Critical analysis of the attraction and retention of seafarers: a case study of South Africa

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WORLD MARITIME UNIVERSITY

Malmö, Sweden

CRITICAL ANALYSIS OF THE ATTRACTION AND RETENTION OF SEAFARERS: A CASE STUDY OF SOUTH AFRICA

By

LETTAH MAPULE MATHEBEKASE

SOUTH AFRICA

A dissertation submitted to the World Maritime University in partial Fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

In

MARITIME AFFAIRS

(MARITIME EDUCATION AND TRAINING)

2018

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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): .....................................................

Supervised by: Professor Michael Manuel

World Maritime University

Internal Assessor:

Institution/organization:
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Title of the Dissertation: **A Critical Analysis of the Attraction and Retention of Seafarers: A Case Study of South Africa**

Degree: **M.Sc.**

This research work analyses the attraction and retention of seafarers globally, narrowing it down to South Africa. BIMCO/ISF has been reporting on a deficit of seafarers since 2005 and the most alarming one is the forecast made in 2005 of a possible global shortage of 16,500 officers, expected to rise to 147,500 by 2025. The deficit in the supply of ship officers raises various concerns for the maritime industry because as seaborne trade evolves, there will be a requirement for more ships to convey seaborne cargo from one nation to another, thus requiring more seafarers. The forecast above raised concerns in most countries around the globe because of fears that there will be a shortage of qualified and competent seafarers available for service on ships.

This study investigates the mechanisms and strategies in place to attract and retain seafarers in South Africa; identifies and analyzes the challenges within the South African Maritime Sector; determines how other countries attract and retain their seafarers and contrasts the findings with current measures taken by South Africa.

**KEYWORDS:** Seafarer supply and demand, Shortage, Attraction, Recruitment, Retention
# TABLE OF CONTENTS

DECLARATION .............................................................................................................. II
ACKNOWLEDGEMENTS .......................................................................................... III
ABSTRACT .................................................................................................................. IV
TABLE OF CONTENTS .............................................................................................. V
LIST OF TABLES .......................................................................................................... VIII
LIST OF FIGURES ....................................................................................................... IX
LIST OF ABBREVIATIONS ........................................................................................ X

## CHAPTER 1: INTRODUCTION .............................................................................. 1
  1.1 Background ......................................................................................................... 1
  1.2 Problem statement ............................................................................................ 4
  1.3 Aim and objectives ............................................................................................ 5
  1.4 Research questions ............................................................................................ 5
  1.5 Purpose of the study ......................................................................................... 6

## CHAPTER 2: LITERATURE REVIEW .............................................................. 7
  2.1 Introduction ......................................................................................................... 7
  2.2 Employee attraction .......................................................................................... 7
  2.3 Employer brands ............................................................................................... 8
  2.4 Employee recruitment ...................................................................................... 9
  2.5 Employee retention .......................................................................................... 10
  2.6 Attraction of seafarers ..................................................................................... 12
  2.7 Recruitment agencies ...................................................................................... 15
  2.8 Motives to become a seafarer .......................................................................... 16
  2.9 General challenges .......................................................................................... 17
  2.10 The role of MET in seafarer attraction and retention ....................................... 18
  2.11 The South African maritime sector .................................................................. 19
  2.12 Chapter summary ........................................................................................... 20

## CHAPTER 3: METHODOLOGY ....................................................................... 22
  3.1 Introduction ....................................................................................................... 22
  3.2 Selected participants ....................................................................................... 22
3.3 Instrumentation.................................................................23
3.4 Questionnaires.................................................................24
3.5 Interviews ........................................................................25
3.6 Informed consent...............................................................25
3.7 Limitations ......................................................................26
3.8 Chapter-summary..............................................................26

CHAPTER 4: PRESENTATION AND DATA ANALYSIS: QUESTIONNAIRES ..........27
4.1 Introduction.......................................................................27
4.2 Quantitative analysis..........................................................30
4.3 Demographics of participants..............................................27
4.4 Career motivation...............................................................31
4.5 Maritime awareness: high school students .........................33
4.6 Seafarers expectations..........................................................34
4.7 Effectiveness of recruitment process....................................35
4.8 Retention of seafarers..........................................................36

CHAPTER 5: PRESENTATION AND DATA ANALYSIS: SEMI STRUCTURED INTERVIEWS ............................................................37
5.1 Introduction.......................................................................37
5.2 Qualitative analysis............................................................37
5.3 Attracting and recruiting seafarers in South Africa ..................39
5.4 Retention of seafarers in South Africa ...................................42
5.5 Challenges within the South African maritime sector ..............43
5.6 Mechanisms in place to attract and retain in other nations ........44
5.7 Contrasting the findings with measures taken by South Africa ....46
5.8 Suggestions from the survey .................................................47

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS ..........................48
6.1 Introduction.......................................................................48
6.2 Summary of results............................................................48
6.3 Recommendations.............................................................49
6.4 Limitations.......................................................................50

REFERENCES ........................................................................51
APPENDICES ........................................................................60
Appendix A: Consent Form.................................................................60
Appendix B: Maritime Sector Semi-Structured Interview Questions ..........62
Appendix C: Seafarers Questionnaire (Electronic).................................63
Appendix D: Survey Questions: Maritime Students................................65
Appendix E: Survey Questions: High School Students............................67
LIST OF TABLES

Table 1: Seafarers Forecast ........................................................................................................ 14
Table 2: Reasons for Becoming Seafarers ............................................................................. 31
Table 3: High School Students' Knowledge about Seafaring ............................................... 33
LIST OF FIGURES

Figure 1: The Adapted Retention Model ................................................................. 12

Figure 2: Countries of Participants ................................................................. 28

Figure 3: Gender of Participants ................................................................. 29

Figure 4: Age of Participants ................................................................. 30

Figure 5: Source of Information ................................................................. 32

Figure 6: Expectations of Seafarers ................................................................. 35

Figure 7: The Effectiveness of Recruitment Process ......................................... 36

Figure 8: Interest to Remain a Seafarer ................................................................. 36

Figure 9: Semi-Structure Interview Sequence .................................................. 38

Figure 10: Process of Seafaring Qualification in South Africa .................................. 42
LIST OF ABBREVIATIONS

AMSOL  African Marine Solution
BIMCO  Baltic and International Maritime
COC  Certificate of Compliance
CPUT  Cape Peninsula University of Technology
DOT  Department of Transport
DUT  Durban University of Technology
ECSA  European Communities Ship-owners Association
ISF  International Shipping Federation
JITI  Japan International Transport Institute
MET  Maritime Education and Training
NDP  National Development Plan
OECD  Organization for Economic Co-operation and Development
SAIMI  South African International Maritime Institute
SAMSA  South African Maritime Safety Authority
SSTG  Sea Safety Training Group
WMU  World Maritime University
CHAPTER 1: INTRODUCTION

1.1 Background

In today’s global economy, high level skills are the determinants of competitive advantage and economic growth (Aguinis, Gottfredson & Joo, 2012). Skilled and talented people are the real assets for a country, industry or an organization (Bagoulla & Guillotreau, 2016). Few would deny that nowadays most business models are based on human capital from beginning to end. The reality is that industries/organizations cannot survive and prosper without employing quality people. Therefore, they should strive to attract skilful and competitive applicants, and this can be made possible by a well-established and an efficient recruitment process (Sidorcuka & Chesnovicka, 2017).

Another key thing to remember is that the shortage of skills and the struggle for talented people is a global case. There is, therefore, a need for collaborative efforts when devising solutions to this challenge. Having said that, there has been a substantial emergence of research supporting the claim that there is a growing need for talent and skills (Horwitz, 2013). However, with the rise of Facebook and Twitter feeds, there is a need to reconsider the way attraction and retention of talent are conducted, because ‘talent’ does not mean the same thing it did in the past, where it meant the expertise or ability to perform (Shiptalk Limited, 2012). The meaning of ‘talent’ today has been expanded to include the creativity, articulation, and image portrayed on social media (Gravili, 2017).
Organizations everywhere are experiencing new trends and developments. The following quote by John Chambers as cited by Reed (2001) highlights the transition taking place globally:

“Every company, every country is in transition whether it realizes it or not. I would like to tell you that the reason that this is occurring is because of enlightened leadership, global competition and organizational change. But the real reason for change is survival” (p. 2).

Indeed, there is evidence that nothing in the modern world is constant. To that end, businesses are being pulled in different directions, compelling employers and employees to change their strategies and practices at every level. There is augmented emphasis on attracting and retaining talent in various sectors (Reed, 2001). Keller and Meaney (2017) define talent as “the natural skill and innate will that predisposes someone to excel at something” (p.13). Over and above talent, many organizations are in a quest for competent and productive people in order to propel the organization forward (Reed, 2001).

The maritime industry, which encompasses seafaring, is not exempted from the prevalent changes. The industry has been experiencing some transitions from the time of economic globalization after the Second World War, with the introduction of open registries and the evolution of international and national legal systems. In the early eighties the industry saw a decline in world seaborne trade due to recession that hit the world economies hard. Recently, many international organizations such as, the European Communities Shipowners Association (ECSA), the Baltic and International Maritime Council (BIMCO) / International Shipping Federation (ISF), Drewry Shipping Consultants (DREWRY) and others, have given forecasts relating to global trends in the supply and demand of merchant seafarers. The BIMCO/ISF forecast is reported to be the most comprehensive one (Bagoulla & Guillotreau, 2016), thus it will be the one mostly used as a point of reference in this work.

