capable person should be assigned the most complicated task, and the least competent worker should be given

the simplest one. The authors considered that institutions and the market needed to work together effectively:
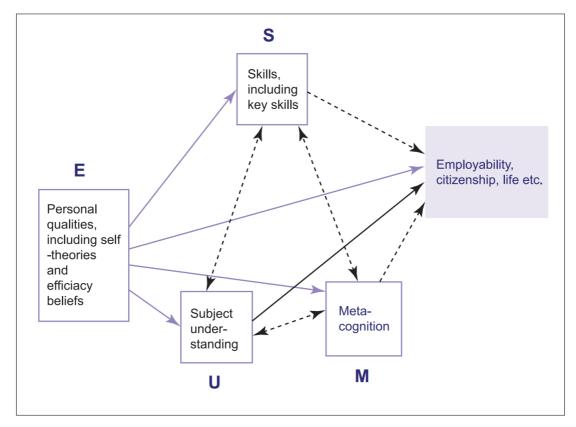
- To determine which competencies are best applied to each exact job;
- To look into how different human capital skills affect graduates' salaries and work satisfaction;
- To assess the degree to which human capital competency behaviour is equivalent to traditional education with regards to the impact of the inconsistency of people's employment situations.

Yorke and Knight (2004) introduced the '**USEM**' (**U**nderstanding, **S**kills, **E**fficacy **B**eliefs, and **M**etacognition, Figure 5) explanation of employability, which is intended to be integrated into the curriculum. The authors assumed that employability is affected by four factors:

- **U**nderstanding - represents the key outcomes of the student's higher education studies (theoretical knowledge);
- **S**kills - all of the practical approaches the student can employ;
- **E**fficacy Beliefs - demonstrated the student's capacity to adapt to the surroundings, make decisions, and maintain a personal attitude.
- **M**etacognition - involves personal attributes of the student's development as well as the ability to reflect on, in, and for action.

Figure 5

The USEM Account of Employability

Note. Figure is derived from Yorke and Knight (2004).

Employee involvement and empowerment may set the ground for management to undertake complete quality control within the organization: increased morale, productivity, team cohesion and innovation are benefits organizations may gain with a deeper bidirectional relationship with employees (Muthmainnah et al., 2022).

2.4 Employment challenges in Maritime Education and Training

Seafarers play a significant role in world trade. Unlike other professions, they are not confined by their work area - they are worldwide; therefore, no country has a monopoly on the provision of seafarers (Sampson & Schroeder, 2006). The principle
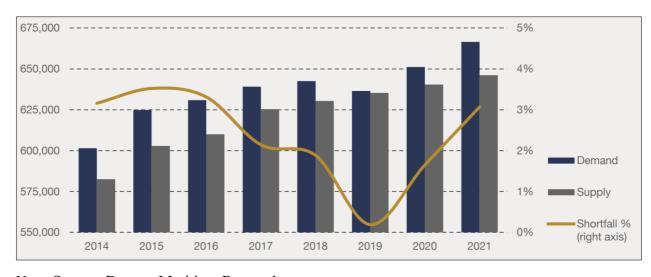
of supply and demand characterizes seafarers' employment; despite the demand, there has been a certain amount of shortage in the supply of seafarers for several years in the job market (Lobrigo & Pawlik, 2015). Drewry's (2021) most recent evaluation of worldwide seafarer availability as of the beginning of 2021 showed:

- Global officer shortage has risen to roughly 20,500.
- Officer supply was about 646,100, a 0.9% increase, in line with previous trends.
- Officer demand increased 2.4% year on year to 666,550.

Figure 6 shows that the predicted worldwide officer shortage for 2021 is 20,450, or less than 3% of the global pool.

Figure 6

Global Officer Demand and Supply, 1 January 2021
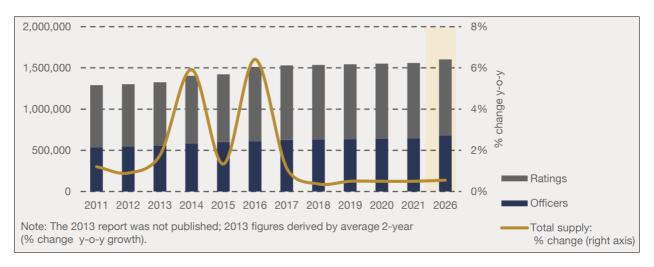
Note. Source: Drewry Maritime Research

Drewry (2021) research also predicted that the officer shortage is expected to reach 38,000 by 2026, the most significant level since 2013. It is anticipated that the total

supply of seafarers, including officers and ratings, will increase by 0.5% a year from now until 2026, when it will increase by 0.6% (Figure 7).

Figure 7

Seafarer Supply

Note. Source: Drewry Maritime Research.

In regard to seafarers' employment, Drewry (2021) concluded that employment is not always guaranteed, and the following factors must be taken into account during the recruitment of seafarers:

- Union membership (including ITF);
- Political status – e.g., travel restrictions for some nationalities;
- Experience, skill and training;
- Nationality and availability of seafarers;
- Knowledge of English;
- Flag and classification society (Drewry, 2021, p.45).
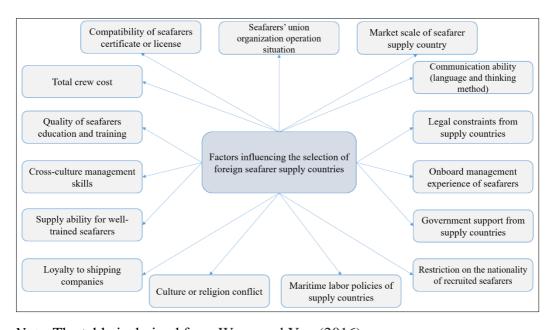
Although the demand for qualified personnel in the maritime field is high, in successful employment, the experience, skill and training issue has become one of the most problematic (Uğurlu, 2015). To prevent this issue, the education and training of

seafarers have been given more attention by higher education institutions, in which companies and countries are simultaneously involved (Gekara, 2009).

Despite the fact that IMO and ILO have strictly defined competence and job criteria for seafarers, some countries still struggle to supply seafarers adhering to international standards to the market. Kartal et al. (2019) determined some factors that influenced the given problem, such as economic inequality, national outlook toward the maritime sector, social distinctions and occupational development. To a substantial degree of importance, the authors explored recruitment factors concerning crewmembers from different nationalities, along with the concept of safety awareness and education of seafarers. Wang and Yeo (2016) evaluated the significant criteria for employing seafarers from various countries and securing employment from different supply chain perspectives (Figure 8).

Figure 8

Factors Influencing the Selection of Foreign Seafarer Supply Countries
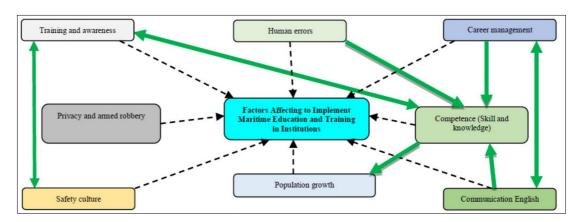
Note. The table is derived from Wang and Yeo (2016).

The study's authors also identified the advantages and disadvantages of various nations. They concurred that in measuring seafarers' employment rate, appropriate competence and qualification of the seafarer with relevant maritime education and training is the most decisive criterion.

Basak (2017) identified the parameters influencing MET system deployment in educational institutions and their relationship and intersections with each other (Figure 9), which shows that apart from all other factors, *'Competence (Skills and knowledge)'* unites all the other four (Career management, Communication English, Human errors and Training and awareness), which are not mutually exclusive and ultimately create a single chain.

Figure 9

Factors Affecting to Implement Maritime Education and Training in Institutions

Note. Figure is derived from Basak (2017)

As the maritime industry advances, MET is undergoing rapid changes. According to Mindykowski et al. (2013), if a country aspires to become a leading maritime provider in the world market, a government must put the vital link and support MET in every aspect. According to Smith et al. (2007), numerous aspects must be considered while designing curricula for an HEI to become a market leader in employability. In particular, the relevant subject should give students the capacity to plan personal

growth, the ability to plan a career, use intellectual abilities in varied situations, and adapt to global concerns continually.
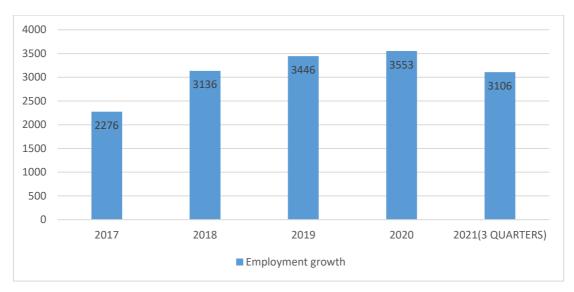
The National Qualifications Framework should make maritime education worthwhile and flexible (Mindykowski et al. 2013), as it is entirely based on the STCW 1978 as an amended convention (Bilgili, 2012). Manuel and Nakazawa (2008) stated that the main reason METIs exist is to provide qualified and serviceable personnel to the maritime market. The authors argue that METIs' goals and standards go beyond filling a market need for technically qualified ship personnel. Given current developments, the most fundamental goal of METIs should be the holistic educational development of the shipboard workforce to support the establishment of distinct career pathways and lifelong learning prospects for qualified seafarers (Manuel, 2017).

2.5 Maritime unemployment in Georgia

According to the 2021 statistical data of the Maritime Transport Agency (MTA) of Georgia (see Appendix A), in 2020, from *Batumi State Maritime Academy*, *Batumi Navigation Teaching University* and *Batumi High Engineering School Anri*, 364 students graduated. Among them, only 171 graduates were employed as cadets. Hence, the unemployment rate of the graduates of Georgia's three maritime institutions reached 53%. However, due to the recent growth in seafarer employment, maritime work represents a significant job prospect for youth in Georgia. The rising rate of employment of seafarers is stated in Figure 10, which is a good illustration of how important the seafaring profession is for Georgia (the rate for 2021 is given only for three quarters of the year).

Figure 10

Number of Employed Georgian Seafarers (2017-2021)
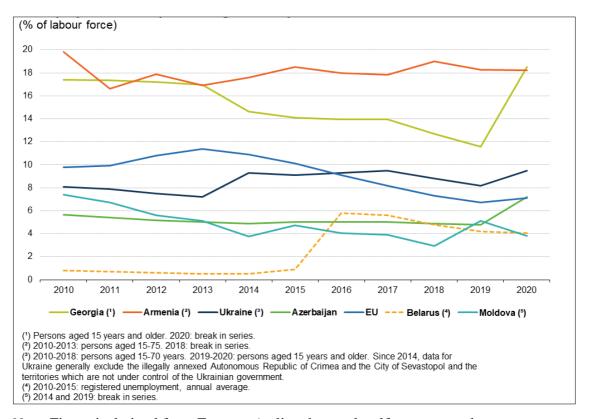
Note. Figure is derived from the statistics of the Maritime Transport Agency (MTA) of Georgia (2021).

Figure 11 represents Eurostat's unemployment rates for the population aged 15 to 74 in Europe. As demonstrated, Georgia had the highest unemployment rate in the region in 2020 (more than 18%). Consequently, decreasing the unemployment rate for MET graduates and boosting the maritime profession for Georgian youth is also essential for the Georgian economy. Every year, Georgian seafarers contribute enormously to the nation's economy. The labour of seafarers produces over 300 million USD per year (Turnava, 2021).

Figure 11

Unemployment Rates, Persons Aged 15-74 Years, 2010-2020

(% of labour force)

(¹) Persons aged 15 years and older. 2020: break in series.
(²) 2010-2013: persons aged 15-75. 2018: break in series.
(³) 2010-2018: persons aged 15-70 years. 2019-2020: persons aged 15 years and older. Since 2014, data for Ukraine generally exclude the illegally annexed Autonomous Republic of Crimea and the City of Sevastopol and the territories which are not under control of the Ukrainian government.
(⁴) 2010-2015: registered unemployment, annual average.
(⁵) 2014 and 2019: break in series.

Note. Figure is derived from Eurostat (online data codes: lfsa_urgan and enpe_lfsa_urgan)

Consideration should be given to employers' attitudes toward graduates to understand the cause of such a high unemployment rate. In 2017-2018 BSMA surveyed the satisfaction of the employers with the graduates from BSMA (see Appendix A)[9]. Nine companies participated in the survey. The companies expressed their dissatisfaction with the competencies of the academy graduates. They gave several invaluable recommendations, which should be taken as priorities:

- More practical training in the teaching process;

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[9] See the web page: https://bsma.edu.ge/page/xarisxis-samsaxuri#3

- To focus on the needs of future professions, to respond promptly to changes in the market, which should be reflected in updated educational programs;
- To consistently issue qualified and competitive graduates;
- To develop and update the existing educational system;
- To educate seafarers with the competence to meet modern requirements.

BSMA hosted the *'Employers Forum'* in 2022 (see Appendix A)[10]. The forum conducted an employer survey to reveal market trends, identify the most pressing issues, receive recommendations, assess BSMA graduates from employers' perspective and illustrate the supply/demand issue. Twenty-six companies and organizations took part in the survey. Companies were asked to outline their challenges while trying to find human resources. The shortage of competent workers in the labour market was highlighted by 64% of the employers, which is in direct contrast with the overall unemployment statists for recently qualified cadets.