In 2005, BIMCO/ISF reported that there is a deficit of 10,000 maritime officers for global ships (BIMCO/ISF, 2005). In 2010, the number increased to 13,000 (BIMCO/ISF, 2010). Drewry (2015) reported that there was a 19,000 deficit of officers.
A year later, BIMCO/ISF (2015) indicated that there was a global shortage of 16,500 officers, expected to rise to 147,500 by 2025.

Japan International Transport Institute (JITI) & the Nippon Foundation (2010) indicated that the world economy is influenced by a number of factors which have a potential to impact the future supply of seafarers, such as an increase in the quantity of ships required to facilitate trade because of fast-growing economies, such as India and China.

The forecasts by the organizations above raised concerns in most countries around the globe because of fear that there will be a shortage of qualified and competent seafarers available for service on ships.

BIMCO/ISF also indicated the progress made by the maritime sector for the previous five years, such as, increasing the training, recruitment and retention of seafarers with scarce skills. Furthermore, they recommended the increase in the level of training seafarers by maritime nations so that the gap between demand and supply does not grow such as to affect shipping and by extension global trade. Caesar & Cahoon (2015) indicate that the deficit in the supply of ship officers raises various concerns for the maritime industry because as seaborne trade evolves, there will be a requirement for more ships to convey seaborne cargo from one nation to another, thus requiring more seafarers. The report by BIMCO (2015) estimates a current surplus of about 119,000 ratings (seafarers), with demand only having increased by about 1% since 2010.

Fei (2018) asserts that the maritime industry is undergoing operational changes and most new generation seafarers do not stay at sea for more than ten years and many qualified seafarers do not perceive seafaring as a lifetime occupation anymore. New ways for attraction and retention of seafarers are required.

There is some literature that suggests that the perceived lack of seafarers is not a reality and that there are more seafarers than the industry needs (Li & Wonham, 1999 and Glen, 2008). Such papers argue that the real issue is not the presence of
seafarers, but their levels of training, prejudices against certain jurisdictions and industry’s differing definitions of competence in seafarer training.

In this work, South Africa is used as a case study because developing countries like it have become attractive to other countries for employment and any form of career advancement, which also includes seafaring (Horwitz, 2013). Secondly, South Africa is a maritime nation with a 3,650 km long coastline and is situated close to the main sea routes used by ships for intercontinental trade (Griffiths, Robinson, Lange & Mead, 2010). Thirdly, the government of South Africa launched a National Development Plan (NDP) called Operation Phakisa in 2014 with the aim to enhance the nation’s economy through the ocean and eradicate the unemployment problem in South Africa. One of the main objectives of Operation Phakisa is to invest in attracting and developing key human capital which will share their expertise with South Africa, its neighbours and the rest of the world, as a means to enhance the country’s economic growth (Funke, Claassen, Nortje, & Meissner, 2016).

1.2 Problem statement

The research problem of this study revolves around finding efficient and improved means for the attraction and retention of seafarers to service the global fleet. Talent attraction is defined as the ability to influence talented candidates to see a particular organization as the best place to work in (Ehrhart & Ziegert, 2005). On the other hand, retention is defined as the process of preventing scarce skills from leaving the organization and encouraging them not to have a desire to work for another organization (Ivanovic, 2007).

As indicated above, BIMCO (2005, 2010 & 2015) reported that there has been a consistent decline in the number of officers available to work onboard vessels around the globe because recruitment and retention have been reduced. Attraction and retention of seafarers is very important for the maritime industry because seafarers are the real assets of the industry. The reality is that it is not just the maritime industry facing this problem, many industries are experiencing shortage of skills. Employers
do not have luxuries to select the most talented and qualified applicants from a large pool of talented and qualified applicants anymore.

The above information raises a point for concern to South Africa in particular amid plans by Project Phakisa for South Africa to be recognized worldwide as a maritime nation by 2030 worldwide and its plans to prioritize maritime education, innovation, research and skills development.

The study aims to analyze how seafarers can be attracted and retained in the maritime industry with specific reference to South Africa.

### 1.3 Aim and objectives

The main aim of this study is to critically analyze how seafarers can be attracted and retained, using South Africa as a case study. In order to achieve the aim, the objectives of the study are as follows:

- To investigate the mechanisms and strategies in place to attract and retain seafarers in South Africa.

- To identify and analyze the challenges within the South African Maritime Sector.

- To determine how certain selected countries, attract and retain their seafarers and contrast the findings with the measures taken by South Africa.

- To recommend effective methods to attract and retain seafarers in the South African Maritime Sector.

### 1.4 Research questions

- What mechanisms are in place to attract and retain seafarers in South Africa?
What challenges are faced by the South African Maritime Sector regarding the attraction and retention of seafarers?

What measures are taken by other countries to attract and retain their seafarers?

What more can be done by South Africa to attract and retain seafarers?

1.5 Purpose of the study

The reports by BIMCO/ISF (2005, 2010 & 2015) and Drewry (2015) indicated that recruitment and retention have been reduced, which will cause a shortage of seafarers by 2025, which can get worse if not appropriately addressed. Cahoon (2007) suggested that researchers investigating the attraction and retention of seafarers in the future should also investigate the seafarers’ perspectives in the research as the previous studies mostly investigated the perspective from the maritime industry’s side. This study will get the perspectives from students (potential seafarers), seafarers as well the employers of seafarers.
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter begins with the broad context of employee attraction; discussing the best practices of attracting talent in the 21st century, followed by the importance of branding. The chapter emphasizes the importance of attracting and recruiting the right (qualified, interested and capable) people because the success of an organization or industry depends on the quality of the labour it has, not forgetting that employees are attracted to a working environment with values and a well-established culture (Matuson, 2013). When an optimal culture is in place it will be easier for the industry or organization to attract the right people for the right job through efficient recruitment processes (Breaugh, 2009).

The chapter then narrows the discussion down to the maritime sector by discussing the global trends regarding the attraction and recruitment of seafarers. Furthermore, the motives of people choosing to become seafarers are discussed together with the challenges that seafarers face. Lastly, an introduction of South African Maritime Sector will be given.

2.2 Employee attraction

The 21st Century is the era where society is surrounded by endless marketing, campaigns and advertisements on the internet, billboards and televisions on a daily basis (Sidorcuka & Chesnovicka, 2017). Literally, job-seekers have access to job opportunities directly from their mobile devices anywhere they are (Dinnen and Alder 2017). In this changing era, it is not getting the message across that matters; what
matters is for the message to reach the right people at the right time (Reed, 2001). To that end, industries and organizations have to be active in employee scouting and persuading qualified people with relevant skills and abilities to join the organization using all relevant recruitment techniques (Breaugh, 2009).

Being able to attract targeted quality people will make any recruitment strategy successful (Reed, 2001). In other words, it is important for industries/organizations to identify quality job-seekers and present the job openings to them (Carless, 2005). Having said that, the industry/organization also needs to gain interest from the targeted job-seekers and inspire them to apply for the offered jobs. Attracting talent is not one way; the industry/organization needs to capture the attention of potential employees by presenting to them what the job entails, including opportunities for growth and development, as well as compensation and benefits them (Breaugh 2009). Even though some job-seekers have access to information regarding job openings they may disregard the recruitment posts and only apply when they see that the industry or organization is interested in them (Ehrhart & Ziegert, 2005).

Another key thing to remember is that employers should make it clear that their focus is not solely on the industry/organization at the cost of their employees (Dinnen & Alder, 2017). They should make the working environment a win-win situation for both employees and the industry/organization (Arsenie, Hanzu-Pazara, & Surugiu, 2012). Younger employees are more motivated when their schedules are accommodated and they are allowed to be innovative in their own way. According to Matuson (2013), these younger employees are also attracted to an industry or organization with values and a well-established culture.

2.3 Employer brands

As discussed above, industries and organizations no longer hold the dominant role regarding the attraction of quality employees (Arsenie et al., 2012). Industries and organizations should build a brand that attracts, develops and retains the best people in key positions (Mosley and Schmid, 2017).
Beardwell and Claydon (2010) defined employer branding as “a set of attributes and qualities that make an organization distinctive, promises a particular kind of employment experience, and appeals to those people who will thrive and perform best in its culture” (p.167).

Branding is a quest by organizations or industry to build trust and represent the industry/organization’s values, culture and its uniqueness in order to positively influence targeted job-seekers (Mosley & Schmid, 2017). Corporate entities and industries that get this right are the open and honest ones that allow their employees to speak on their behalf (Dinnen and Alder, 2017). Generally, people want to be associated with quality, consistency and trust. So, job-seekers are attracted to an organization that is popular because of its, practices, culture and values as represented by its customers and employees. In most cases, their perceptions of how it would be like to work in these organizations is shaped by the employer’s brand (Curtis & Wright, 2001).

2.4 Employee recruitment

Bratton and Gold (2017) defines recruitment as “a process of attracting the interest of a pool of capable people who will apply for jobs within an organization” (p. 143). Kaila, Ravishankar, & Nair (2003) defines recruitment as “a set of activities used to obtain a pool of qualified job applicants. It is the process of searching for prospective employees and matching jobs with the right individual” (p. 12).

From the above definitions, recruitment can be defined as a process of searching and identifying qualified and capable applicants who are interested in certain jobs within an industry or organization.

Looking at the definition above, the words ‘qualified’, ‘interested’ and ‘capable’ stand out and the following deductions are made:
• It is up to applicants to choose which industry or organization they want to work for, even though this choice may be limited in the event of higher unemployment rate or recession.

• Applicants need to have certain qualifications and the capabilities to perform a particular role within an organization, even though this is not a determining factor that their performance will match their qualifications or capabilities.