According to the survey results, most companies prefer public vacancy announcements and open competition to hire new employees. Respondents in the survey had the opportunity to prioritize the predetermined criteria employers consider essential when hiring BSMA graduates. As a consequence, the three key factors that determine the candidate selection process are teamwork, the ability to update knowledge continuously, and understanding of foreign languages; 56% of companies indicated that BSMA graduates need retraining and qualification improvement depending on the activities of their organization. Companies and organizations have listed the prerequisites for increasing graduates' competitiveness, and they serve as a guideline for the job market:

- Improvement of English and Russian language skills;

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[10] See the web page: https://bsma.edu.ge/page/xarisxis-samsaxuri#3

- Encouraging and supporting students in the teaching process and arranging the teaching process in students' interest;
- Arranging full-time employment for III- and IV-year students;
- Improvement usage of theoretical knowledge in practice training;

The last survey BSMA conducted among the students to determine their satisfaction levels toward the teaching process was held in the 2021-2022 academic year. Almost half of the BSMA students (47%) did not take part in the survey. More than four-fifths (78.3%) of those who participated belonged to maritime navigation and engineering faculties. Only 58.4% of these students in the survey expressed satisfaction with the teaching methods. The majority of students felt that drastic changes needed to be made to how they were being taught and that there should be more student engagement, considering their interests and preferences. Most of them emphasized that the simulators were unused and left out of the teaching process. The necessity of changing the evaluation method was also highlighted as a vital element in the study's primary conclusions. Finally, more than a third of students (37.5%) did not have any additional information in relation to their competitiveness as seafarers or access to academy activities or initiatives, such as foreign exchange programs or conferences.

2.6 Summary

Modern education and 21st-century skills, including HE advantages and benefits for the nation's development in the globalised world, have been explicated to act in the capacity of a particular role in the discussion of challenges and employment opportunities among HEIs graduates. The chapter analysed the complexity of HEIs, the importance of revising the teaching/learning process in line with modern standards, the influence on employment issues, requirements from employers and outcomes from HEIs. The chapter dealt with the challenges of current seafarer recruitment processes, factors in selecting seafarers from different countries, and predictions for the nearest future in the world seafarers' trade market. Lastly, the issue of Maritime

unemployment in Georgia was discussed with the current and comprehensive statistics surveyed by the MTA of Georgia and BSMA. The chapter emphasised the importance of METIs in supporting the seafarers' workforce in the maritime sector.

Chapter 3 – Research methodology

This chapter presents the methodology used in this study, the method of participant selection, data collection and analysis.
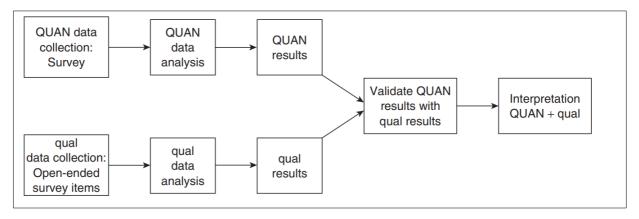
3.1 Methodological approach and rationale

Due to the vast number of Georgian seafarers (supply) and the limitations of including every seafarer's interest and background in the research, the researcher used a mixed method to explore the lack of employment prospects (demand). The primary objective of this approach is to combine quantitative and qualitative data to arrive at a better, more reliable, more comprehensive and complete conclusion. Consequently, the researcher gathered many forms of information at once, better informing the reader about the severity of the issue and the need for investigation than if only one type of information were to be gathered – qualitative or quantitative data analysis (Creswell & Creswell, 2018).

Triangulation Design is the most standard and widely acknowledged mixed-method technique (Creswell & Plano, 2011). Triangulation is a technique to tackle a single topic using several approaches or data (Greene, 2007). According to Morse (1991), this approach enables the researcher to gather various supplemental data to understand the subject matter adequately. According to Creswell (2014), researchers who want to compare, contrast, or validate quantitative data with qualitative research use this strategy. Because the quantitative results of a survey required to be built upon and supported by adding open-ended qualitative questions, the researcher used a specific Triangulation Design: *the validating quantitative data model* (Figure 12).

Figure 12

Triangulation Design: Validating Quantitative Data Model

Note. The diagram is derived from the Croswell & Plano, 2011
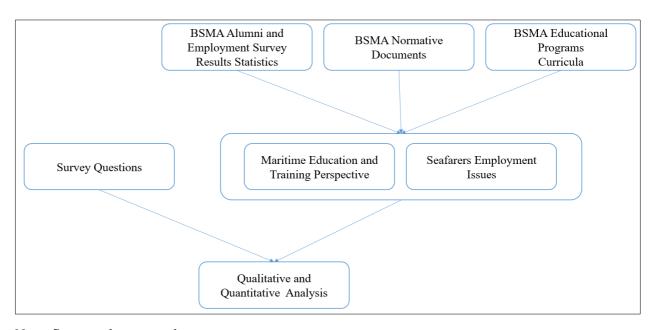
Figure 12 shows the mixing of qualitative and quantitative data research techniques. It is noteworthy to define each of them separately. Qualitative research investigates and comprehends the importance of people or groups allocated to societal or individual concerns (Creswell & Creswell, 2018). This method was evaluated as a practical approach to gathering data in relation to the objectives of the research. It comprises establishing questions and methodologies, acquiring information in the individual's surroundings and inductive data analysis that progresses from particular to broad themes (Leavy, 2014).

Another advantage of mixed techniques in this study was to approach issues simultaneously throughout the research process, with deductive techniques attempting to confirm or refute prior ideas expressed by quantitative research (Leavy, 2017). Quantitative research entails estimating variables and investigating relationships between them in order to identify trends, associations, or direct links, becoming the ideal choice of approach.

In addition, the researcher used another method of triangulation, that is secondary data analysis. It integrated publicly available data and information, such as statistics from

BSMA alumni and employment surveys, BSMA normative documents, and educational program curricula synthesis (see Appendix A), all of which were assessed through the lens of MET perspectives and seafarers' employment difficulties. Figure 13 illustrates a step-by-step summary of the research process.

Figure 13

The Research Process

Note. Source: the researcher.

3.2 Selection of participants

As previously said, the number of Georgian seafarers is pretty vast. Thus, it would be impossible to include the whole population of seafarers in the research. As a result, the researcher employed probability sampling to choose the respondents. The advantage of this form of sampling is that the samples are chosen from broad populations and should only be generalized to those who are the demographic target of the study (Leavy, 2017). Facebook is more prevalent in Georgia than other platforms, such as LinkedIn, Twitter or Gmail. Facebook groups were chosen as the preferred platform

to obtain information and cooperate with Georgian seafarers.: *"The influence of Facebook-based discussions on public opinion is high. According to the Freedom House, Internet penetration is driven partly by the interest in Facebook and other social networking networks"*[11].

The researcher adopted and understood a particular sampling technique, fully familiarised himself with Georgian seafarers' Facebook profiles and sent invitations to participate in the survey through social media from Facebook groups of Georgian seafarers. It should be noted that only BSMA graduates were selected as participants in the research. The researcher also distributed and shared this survey as a Facebook post with various groups with whom Georgian seafarers could potentially find it and where they would be willing to participate in the study without direct contact with the researcher.

3.3 Instrumentation and data collection

3.3.1 Survey questions

The researcher used a semi-structured questionnaire with open-ended questions to measure and understand the issues dissatisfied Georgian seafarers had experienced in connection with the BSMA. The researcher created the survey questions in '*Google Forms'* for distribution to potential respondents. In creating the open-ended question, the researcher used the *'funnel'* structure model provided by Roller and Lavrakas (2015). According to this *'funnel'* structure, the question creation begins with basic, broader questions and progresses to a more particular focused one. This style gave participants more opportunity to expand on their answers as they established

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[11] See the web page: https://medialandscapes.org/country/georgia/media/social-networks#:~:text=The%20most%20popular%20social%20media,%2C%20according%20to%20Internetworldstats.com.

connections between the questions and gave the survey more detailed and candid answers.

Kumar (2018) provided the advantages of using open-ended questions in a survey:
1. In a survey, open-ended questions can yield a plethora of data because the participants feel unrestricted to comment and voice their opinions;
2. In open-ended questions, participants are not *'conditioned'* to choose requested responses from the checklist;
3. Open-ended questions remove the potential for researcher bias since they allow respondents to express themselves freely.

The questions in *'Google Forms'* consisted of three parts: participants' profile, academic experience at BSMA, and employment prospects. Since the survey was conducted among Georgian Seafarers, the questionnaire was prepared in Georgian and additionally in English. Before distributing the questionnaire, the researcher tested the understanding of his research instrument and correct perception of the content with his colleagues at WMU and native speakers of both languages.

The researcher specifically targeted the seafarers who graduated from BSMA between 2019 and after because the last accreditation that BSMA programs received started in 2019. In the survey, 137 respondents participated, and only two respondents were eliminated from the survey because they were not in the target group. Consequently, 135 participants' responses were considered valuable, and their number was evaluated in the survey responses. Only one was female, which can clarify the assumption that the seafaring profession is less attractive and unpopular among women in Georgia.

The age distribution of the participants is presented in Table 2 (Participants' Demographics are given in three tables: Table 2, Table 3 and Table 4 to distinguish the total number of responses to each demographic question). One can observe that more than three-quarters of the participants are seafarers aged 21 to 30 years. The

smallest percentage of seafarers were under 21, which makes sense as this is when seafarers typically graduate from the BSMA.

Table 2

Participants' Demographics (a)

Age	Quantity	Percentage (%)
Below 21	2	1,5
21-25	52	38,5
26-30	52	38,5
31-35	15	11,1
36-40	7	5,2
Above 40	7	5,2

Note. Number of respondents – 135.

Regarding years of graduation, most respondents graduated from the BSMA before 2016 (Table 3) (more than a quarter of the survey participants - 25.4%). The seafarers of the BSMA from 2019 to 2022 (44.6%) are noteworthy because the last accreditation of the educational programs was received in 2019, equal to almost half of the seafarers participating in the survey, which in the research will once again emphasize the current situation.

Table 3 also shows the number of participants according to their specialization. The majority (73.3%) are graduates of maritime navigation. The number of marine engineering graduates (17.2%) was almost double that of electrical engineering (9.0%). This illustrates how popular maritime navigation is in Georgia and should accordingly be taken into consideration during curriculum planning and announcing the vacant places for entrants.

Table 3

Participants' Demographics (b)

Year of Graduation	Frequency	Percentage (%)
Before 2016	34	25,4
2016	10	7,5
2017	17	12,7
2018	13	9,7
2019	9	6,7
2020	16	11,9
2021	14	10,4
2022	21	15,7
Specialization		
Maritime Navigation	99	73,9
Marine Engineering	23	17,2
Electrical Engineering	12	9,0

Note. Number of respondents – 134.

When observing experience at sea, the majority of participants have less than 12 months of experience (35.9%). More than a quarter had more than 30 months (27.5%), and the smallest number of seafarers (6.1%) had 24-30 months of sea experience, which is to be expected (Table 4).

Table 4

Participants' Demographics (c)

Sea experience	Frequency	Percentage (%)
Less than 12 months	47	35,9
12-18 months	24	18,3
18-24 months	16	12,2
24-30 months	8	6,1
More than 30 months	36	27,5

Note. Number of responses – 131

3.3.2 BSMA Alumni and Employment Survey Results Statistics

The researcher used the surveys conducted by the *'Quality Assurance Service'* of the BSMA to inspect the situation in the BSMA preliminarily and gain the general attitude of the graduates. These studies were related to a graduates' employment and statistics survey, an employer and strategic partner survey, and an employer evaluation of graduates.

As a graduate from BSMA and an educator, the researcher is keenly interested in the successful employment of all cadets and has personally and directly been affected by this issue. Even though the researcher graduated from the academy in 2017, the challenges at the academy are still significant now, as evidenced by current studies and, the researcher's subjective opinion. The likelihood that these challenges have varied significantly from the current scenario is low. As a result, the relevance of the included surveys is crucial and serves as an essential leitmotif for the dissertation.

3.3.3 BSMA Legal References and Educational Programs Curricula

The researcher utilized and analysed fundamental normative documents used by the BSMA, documents of structural arrangement and distribution of responsibilities, to outline the general picture of the academic situation in BSMA. Based on the comparison of the documents to create solid and comprehensive connections, the researcher raised and described the procedures and approaches the BSMA uses to create a new educational program's curriculum, subject delivery and assessment, and all fundamental principles BSMA followed to achieve the utmost degree of excellence.

3.4. Qualitative and Quantitative data analysis

The collected data from BSMA Alumni and Employment Survey Results Statistics, BSMA Normative Documents and Educational Programs Curricula and semi-structured open-ended questionnaires were analysed using *MAXQDA 2022 analytics pro* specifically intended for qualitative and mixed methodologies data, text, and multimedia analysis. The software allowed the researcher to merge two forms of data and construct so-called joint displays: the responses to the open-ended questions were conceptually coded, and the frequency tables of the standardized answers and statistical traits were extrapolated.

The researcher categorized and decreased collected information through the coding process that encapsulated and expressed the substance of each data segment, corresponding to relevant research objectives and questions. Even though the primary purpose of the open-ended questions was to supplement the closed-ended questions in more depth, the answers given by the participants were used to group them into secondary categories; therefore, the answers evolved into the form of an interview and provided significant merit to the qualitative data analysis.

The researcher processed the quantitative data analysis using the same software with the corresponding function - *descriptive statistics* and *compare groups*. With the help of the given functions, it became manageable for the researcher to compare the information provided by the Georgian seafarers according to various indicators and establish the relationship between them. The software has also immensely contributed to presenting quantitative analysis graphically and visually for a more accessible and better visual understanding for the reader.

3.5 Ethical issues

This study considered human participation in the collection of research materials in accordance with the rules and guidelines of the *WMU Research Ethics Committee*. Before participating in the survey, the researcher introduced all the respondents to the consent form to ensure their anonymity and confidentiality.

3.6 Summary

This chapter discussed the methodology used by the researcher to study the unemployment issues of Georgian seafarers. The researcher discussed quantitative and qualitative research methods, participant selection criteria and the research flow process schematically; the chosen rationale of open-ended questions and their advantages on the study population. The next chapter will present the results of this study and the relationship between the received responses through mixed method analysis.

Chapter 4 – Results

This chapter describes the intersection of the survey's main findings. It identifies the major challenges and issues graduates face when finishing BSMA and looking for work, taking into account the participants' opinions in connection to the current system. The results are grouped into four categories:

- Employment issues
- The academic experience at BSMA
- Needs for collaborations
- Positive feedback

4.1 Employment issues
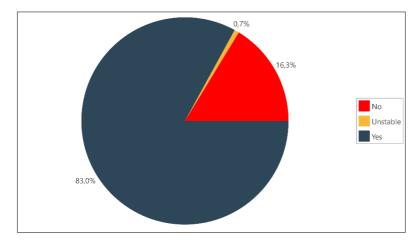
The researcher in this section aims to show the challenges that the participants face after finishing the BSMA, the degree of involvement of the BSMA in their employment process, the effects of nepotism/bribery and the difficulties in preparing for interviews with crewing companies.

4.1.1 Surveyed participants employment overview

According to Figure 14, 83.0% of participants are employed based on their initial specialization with 16.3% employed in an alternative specialization. Interestingly, one candidate indicated 'unstable', which should be translated as employed.

Figure 14

Participants' Current Employment Status
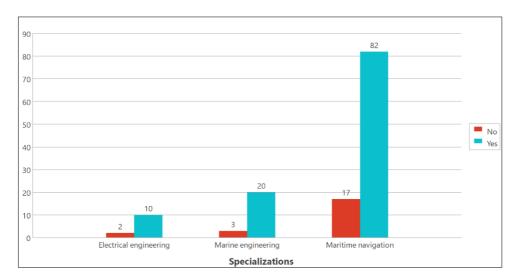
Note. Number of responses – 135

Based on a comparison of the participants' specializations and employment status (Figure 15), we can deduce that the unemployment rate for both maritime navigation and electrical engineering is 17%, irrespective of popularity, while marine engineering is slightly lower at 13%. Specializations – *Logistics* and *Basic Vocational Qualification in Ship Deck Operation* will not be discussed further since they are not the focus of the dissertation, along with their comments.

Figure 15

Comparing of Specializations and Employment
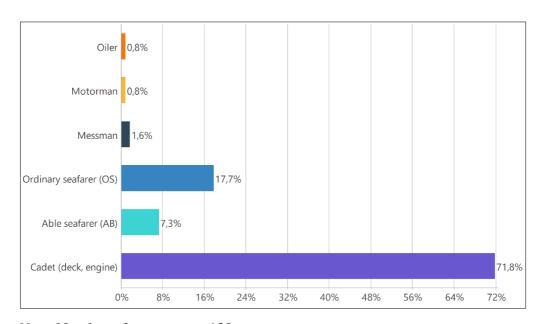
Note. Number or responses – 134.

As per the curriculum, all BSMA graduates get a minimum of six months of practice during their study period. Seafarers must undertake the interviews with the companies invited by the BSMA or independently, without the assistance of the academy, in order to complete the final six months and receive the certificate of competence (i.e., after finishing the 12-month cadetship program and passing the appropriate exams). According to the STCW 1978 as amended, onboard training is a critical component of comprehensive maritime education. One of the most significant impediments to continuing employment is the difficulty in arranging a comprehensive cadetship program because the STCW Convention demands either 12 months of aboard training or 36 months of sea service experience to qualify as an officer on watch.

The first positions of seafarers who participated in the survey after graduating from the academy are shown in Figure 16. Notably, only 71.8% of respondents reported being employed as cadets after graduation, when one would expect all respondents to be cadets. It is unusual to see almost a fifth of respondents are working in ranks that are disconnected from their qualifications.

Figure 16

Participants' First Positions after Graduation from BSMA

Note. Number of responses – 130
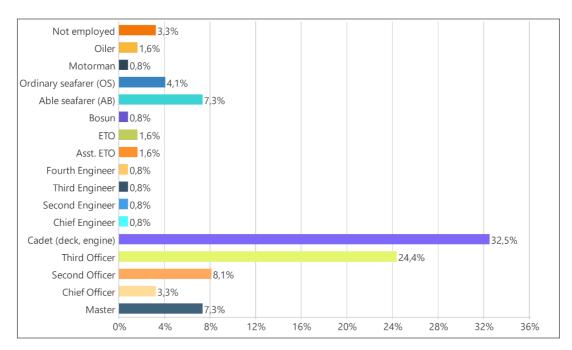
Therefore, it should be observed that the percentages of OS (ordinary seafarers) and AB (able seafarers) are much greater than those of other categories (other than cadets, minorities include messman, oiler, and motorman.). These percentages compose 25.0%. One of the most revealing comments regarding this issue was made by Participant №33, who made the following observation while discussing the BSMA's involvement in graduates' employment with crewing companies, directly referring to the issue of bribery, which may explain why some of the statistics in Figure 16 do not match the qualification originally awarded:

> *"I went to an interview at an organization called "Ocean Tankers", where I was required to pay a bribe and wait a year and a half before they even consider hiring me as a cadet. Sadly, Covid-19 arrived, and the company went out of business. I was forced to go as an OS to another company that desperately needed workers and hired me despite my strong qualifications.*

The quantitative distribution of the participants' present positions is represented in Figure 17. The results show *Cadets* make up the majority (32.5%), followed by *Third officers* (24.4%), accounting for more than half of all current positions. It is also essential to consider that the primary goal of the researcher was to survey seafarers who had recently graduated from BSMA, and the aforementioned two groups corresponded to the criteria of that goal.

Figure 17

Seafarers' Current Position

Note. Number of responses – 123. The researcher derives the table from the statistics by excluding participant No.76 (specialized in electrical engineering but indicting their current status as *'chief officer'*).

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[12] S*ource: translation made from the survey questions by the researcher*

Table 5 categorizes the functional level of the surveyed seafarers. Unfortunately, 15.1% of the seafarers in the survey are still working at a lower level than cadets, further illustrating the challenges associated with finding employment as a cadet after graduating from the BSMA.

Table 5

Levels of Participated Seafarers

Category	Corresponding positions	Percentage
Management level	• Masters	
	• Chief Officers	12.6%
	• Chief Engineers	
	• Second engineers	
Operational level	• Third officers	
	• Second officers	
	• Asst. ETOs	
	• Electro-technical officer (ETO)	38.7%
	• Fourth engineers	
	• Third engineers	
Sub-operation level	• Cadets (deck, engine)	33.6%
Support level	• Bosuns	
	• OS (Ordinary seafarers)	
	• AB (Able seafarers)	15.1%
	• Motormen	
	• Oilers	

Note. The table does not include unemployed seafarers. Number of respondents – 119.

BSMA offers vocational education courses (free of charge for Georgian citizens and takes only 17 months), bachelor's and master's degree programs. Graduates of vocational education courses can only find jobs at the support level, which are inferior

positions. Therefore, participants' current employment at the support level call into question the validity of the BSMA qualifications, resulting in students obtaining no benefit for paying tuition fees[13] (9000 GEL) and 4-years of their time.

Table 6 represents the relationship between the participants' respective specialization and their first positions after graduation from the BSMA. The trend of not-employment as a cadet was the greatest (32%) in maritime navigation. The result for marine engineering was 19%, while electrical engineering had the lowest (8%). This strongly suggests that finding employment as Cadets after graduation involves a lot more obstacles than BSMA is aware of.

Table 6

Specialization vs Participants First Position

Specialization	Employed as Cadets	Employed other than Cadets
Maritime navigation	61	29
Marine engineering	17	4
Electrical engineering	11	1

Note. Number of participants - 123
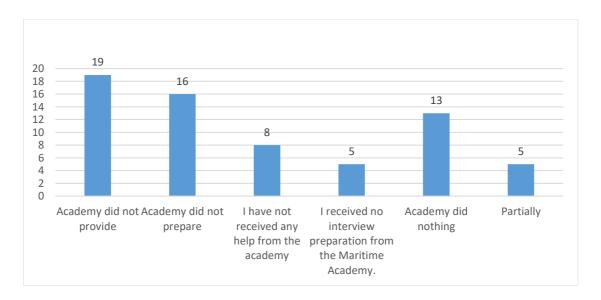
4.1.2 BSMA employment process engagement

When asked, "*How did BSMA directly facilitate your employment process?*" the participants reported more than one hundred unfavourable responses, the majority of which are shown in Figure 18.

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[13] See the web page regarding tuition fees: https://naec.ge/#/ge/post/2361

Figure 18

Frequent Answers in 'BSMA's Engagement for Employment'

The comment made by Participant №7 appears to put, in a nutshell, the general challenge that BSMA must be aware of. Although it seems like an exaggeration, the comment is not entirely divorced from the truth:
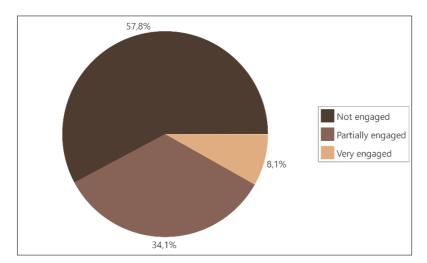
> *"95% of the students do not believe their employment to be assured by the BSMA".*

The participants often specifically complained about the *'Academy's low to zero engagement'* in the process of finding jobs. More than half of the respondents (57.8%) claimed that the Academy is not participating in the recruiting process and could not give employment support to them (Figure 19). Participant №118 believes that, aside from the mock interview process, the Academy did not participate any further:

> *"If we exclude the instruction and imitations of interviews, then they did not provide any additional help at all".*

Figure 19

BSMA's Engagement in Employment Process

Note. Number of responses – 135. Response №110: *"The academy supported my employment process on their training ship as well as allowed me to have my cadetship program in a German company"* considered as "Very engaged (I had full range of employment assistance)" and Response №34: *"I did my career pathway and got employed by myself"* considered as "Not engaged (I had no employment assistance)"

The BSMA has a department dedicated to career support and international relationships. The department's mission statement is in document *'ND 2- P17'* (see Appendix A). It states that its goals are:
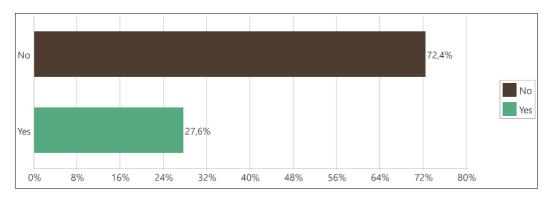
> *"To establish close contact with local or foreign organizations operating in Georgia, the business sector, state structures, and international employers to establish and strengthen partnership relations with them. To develop the career potential of students/vocational students and graduates and to support their employment."*

Despite these functions and goals of the dedicated department, nearly three-quarters of the respondents (72.4%) responded negatively to the question: *"Have you heard about the dedicated Career Support Division at BSMA?"* (Figure 20) An even worse

outcome was obtained for the question, *"Have you ever used the services provided by the dedicated Career Support Division at BSMA?"* where the negative answers rose to 91.0% (Figure 21).

Figure 20
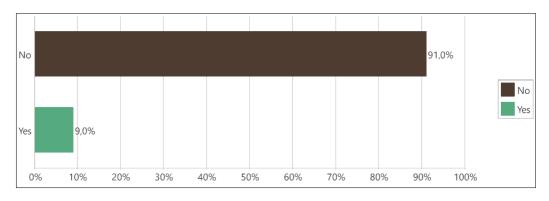
Participants' Awareness of the 'Career Support Division' at BSMA

Note. Number of responses – 134.

Figure 21

Participants' Usage of 'Career Support Division' at BSMA

Note. Number of responses – 134.
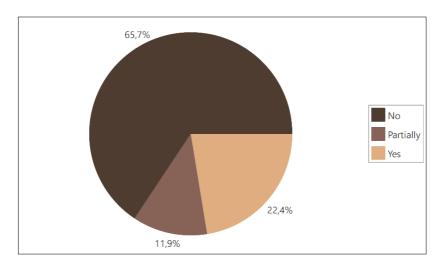
The same normative document entitles the department:

> *"To analyse job vacancies on employment websites quantitatively and qualitatively, to provide graduates, students, and professional students with up-to-date information about available positions regularly, and to support students and professional students in their interactions with employers by organizing and carrying out specific thematic events".*

However, just under two-thirds (65.7%) of the respondents were not aware of any statistics regarding guaranteed jobs after graduation (Figure 22).

Figure 22

Respondents' Awareness of Statistics Regarding Guaranteed Jobs after Graduation

Note. Number of responses – 134.

Participants complained that BSMA only provides a very limited number of companies to interview candidates despite the number of graduates. This is illustrated by the statement made by Participant №29:

> *"Due to the over-dependence of few employers in our market, only two companies staged selection interviews for new seafarers after graduation from BSMA: "Ocean Tankers" and "Columbia Shipmanagement."*

Participant №47 expanded further on the issue of over-dependence on limited employers:

> *"We were exclusively aware of statistics, such as employment in Columbia Shipmanagement only".*

Participants cited that one of the main factors contributing to employment problems after graduation was the gulf between the number of graduates and the job vacancies available. Participant №91 remarked candidly:

> *"We got information that 1-2 companies would conduct interviews and employ 3-4 individuals."*
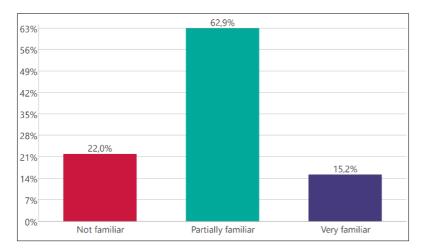
Participant №48 shared the same narrative:

> *"The only help was their collaboration with some companies with extremely high competition. About 10-20 seafarers were employed yearly."*

The participants also discussed the current challenges posed by the company's representatives. The interview structure, requirements, and prerequisites were only partially known by the majority of respondents (63.4%) (Figure 23). This is clearly in direct contrast with the affirmations made in document *'ND 2- P17'* by a department that the majority knew nothing about, representing an existential crisis for the department itself and the graduates who rely only on BSMA.