• Different industries or organizations recognize potential and capabilities differently, so a ‘blanket approach’ does not apply to all industries or organizations. (Bratton & Gold, 2017).

In view of the above, attracting and recruiting the right people is a very important aspect of human resource management. Employers should work towards attracting and recruiting the people that will ‘fit in’ with the industry or organization and be able to perform throughout their career span. (Smith, 2017).

2.5 Employee retention

Ongoing globalization and the speed of technological advancement has put pressure on industries and organizations to maintain their competitive advantage and retain their skilled and talented employees (Kyndt, Dochy, Michielsen & Moeyaert, 2009). In most cases, payment of high salary is used as a way to retain employees (Fei, 2018; Gould, 2010 and Lindgren & Nilsson, 2012). Then again, paying employees high salaries does not guarantee that they will stay in the profession forever if other needs are not met. Hiltrop (1999) elaborates that the other motivator that organizations can use to retain employees is the awareness and addressing of the psychological contract.

Lo & Aryee (2003) define psychological contract as “an employee’s perception of the terms and conditions of a mutual exchange agreement between themselves and their organization” (p.3). Lambert (2011) defines it as a silent contract which has implicit expectations about an occupation on the one hand by the employee and on the other
hand by the industry or organization which expects the new employee to perform as required (Kyndt et al., 2009).

Caesar (2016) indicates that employers and employees interpret the terms and conditions of the psychological contract differently. The literature indicates that whenever there are imbalances between the expectations of employees and contribution of employers, and vice versa, then there will be discontentment that can negatively affect employer – employee relationships (Cassar & Briner 2011; Griffin & Moorhead, 2011 & Suazo, 2011).

The literature further indicates that a violation or breach of a psychological contract causes negative outcomes such as job dissatisfaction, poor performance, frustration and loss of morale and commitment (Caesar, 2016; Lo & Aryee, 2003; and Robinson & Wolfe Morrison, 2000). Generally, many violations and breaches of the psychological contract will lead to employee attrition. (Aguinis et al., 2012; Bordia, Restubog, Bordia, & Tang, 2010; Chien & Lin 2012 and & Suazo, 2011). Henderson, Wayne, Shore, Bommer & Tetrick (2008) indicate that the achievement of psychological contract by both parties has positive results, thus improves job satisfaction and the employee attitudes.

Curtis and Wright (2001) assert that job satisfaction is increased in industries or organizations with attributes such as positivity, ethical and value-oriented behaviours, fairness, trust, respect and good communication lines. Generally, employees will stay in an industry/organization when they can truly identify with and what it stands for. Moreover, when they feel like their contribution of time, energy and efforts adds value to the industry/organization’s success (Maphisa, Zwane & Nyide, 2017; Reitman, 2007). Rodriguez (2008) highlights that talented employees will leave the industry/organization if they feel like they have reached a plateau in their career, especially if they see their peers getting promoted and advancing faster than them in their careers.

Lastly, Maphisa et al. (2017) assert that industries or organizations should use succession planning to retain talented employees. Succession planning is defined as
a practice by an industry/organization to ensure that talented employees are trained and developed to take over key roles to ensure continuity.

Stadler (2011) suggests that training and developing these employees will increase their job satisfaction which will lead to them being committed to the industry/organization as they believe that their future is bright. Their commitment will lead to them excelling in their jobs, subsequently increasing their willingness to remain employed by the industry/organization.

Figure 1 below, suggests that when industries of organizations meet the expectations of employees, their job satisfaction is improved which motivates them to stay if there are no better employment alternatives elsewhere (Caesar, 2016).

Figure 1: The Adapted Retention Model

Source: Caesar (2016, p 68)

### 2.6 Attraction of seafarers

It is generally known that the demand for seafarers is a derived demand as it is driven by the need for trade to happen between various countries (McLaughlin, 2012). Seafarers supply on the other side, is driven by national and intercontinental factors that are not present in other markets.

Glen (2008) explains that seafarer occupation is classified by departments, for example deck or engine, and qualification or skills level as regulated in the Standards of Training, Certification and Watchkeeping (STCW) Convention. “Seafarer is either a rating, cadet, or officer” (p.846).
As previously mentioned, according to BIMCO/ISF (2005, 2010 & 2015) the number of seafarers has been declining and there is a current global shortage of 16,500 officers and it is expected to rise to 147,500 by 2025. The indication is that seafarer shortfalls exist mostly in specialized areas like offshore support vessels and tankers. Drewry (2015) released a report agreeing with the forecast by BIMCO and asserted that there will be a requirement of 42,500 officers by 2019.

Li & Wonham (1999) argue that ‘number of seafarers’ may mean different things to different people. For example, it can mean number of seafarers that are actually working onboard, number of seafarers’ posts and so on. Li & Wonham (1999) also propose the use of ‘active seafarer as opposed to ‘qualified seafarer’ when investigating supply and demand of seafarers. They also assert that quality and quantity of seafarers is the main issue because some seafarers that have been trained and certified in one country may not be quality seafarers to work in another country. Furthermore, Leggate, McConville & Morvillo (2005) argue that technological advancement will cause a constant decline in crewing levels which does not correlate with forecasted future demand. Another factor is the use of larger ships coupled with the use of modern propulsion and cargo handling systems which require fewer, but well-trained seafarers (Lin, Wang, & Chiang 2001 & Leggate et al., 2005). Furthermore, Wu & Winchester (2005) indicate that BIMCO/ISF (2015) disregards differences between national and global markets, making it difficult to identify the correct demand and supply balance of seafarers at a national level. Glen (2008) asserts that there is a need for more reliable statistics of seafarers.

Moreby (1998) indicates that the maritime industry is unique because, unlike other industries, employees leaving cannot be replaced by employees trained outside the industry. According to Leggate & McConville (2005), 76% Filipino seafarers are around 25 to 44 years old and that there are not enough opportunities for Filipinos above 45 years old in the industry.

The BIMCO/ISF (2005, 2010 & 2015) indicates that most officers from Organization for Economic Co-operation and Development (OECD) countries have a higher
average age than officers from the Far East, indicating a possibility of accelerated lack of supply of seafarers from OECD countries as the current seafarers retire. McLaughlin (2012) adds that there has also been a decline in recruitment and retention of seafarers in OECD countries. Irrespective of the experience, knowledge and skills, older workforce will not stay in the career for long (Bridger & Bennett, 2011).

Fei (2018) concurs with the indication above that there has been a continuous decline in the number of officers required to work onboard vessels from different countries, especially OECD countries. The contrasting indication was that there is a rising proportion of officers and ratings from developing countries, as depicted by the table 1 below.

Table 1: Seafarers Forecast

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<td>All national groups supply</td>
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<td>624</td>
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<tr>
<td>Estimated Demand</td>
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</tr>
<tr>
<td>Shortfall</td>
<td>10</td>
<td>13</td>
<td>16.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Fei (2018)

To explore the table further, the main providers of seafarers are OECD countries, Eastern Europe, Africa/Latin America, Far East and the Indian subcontinent. It is indicated that the highest suppliers of seafarers are OECD and Far East Countries. (BIMCO/ISF, 2015),

Bagoulla & Guillotreau (2016) assert that when addressing seafarer shortages, it should be taken into consideration that seafaring is a unique occupation that employs people from various countries to work on vessels that fly different flags.
2.7 Recruitment agencies

A recent study by Fei (2018), indicates that the attraction and recruitment of seafarers is not about filling vacancies, but it is about attracting the right person from a good and reliable source to fill the right vacancy through effective recruitment methods. As indicated by Li & Wonham (1999) above, ‘quality’ and ‘right’ are debatable because different nations issue certificates to the satisfaction of their own maritime administration which may not meet the standard of another nation.

A series of studies indicate that the modern attraction used by various shipping companies can be done directly or indirectly, using crewing agencies or any other third party (Caesar, 2016. Fei, 2018; & Nguyen, Ghaderi, Caesar & Cahoon, 2014). The indication is that most ship-owners prefer the latter in order to save cost and also because the crewing agencies can reach a larger number of candidates. In addition, Nguyen et al. (2014) indicate that most ship-owners rely on crewing agencies because some of the modern vessels they own do not have enough training berths to train cadets. Furthermore, Theotokas and Progoulaki (2007) add that ship-owners of larger vessels primarily use direct recruitment for senior officers and indirect shipping (involving crewing agencies) for training cadets.

In view of the above, even though indirect recruitment is presented as the method mostly preferred by ship-owners, it would be necessary to point out its challenges or shortcomings. Some literature has recognized that the use of indirect recruitment has led to a rise of instances where quality of training and performance of seafarers is not up to the desired standards (Caesar, Cahoon & Fei, 2013; Caesar, 2016 & Henderson et al., 2008).

Dimitrova and Blanpain (2010) state that there is a rise of unlicensed crewing agencies that are involved in unethical practices like demanding extra fees from seafarers before letting them sign employment contracts. This is concerning because some of these seafarers do not have cash to pay these agencies so they end up having to borrow money, meaning they start off their career with a debt. Henderson
et al. (2008) assert that recruitment agencies should be adequately regulated to ensure that seafarers do not pay any recruitment fees or charges.

Furthermore, Nguyen et al. (2014) indicate that using recruitment agencies may negatively affect the working relationships between ship-owners and seafarers as they may think their employers do not care about them because all correspondences are done through third parties.

### 2.8 Motives to become a seafarer

Many researchers focused on how the attraction and retention of seafarers is conducted and there appears to be a lack of research on what motivates a new high school graduate to have a desire to join a maritime occupation and become a seafarer. Lindgren and Nilsson (2012) assert that most of the entrants from developing countries are mostly drawn by economic reasons because of the high unemployment rates in their countries. In addition, Barnett, Gatfield, Overgaardt, Peckan, & Graveson (2006) indicate that entrants from developing countries join seafaring to be able to feed their families, whereas entrants from OECD countries are not driven by economic reasons; they mostly become seafarers because of family influence, travelling opportunities, the love for the sea and so on.

In view of the above, recruiters should consider the differences when they want to attract and recruit seafarers. In addition, understanding the above dynamics will assist in the retention of seafarers by taking into consideration the regions they come from (Caesar et al., 2013).

Henderson et al. (2008) state that in the last 3 decades, becoming an officer and captain at sea was an attractive career with respect and dignity as it offered people an opportunity to see the world. They further indicate that things have changed with added responsibilities to the crew, shorter turnaround time, remote-controlled ports and a desire to cut cost; seafaring has lost its attraction (Henderson et al., 2008). Furthermore, Gould (2010) adds that living and working conditions onboard ships are
progressively becoming unbearable for seafarers and causes them to leave seafaring even before completing cadetship. Then again, Couper et al. (1999) indicates that entrants who join seafaring for economic reasons end up staying in these poor conditions because they feel there is no easy way out.

Literature indicates that most recruiters in the maritime industry do not take time to get to know the seafarers they recruit well (Caesar, 2016 & Fei, 2018). The shipping industry needs to consider the conflicting expectations from entrants from different nationalities and the industry’s expectations in order to present the attractive image of seafaring to potential seafarers thus attracting more entrants.

Nguyen et al. (2014) assert that shortage of seafarers is resulting on fewer members onboard who are forced to work longer hours, which may lead to lesser vacation time, thus causing fatigue among seafarers. Uğurlu (2016) states that employing additional seafarers can ease the workload onboard, however, it may not be feasible to employ additional officers because of the shortage of cabins. Couper et al. (1999) adds that officers are busiest during the port periods, so, it is important to get solutions that reduce workload at ports and allow deck officers to rest during port calls.

2.9 General challenges

Research indicates the numbers of ratings are quite satisfactory as compared to the officers’ figures. Recently, there has been challenges with a higher attrition rate among officers. Nguyen et al. (2014) indicate that, generally, seafarers do not want to spend many years at sea anymore. Cohoon (2014) asserts that seafaring has become unattractive to people entering the job markets. It is further highlighted that current seafarers are studying towards a different degree stream whilst at sea to prepare for a possible change in career. He points out that often the media presents the shipping industry negatively by displaying stories that demonstrate the lack of safety onboard, sinking of ships, piracy and criminalization of seafarers. Highlighting mostly negative issues about seafaring as opposed to all the positives will most likely cause fear to many new market entrants.
Most seafarers face challenges such as limited resources at sea for career progression, the desire to start a family, increasing high paying opportunities on shore-based establishment, the increasing workload put on seafarers, fatigue, cultural differences and loneliness (Nguyen et al., 2014).

Fei (2018) indicated that most seafarers quote poor conditions in which they live and work in as a challenge they face on a daily bases and it is one of the reason they leave seafaring. There was also a mention by Fei that seafarers also need non-monetary benefits like medical cover, recognitions of further learning and so on, as a positive factor for them to remain in the maritime sector.

Wadsworth et al. (2008) indicate that the number of crew members has declined and the job to be done and salary remained the same. The tight schedule leads to fatigue because the few crew onboard has to work longer hours at sea, they have to switch to port work when the ship enters port and sometimes they do not even get enough shore leave. In addition, Cockroft (2003) mentions that the reduction of crew members came in as a measure to cut costs and points how the burden of cutting costs bears heavily on the shoulders of seafarers. The other point is that the added burden may lead to accidents which will give a bad name to the industry, thus making it unattractive to potential seafarers.

Kitada (2013) asserts that seafaring is still dominated by men and that its norms and values reflects masculinity. The findings by Magramo & Eler (2012) concurred with Kitada’s assertion and added that few shipping companies are willing to employ women to become officers. Both authors indicate that women employed as officers face obstacles and challenges such as sexual harassment and gender discrimination.

2.10 The role of MET in seafarer attraction and retention

Fei (2018) highlights the importance of MET institutes in ensuring that quality seafarers are employed in the maritime industry. Leggate et al. (2005) mention the
international legislations that have been introduced, such as the revised STCW and the International Safety Management (ISM) Code, which enforce new responsibilities to MET institutions as well as shipping companies and seafarers. Ships are now technically complex, causing the demand for an advanced technical competence. Henderson et al. (2008) add that despite the importance of MET institutions in attracting and recruiting seafarers, the importance of standardizing the training contents should be emphasized.

Nguyen et al. (2014) indicate that the economically disadvantaged countries cannot afford training berths and they rely on ship-owners to provide training berths to cadets. However, Deloitte Services (2011) pointed out the lack of cooperation between MET institutes and ship-owners that employ MET graduates. This Deloitte report further indicates that the cooperation between MET institutions and ship-owners would ensure that relevant training is received by cadets. Fei (2018) also indicates that the evolution of technology in many ships requires MET institutes to teach relevant skills to seafarers to be on par with current technology evolutions.

Arsenie et al. (2012) assert that it is better for seafarers to be recruited immediately after their school period so the students can make early decisions if they want to continue with seafaring in the future. It is further pointed out by the authors above that MET institutions have to give students career advice and be open to students about what seafaring really entails.

2.11 The South African maritime sector

Twenty-four years past apartheid, South Africa still struggles with creating sustainable jobs, notwithstanding efforts by government to introduce new mechanisms to reduce the unemployment rate (which is currently at 27%) such as introducing a National Development Plan (NDP) in order to increase opportunities for employment for the South African Youth. (Ruggunan & Kanengoni 2017).
South Africa supplies quality seafarers, both officers and ratings, for the global as well as South African fleet (SAIMI, 2017). There are however, limitations in literature on South African seafaring profile. Literature exists in the form of grey literature such as data from maritime conferences, reports from shipping industry and the South African Maritime Safety Authority (SAMSA) (Ruggunan & Kanengoni 2017).

Bonnin & Wood (2002) indicate that South African officers go through a three-year educational program at a tertiary institution and when they finish they have to go to sea for twelve months to be certified at a minimum operational level. Ratings, on the other hand, attend a maritime course for six weeks at an accredited maritime institution and they are also required to go to sea for twelve months. South African MET institutions have an excellent global standing and are all accredited institutions and are compliant with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 1978, as amended.

Bonnin & Wood (2002) also highlighted how the unavailability of enough training berths is making it difficult for maritime students to complete their required amount of sea time. The shortage of skilled seafarers is mainly on tankers. Almost all MET institutions in South Africa are not involved in finding training berths for students, except Unicorn Maritime Institutions which only trains ratings when there is a specific requirement from industry.

2.12 Chapter summary

The purpose of this chapter was to conduct a literature review regarding the attraction and retention of seafarers. The background of the study indicates the projections by various sources suggesting shortage of 147,500 ship officers, especially on offshore support vessels and tankers by 2025 (BIMCO/ISF 2015; Drewry 2015). By contrast, Li & Wonham (1999) argued regarding the meaning of ‘number of seafarers’ and they proposed the use of ‘active seafarer’ instead of ‘qualified seafarer’. Additionally, Leggate et al. (2005) argued that the advancement of technology will cause a decline
in crew numbers. With the critics highlighted above, it is important to devise workable solutions to ensure that forecast does not become a reality (Caesar, 2016).

It was discussed that attraction of seafarers can be done directly or indirectly, with the latter method emerging being the most preferred by the ship-owners in order to save cost. Shortcoming of indirect recruitment includes an emergence of unlicensed recruitment agencies, demanding money from seafarers, compromised quality of training and so on (Caesar, Cahoon & Fei, 2013; Caesar, 2016 & Henderson et al., 2008).

Economic reasons are deemed to be the leading motivators in attracting entrants from developing countries (Lindgren and Nilsson, 2012). The other reasons, especially for entrants from OECD countries, are family influence, travelling opportunities, the love for the sea and so on (Barnett et al., 2006).

Seafarers face general challenges at sea such as limited resources for career progression, the desire to start a family, increasing high paying opportunities on shore-based establishment, the increasing workload put on seafarers, fatigue, cultural differences and loneliness (Nguyen et al., 2014). All the challenges mentioned above indicate a need maritime industry to review their current seafarers’ recruitment strategies and mechanisms.
CHAPTER 3: METHODOLOGY

3.1 Introduction

The main aim of this study is to critically analyze the attraction and retention of seafarers, using South Africa as a case study. As such, the questions to answer as follows:

- What mechanisms are in place to attract and retain seafarers globally and in South Africa?

- What challenges are faced by the South African Maritime Sector regarding the attraction and retention of seafarers?

- What measures are taken by other countries to attract and retain their seafarers?

- What more can be done by South Africa to attract and retain seafarers?

This chapter outlines the methods and instruments used to gather and analyze data.

3.2 Selected participants

The participants who responded to the seafarers’ questionnaires are mostly the students from the World Maritime University (WMU) and the alumni. They were originally from these countries: Philippines, South Africa, Panama, Egypt, India, Malaysia and Nigeria. Those who responded to the Maritime Students’ questionnaires were from South Africa and United Kingdom; those who responded to
high school questionnaires were all from South Africa and those who participated in the semi-structure interviews were 1 Norwegian, 1 international organization employee, 1 Filipino and 5 South Africans. WMU students and the alumni are mostly maritime experts, senior naval officers, government officials, maritime lawyers, port officials and high-ranking seafarers.

In view of the above, the study encompasses different geographical areas. A wide range of views were received from the above-mentioned participants who were willing to participate in the research.