Figure 23

Participants' Familiarity with the Requirements and Format of Job Interviews with Crewing Companies

Note. Number of responses - 133. Responses №18 and №33: *"Each organization has distinct criteria"; "In general, what we learned at the school connects to every area of our career. The crewing businesses demanded everything, and it was clear from the start"* were considered as 'Very familiar';

Response №34, *"It was known in most circumstances,"* was considered "Partially familiar."

Responses №38 and №117, "*It is unclear what they will ask, but they ask questions connected to the profession"; and "Generally, their criteria are not matching, every crewing firm has their style, so it is hard to prepare for the interview,"* were considered 'Not familiar.'
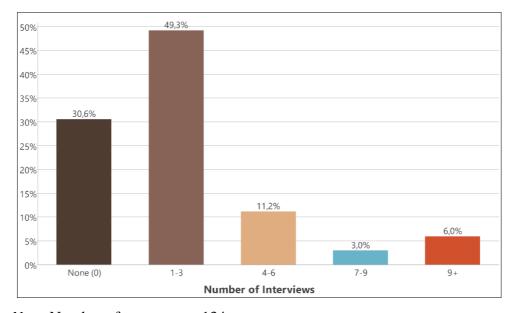
Additionally, Participant №79 calculated the increasing distance between the amounts of knowledge acquired by the students enrolled on BSMA courses versus the amount of knowledge required to obtain a job:

> *"I do not deny that the academy gave me some considerable knowledge, but I needed to master 80% of it independently without them. I did not learn the proper fundamentals at that time there."*

Failure in the interview might also be caused by a clear lack of interview practice and preparation. Figure 24 demonstrates that less than half of respondents (49.3%) took part in 1-3 interviews prior to applying for work with crewing companies. Pessimistically, not even a third (30.6%) had any interview practice experience at all. Such preparation is a core responsibility of BSMA, as confirmed in their own normative document related to their *'Career Support Division'* where they appear to offer *"Development and organization of career support programs for graduates"*, however, this was not present in participants' answers.

Figure 24

Participants' Experience in Interviews (frequency) number of interviews

Note. Number of responses – 134.

Even when students have fulfilled their academic requirements to the highest level and their motivation is high, there is clear evidence to prove that when it comes to organizing interviews, the *'Career Support Division'* failed:

> *"Seven top students were scheduled for interviews by the BSMA. After the interview, they informed us that the company had ended its cadet program, and I was left in the dark"* (Participant №83).

Participant №125's experience with one of the companies reveals a lot about the current situation and the constant disappointments influenced by mismanagement, and it clearly suggests that there exist hidden factors that secure cadet employment:

> *"It is terrible that some companies, particularly the 'Elviktor' corporation, treated us in such a way. They disregarded us after a protracted wait for the cadet interview and even used every 'A category' student as leverage. I am acquainted with the other less prepared graduates who were suddenly employed as cadets. I am overwhelmed by a sense of unfairness, and this was awful."*

In his statement, Participant №131 exposed two parallel obstacles that cadets face when being interviewed: one being their English language proficiency is desired more than their acquired knowledge, and the other 'additional financing' that naturally means bribes:

> *"Only the English language proficiency of beginning seafarers is taken into consideration by some crewing companies, and questions about 5% of acquired knowledge are asked. Crewing companies hire seafarers without ever being interviewed, which means that the conversations are primarily affected by acquaintances and additional financing, which is depressing."*

4.1.3 "The elephant in the room"[14]
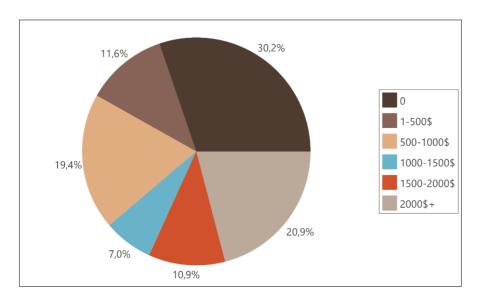
Corruption, bribery and nepotism have plagued our society for centuries (Herrera & Rodriguez, 2003). Unfortunately, recently qualified Georgian seafarers are victims of this unfair system of discrimination. According to several participants, one of the leading causes of their sense of failure and unemployment was directly related to dealing with corruption. Guaranteed successful interviews were often only achieved with the payment of bribes during interviews. 30.2% of participants were unaware of

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[14] 'The elephant in the room' means "an obvious major problem or issue that people avoid discussing or acknowledging". https://www.merriam-webster.com/dictionary/elephant%20in%20the%20room

the existence of *'incentives/costs'*. On the other hand, the rest (69.8%) of those surveyed believed that incentives must cost between 1$-2,000$ or more to result in a successful interview (Figure 25).

Figure 25

Participants' Answers to Incentives/Costs for a Guaranteed Successful Interview with Crewing Companies

Note. Number of responses – 129.

Participant №33 confirmed:

> *"I was ready and paid $1,500 to be a cadet aboard the ship."*

Participant №119's comments highlighted the impact this has on the morale of even the best students:

> *"When candidates are chosen for interviews, there are many instances of nepotism, familiarity, and incentives that the hiring company directly or indirectly requests. These practices eventually harm the acquired knowledge student."*

"The most crucial factor is that new cadets should not spend a lot of money upfront on a contract." (Participant №28).

These were the phrases used most frequently to describe the problem: *'obligated me to pay', 'relatives', 'familiarity', 'nepotism'* and *'corruption'*. Participant №70 believes that even in addition to the education gained at the academy, seafarers need to have a close-knit relative and solid financial standing and adds:

"I nevertheless believe that the crewing businesses charge first-time cadets too much money; knowledge is the only thing that does not count."

The following viewpoint was expressed by an experienced seafarer concerning the issues with crewing companies and the current situation in Georgia:

"Unfortunately, 90% of crewing companies in Georgia are 'middle-man' recruiters; they do not have contracts with businesses that provide them with income, which is replenished at the expense of seafarers. Unfortunately, there are many shortcomings in the crewing domain, as well as in the maritime sector generally, in Georgia." (Participant №69).

Participant №37 also discusses the significance of preventing corruption and nepotism in Georgia's maritime industry:
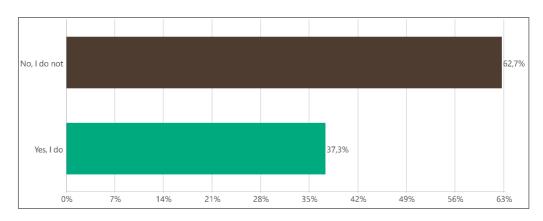
"Regarding this matter, I would be content if crewing offices and seafarers' employment—specifically, paying a commission and hiring relatives—were adequately regulated. Even if graduates have the ideal expertise, they still need a relative or at least 2,000$ or 3,000$ to go for the first time. This terrible truth is encountered almost in every office."

The researcher utilized the responses to the following question to summarize the issue of various *'elephants'* in the room in regard to the obstacles faced by cadets during interviews: *"Do you believe that success at interview with crewing companies is based exclusively on your qualifications from BSMA?"* (Figure 26). The fact 62.7% of

respondents stated that they do believe that their qualifications were not enough for successful employment highlights that the BSMA and Georgia's maritime industry have issues in the regulation of recruitment and employment process.

Figure 26

The Participants' Answers to the Question: "Do you Believe that Success at Interview with Crewing Companies is Based Exclusively on Your Qualifications from BSMA?".

Note. Number of responses – 136.

4.2 The academic experience at BSMA

This section shows the opinions and statistics of the respondents about the educational system within BSMA, hands-on practical training, and teaching staff, and presents the participants' answers with appropriate quantitative reasoning.

4.2.1 The current educational system

The respondents had the opportunity to express their opinion in more detail through open-ended questions. Along with other issues, the educational shortcomings in the BSMA were one of the major and frequently repeated issues in the given answers. Respondents complained about the curriculum in terms of the outdated teaching

methods and approaches, the simplicity and incompatibility of the programs with modern standards, and impractical subjects that have no use in international shipping. As a result, they could not perform at their best throughout the interview.

The comment made by Participant №105 on the issue is unequivocal evidence of this:

> *"The education and competence that BSMA offers are insufficient to undertake a crewing company interview confidently. Whether a student is good or not, he or she constantly encounters subtleties that they are unfamiliar with, leaving them with the impression that their knowledge is inadequate. In the end, this mentality keeps seafarers from succeeding."*

The same participant also highlighted the relevance of updating the educational system and raising the institution's international stature:

> *"It would be beneficial if the BSMA included lessons in the curriculum that would assist students in boosting their self-confidence and better preparing for interviews. More accomplished graduates will enhance the institution's reputation and publicize it worldwide."*

More than half of the respondents explicitly or indirectly mentioned program shortcomings, such as incompatibility, simplicity, and usability. Most often used phrases included *"completely outdated," "extremely outdated,"* and *"practically outdated."* It is vital to note that all of the participants' objections were related to significant modifications to the teaching methods. According to the participant №104, there is a mismatch between the educational requirements of the market and what is taught at the academy.

> *"I discovered a significant discrepancy between the education I gained in the BSMA and my interview".*

Participants expressed their discontent with learning courses that do not apply to their jobs or do not meet conventional criteria by using terms like *'unnecessary subjects'*, *'undesirable subjects', and 'non-mandatory subjects'*. Participant №72 stated:

> *"The academy offers just a superficial level of education, and none of the disciplines meets the standards."*

Secondary remarks apply to the cadets' awareness that their time is not being used appropriately and that a solution is required:

> *"Subjects like history, which I learned in sixth grade, should be eliminated since they are a waste of time, and in their place, a material that would benefit the student in maritime practice should be introduced."* (Participant №124).

The same reasoning is shared by participant №104 who believes it unprofessional to be obligated to study a heavy load of 'unimportant subjects':

> *"For instance, advanced chemistry, physics, and maths. The amount of time BSMA spent on these subjects was a pointless waste."*

Participant №119 also expressed dissatisfaction that the BSMA did not provide the students with an accurate representation of the working of a ship, which must be one of the fundamental and irreducible responsibilities of any METI globally:

> *"The maritime academy does not provide the training we need to staff ships, perform the necessary tasks, and operate."*

According to the STCW convention, English is mandatory language in international shipping (Yabuki, 2011). The researcher acknowledges that the BSMA has taken this into account in their normative documents. However, upon asking their students the relevant questions, it became clear that the minimum obligation was also the maximum. The participants also concentrated on the importance of developing a deep practical understanding of the English language for their future as international seafarers:

"One of the critical requirements for passing the interview was the importance of the English language." (Participant №108).

Participant №110 favours converting Georgian teaching to English:

"To ensure that everyone is prepared for and accustomed to speaking in English, I suggest the BSMA hold all lectures in English."

According to the BSMA syllabi, Georgian is the teaching language, and seafarers cannot use Georgian terminology while sailing internationally. In light of this reality, participant №25 suggests:
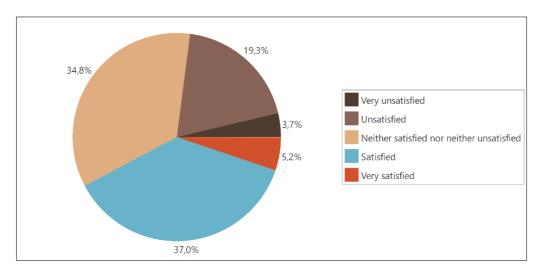
"I believe that the BSMA needs to offer English maritime education as some subjects lack a Georgian nomenclature. It is unproductive and challenging to master obligatory norms in Georgian. Consequently, the graduate will encounter several issues when having international practice."

To summarize the section, the researcher has used Figures 27 and 28, which represent self-assessment statistics that revealed the satisfaction of the respondents in relation to the competencies they taught at the academy. Figure 27 demonstrates that 57.8% of participants were unable to say that they were satisfied. Just 5.2% of the respondents were very satisfied with their competencies. To complement the given results with Figure 28, where nearly three-quarters are partially satisfied, one can conclude that the education provided by BSMA faces critical issues and the academy's vision to be *"a leading educational centre in the region"* is blurred. With this in mind, participant №58 concisely evaluates:

"The Maritime Academy should educate seafarers with maritime expertise rather than superficial maritime knowledge, what we unfortunately gained."

Figure 27
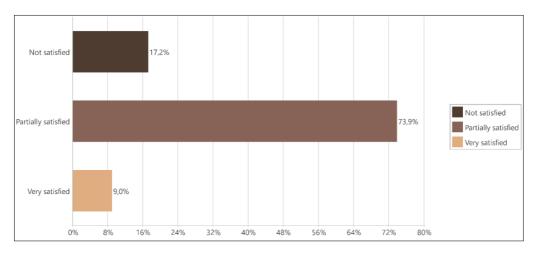
Participants' Satisfaction with Competencies Taught within the Curriculum at BSMA

Note. Number of respondents – 135.