### 3.3 Instrumentation

The dissertation research was accomplished utilizing both qualitative and quantitative methods. Quinlan (2011) defines qualitative data as non-numerical data used to uncover and characterize trends, perspectives, opinions, findings, stories and so on but which cannot be statistically measured/analyzed. On the other hand, Creswell (2009) defines quantitative research as a method that quantifies and measures the numerical and statistical outcomes from the analysis of data gathered through questionnaires or surveys and reports on findings.

Primarily, the researcher collected information by means of electronic questionnaires, and semi-structured interviews. Secondly the researcher collected and reviewed data from the existing literature regarding the attraction and retention of seafarers from secondary sources which included published and peer-reviewed research papers, journals and books relevant to the topic.
3.4 Questionnaires

Willemse (2009) asserted that the questionnaire must stand alone, be short and contain all information that addresses the aim of the study. The above-mentioned factors were considered when developing the questionnaire.

Initially, three electronic questionnaires were designed and sent to four students from different specializations at the World Maritime University as a pilot to test the validity and reliability of the questionnaires. Content validity of questionnaires was done to fully measure if the questions in the questionnaires relate well to the attraction and retention of seafarers and to the research objectives. The questionnaires were sent to seafarers in senior positions who are familiar with the research topic. These participants reviewed all of the items of the questionnaires for clarity, readability, and ability to address the research questions and advised the researcher as to which items should be added or excluded in the final questionnaires. To that end, some questions were excluded from the final questionnaires. The reliability was tested by the researcher by filling in the questionnaires three times and the same results were produced. Three questionnaires were used for the study and are attached as appendices C, D & E.

Questionnaires were used in this study because a questionnaire can reach a vast number of participants at once and is relatively easy to administer. It is also cheaper and quicker to gather a large amount of data and the researcher can produce both quantitative and qualitative data from them. Furthermore, a questionnaire is convenient for participants because they can be filled whenever and wherever. Lastly, it is easier to design questionnaires to ensure confidentiality (Saunders, 2016).

The questionnaires for seafarers and maritime students included both closed-ended and open-ended questions; and the questionnaires for high-school students included closed-ended question only. Generally, respondents prefer closed-ended questions as they are simple and can be answered quickly but with open-ended
questions, the author wanted to explore some answers in detail and potentially make more discoveries that were not anticipated.

### 3.5 Interviews

Semi-structured interviews were used for this study. According to Bryman & Bell (2015), the use of semi-structured interviews is a method of research that is open and allows questions that were not part of the original list to be added based on the answers of the interviewee. This method of research was chosen because of its flexibility and the potential to obtain more information than initially anticipated. So, using this method afforded the researcher the opportunity to uncover more details regarding the topic (Walsh & Wigens, 2003).

The interview included eight participants who are in senior positions in maritime organizations. The interviews were designed to give participants an opportunity to share how their own countries normally attract and retain seafarers. These participants were chosen for the study because they occupy strategic positions and have influence on and access to their organizational policies and practices.

The initial plan was to interview between twenty and thirty people but most participants referred the researcher to other persons who also referred the researcher to others, which ended up not yielding positive results. Most of the participants who were interviewed were recruited by telephone and email. Subsequently, the interviews were mostly done over a phone, with three done face-to-face. The semi-structured interview questions are attached as Appendix B.

### 3.6 Informed consent

The researcher requested consent from the participants prior to sending questionnaires and conducting interviews. Participants were further notified about the Ethics Committee established at the World Maritime University to ensure that all research work is conducted in an ethical manner and to ensure confidentiality of
information. Participants were informed that research is done for academic purposes and also about their right to partake or pull out at any time of the research. Lastly, the time required for filling-in the questionnaire or taking part in the semi-structured interview was also indicated.

3.7 Limitations

The researcher had initially planned to interview most South African maritime professionals and some students of the World Maritime University (WMU) class of 2018 to get their understanding on the attraction and retention of seafarers and to learn how the recruitment and retention of seafarers is conducted in their own countries. The challenges of gathering data from remote places and the failure of some targeted respondents (identified and contacted maritime professionals and experienced seafarers) to respond, placed some limitations on this work.

3.8 Chapter-summary

This Chapter discussed the methodology used to collect data from high school student, maritime students, seafarers as well as senior officials in the maritime sector. The reasons for particular participants taking part and choosing the used collection methods (questionnaires and semi-structured interviews) for collecting data were given. The researcher also indicated the limitations encountered and explained the use of the consent forms.
CHAPTER 4: PRESENTATION AND DATA ANALYSIS: QUESTIONNAIRES

4.1 Introduction

The aim of this chapter is to give the results and analyses of quantitative data collected by means of questionnaires. This chapter begins with discussion of the instruments used to analyze data, followed by the following analysis:

- Demographics of participants in order to understand the profile of participants.
- Sources of information about seafaring.
- Knowledge of high-school students about seafaring or maritime professions.
- Expectations that seafarers had when they joined the profession.
- Effectiveness of the recruitment process.
- Retention.

4.3 Demographics of participants

4.3.1 Countries of participants

Figures 2 (a and b) below indicates the countries of respondents to the questionnaires. As previously indicated, the seafarers that responded to the seafarers’ questionnaire were from Egypt, India, Malaysia, Nigeria, Panama, Philippines and South Africa. Those who answered the maritime students’ questionnaire were from the United Kingdom and South Africa. Attraction and retention of seafarers is a global issue, the countries selected maximize diversity and allow the researcher to explore a broader scope of this topic.
4.3.2 Gender of participants

Figure 3 below indicates the gender of participants. The indication in both figures is that the percentages of females is less than that of males, showing that less number
of women were available to take part in the study, which supports the assertion by Kitada (2013) and Magram & Eler (2012) that seafaring is still dominated by men. This finding highlights a need for maritime industry to explore more possible strategies to get women interested to become seafarers.

![Gender of Seafarers who participated in the survey](image1)

![Gender of Maritime Students who participated in the Survey](image2)

**Figure 3: Gender of Participants**

### 4.3.3 Age of participants

Figure 4 below indicates the age of respondents to the maritime students’ and seafarers’ questionnaires. The age ranged from 17-30 years (18%), 31-43 years (44%), 44-60 years (36%) and over 60 years (2%). This finding concurs with an assertion by McLaughlin (2012) that most seafarers are getting progressively older, meaning that they will not stay in the maritime career for long. This point was further elaborated by Bridger & Bennett (2011) stating that older workers generally experience a decline in general health and many more essential capabilities required to conduct seafarers’ daily tasks.
4.2 Quantitative analysis

Three questionnaires, one for seafarers, one for maritime students and one for high school students, were designed to add to the interviews. Google forms were used to design the questionnaires and the links were emailed to the respondents. The researcher then designed graphs and tables according to the responses received. A total of 72 (11 females and 61 males) seafarers responded to the questionnaires for seafarers, 22 (6 female and 16 males) maritime students responded to the questionnaires for maritime students and 28 high school students responded to the questionnaire for high school students.

The questionnaires for seafarers and maritime students were designed to investigate the reason they chose to study in maritime programmes, where they received information about the seafaring profession, their plans after studies, their perceptions regarding seafaring and what they think can be done better to attract more students to follow maritime career.
4.4 Career motivation

4.4.1 Reasons for becoming seafarers

Ten items were presented to the respondents to indicate which item influenced their decisions to become seafarers. Table 2 indicates the responses provided by participants. Even though some respondents chose more than one option, the findings support the developing countries’ trends where most employees are most likely to be motivated by financial reasons to join a seafaring career (Lindgren and Nilsson, 2012). These findings, however, contradict those of Barnett et al. (2006) which suggested that entrants from OECD countries are not driven by economic reasons. Table 2 indicates that the majority of maritime students (note that the majority is from the United Kingdom) were also mostly influenced by financial reasons to become seafarers. The love for the sea was the least chosen reason in this study, supporting the argument by Gould (2010) that the love for the sea is losing its place as one of the non-monetary reasons to become a seafarer because living and working conditions onboard ships are progressively becoming unbearable for seafarers and causes them to leave seafaring even before completing cadetship.

The other reasons given by seafarers were traveling opportunities, educational reasons and meeting new people. As indicated by Carless (2005), maritime industry has to identify what motivates job-seekers and present it to them.

Table 2: Reasons for Becoming Seafarers

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Seafarers</th>
<th>Maritime Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Financial Reasons</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td>2  Travelling Opportunities</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>3  Educational Reasons (growth and development)</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>4  Networking (meeting people from around the globe)</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Reasons</td>
<td>Seafarers</td>
<td>Maritime Students</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td>5</td>
<td>The love for the sea</td>
<td>6</td>
</tr>
</tbody>
</table>

### 4.4.2 Source of seafarer information

Figure 5 indicates the sources of information about seafaring profession. The study indicates that the influence of family members or relative is crucial, especially in the OECD countries like the United Kingdom as suggested by Barnett et al. (2006), followed by online and colleges or universities. This was also supported by the interviewed maritime educator from the Philippines. The results of the study indicate how important it is for current seafarers to present a good image to their family members and friends. A significant number of respondents learned about seafaring for the first time online (on the internet). This is an indication that there is a need for new developments in talent acquisition where the use of technology is incorporated.

Lastly, the results also highlight the importance of a MET institution in promoting seafaring. There is a need for collaboration between ship-owners and MET institutes as asserted by Deloitte Services (2011). Fei (2018) further indicated that there is a rising requirement for MET institutes to teach relevant skills to seafarers to be at par with current technology evolutions.

![Figure 5: Source of Information](image)
4.5 Maritime awareness: high school students

According to Sidorcuka & Chesnovicka (2017) & Dinnen & Alder (2017) in the 21st century there is access to endless job marketing, campaigns and advertisements on the internet, billboards and televisions on a daily basis and it is easier for job-seekers to have access to job opportunities directly from their mobile devices anywhere they are.

The findings for the extent to which high school student know about seafaring are indicated in table 3 below. According to the findings, 71% (20 of 28) of students do not know what seafaring is; only 29% do. The majority do not know what maritime education and training entails, even though many of them know someone who works on a ship. The majority are not interested in becoming seafarers but they are willing to learn more about the profession. To that end, maritime institution and industries have to be active in employee scouting and teaching more high school students about seafaring (Breaugh, 2009).

Table 3: High School Students' Knowledge about Seafaring

<table>
<thead>
<tr>
<th>To what extent do you agree with the following statements regarding knowledge about seafaring?</th>
<th>Options</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I know what a seafarer is.</td>
<td>16</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>2 I know about job opportunities on ships.</td>
<td></td>
<td></td>
<td>4</td>
<td>20</td>
<td>4</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>3 I know someone who works on a ship.</td>
<td></td>
<td>4</td>
<td>8</td>
<td>4</td>
<td></td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>4 I know what maritime education or studies are about.</td>
<td>12</td>
<td>4</td>
<td>8</td>
<td></td>
<td>4</td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>5 I would like to become a seafarer.</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>6 I am interested in learning more about seafaring</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td>12</td>
<td>8</td>
<td>28</td>
</tr>
</tbody>
</table>
4.6 Seafarers expectations

Expectations of seafarers are represented by Figure 6 below. Lambert (2011) indicates that when a new employee joins a profession they have implicit expectations about the profession known as a psychological contract. The literature indicates that whenever there are imbalances between the expectations of employees and contribution of employers, and vice versa, then there will be discontentment that can negatively affect employer–employee relationships (Cassar & Briner 2011; Griffin & Moorhead, 2011 & Suazo, 2011).

The study’s findings indicate that generally, seafarers feel like their expectations have been met, even though there are those who do not agree. The indication is that most seafarers expected good salaries and opportunities to travel, which they achieved. Some respondents indicated that their plans to achieve their milestones within a certain timeframe materialized, with others indicating that seafaring has exceeded their expectations and it has become a way of life. Furthermore, some mentioned that they gained skills and knowledge as well as academic qualifications that opened doors and helped them grow. However, some indicated that their expectations for training and qualifying within a targeted timeframe did not happen as anticipated, as echoed by one participant below (quoted verbatim):

“The promises that are not kept by Maritime schools, especially in Nigeria, leaves one to wonder. Seafaring is such a high-risk job, and yet it is so difficult to secure a vessel to gain Students' Industrial Work Experience Scheme (SIWES) and sea time. Seafarers, especially in Nigeria, are not being treated and paid fairly like their counterparts in other countries.” –Second Officer.
4.7 Effectiveness of recruitment process

Figure 7 indicates the responses regarding the effectiveness of the recruitment process. The finding was that the recruitment process is well planned on paper but in reality, things are not as easy as expected. The shortage of training berths is hindering the attainment of timely qualifications by seafarers. Seafarers indicated that it is expensive to become a seafarer because very few people qualify for bursaries, so sometimes they cannot complete their studies on time due to financial constraints. Nguyen et al. (2014) indicate that one of the challenges faced by seafarers is the limited berths at sea which may interfere with the career plans of seafarers.

Another finding was that maritime careers are generally not advertised in the mainstream media making it unknown to an average school leaver. The maritime industry should make use of media that reach larger numbers of potential seafarers.
4.8 Retention of seafarers

Figure 8 represents the willingness of respondents (seafarers) to remain in the profession. 60% of respondents expressed their willingness to remain seafarers with some indicating their aspiration to become master mariners. However, some plan getting off the ship and continue working as ship-related professionals ashore. Some respondents noted the hard work they had put in to get where they are and indicated their unwillingness to start afresh in another profession, hence, they plan to remain in ship-related professions ashore, close to their families.

There was also an indication by some respondents that that they will not renew their contracts because they feel like they missed out so much on their family time.
CHAPTER 5: PRESENTATION AND DATA ANALYSIS: SEMI STRUCTURED INTERVIEWS

5.1 Introduction

The aim of this chapter is to present and discuss the results and analyses of qualitative data collected by means of semi-structured interviews and the sequence followed. This chapter begins with discussion of the instruments used to analyze data, followed by the following analyses:

- Attracting and recruiting seafarers in South Africa: where the analysis includes motivation to become seafarers and the process for recruiting seafarers.
- Retention of seafarers in South Africa.
- Challenges faced by South African maritime sector.
- Mechanisms in place to attract and retain in other nations
- Contrasting South Africa and Philippines and Norway

5.2 Qualitative analysis

Eight people were interviewed using semi-structured interviews. Caesar (2016) suggests that using semi-structured interviews by telephone is not an alternative for face-to-face interviews. This is an approach that is as equally effective in practical terms. The researcher used the telephone to interview some participants because they were geographically far and it was impractical to go to them. The questions used during all interviews were open-ended to allow the respondents to express themselves freely. The interview questions were pre-tested to determine appropriateness of questions to achieve the aim of the study and to eliminate errors.
Pre-testing was done by interviewing a maritime professor who suggested that some questions be amended and those that did not address the topic be removed.

Semi-structured interviews were conducted in order to gain expert knowledge and the discussions were transcribed and recorded. Figure 9 indicates that sequence followed by the researcher.

**Figure 9: Semi-Structure Interview Sequence**

*Source: Adapted from Caesar (2016)*

Emails containing questions and consent forms were sent to the participants requesting to interview them. Follow up telephone calls were subsequently made to introduce the researcher and the topic, how the information will be handled and to finalize the date and time for the interview. As recommended by Harvey (2011), the interview dates were set at the convenience of the participants.

Before the interview commenced, participants were asked for permission to record the interview and it was explained to them that the interview would be transcribed verbatim. There was a request of anonymity from some participants which was assured to them. The interviews were conducted in a friendly, polite, conversational and unbiased manner. The interviewees were relaxed and if they did not know the
answer to a question, they indicated that they would research the issue and email relevant answers at a later stage. Each interview lasted about 30 minutes. On completion of the interviews, data received was transcribed and analyzed.

There are various types of Computer Aided Qualitative Data Analysis Software (CAQDAS) that can be used to transcribe large data with an average of 25 or more respondents such as ATLAS.ti, MAXQDA, NVivo; and so on (Caesar, 2016). However, the researcher used manual transcription and analysis of the data.

Profile of the participants of semi-structured interviews:
- Maritime Historian, Journalist and Educationalist (P1): South Africa.
- Maritime Professor (P2): International Organization.
- Maritime Training Manager (P3): South Africa.
- Quality Officer (P5): South Africa.
- Fleet Manager (P6): South Africa
- Head of Crewing (P7): Norway
- Maritime Educator (P8): South Africa.

5.3 Attracting and recruiting seafarers in South Africa

The finding is that South African Maritime Safety Authority (SAMSA) works together with Department of Transport (DOT), South African International Maritime Institute (SAIMI) and other stakeholders to showcase maritime careers, including seafaring, during “Maritime Days”. They inform high school learners nationally about the importance of the sea and the careers available in the transport sphere, including the maritime sector and also highlight the benefits of becoming a seafarer (P3, P5, P6). A new institution – the South African International Maritime Institute (SAIMI) - was introduced in November 2014 to promote seafaring, do research and promote maritime skills development in South Africa. This institution is still in its initial stages of growth and more research regarding its operations with seafarers is still to be conducted.
There was also an indication that some MET institutions do direct recruitment at secondary schools for longer courses (P3). There is National Cadet Program which assists in identifying and selecting qualifying students from Cape Peninsular University of Technology (CPUT), Durban University of Technology (DUT) and Sea Safety Training Group (SSTG) and in placing them onboard ships contracted to train and recruit South African Seafarers (P1). Industries such as African Marine Solution (AMSOL) were found to use platforms such as LinkedIn, which is relevant for the 21st century youth as asserted by Sidorcuka & Chesnovicka (2017), that they can access job enlisting wherever they are, from their mobile devices (P6).

The author’s opinion is that advertising the maritime sector only on special occasions is not effective enough to attract the interests of potential seafarers. Advertisements should happen throughout the year, using all necessary media to attract the youth of the 21st century. As indicated by Shiptalk Limited (2012), Twitter, Facebook and other social media are what captures the attention of today’s youth. Sidorcuka & Chesnovicka (2017) also indicated that the youth can access job advertisements from their mobile devices wherever they are. The South African maritime sector can use such platforms to reach a vast number of potential seafarers in a relatively short space of time. The results, (see Table 3), indicate that most high school students do not know about seafaring. Because of this lack of knowledge, most of them are not interested in becoming seafarers as indicated on Table 3. This can be solved by using social media more effectively.

5.3.1 Motivation to become seafarers

The finding with respect to this is that the general motivation for becoming seafarers are financial reasons (see Table 2), followed by traveling opportunities and the opportunity for growth and development. Most interviewed people also confirmed that their organizations use good salaries to inspire young people to join seafaring. Even though the findings indicate that most seafarers do expect to earn good salaries when they became seafarers (see Figure 6), there are other motivating factors such as achieving a certain milestone within a targeted timeframe that if not achieved, may
cause demotivation as suggested by the 34% (see Figure 6) that think that seafaring has not met their expectations.