Figure 28

Participants' Satisfaction with the Course Curriculum of BSMA matching their Expectations in Line with the Outcomes Required for Securing Employment in their Chosen Field of Study

Note. Responses №30, 50 and 118: *"I am just so lucky and I do not see the role of Academy in my success, "As I noted I am not employed yet"* and "The programs require

renewing and, in my opinion, it is a waste of time to study such subject that are not useful. I would use studies that are more practical in the process." Were considered as 'Not satisfied (requires dramatic improvements)'

4.2.2 Hands-on practical training

Participants highlighted the usage of simulators and other technical aids as essential for their education. The most frequently given answers by the respondents were: *'more practice', 'more practical knowledge, 'more attention to the practical knowledge, 'need to get more practice', 'lack of practicality,* and *'no practical studies.* The 6-month cadetship provided by the academy was ineffective for Participant №25 since they had insufficient access to technology throughout the teaching period:

> *"My six months of 'practice' on a cadet training ship were utterly ineffective due to the lack of practical instruction and direct interaction with navigational instruments."*

Practical lessons in the teaching process were also deemed vital by the seafarers who participated in the survey. The participants were primarily disappointed with the lack of practical training. Cadets are aware that practical training, in addition to academic education, is a crucial aspect of the seafarer's career, and they expected more from the 6-month cadetship provided. Participant №61 states:

> *"Deepening practical understanding is important in addition to academic knowledge".*

The researcher's general impression from the respondents' answers was that the sophisticated equipment/simulators, according to international standards, were used more to entice students to enrol than to train them as soon as they became students. Participant №62 emphasized the relevance of both practice and theory in the teaching process, understanding that practical training increases students' engagement:

"The BSMA should use simulators and technology to raise student interest and expertise".

The issue of the academy's obsolete and defective technology was mentioned in fewer remarks, such as *"Academy was not equipped modernly"* (Participant №124); *"Devices were malfunctioning and outdated"* (Participant №29); Nevertheless, as stated in the first chapter, the academy is fully equipped with cutting-edge equipment, and the government provides complete assistance in upgrading and replacing the equipment, so those criticisms can be considered as exaggerations.

4.2.3 Academic personnel

Although negative feedback related to academic personnel is often motivated by personal issues and often exaggerated, it cannot be ignored that during the survey, one of the critical issues was discontent with academic personnel at BSMA. The phrases *'lack of competency', 'lack of professional lecturers', 'incompetent and outdated lecturers', 'burned-out lecturers', 'unprofessional lecturers',* and *'old and lazy lecturers'* were frequently used to describe the teaching staff. The participants criticized the teachers employed by the institution for their outdated approaches and inability to use cutting-edge technology to plan effective lessons. Participant №25 addresses this concern:

"Most elderly professors lack communication skills and cannot pique students' interest in a particular subject, especially now that the marine industry has gone entirely computerized."

The participants felt it necessary to comment that the existing academy's utilization of its current curricula is out of date, and the teaching practices are not up to date. Participant №122 captures this sentiment:

"The Soviet Union is no longer and the higher education system has been altered globally."

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Student life was compared to the USSR frequently on several occasions. As illustrated by the following comment by participant №104:

"During my studying period, practical training was lacking, yet communist relics like grooming, shaving the beard, and other such silliness were prioritized. Instead, BSMA should use each minute to get as near as possible to deliver the education accurately."

Participant №95 also brought up the issue that the marine engineering faculty's communist influences only amplified their ineptitude:

"Most engineering faculty lecturers must be changed, not because they are incompetent, but because there are many better methods to acquire or provide knowledge in the twenty-first century. The outmoded techniques of the 'communist' era must be abandoned."

Exam and evaluation-related concerns were also highlighted in the survey replies. Participants primarily concentrated on low exam barriers, exam over-simplicity, elementary assignments, and low teacher engagement. Participant №79 proposed:

"To improve educational quality, we need lecturers who focus on students' education and knowledge rather than on awarding grades."

Participant №6 stated the following as evidence that students feel that they are under-achieving and falling behind international expectations because their educators are not maximizing their potential, criticising that earning a grade and having knowledge is not equivalent:

"I suggest professors demand more of their students to assist them in understanding that knowledge is more critical than grades when it comes to getting a job in the future."

This is further elaborated by Participant №104:

> *"Grades are simple to earn at BSMA. The system has several flaws that allow anyone to get past all the barriers in the exam quickly. Consequently, boarding the ship without the bare minimum of expertise makes development exceedingly challenging."*

Most participants focused on these issues and interestingly recommended inviting passionate, active professionals in BSMA to take over the jobs of outdated senior staff members because they understand the connection between real-life experts and the outdated academic approach. The phrases *'more active young professional seafarers', 'invite more active seafarers' and 'more young lecturers'* are repeated throughout this section:

> *"More active seafarers should work as BSMA lecturers to share their experiences with the younger generation"* (Participant №116);
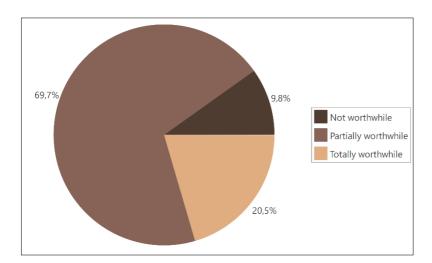
> *"To employ educated, motivated individuals who can impart knowledge to a younger generation"* (Participant №133);

> *"To hire current youthful academics that provide the aspiring seafarers with further education"* (Participants №136).

Figure 29 shows the participants' responses to the question, *"Overall, which of the following statements applies to you?"* The results can be used to summarize the academic experience at BSMA: 9.8% of the participants are unsatisfied with their education and believe it was not worthwhile. Most of the remaining respondents (69.7%) said finishing the academy was "partially worthwhile," while just a fifth of all respondents (20.5%) were completely satisfied.

Figure 29

Education at BSMA

Note. Number of responses – 134. Response №11 - "It was a very important experience for me, although teaching process disappointed me" considered as 'Partially worthwhile' and response №40 – "It would be more worthwhile if I studied better because at the academy, they did their best" considered as "totally worthwhile".

4.3 Needs for collaborations

The researcher was aware that collaborations are the backbone of any successful international maritime education and was equally aware of this when the original survey was composed. The majority of participants agree that the academy must collaborate more and forge connections with recruiting companies to address the difficulties outlined above:

> *"Due to the large and growing number of students and the limited number of available jobs, they should collaborate with as many recruitment firms as possible and continually look for new opportunities"* (Participant №105).

The terms *'more companies', 'more activity with crewing companies', 'more communication with crewing companies', 'more contracts with crewing companies',*

'inviting new crewing companies' and *'expanding connections'* were omnipresent and ubiquitous by participants. The consequence of not taking such feedback into account is summed up by Participant №105:

> *"The BSMA collaborates with several recruitment companies whose representatives come to the academy roughly once a year to interview 400 students. The minimum number of new hires is around 20."*

Although this is common knowledge, the observation made by Participant №114 stands out as a perfect consolidation of the need for continued, successful practice following academy graduation:

> *"For most students to immediately find employment and acquire standard practice, the academy should attempt to begin discussions with as many companies as feasible."*

4.4 Positive feedback

Although admittedly sparse, the participants did have a favourable outlook toward the BSMA and recognized its achievements too. No institution is perfect and the intention of the research was to look for areas of improvement and opportunities for advancement. The following are examples of BSMA's successes and comprehensive fulfilment of its academic responsibilities. Participant №23 states:

> *"BSMA arranged the fundamental certificates for graduates. 'East Wind' and 'CSM' company interviews were arranged for me by the BSMA, and I was accepted as a cadet in both";*

> *"The BMSA submitted my transcripts as requested by the embassy when I applied for a US visa"* (Participant №4);

> *"English language lecturers were fighting for the students to have digested*

material in English. This was the academy's and these lecturers' contribution to the interview preparation process" (Participant №29).

4.5 Summary

This chapter summarizes all the results the researcher received from the participants by conducting the survey. The results of the survey identified important and crucial challenges BSMA and their graduates face, such as maritime employment/recruitment difficulties.

The results are interwoven and thus highlight the complexity of the research. The suggestions made by the participants can be used as constructive feedback and a real plan for the development of the BSMA. The following chapter will discuss BSMA programs curricula and provide an analysis of the actual condition of the academy from the MET perspective.

Chapter 5 – General overview of BSMA programs curricula

Any student at BSMA must earn 240 ECTS as specified by the educational programs in order to graduate with a '*Bachelor of Nautical Science', 'Bachelor of Engineering in Maritime Engineering',* and *'Bachelor of Engineering in Marine Electrical Engineering'* respectively with *Maritime Navigation, Marine Engineering and Electrical Engineering* specializations. Each academic year, the student has the opportunity to complete 60 credits in a standard way (30 credits per term); hence, 240 ECTS are required in total to receive a bachelor's degree. Educational programs comprise different sorts of academic courses. Students enhance their research and management skills in addition to their professional knowledge and talents as *ship navigators, marine engineers* and *electrical engineers.* The courses are given a set number of credits. In the educational program, the following academic courses stand out:

- Exact and Natural Sciences;
- Legal Sciences;
- Humanitarian and Social-Economic Sciences;
- Speciality;

In the document: *'Assessment and Development of Educational Program Learning Outcomes'* (ND 2- F19, see Appendix A), BSMA states:

> *"Learning outcomes are described in three categories - knowledge and understanding, ability and responsibility, and autonomy. The program's learning outcomes answer the following question: What should the graduates know and be able to do? The program's learning outcomes should be directly derived from the program aims."*

The same document describes the following requirements to consider when formulating the learning outcomes of the program (the researcher picked up the criteria in accordance with his research aims):

- Program qualification and assessment should be closely tied to the program's learning outcomes.
- The program's learning outcomes should be in line with local and global labour market demands.
- Learning outcomes must be visible and quantifiable.
- The program's aims should provide realistic and practicable learning outcomes.

The initial study targeted the curriculum of the educational programs available to the public online on the website: www.bsma.edu.ge under the accreditation council decision in 2019. Several critical issues were discovered while analysing the delivery and design of the study programs. Figures 30, 31 and 32 show the aforementioned specializations' correspondences with programs' aims and learning outcomes.

The BSMA supports highlighting the complexity of learning outcomes in the cognitive domain while employing Bloom's taxonomy's key verbs. In Figure 30, the verbs *'plan', 'use'* and *'provide'* are used to describe the fundamental idea of *'applying'*, which Kennedy (2007) defines as *"the ability to use learned material in new situations, e.g., put ideas and concepts to work in solving problems."* However, the fundamental skills that the program sought to develop required a higher cognitive level, such as *'evaluating' and 'analysing'*, because *'thinking critically'* and *'problem-solving'* as highlighted in the aims part 2. As a result, assessing and improving the alignment of the program's aims and outcomes was critical in order to identify of potential improvement.

Figure 30

Maritime Navigation Curriculum Aims and Learning Outcomes (2019)

Aim of the program	Learning outcomes
Aim of the program is to: 1. **Train** sea navigators of management, operational and support level, who meet national (industry specification "Maritime navigation") and international STCW convention (A-II/1, A-II/2, A-II/3) standard requirements. On the basis of appropriate training and recognized seagoing practice navigators **will gradually be able to get an officer position** on an ocean merchant ship; 2. **Train** a practice-oriented worker who will be able to identify navigation threats, solve problems and think critically within acquired competence	After successful completion of the educational program graduate will be able to: 1. **Plan** navigational and cargo operations; 2. **Navigate** in different weather conditions; 3. **Provide** safe navigation; firefighting; 4. **Use** of safety and survival crafts in emergency situations; 5. **Provide** first medical aid; knowledge of survival at sea techniques; 6. **Provide** hydro meteorological observation and read synoptic charts; 7. **Use** navigational information, charts and electronic charts, control ship positioning and movement; 8. **Use** celestial bodies and equipment; 9. **Use** ship radio and electric navigational, radiolocation and navigational automated systems; 10. **React** adequately on Master's orders; 11. **Properly organize** navigational watch and work of crew members; 12. **Use** of informational and communication technologies; 13. **Provide** safety, survival and rescue operations in English language based on international regulations requirements; 14. **Use** all kinds of Radio navigational systems in accordance with Radio Regulations

Note. Figure is derived from the web page: www.bsma.edu.ge

The same criticisms were levelled against the aims' alignment with the learning outcomes for marine engineering (Figure 31). According to the ECTS User's Guide (2005), *"Learning outcomes are assertions of what student is expected to know, understand and be able to demonstrate after completion of a learning process."* The following structure could be used to describe a learning outcome: stem + active verb + focus/object + context/condition + qualifier (optional). It should follow the given structure: *"On successful completion of this course, students should be able to"*, and the remaining part is completed using the 'formula' above. As a result,

recommendations pertained to revising the learning outcomes and positively supporting the program's aims, resulting in what might be considered a deliberately vague or naïve approach to areas of key responsibilities.

Figure 31

Marine Engineering Curriculum Aims and Learning Outcomes (2019)

Aim of the program	Learning outcomes
Aim of the program is to: 1. **Train** ship marine engineers of management, operational and support level, who meet national (industry specification "Marine Engineering") and international STCW convention (A-III/1, A-III/2, A-III/3) standard requirements. On the basis of appropriate training and recognized seagoing practice marine engineers **will gradually be able to get an officer position** on an ocean merchant ship, ranging from officer in charge of an engineering watch to Chief engineer officer 2. Through general knowledge and industry skills, the program aims at **developing problem-solving, organizational, study and research planning skills**	After the completion of the educational program, student will acquire general and specific competences as: 1. Ability to **find** and **process** information from different sources and develop solution; 2. Ability to **work** with design and technological documentation, technical literature; Scientific and technical reports and other informational resources (including resources in English language); 3. Skills to **operate** ship's power plants, main engine technical appliances and auxiliary systems; 4. Skills to **organize** maintenance and repair works;

Note. Figure is derived from the web page: www.bsma.edu.ge

Marine electrical engineering (Figure 32) presented the issues and vagueness leading to an increasing disconnect between program aims and learning outcomes.

Figure 32

Marine Electrical Engineering Curriculum Aims and Learning Outcomes (2019)

Aim of the program	Learning outcomes
Aim of the program is to: 1. **Train** ship electrical engineers of operational level, who meet national (industry specification "Marine Electrical Engineering") and international STCW convention (A-III/6) standard requirements. 2. Based on appropriate training and recognized seagoing practice ship electrical engineers **will gradually be able to get an officer** position on an ocean merchant ship. 3. They can also be employed in the state or private institutions related to the maritime transport or industry. 4. Train practical skills oriented specialists who **will be able to maintain and repair** ship's electrical and electronic equipment, movable mechanisms, ship's auxiliary machinery, automated control systems, generators, distribution systems, computer network service of the vessel.	1. Educational program gives opportunity to gain **theoretical knowledge**, **develop practical skills** for future employment in modern professional environment. 2. Based on gained general and specific competences will be able **to search and process** information from different recourses, identify problems and find adequate solutions 3. **Has English language knowledge** enough to work as electrical engineer on vessel (business correspondence, communication with radiotelephone, provide contact during safe and rescue operations) and will be able **to establish communication** with multinational crewmembers. 4. Will gain such essential skills as **self-discipline**, **sociability**, **punctuality**, **professional and personal responsibility**.

Note. Figure is derived from the web page: www.bsma.edu.ge

Furthermore, the researcher acquired the current curriculum versions after accessing the BSMA normative documents via '*Electronic Case Management'* (for staff only). The following dates are the decisions taken by the BSMA Senate:

- For maritime navigation – 01.10.2021
- For marine and electrical engineering – 30.03.2022

After analysing the currently updated documents, the researcher assumed that BSMA had experienced the need to make significant and discernible modifications, which serves as confirmation and awareness of the lack of clarity prior to the decisions made in 2021. In particular, the program's aims are more specific, and the degree of learning outcomes accommodates the context, maintaining compliance with Bloom's taxonomy's complexity of the relevant knowledge of the aims and learning outcomes.

In Georgia, we say: *"სჯობს გვიან, ვიდრე არასდროს"*, which translates as *"better late, than never"*.

Subjects such as *'Leadership and ethics', 'Maritime law', 'Quality assurance and marine risks management' and "Ship commercial management"* (see the curricula in Figures 33, 34 and 35) now corresponds to the aims of the desired program aligned with learning outcome that was lacking in the previous normative documents. One of the updated examples that now match is provided below:

Program's aim:
> *"To prepare a specialist, who will have readiness and reaction over emergency situations, managing a vessel safely and efficiently, having knowledge in a safe management system, acknowledgement and practical usage skills in accordance with the quality legislative essentials, codes and guidebooks".*

Learning outcome:
> *"Recognizes the importance of effective authority in marine field foreseeing the professional ethic norms; Takes responsibility for fulfilling teamwork and leadership principles by foreseeing the rights and obligations imposed upon him/her".*

Figure 33

Maritime Navigation

Note. Figure is derived from www.bsma.edu.ge; subjects in brown are highlighted by the researcher.

Figure 34

Marine Engineering

Note. Figure is derived from www.bsma.edu.ge; subjects in brown are highlighted by the researcher.

Figure 35

Marine Electrical Engineering

I Semester	1.Pre Intermediate English MF I -5 ECTS or 2.Intermediate Plus English MF I -5 ECTS	Physical Training I 2 ECTS	Mathematics MF I 5 ECTS	General Physics MFI 5 ECTS	Information Technologies in Seamanship MF 4 ECTS	Industrial Chemistry 4 ECTS	Engineering Graphics 5 ECTS
II Semester	1.Pre Intermediate English MF II -5 ECTS or 2.Intermediate Plus English MF II -5 ECTS	Physical Training II 2 ECTS	Mathematics MF II 5 ECTS	General Physics MFII 5 ECTS	Electrotechnical materials 4 ECTS	Theoretical basis of electrical engineering I 6 ECTS	Selective Component 3 ECTS
III Semester	Maritime English EE1.1 5 ECTS	Ship's Power plants EE 5 ECTS	Ship's Constructions and Stability ME/EE 5 ECTS	Ship Electronics 5 ECTS	Theoretical basis of electrical engineering I 6 ECTS		Technical Mechanics EE 4 ECTS
IV Semester	Maritime English EE1.2 5 ECTS	Ship's Auxiliary Machinery 4 ECTS	Educational Technological Practice EE 5 ECTS	Basics of Ship Automation 5 ECTS	Power Converter Equipment 5 ECTS		Electric Machines 6 ECTS
V Semester	Maritime English – EE2 5 ECTS	Maritime Safety Rules EE 5 ECTS	Ship gauging devices and monitoring systems 5 ECTS	Basics of pneumatic and hydraulic automation ME/EE 5 ECTS	Automatic Control Systems 5 ECTS		Theory of Electric Drives 6 ECTS
VI Semester	Onboard Training MN 30 ECTS						
VII Semester	Ship's Electric Power Systems (I) 5 ECTS	Automation of Ship's Power Plants 5 ECTS	Ship household appliances 5 ECTS	Deck and cargo lifting equipment management system 5 ECTS	Ship Navigation Systems and Maritime Communications Network 5 ECTS		High Voltage Systems 5 ECTS
VIII Semester	Ship's Electric Power Systems (II) 5 ECTS	International Maritime Law 5 ECTS	Professional Knowledge and Competencies EE 5 ECTS	Operation of the ship's computer network 5 ECTS	Leaderships and Ethics 5 ECTS		Free Component 5 ECTS

Note. Figure is derived from www.bsma.edu.ge; subjects in brown are highlighted by the researcher.

Despite the academy's changes to the existing curriculum, not all of them are represented on their website, which may be confusing to an interested third party and illustrates the concern with coordination between the quality assurance service and IT. This may influence why potential employers are not confident in cadets' competencies based on the published curricula alone.

All of the specializations discussed in Figures 33, 34 and 35 encompass the STCW competencies and knowledge. The programs are designed for students to graduate from BSMA with a foundational understanding of technical sciences such as mathematics and physics, mainly in the two semesters. The program's relevant and profession-specific modules begin to be taught in the third semester and continue through the eighth semester; the onboard training component of all academic programs takes place in the fifth semester (30 ECTS).

As previously explored in Chapter 1, the majority of employers see inadequate English language proficiency as one of the most considerable shortcomings of BSMA graduates, which has a direct negative impact on their prospects of obtaining employment. The English language courses, which include Maritime English, are delivered starting from the first semester but end abruptly in the fifth semester for no discernible reason.

Despite apparent gaps that have been filled, all three BSMA curricula continue to feature *'Physical training'* (a total of 4 ECTS for all three specializations). The *'selective component'* for maritime navigation is worth 3 ECTS, while the remaining two specializations are worth even more - 8 ECTS combined (including free component). These subjects are: *'philosophy', 'academic writing', 'maritime history', 'shipbuilding history',* and *'world and Georgian history and culture'.* None of these courses corresponds to the program's core aims, further defined in the learning outcomes, offering some indication of why a large number of respondents had such negative feedback on the course itself. This might represent a valid example of where the BSMA specifically failed to offer the content that qualifies cadets with relevant employable skillsets.

In conclusion, it is encouraging to observe that the curricula of the academy's programs are evolving positively and are headed in the right direction, considering the maritime education and training requirements of today and tomorrow. Nevertheless, there is still much room for improvement, which must consider the needs of students and employers with the aim of obtaining employment as a priority and not as a lottery.

Chapter 6 – Discussion and conclusion

This chapter highlights and discusses the main findings obtained by the researcher in terms of the dissertation's original research questions obtained as a consequence of the survey and document analysis results. To facilitate the interpretation of the conclusions, a 'USEM' employability model for BSMA was applied for suggesting METIs a role in increasing the employability of their cadets. In addition, each research question has been discussed with the relevant question as a header.

6.1 A 'USEM' employability model for BSMA
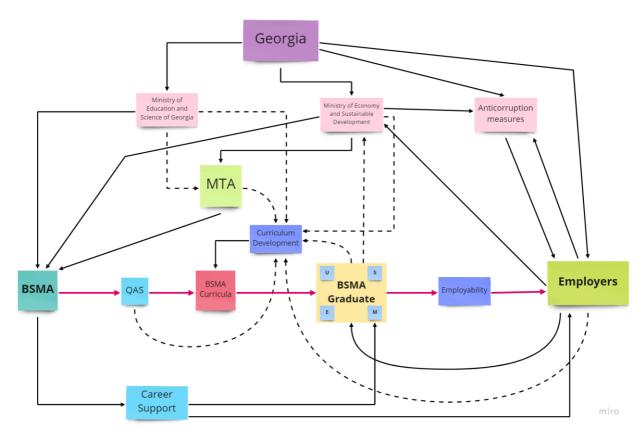
To date, BSMA has not benefited from using a 'USEM' employability model that demonstrates the interconnectivity and complex interplay of all determining factors that influence a complete and comprehensive understanding of the current state of employability of its cadets in Georgia. The researcher adopted this model for evaluation of BSMA as METI, and coherently expanded the model with the intention of consolidating not only the scope of his dissertation into the scope of potential areas of improvement but also a clear illustration of where the key players intersect (Figure 36).

As discussed in the literature review, the main principle of applying the 'USEM' employability model is that there are extremely deep linkages between securing employment and academic development. That means attaining employment is more likely if and when students achieve competence in the following four goals:

U - Subject **U**nderstanding;

S – '**S**kilful Practices in Context';

E - Personal characteristics such as self-theories and **E**fficacy beliefs;

M - Stands for **M**etacognition (in Figure 36, these are indicated using only the first letters).

Figure 36

A 'USEM' Employability Model for BSMA

Note. Source: the researcher. Solid arrows indicate direct connections; dashed arrows indicate indirect but necessary connections.

Let us consider each of the four goals from the perspective of a Maritime Academy graduate at BSMA. The graduate should have appropriate knowledge and competency in maritime education and necessary training expertise, regarded as a minimum performance by the STCW Convention (U). Their foremost priority will be to acquire skills that will allow future seafarers to handle tasks more efficiently and competently while keeping the core principles of seamanship in mind (S). As noted by the employers in the initial investigations, seafarers must have rapid and rational decision-making abilities, collaboration skills, easy adaptability to the environment, communication, leadership, endurance skills, and the capacity to operate in a stressful

environment (E). Due to the nature of the seafarer's work, they must have the ability to plan, monitor, evaluate, and modify, as demonstrated by career growth and putting plans into action (M). According to this concept, students who possess these four values after graduation have a wide range of employment opportunities.

In this context, it is vital to include the Ministry of Economy and Sustainable Development, of which the Maritime Academy is a direct component, and the Ministry of Education, which national framework governs higher education at the Academy. The Maritime Transport Agency is under the Ministry of Economy and Sustainable Development. The latter represents the National Maritime Authority of Georgia, which ensures the effective implementation of organizational and legal instruments in the maritime domain under national and international requirements.

The Maritime academy must ensure that employment becomes the graduate's top priority and that there are no obstacles in the process, even if METIs' primary obligation is not to guarantee employment. All METIs must ensure that their graduates have the knowledge and abilities necessary for maritime excellence.

This model emphasizes curriculum development as a solution. The figure outlines the direct and indirect involvement of numerous stakeholders in the development of the curriculum. The BSMA's most basic unit is the Quality Assurance Service (QAS), which is closely tied to the Academy's curriculum's conformity with critical standards, and ultimately has the final word in the curriculum creation process. It is the number one structure responsible for excellence, which ultimately becomes the guarantor of the student's highest quality education; thus, with all USEM values under the responsibility of the quality assurance service and through curriculum compliance, the Maritime Academy graduate should very quickly open the door to the prerogative of employment.

The importance of career development under the careful management of BSMA cannot be understated. Based on the academy, the primary function of this service is to find new collaborations, connections, and potential employers. As a result, the academy has a direct pathway, not with the obligation to find employment for all of its students with a 100% guarantee, but with the function of maximum employment promotion for graduates. Failure to acknowledge of the existence of corruption and failure to collaborate with the Georgian government, the Ministry of the Education and Sciences and the potential employers/investors while actively promoting **M**etacognition within BSMA graduates can only lead to a vivid understanding of discriminatory challenges ahead that do not relate their educational growth in any way.

Employers, on the other hand, have direct contact with graduates. Graduates are their core workforce, the individuals who make their business tangible. Employers and employees pay wages and taxes, thus contributing to the country's economy positively, which is why they are in full connection with the Ministry of Economy and Sustainable Development. Given that maritime employers do not represent local enterprises and are frequently agents of foreign corporations, they should have no functional relationship with Georgia other than contractual duties to the state. However, based on the study, the state must begin monitoring employers with direct oversight, and early identification of illegal conduct with the appropriate anticorruption responses in order to mitigate unemployment figures related directly to the aforementioned issues.

Lastly, the requirement for curriculum improvement is inseparable from any METIs top priority and is directly proportional to graduate employability. Figure 36 shows that all the parties listed have a role to play in the improvement of the theme of this dissertation, eventually resulting in comprehensive academic curricula that further holistic sustainable employment prospects. Employers are the benefactors of this comprehensive academic curricula, and the curricula must consider their preferences, requests, and essential guidance. The Ministry of Education should guarantee its

alignment with 21st-century education by applying the most professional, practical, and current approaches.

The Ministry of Economy should consider national and worldwide strategies, as well as the need for competent staff, both for the country and globally, to achieve sustainable development in collaboration with other countries worldwide. The Maritime Transport Agency is required to implement all innovations provided by International Maritime Organization (IMO) and associations and enforce them on Georgia as a member country. Above all, the interests of metacognitively aware students' viewpoints, who are the recipients of education as a product and contribute to the country's economy, sustainability and development, must be taken into account.