The literature suggests that little knowledge on the part of the industry/organizations about the expectations and career motivations of the new entrants may increase the attrition rate and make it difficult to have enough seafarers for the current fleet (Caesar et al., 2013; Cahoon, et al., 2014; Couper, et al., 1999; Fei, 2018; & Lindgren & Nilsson, 2012).

5.3.2 Process for recruiting seafarers

The finding regarding the South African seafarers’ recruitment process is that the applicants are required to have English, Mathematics and Science as their major subjects when they complete secondary schooling. The applicants enrol for Maritime Studies or Mechanical Engineering (marine), and then complete two semesters in a university. Upon successful completion of two semesters in a university, it is the students’ responsibilities to find an “employer” or a training berth to get sea time. The student is required to attend a safety familiarization / pre-sailing course for approximately 3 months, followed by sea training (deck or engine) for 12 – 18 months which is followed by ancillary training (and workshop skills training for Marine Engineers). On completion, the cadet will do SAMSA oral examination and get a first (operational level) Certificate of Compliance (COC). Students will then complete the remaining 2 years at a university to get a national diploma. In total, the students go through a three year educational program at a tertiary institution, as indicated by Bonnin & Wood (2002).

Some indications by respondents were that sometimes it takes longer for applicants to get training berths which delays the qualification process. Some indicated that they had to wait for more than 7 months before starting with their sea training. It was also mentioned that the students have to pay for their university studies or apply for a bursary, which is not guaranteed. Figure 10 indicates the process of seafaring qualification in South Africa.
5.4 Retention of seafarers in South Africa

The assertion by one participant during a semi-structured telephone interview was the following:

“What keeps seafarers at sea is a good salary, job satisfaction and the real love for the sea” – P3

The words above were echoed by most of the interviewed participants with 7 out of 8 of them mentioning a good salary as a retention method. There was, however, a consensus among participants that the lack of ships for training and employing South African seafarers is a challenge.

As indicated in the previous chapter, 60% of the interviewed seafarers are willing to remain in the seafaring profession (see Figure 8). Some of them indicated ship-related career ashore that their willingness to remain in the profession is to achieve their personal life targets and after that they would like to work ashore. Some indicated that they will remain seafarers simply because they had worked hard to get where they are and they do not want to start afresh in another profession. The plan is to remain in the seafaring profession while working ashore.
5.5 Challenges within the South African maritime sector

As indicated above, the main challenge in the South African maritime sector is the lack of berths on ships. The indication is that even though South Africa has acquired a training vessel – SA Agulhas – for cadet training under the auspices of SAMSA, it is still not enough to accommodate all cadets in the country. Another concern raised was that it is hard for students to get training berths by themselves.

The lack of berths, if not addressed, may cause a backlog of cadets who cannot move to the next stage of their career, thus limiting the future supply of seafarers to service the world’s fleet as per Operation’s Phakisa plan.

Yet another challenge was the difficulty experienced by students in paying for their maritime degrees as most of them come from underprivileged backgrounds. With few institutions offering bursaries for the upcoming seafarers, it is a challenge for some students to graduate on time because of their inability to pay school fees.

There was an indication that some South African cadets have the impression that life at sea is similar to life ashore, where they only work for 8 hours a day and get weekends and holidays off. It is indicated that some cadets do not want to accept the seafaring way of doing things and they always refer to the South African Labour Relations Act, forgetting that seafaring is an international career (P1 & P7).

By contrast, the findings from seafarers’ perspectives were that they were not well prepared for seafaring job. It was found that an average seafarer requires an orientation of what seafaring entails before committing his/her life to it. The indication was that the long months away from family and the difficult working conditions onboard ships were not anticipated which made it harder to adjust. The shortage of training berths for cadets and ships to employ seafarers makes qualifying as a seafarer take longer than planned. This relates to the theory by Nguyen et al. (2014) that suggests that limited resources at sea impedes the career progression and growth of most seafarers, thus reducing their job satisfaction. Moreover, Stadler
(2011) indicates that a lack of job satisfaction can lead employees to being apathetic towards the industry/organization as they see no point in working hard. The evidence is indicated in the comment from a Fourth Engineer Officer below (quoted verbatim):

“As young seafarers we were sold dreams only to get into the industry and be met by long months of sitting idle before finding a ship to sail on, or a company to train us. Even after qualifying as an officer it is absolutely stressful to find a job, if not impossible, as there are hundreds of people with the same qualifications and only a handful of companies to apply to. South Africans are sitting with a challenge as there are only few companies that recruit South African Seafarers, and the same companies prioritize other nationalities before recruiting in Africa” –Fourth Engineer.

Reitman (2007) asserts that employees want to grow and expand their current knowledge. In addition, Rodriguez (2008) highlights that talented employees will leave the organization if they feel like they are not progressing in their career, moreover if they see their peers getting promoted and advancing faster than them.

There was also an indication that South African seafarers have to compete with cheaper seafarers from the East and on top of that they are required to pay tax, which is overstretching them (P5).

5.6 Mechanisms in place to attract and retain in other nations

The findings regarding Philippines seafarers is that most Filipino youths aspire to become seafarers from an early age because seafaring is a popular profession in the Philippines. Most Filipino seafarers are recruited by a recruitment agency or directly by a shipping company. Different methods of advertising are used, including going directly to the agencies to check for any vacancies. It was found that crewing agencies in Philippines allow seafarers to stay in the agency’s accommodation for free while they wait to be placed on a ship. There was an indication that there are many MET institutions (the exact number could not be supplied) that actively do the attraction
and recruitment of seafarers. The indication is that after secondary schooling, students enrol for 4 or 5 year degree programs for officers (deck or engineer) where they pay for the school fees. On completion they have to find placement on a ship to do cadet training onboard. After that they will be eligible to be examined to become marine officers. Failure to do so, they become ratings. The indication is that some who qualified to become officers are willing to work as ratings because there are not enough ships to employ them. There is also Maritime Academy of Asia and the Pacific (MAAP) in the Philippines, which is financed by trade unions and international investments from Norway and Japan, which also trains officers. MAAP offers students free scholarship, accommodation and a grant.

The other finding is that there is also Philippines Merchant Academy (PMMA), the only state-owned MET institution in Philippines, which offers maritime degrees as well as short courses for ratings. Students at PMMA receive free tuition fee and accommodation, as well as stipend. Students (officers) at PMMA go through a four year course (Bachelor of Science in Marine Transportation or Marine Engineering). The students attend classes full time for 2 years, then they do 1 year apprenticeship training onboard ships as deck or engine cadets. On the fourth year they go back to PMMA to complete their degrees. Students graduate as midshipmen and are guaranteed 100% employment as they are preferred by the Philippines Navy and Coast Guard, as well as major shipping companies and recruitment agencies worldwide.

On the other hand, the findings from a Norwegian shipping company was that seafarers are recruited at a young age from the maritime high schools, colleges and universities in the Philippines, Romania and South Africa; and developed within the shipping company. The indication was that they pay seafarers’ good salaries that are above average but not the highest and value and care for their employees and offer them long-term commitment, provided seafarers perform as required. The other finding was that the company establishes a municipality as a centre of gravity for recruiting seafarers. The youths from the municipality are exposed to the maritime careers at an early age and they grow into it.
The indication from the company was that they value their seafarers, treat them well and let them know that their work is important. In addition to this, the spouses and children of seafarers are well taken care of. The company indicated that they promote their brand and they are known as a company that invests in the growth and development of their seafarers by sending them to seminars, conferences and courses.

5.7 **Contrasting the findings with measures taken by South Africa**

South Africa and Philippines both seem to depend on other nations (e.g. Norway) for employing their seafarers as both nations do not have enough ships to train and employ seafarers, with the exception of the PMMA midshipmen that join the Philippines Navy or Coast Guard. The findings indicate that seafaring is more popular in the Philippines than it is in South Africa. It seems like Filipino and South African seafarers have similar challenges, for example – lack of ships and in general most students having to pay for their studies (PMMA being the exception). SAIMI as a developing institutional intervention can also seek to follow some of PMMA’s strategies of having a fully funded program or MAAP’s strategies of getting sponsorships from international organizations and offer full scholarships to seafarers that cover tuition, accommodation and study grants. The study programmes followed by South Africa, CPUT, DUT and SSGT seem to be sufficient in terms of duration, unlike the longer term of studies that an average Filipino officer goes through.

On the other hand, both Philippines and South Africa can learn from Norway and recruit seafarers at a young age from the maritime high schools or colleges, but the challenge is where to get training berths for all cadets. The challenge may not be the shortage of seafarers because of the unwillingness of people to become seafarers, but because developing countries like South Africa and Philippines do not have enough resources (ships) to train all the willing people to become seafarers.
5.8 Suggestions from the survey

Respondents highly suggested the improvement of the working and living conditions of seafarers. There were also suggestions to employ more seafarers to ensure that seafarers onboard ships get enough rest, thus be productive. As indicated in the second chapter, even though it may seem like a good suggestion, modern ships do not have enough cabins to accommodate a larger crew as ship-owners aim to maximise profits.

There were also suggestions to get internet for the whole crew onboard. Furthermore, there were recommendations that people in the profession should display a good image to their families, friends and relatives and avoid only talking about the negatives of the industry.

The other recommendation was the involvement of government in auditing the MET institutions to ensure quality education and to allow a certain number of MET institutions within a country that will have a direct link with the shipping companies to ensure that supply equals demand.
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This final Chapter begins by highlighting the findings analyzed in Chapters 4 and 5. This is followed by discussing the contribution of the study. Thereafter, the limitations of the work are presented and finally recommendations are made.