The model showed that METIs could play a role in increasing the employability of their cadets. A revised systematic approach to learning, considering all feasible alternatives and scenarios, and updating and revising the curriculum will eventually reform the foundation for student employment.

6.2 Research questions

Research question 1: *To what extent are Georgian seafarers restricted in their entrance to the global seafarers' job market, and why?*

The research revealed that one of the main concerns to be highlighted and further investigated is the issue of putting into practice the due diligence required to secure employment prospects, which is the logical next after graduating from BSMA and acquiring degrees. As the international maritime industry faces a scarcity of seafarers, Georgia has a unique opportunity to become a world leader as a maritime supplier country at a time when the nation is in a process of economic growth. Unlike in other nations, where interest in marine sciences is low and developed countries have a shortage of seafarers, Georgia's emphasis on developing marine sciences must be

increased dramatically, as described in the first chapter, if we are going to see any improvement in the future.

Graduates and students have one request: to raise the quality of teaching in line with global market requirements so that graduates from BSMA no longer have to worry about employability, which is a higher education institution's primary duty and prerogative. Based on current demand, no recently graduated cadet should be facing unemployment since the global market is offering these students the opportunities to have a career in maritime industry. Lack of genuine competence, engagement in practical training, and inadequate communication between employer and academy result in such adverse outcomes as corruption, bribery and nepotism. These conditions affect the country's image and reputation, meaning that Georgian seafarers face an additional discrimination barrier.

Georgian seafarers claimed in the study that they seek a solid education, adequate in the amount established by the labour market's expected criteria. However, so-called *'communist'* analogies, ineffective methods, and teaching approaches are no longer applicable in the twenty-first century, lowering students' enthusiasm and undermining their capacity to discover and acquire new knowledge.

Ziarati et al. (2010), highlight the significance of the European Maritime Safety Agency's (EMSA) research on seafarer competence, emphasizing that it is difficult for the country to ensure seafarer employment if it releases incompetent seafarers who fall short of international standards. Primarily, EMSA emphasizes the cooperative participation of the government with MET systems, which should guarantee to supply of expert staff to the maritime sector. As a result, one may assume that the aforementioned issue is not just the BSMA's prerogative but also one of Georgia's most pressing concerns.

According to the study's findings, participants also focused on and criticized employers' attitudes toward graduates. Particularly heinous is the unofficial practice of selecting candidates in an unscrupulous manner. For participants, one of the most significant hurdles to success and employment in kick-starting their maritime careers was the custom of needing to pay bribes to secure employment or start a job through a relative or an acquaintance.

Research question 2: *How far is the current BSMA curricula in alignment with global standards?*

According to a review of BSMA normative and curriculum documents, the BSMA is making significant progress in bringing the educational process closer to international standards. Correcting mistakes, detecting inaccuracies, and removing incorrect chain links in program aims and learning outcomes can be seen as significant and positive.

Despite these, most participants claim that the subjects they passed were either not taught in sufficient depth or were irrelevant for their careers. It is disappointing that achieving academy excellence with such normative documents should neither be unattainable nor difficult and leads to the conclusion that BSMA in some areas does not go beyond the limits of primary maritime education.

It should also be emphasized that, despite the business sector's suggestions and recommendations to the academy, the curriculum contains subjects for which graduates have no practical application, neither considering international norms nor the program's aims.

Executing any educational program effectively necessitates using appropriately trained and competent personnel. As a consequence of the respondents' survey, one gets the impression that some academic staff are not educating cadets appropriately or in a manner that matches the cutting-edge technologies. Frequently compared to

communist relics, outdated teaching techniques illustrate that academic employees should consist exclusively of adequately trained professionals, involve experienced and active seafarers, and employ more modern, technology-integrated approaches. Furthermore, because marine sciences are directly proportional to technological development, marine education cannot be expected without using new means, notably when the academy is fully-equipped with the material and technical base corresponding to modern standards. Respondents indicated in their answers that they had the bare minimum access to simulators or training appliances, which is a clear example of this trend.

The relevance of this study's fourth-year subject, *'Maritime Competences'*, cannot be overstated. The participants rate the provided subject highly, as well as the instructors' attitudes and the benefits of having the subject taught in English. We may deduce from this that the academy still has a best practice example in its domain and should learn from the teaching *'Maritime Competences'* approach as a guide to all the other subjects, evaluate the subjects' performance, and enhance the process with comparable feedback.

Research question 3: *What can be done in order to secure employment for BSMA cadets and at the same time to secure the prestige of the BSMA as a METI?*

As mentioned in the literature review (Basak, 2017), factors affecting to implement of MET in institutions when discussing the adequacy and standard of maritime education and training, based on the dissertation findings, we can assume that the critical factors in BSMA are *Training and awareness, Career management factors, Competence (skills and knowledge), Communication English* and *Human error*. Contrary to this study, the increasing demand from the population is a significant factor, which is a big challenge for BSMA. Finally, the researcher concludes that increasing *Competence* is essential for system rejuvenation and comprehensive improvement.

Research question 4: *How have BSMA graduates evaluated their academic experience and the BSMA's responsibility to provide a cohesive career journey for all cadets?*

As previously said, the seafarer profession is popular among Georgians, and the growth of this sector should be Georgia's most critical mission. However, the reality is somewhat different: the demand for a career path and the ability to obtain a job after completing the course should match, but they do not, to some extent, it appears that Georgia is at crossroads where they have to *'shape up or ship out.[15]*

The BSMA yearly advertises a high number of vacant places for its specializations; however, the employment rate is relatively low. Furthermore, as the participants pointed out, many recruitment firms in Georgia work as agents/middlemen of global shipping companies, and hiring cadets is not their prerogative. The Academy should consider these factors or raise the level of competence among cadets so that more foreign and regional companies are interested in Georgian seafarers.

According to the seafarers surveyed, the academy does not have many connections with enough companies to create or provoke healthy competition. More cooperation is required to eliminate the problem of unemployment. While there is a desire and a robust demand for the maritime profession among the entrants, the Academy and Georgia are also obliged to provide the connections mentioned above, access to additional crewing firms, and create greater interest among foreign partners. As a maritime state, Georgia has made significant progress toward development, but it still has more obligation to educate the next generation and give quality education. Maritime education should be the country's top priority, necessitating dynamic, highly-specific, indispensable staff training.

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[15] This idiom means "to tell someone that they must improve their performance or behaviour or they will have to leave": https://dictionary.cambridge.org/dictionary/english/shape-up-or-ship-out

The difficulties stated by responders should not go unaddressed, however because Georgia has not joined the MLC 2006 agreement[16], which makes policing the recruitment processes that directly relate to seafarer employment problematic in the country. Nevertheless, no one should turn a blind eye or turn a deaf ear when these challenges are so visible in the marine industry.

6.3 Conclusion

Thus, as the famous USA president Franklin D. Roosevelt said*: "A smooth sea never made a skilled sailor"*, in order to secure employment for BSMA cadets and the prestige of the BSMA as a METI of excellence the need for the institution to take its inspiration from not only the market but also the students is paramount. Change is not easy, and the challenges are considerable, but that has made us skilled sailors for centuries and centuries to come.

6.4 Limitations and future research

The research featured a feedback analysis of BSMA graduates and a discussion of the educational situation in this institution, which may not mirror the case in other Georgian maritime institutions. Future research might examine the remaining institutions' learning/teaching analyses and their graduates' perspectives on employment issues.

Further, this research surveyed 135 Georgian seafarers, which only represents a very small fraction of the attitudes of all Georgian seafarers about employment issues. Future researchers would benefit from investigating a more substantial number of seafarers in proportion to the number of seafarers registered in Georgia, providing the

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[16] See the web page:
https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:11300:0::NO::P11300_INSTRUMENT_ID:312331

study with other accurate and qualitative metrics and findings for investigating the given market and addressing the issue.

Finally, this research focused on the graduates' attitudes regarding study/teaching and employment experiences. Future studies would undoubtedly find further investigative material through researching all maritime institutions in Georgia, taking into account academic and administrative staff perspectives and analysing students' attitudes toward learning or employers' perceptions and practices toward the recruiting process.

Hence, this research openly invites the BSMA to consider the adoption of the USEM's employability model presented in this paper, which is intended to give a holistic overview of the interplay of all significant key players in the advancement of seafarers' careers and life-long learning. Future research can explore the application of different employability models that are more appropriate and relevant to the present state of the academy and market demand, as both aforementioned issues evolve dynamically over time and at short notice.

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Appendices

Appendix A: Secondary data analysed

BSMA Surveys	Source
2020 წლის კურსდამთავრებულთა სტატისტიკა 2020 graduate statistics	https://bsma.edu.ge/media/files/91cffa88-8579-4a3a-b989-31b6c7f92158.pdf
დამსაქმებელთა გამოკითხვის სტატისტიკა 2017-2018 Employer Survey Statistics 2017-2018	https://bsma.edu.ge/media/files/7ec614ae-e324-4b32-bb62-2726b378c7ad.pdf
დამსაქმებლის მიერ კურსდამთავრებულების შეფასება 2022 Employer evaluation of graduates 2022	https://bsma.edu.ge/media/files/1aa7f98b-cab6-47d7-b220-4b1e9da3cce4.pdf
დამსაქმებლის მიერ კურსდამთავრებულების შეფასება 2022 Assessment of the Educational Program by Students - 2021 - First Semester of the 2022 Academic Year	https://bsma.edu.ge/media/files/8376a801-4485-41a3-bf28-bf2392ad16fc.pdf

BSMA Normative Documents	Source
ხარისხის სახელმძღვანელო Quality Manual ND 2-Q03	https://bsma.edu.ge/media/files/1766f57f-7353-4912-a261-9a862374d29f.pdf
საგარეო ურთიერთობებისა და კარიერული მხარდაჭერის დეპარტამენტის დებულება ND 2-P17 Department of External Relations and Career Support Regulation ND 2- P17	Via '*Electronic Case Management*' of BSMA (for staff only).
საგანმანათლებლო პროგრამის სწავლის შედეგების შეფასების წესი ND 2-F19 Assessment and Development of Educational Program Learning Outcomes ND 2- F19	Via '*Electronic Case Management*' of BSMA (for staff only).

Maritime Transport Agency of Georgia (MTA)	Source
Statistical Data, 2021: Ministry of Economy and Sustainable Development of Georgia, Maritime Transport Agency	The data were obtained with permission of MTA based on the researcher's request sent on 11.03.2022.

Appendix B: Sample questionnaire (კითხვარი)

ნაწილი 1: მონაწილის შესახებ ინფორმაცია **Part 1: Participant's profile**	
1. სახელი, გვარი (არჩევითი) **Name, Surname(optional)**	
2. მიუთითეთ თქვენი სქესი. **Indicate your gender.**	☐ მამრობითი Male ☐ მდედრობითი Female ☐ მირჩევნია, არ ვთქვა Prefer not to say
3. მიუთითეთ თქვენი ასაკი. **Indicate your age.**	☐ <21 ☐ 21-25 ☐ 26-30 ☐ 31-35 ☐ 36-40 ☐ 40+
4. რომელ წელს დაამთავრეთ ბათუმის სახელმწიფო საზღვაო აკადემია? **When did you graduate from BSMA?**	☐ <2016 ☐ 2016 ☐ 2017 ☐ 2018 ☐ 2019 ☐ 2020 ☐ 2021 ☐ 2022
5. რომელი სპეციალობა დაამთავრეთ? **Which specialization did you finish?**	☐ საზღვაო ნავიგაცია Maritime navigation ☐ გემის მექანიკა Marine engineering ☐ გემის ელექტრომექანიკა Electrical engineering ☐ სხვა (გთხოვთ, მიუთითოთ) Other (please, specify)
6. ხართ თუ არა დასაქმებული თქვენი სპეციალობის შესაბამისად? **Are you currently employed according to your specialization?**	☐ დიახ Yes ☐ არა No ☐ სხვა (თუ ასეა, გთხოვთ, დააკონკრეტეთ) Other (if that is so, please, specify)

7. საზღვაო აკადემიის დამთავრების შემდეგ, რა პოზიციაზე დასაქმდით პირველად? **What was your first position of employment after graduation?**	☐ კადეტი (გემბანის, სამანქანე) Cadet (deck, engine) ☐ მატროსი (OS) Ordinary seafarer (OS) ☐ მატროსი (AB) Able seafarer (AB) ☐ სხვა (გთხოვთ, მიუთითეთ) Other (please, indicate)
8. რა არის თქვენი ამჟამინდელი პოზიცია? **What is your current position?**	☐ კადეტი (გემბანის, სამანქანე) Cadet (deck, engine) ☐ მატროსი (OS) Ordinary seafarer (OS) ☐ მატროსი (AB) Able seafarer (AB) ☐ ბოცმანი Bosun ☐ კაპიტნის მესამე თანაშემწე Third Officer ☐ კაპიტნის მეორე თანაშემწე Second officer ☐ კაპიტნის უფროსი თანაშემწე Chief officer ☐ კაპიტანი Master ☐ სხვა (გთხოვთ, მიუთითეთ) Other (please, indicate)
9. რამდენხნიანი საზღვაო გამოცდილება გაქვთ? **What is your experience at sea?**	☐ <12 თვე <12 months ☐ 12-18 თვე 12-18 months ☐ 18-24 თვე 18-24 months ☐ 24-30 თვე 24-30 months ☐ 30 თვე+ 30 months+
ნაწილი 2: სასწავლო გამოცდილება ბათუმის სახელმწიფო საზღვაო აკადემიაში **Part 2: Academic experience at BSMA**	
10. ზოგადად, რამდენად კმაყოფილი ხართ იმ ცოდნითა და კომპეტენციებით, რომელიც საზღვაო აკადემიის საგანმანათლებლო პროგრამამ მოგცათ?	☐ ძალიან კმაყოფილი Very satisfied ☐ კმაყოფილი Satisfied ☐ არც კმაყოფილი და არც უკმაყოფილო Neither satisfied nor neither unsatisfied ☐ უკმაყოფილო Unsatisfied

Overall, how satisfied were/are you with the competences taught within the curriculum at BSMA?	☐ ძალიან უკმაყოფილო (ამ შემთხვევაში, გთხოვთ, მიუთითოთ, რამ გამოიწვია თქვენი უკმაყოფილება)Very unsatisfied (If unsatisfied, please, specify what led to this dissatisfaction)
11. რამდენად კმაყოფილი ხართ იმით, რომ თქვენ მიერ საზღვაო აკადემიაში არჩეული <u>სპეციალობის საგანმანათლებლო პროგრამამ</u> გაამართლა თქვენი მოლოდინები შემდგომში თქვენს წარმატებულ დასაქმებაში? **How satisfied are you that the course curriculum of BSMA meets/met your expectations in line with the outcomes required for securing employment in your chosen field of study?**	☐ უკმაყოფილო (პროგრამა საჭიროებს სafუძვლიან გაუმჯობესებას) Not satisfied (requires dramatic improvements) ☐ ნაწილობრივ კმაყოფილი (პროგრამა საჭიროებს გარკვეული სახის გაუმჯობესებას) Partially satisfied (requires some improvements) ☐ ძალიან კმაყოფილი (პროგრამა არ საჭიროებს გაუმჯობესებას) Very satisfied (requires no improvements) ☐ სხვა (გთხოვთ, დააკონკრეტეთ) Other (please, specify)
12. ზოგადად, ჩამოთვლილთაგან, რომელი დებულება შეგესაბამებათ თქვენ? **Overall, which of the following statements applies to you?**	☐ ჩემთვის საზღვაო აკადემიაში მიღებული განათლება ძალიან ღირებული და შედეგიანი იყო I felt that my education at BSMA was totally worthwhile ☐ ჩემთვის საზღვაო აკადემიაში მიღებული განათლება ნაწილობრივ ღირებული და შედეგიანი იყო I felt that my education at BSMA was partially worthwhile ☐ ჩემთვის საზღვაო აკადემიაში მიღებული განათლება

	საერთოდ არ იყო ღირებული და შედეგიანი I felt that my education at BSMA was not worthwhile ☐ სხვა (გთხოვთ, დააკონკრეტეთ) Other (please, specify)

<table>
<tr><td colspan="2">ნაწილი 3: დასაქმების პერსპექტივები

Part 3: Employment prospects</td></tr>
<tr>
<td>13. თქვენთვის ცნობილი იყო თუ არა აკადემიის დასრულების შემდეგ გარანტირებული დასაქმების შესახებ არსებული რაიმე სახის სტატისტიკა?

Were you aware of any statistics regarding guaranteed jobs after graduation?</td>
<td>☐ დიახ Yes
☐ არა No
☐ ნაწილობრივ (ამ შემთხვევაში, გთხოვთ, დააკონკრეტეთ, რა სახის ინფორმაციას ფლობდით) Partially (if so, how? Please, specify)</td>
</tr>
<tr>
<td>14. ფიქრობთ თუ არა, რომ საკრუინგო კომპანიებთან წარმატებული გასაუბრება დამოკიდებულია <u>მხოლოდ და მხოლოდ</u> იმ ცოდნასა და კვალიფიკაციაზე, რომელსაც საზღვაო აკადემიაში იძენთ?

Do you believe that success at interview with crewing companies is based exclusively on your qualifications from BSMA?</td>
<td>☐ დიახ Yes, I do
☐ არა (ამ შემთხვევაში, გთხოვთ, მიუთითოთ, რა ფაქტორები ახდენენ ზეგავლენას გასაუბრებებზე შერჩევის შემთხვევაში) No, I do not.
(If no, please, specify what other factors influence being selected at interview.)</td>
</tr>
<tr>
<td>15. თუკი საკრუინგო კომპანიები საჭიროებს რაიმე სახის არასაგანმანათლებლო წახალისების საშუალებებს, რა თანხით შეაფასებდით მათთან</td>
<td>☐ 0 $
☐ 0-500$
☐ 500-1000$
☐ 1000-1500$
☐ 1500-2000$
☐ 2000$+</td>
</tr>
</table>

წარმატებულ გასაუბრებას? **If crewing companies require non-educational incentives, how much would you estimate it would cost to guarantee a successful interview?**	
16. რამდენად ცნობილი იყო თქვენთვის საკრუინგო კომპანიებთან გასაუბრების მოთხოვნები და ფორმატი? **How familiar were you with the requirements and format of job interviews with crewing companies?**	☐ არ იყო ცნობილი (არ მქონდა წინასწარი ინფორმაცია) Not familiar (I had no prior knowledge) ☐ ნაწილობრივ იყო ცნობილი (მქონდა გარკვეული ინფორმაცია) Partially familiar (I had some prior knowledge) ☐ ცნობილი იყო (წინასწარ ვიცოდი გასაუბრების ფორმატი და მოთხოვნები) Very familiar (I had full knowledge) ☐ სხვა (ამ შემთხვევაში, გთოხვთ, დააკონკრეტოთ) Other (if that is so, please, specify)
17. რამდენი სხვა რაიმე სახის გასაუბრება გაგივლიათ საკრუინგო კომპანიებთან გასაუბრებამდე (გქონდათ თუ არა გასაუბრების გამოცდილება, მიუთითეთ რაოდენობა)? **How many interviews have you attended before, excluding "crewing companies"?**	☐ არც ერთი (0) None (0) ☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 9+
18. რამდენად იყო ჩართული საზღვაო აკადემია თქვენი დასაქმების პროცესში? 	☐ საერთოდ არ იყო ჩართული (არ მიმიღია დასაქმების პროცესში აკადემიისგან არანაირი დახმარება) Not engaged (I had no employment assistance)

How engaged was BSMA in furthering your employment process?	☐ ნაწილობრივ იყო ჩართული (მივიღე დასაქმების პროცესში აკადემიისგან გარკვეული სახის დახმარება) Partially engaged (I had some employment assistance) ☐ სრულად იყო ჩართული (მივიღე დასაქმების პროცესში აკადემიისგან სრული სახის დახმარება) Very engaged (I had full range of employment assistance) ☐ სხვა (გთხოვთ, დააკონკრეტოთ) Other (please, specify)
19. გსმენიათ თუ არა საზღვაო აკადემიაში კარიერული მხარდაჭერის სამმართველოს შესახებ? **Have you heard about the dedicated *Career Support Division* at BSMA?**	☐ დიახ Yes ☐ არა No
20. გამოგიყენებიათ თუ არა საზღვაო აკადემიის კარიერული მხარდაჭერის სამმართველოს სერვისები? **Have you ever used the services provided by the dedicated *Career Support Division* at BSMA?**	☐ დიახ (ამ შემთხვევაში, გთხოვთ, მიუთითოთ რა სახის სერვისი მიგიღიათ) Yes (If yes, please indicate the services) ☐ არა No
21. როგორ უზრუნველყო საზღვაო აკადემიამ თქვენი დასაქმების პროცესი? **How did BSMA directly facilitate your employment process?**	☐ გთხოვთ, დეტალურად აღწეროთ Please, specify.

22. როგორ მოგამზადათ საზღვაო აკადემიამ საკრუინგო კომპანიებთან გასაუბრებისთვის? **What appropriate steps did BSMA take to prepare you for taking interviews with crewing companies?**	☐ გთხოვთ, დეტალურად აღწეროთ Please, specify the steps.
23. რას ურჩევდით საზღვაო აკადემიას წარმატებული დასაქმებისთვის სასწავლებლის ჩართულობის დონის გაუმჯობესებისთვის? **What would you suggest in order to improve the level of engagement of BSMA with the employment process leading to successful employment?**	☐ გთხოვთ, დეტალურად აღწეროთ Please, specify.

Appendix C: Consent form

WORLD MARITIME UNIVERSITY

Dear Participant,

Thank you for agreeing to participate in this interview, which is carried out in connection with a dissertation which will be written by the interviewer, in partial fulfilment of the requirements for the degree of Master of Science in Maritime at the World Maritime University in Malmo, Sweden.

The topic of the dissertation is "**Mitigating maritime unemployment in Georgia: A Maritime Education and Training perspective**"

The information provided by you in this interview will be used for research purposes and the results will form part of a dissertation, which will later be published online in WMU's digital repository (maritime commons) subject to final approval of the University and made available to the public. Your personal information will not be published. You may withdraw from the research at any time, and your personal data will be immediately deleted.

Anonymised research data will be archived on a secure virtual drive linked to a World Maritime University email address. All the data will be deleted as soon as the degree is awarded.

Your participation in the interview is highly appreciated.

Student's name	Besik Chkhikvadze
Specialization	Maritime Education and Training
Email address	w1010877@wmu.se

* * *

I consent to my personal data, as outlined above, being used for this study. I understand that all personal data relating to participants is held and processed in the strictest confidence, and will be deleted at the end of the researcher's enrolment.

Name: ……………………………………………………………………

Signature: ……………………………………………………………………

Date: ……………………………………………………………………

Consent form translation:

ძვირფასო მონაწილევ,

პირველ რიგში, მადლობას გიხდით გამოკითხვაში მონაწილეობისათვის, რომელიც ტარდება სტუდენტის (ბესიკ ჩხიკვაძის) დისერტაციისთვის, რაც აუცილებელ ნაწილს წარმოადგენს საზღვაო საქმის მაგისტრის ხარისხის მოსაპოვებელად მსოფლიო საზღვაო უნივერსიტეტში ქალაქ მალმეში, შვედეთში.

დისერტაციის თემაა: „საქართველოში მეზღვაურთა დაუსაქმებლობის პრობლემის შემცირება: საზღვაო განათლებისა და წვრთნის პერსპექტივა".

თქვენ მიერ გამოკითხვაში მოწოდებული ინფორმაცია გამოიყენება **მხოლოდ და მხოლოდ** ამ კვლევის მიზნებისთვის და მიღებული შედეგები აისახება დისერტაციაში. დისერტაცია შემდგომში აიტვირთება მსოფლიო საზღვაო უნივერსიტეტის ციფრულ პლატფორმაზე (maritime commons), რომელსაც უნივერსიტეტი შემდგომში განიხილავს ადიარებისთვის და საჯაროდ ხელმისაწვდომს გახდის.

ანონიმირებული კვლევის მონაცემები დაარქივდება და შეინახება მკაცრად დაცულ ელექტრონულ დრაივზე, რომელიც დაკავშირებულია მსოფლიო საზღვაო უნივერსიტეტთან ელექტრონული ფოსტის საშუალებით.

თქვენი მონაწილეობა მოცემულ გამოკითხვაში უკიდურესად ღირებული და დასაფასებელია!

თქვენ შესახებ პირადი ინფორმაცია არსად არ გამოქვეყნდება!
თქვენ შეგიძლიათ თქვენ მიერ მოწოდებული მონაცემები გამოითხოვოთ ნებისმიერ დროს და თქვენი პირადი ინფორმაცია მაშინვე წაიშლება.

სტუდენტი: ზესიკ ჩხიკვაძე

სპეციალობა: საზღვაო განათლება და წვრთნა

ელ.ფოსტა: w1010877@wmu.se

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ზემოთ აღნიშნულიდან გამომდინარე, თანხმობას ვაცხადებ, რომ ჩემი პერსონალური ინფორმაცია გამოიყენება მოცემული კვლევისთვის. ვიაზრებ იმ ფაქტს, რომ ჩემ მიერ მოწოდებული ნებისმიერი სახის ინფორმაცია უკმაცრესი კონფიცენციალურობით გამოიყენება და წაიშლება მაშინვე, როგორც კი სტუდენტი მიიღებს მაგისტრის ხარისხს!

მოცემული გრაფის აღნიშვნით თანხმობას ვაცხადებ და ხელს ვაწერ გამოკითხვაში მონაწილეობაზე.

კიდევ ერთხელ გიხდით მადლობას!

Appendix D: WMU Research Ethics Committee Protocol

WORLD MARITIME UNIVERSITY

WMU Research Ethics Committee Protocol

Name of principal researcher:	Besik Chkhikvadze
Name(s) of any co-researcher(s):	N.A.
If applicable, for which degree is each researcher registered?	MSc in Maritime Affairs Maritime Education and Training specialization
Name of supervisor, if any:	Momoko Kitada
Title of project:	Mitigating maritime unemployment in Georgia: A Maritime Education and Training perspective
Is the research funded externally?	No
If so, by which agency?	N.A.
Where will the research be carried out?	Georgia through online survey
How will the participants be recruited?	BSMA alumni network
How many participants will take part?	Ideally 120 seafarers are estimated to participate in the survey
Will they be paid?	No
If so, please supply details:	N.A.
How will the research data be collected (by interview, by questionnaires, etc.)?	Survey questionnaire
How will the research data be stored?	Data will be stored on a password-protected secure drive
How and when will the research data be disposed of?	The data will be deleted upon completion of MSc studies or by 30th of October, 2022.
Is a risk assessment necessary? If so, please attach	N.A.

Signature(s) of Researcher(s):   Date: 6 July 2022

Signature of Supervisor: Date: 6 July 2022

Please attach:
- A copy of the research proposal
- A copy of any risk assessment
- A copy of the consent form to be given to participants
- A copy of the information sheet to be given to participants
- A copy of any item used to recruit participants