6.2 Summary of results

SAMSA in collaboration with DOT, SAIMI and other stakeholders promote maritime careers to high school learners nationally during “Maritime Days”. Qualifying students from CPUT, DUT and SSTG are selected and placed onboard ships contracted to train and recruit South African Seafarers. Industries such as AMSOL use LinkedIn to advertise seafarer job openings.

Generally, seafarers are attracted to the industry for financial reasons, opportunities to travel and for personal growth and development.

The education process is as follows:

- Applicant enrolls for Maritime Studies or Mechanical Engineering (marine)
- Completes two semesters in a university.
- The student looks for an “employer” or a training berth to get sea time.
- Sea training for 12 – 18 months which is followed by ancillary training (and workshop skills training for Marine Engineers).
- On completion, the cadet conducts SAMSA oral examination and get a Certificate of Compliance (COC).
Generally, seafarers are willing to remain in the profession when they get a job satisfaction, good salary and have the love for the sea.

Challenges encountered in the South African maritime sector are as follows:

- Lack of berths for cadet training and employing seafarers.
- Inability of some maritime students to pay their study fees.
- Mismatch between seafarers’ expectations and the requirements of seafaring profession, ie working overtime or on weekends.

6.3 Recommendations

The dissertation makes the following recommendations:

Promotion of intra-African trade: since the aim of Operation Phakisa is to increase the nation’s economic growth through the ocean, to address the unemployment problem in South Africa and to share the expertise with South African neighbours and the rest of the world (Funke et al, 2016), it is recommended that South Africa promote economic trade patterns with other African countries. As maritime trade evolves, more ships will be required to transport seaborne cargo from one country to another (Caesar & Cahoon, 2015). It is also recommended that South African government get more ship-owners to register their ships under the South African flag and have a contract with them to recruit South African seafarers.

Management of Seafarers’ Expectations: it is recommended that the contracts that seafarers sign include a section where seafarers can state their expectations and such expectations to be communicated and addressed accordingly.

Improvement of the Living/Working Conditions for Seafarers: It is recommended that the living and working conditions of seafarers be addressed and improved and work-life balance be guaranteed.
Bursaries and Scholarships: it is recommended that South African government is to collaborate with the MET institutions, ship-owners and other international organizations to offer more bursaries to maritime students and assist them to find berths for training.

Labour Relations: it is recommended that seafarers be exposed to the Maritime Labour Convention 2006 (MLC) as part of their training.

6.4 Limitations

Owing to time-frame, distance and cost-related factors, the study relied on a certain number of participants in the survey and semi-structured interview, therefore, results of the study cannot be generalized to all seafarers.
REFERENCES


53


Japan International Transport Institute (JITI) & the Nippon Foundation. (2010). A study on the future global supply and demand for seafarers and possible measures to facilitate stakeholders to secure a quantity of quality seafarers.


Appendix A: Consent Form

A CRITICAL ANALYSIS OF THE ATTRACTION AND RETENTION OF SEAFARERS: CASE STUDY OF SOUTH AFRICA

Consent for Research Participation

Title: A Critical Analysis Of The Attraction and Retention of Seafarers: Case Study of South Africa

Researcher: Lettah Mapule Mathebekase

Institution: World Maritime University (WMU)

Researcher email: w1701277@wmu.se

Researcher cellphone: +46762872448

You are being asked to participate in this research study conducted by Lettah Mapule Mathebekase, a Master of Science student at the World Maritime University. Please take note of the following information and ask questions about any information that is not clear to you:

- Your participation in this research study is completely voluntary and there is no payment involved.

- The responses you give will be used only for this research study and if you feel uncomfortable answering any questions you can withdraw from the study or decline to answer any question at any point with no consequence.

- The Research Ethics Committee (REC) at the World Maritime University has reviewed and approved this research study.

- The responses you give are strictly confidential and the names of all participants will be treated with anonymity. Data collected from this study will be retained until the dissertation has been completed and the Ethics Committee gives the approval to dispose of it. All paper records will be shredded and recycled and soft copies will be removed from the computer hard drive using an appropriate software.
• If you have any queries you may contact the researcher by email or cellphone.

STATEMENT OF CONSENT

I have read and understood the information in this form. I have asked all questions I have regarding my participation in this study.

I understand that by signing below, I volunteer to participate in this research.

I have been provided with a copy of this consent form.

I consent to participate in this study.

____________________  ___________________  ___________
Name of Participant   Signature of Participant   Date

Researcher Signature

I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

____________________  ___________________  ___________
Name of Researcher   Signature of Researcher   Date
Appendix B: Maritime Sector Semi-Structured Interview Questions

Name (Optional): ____________________  Gender: __________
Organization: ______________________  Position: ______________

1. What recruitment strategy does your organization have in place? (How do you attract Seafarers to join your organization)?

2. Do you think young people in your country know about Seafaring? Why do you think so?

3. What do you think causes Seafarers to stay in your organization?

4. In your own opinion, do you think most Seafarers enjoy working as Seafarers?

5. What retention strategies/mechanisms does your organization have in place?

6. What general challenges does your organization face regarding attracting and retaining seafarers?

7. What more do you think should be done for your organization to attract and retain Seafarers?

I would like to thank you for taking your time to answer to these questions!
Appendix C: Seafarers Questionnaire (Electronic)

Name (Optional): __________________________ Gender: _________
Organization: __________________ Position: ________________

1. Which country were you born in? __________
2. At what age did you start your Maritime training? __________
3. Did you have any knowledge on Seafarer’s work or maritime field before you entered your maritime institute? Yes No (circle the appropriate)
4. Did you know anyone in your community who was a Seafarer before you became a Seafarer? Yes No (circle the appropriate)
5. Why did you choose to become a Seafarer? What do you consider to be the main attractions of seafaring career?
   - Financial Reasons
   - Travelling opportunities
   - Networking
   - Educational Reasons
   - The love for the sea
   - Other _____________________________________________________
6. How did you get to know about Seafaring?
7. In which stage of your life did you decide to become a Seafarer? (ie. When you completed you Secondary Schooling or after tertiary)? _______________________________
8. Has your Seafaring career, so far, met your expectations? How so? ____________________________
9. Would you advise young people to become Seafarers? How would you motivate them to join Seafaring? ________________________________________________
10. Is it easy for a newly trained cadet to get employment in your country? _____________________
11. Was the recruitment process you went through the best recruitment process, in your opinion? ________________________________
12. Please take us through the steps of Seafaring application process? ________________________________________________________________
13. Is Seafarer attraction process effective based on your experience? Please elaborate?

___________________________________________________________________

14. Are you planning to remain a Seafarer? Why?

___________________________________________________________________

15. Do you think more could be done to improve the status and image of seafaring career? What can be done and how?

___________________________________________________________________

16. Do you think what the MET institutes teach in your country is adequate? If no, what else can they teach?

___________________________________________________________________

17. What general challenges do you think the maritime industries face regarding attracting and retaining seafarers?

___________________________________________________________________

18. What do you think your country and the whole world can do to attract and retain seafarers?

___________________________________________________________________

I would like to thank you for taking your time to answer to these questions!
Appendix D: Survey Questions: Maritime Students

(You are invited to participate in our survey in which we are analyzing how to attract and retain Seafarers in the South African Maritime Sector. It will take approximately 10 minutes to complete the questionnaire. Please note that your participation in this study is completely voluntary. If you feel uncomfortable answering any questions, you are welcome to withdraw from the survey at any point. It is very important for us to get your opinions regarding Seafaring. Your survey responses will be strictly confidential.

Thank you very much for your time and support.)

Name (Optional): ___________________ Gender: _______ Age: ______

Home Municipality: ___________________

Current Institute: ___________________

Current Major Modules: __________________________________

1. Where did you get information about the Seafarers’ profession?
   ___________________________________________________________________
   ___________________________________________________________________

2. What do you think is the best place to find information about the Seafarers’ profession?
   ___________________________________________________________________
   ___________________________________________________________________

3. Do you think you received enough information about the Seafarers’ profession?
   ___________________________________________________________________
   ___________________________________________________________________

4. What do you expect from the maritime education?
   ___________________________________________________________________
   ___________________________________________________________________

5. What factors affected your choice about the Seafarers’ profession?
   ___________________________________________________________________
   ___________________________________________________________________

6. Did your family or friends contribute to your interest of going out at sea? If so in which way?

65
7. Have any of your relatives worked as a Seafarer?

8. Describe shortly, what kind of image you have of the Seafarers’ profession.

9. Do you think Maritime Industry and Institutions can do better in attracting more students to follow Maritime Career? If so, what can be done?
Appendix E: Survey Questions: High School Students

(You are invited to participate in this survey in which we are analyzing how to attract and retain Seafarers in the South African Maritime Sector. It will take approximately 3 minutes to complete the questionnaire. Please note that your participation in this study is completely voluntary and there is no payment involved. If you feel uncomfortable answering any questions, you are welcome to omit the questions or withdraw from the survey at any point. It is very important for us to get your opinions. Your survey responses will be strictly confidential. Thank you very much for your time and support.)

Name (Optional): __________________________ Gender: ____________

Age: ______

Home Language: ____________ Home Municipality: _________________

High School: _________________ Education Level / Grade: _________

Major Subjects: ______________________________________________________________________________________

<table>
<thead>
<tr>
<th>Please rate the degree to which you agree or disagree with each statement below.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I know what a Seafarer is.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2 I know about job opportunities/ careers on ships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3 I know someone who works on a ship.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4 I know what Maritime Studies are about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5 I know someone who is doing Maritime Studies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6 Seafaring is attractive to me for employment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7 I would not be interested in Seafaring except as a last resort.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8 I am interested in learning more about Seafaring.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>