



**THE RETENTION OF WOMEN IN THE MARINE OPERATIONS**

**By**

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**Abstract**

The marine industry has been known over the years for the responsibility of carrying over 90 percent of the world trade and maintaining the logistical pipeline in the international crisis. The industry affects almost everyone globally, with regards to their daily living, as the goods that are consumed in every household are shipped in and out, worldwide. This study focused on the female marine pilots, the female tug masters and marine engineers of Transnet National Ports Authority (TNPA)'s 8 ports, who penetrated the male dominated industry, the maritime industry. The aim of the study was to investigate the retention of female mariners in this male-dominated industry. To achieve this, the qualitative methodology was employed. Purposive sampling was done to recruit the participants for this study. A non-probability sample of 18 female mariners was drawn out of a population of approximately 100 TNPA women working as marine pilots, marine engineers and tug masters. The findings of the study indicated that only a minority of women can succeed in this industry, but the majority is unable to stand against the challenges, which result in them giving up their careers. The findings of the study also revealed the notion that the maritime industry is a man's world, the stereotype that a woman should be at home cooking in the kitchen and bearing children. The participants of the study also hinted on the rising challenge of sexual harassment, in addition to the gender stereotypes. This demoralises the female mariners, whose decisions are also often downplayed by their male counterparts. Based on these findings, it was recommended that more females should be attracted to this industry, for instance, in the form of sponsorships to support them to pursue studies in this field. It was also recommended that awareness should be raised, in order for potential mariners to familiarise themselves with the industry, prior to joining it. Essentially, it was noted that policy makers should ensure that affirmative action is emphasised, for women to realise their dreams of becoming mariners.

**Key words:** female mariners; retention, marine sector

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

South Africa is still recovering from a past regime, where women were deprived of careers such as law, medicine and engineering. In the 21<sup>st</sup> century, women should be granted the freedom to embark on any career that they see suitable for them and in particular, the marine sector must be made available to all who are interested in it, despite their gender. The maritime industry has attracted a fair number of women, the number of which seems to be growing, although it is much lower than that of their male counterparts. The aim of this study is therefore to investigate the challenges affecting women in the marine operations, as well as to suggest how best to improve the retention of the women in this sector. The retention of women in the operation is imperative, as knowledge must be shared and maintained in the organisation, for future employees and for the success of the organisation. It is therefore important to encourage upcoming young female mariners into the marine operations careers. In view of that, this chapter introduces the topic of the study, which is the retention of women in the marine operations. The chapter thus discusses the background and the aim of the study, the problem statement and rationale for the study, the significance of the study, as well as the organisation of the study.

### 1.2 Background of the study

Transnet National Ports Authority (TNPA) operates in the marine industry, the operation of the berthing of vessel for discharging and loading of cargo off vessels sailing to various parts of the world. They operate in eight ports around the South African coast. The eight ports are Cape Town, Durban, Richards bay, East London, Port Elizabeth, Saldanha, Mossel Bay and Ngqura. TNPA provides for safe, effective and efficient port services to vessels from around the globe (Transnet National Ports Authority, 2010). TNPA has been providing the harbour services to its clients for years and they provide for deep, navigable and safe water limits, in and around their ports. They provide piloting services to the vessels that call at TNPA's ports and the assistance of the vessels' maneuverability by the tugboats and a facility for the vessels to call, upon arrival or departure from the ports, being the Port control stations.

For the success of safe sea operations, there are a number of role players, those being the Vessel Traffic Control system, the piloting department and the department of tugboats and mooring boats,

including the berthing or linesman department. All these departments are required in order to accomplish the service of the harbouring of the vessels or the sailing of the vessels out of the harbour to the different ports worldwide. TNPA has been one of the organisations which have become diverse in welcoming women in a sector dominated by men, such as the marine piloting, berthing staff, tug masters and marine engineering (Transnet National Ports Authority, 2010).

### **1.3 Problem statement**

The marine industry maintains a steady 2 percent of the female population (Walker, 2015). Although the numbers of women entering the industry may be increasing, the process is occurring at a snail pace. The marine industry has not been aggressively promoted, particularly to the females around the globe. The majority of male mariners still bear the stereotype that the marine career is only for the males (Mukherjee, 2017). There appears to be a trend, particularly within Transnet National Ports Authority, indicating that females who have chosen the marine operations field as careers, once appointed, do not seem to maintain a career in the operation. They do not maintain their position in the operational career, long enough to be seniors in the operation, or long enough to be able to transfer the knowledge they have gained to upcoming junior mariners. The numbers of women who graduate in maritime universities is increasing, however the number of women being employed in the marine industry is not equivalent to the graduate females (Jo, 2010). Given these scenarios, this study is an endeavour to understand why there are fewer females in this industry, as well as to investigate the challenges being faced by the female mariners. On that note, the study has the following aims and objectives.

### **1.4 Aim of the study**

The main aim of this study is to investigate the reasons behind the poor retention of women in the marine operational careers of TNPA. In that view, the study has the following objectives.

### **1.5 Objectives**

- To identify the challenges encountered by females in marine operations.
- To establish the factors affecting women when carrying out their marine operations duties.
- To suggest ways on how best to promote the retention of women in marine operations.

## **1.6 Research Questions**

- What are the challenges experienced by the female mariners?
- What are the factors affecting female mariners in their field of work?
- How can the retention of women in marine operations be enhanced?

## **1.7 Significance of the study**

The study may assist in defining the women in these careers and in describing the differentiation of the women to the men, and by so doing, enable the organisations to give the support required by the women in the marine operations. This research aims to enhance equality, for the benefit of the organisation and the people working in it, especially the women. There appears to be a number of women who do not want to be in the marine operations for long, as they believe that their physical abilities deteriorate with age and after child bearing. In this view, this study might help the organisation to access the required needs of the women's career path in the marine industry.

The study might also assist the organisation in determining the adequate percentage of female pilots, tug masters and marine engineers who may be appointed in the marine operations positions, in order for the operations to remain efficient and effective. The study may also contribute to new knowledge sharing and knowledge transfer in the industry, on the retention of female mariners. The recommendations from the study would assist marine organisations to determine and alleviate the challenges encountered by women in the marine operations.

## **1.8 Organisation of the study**

Chapter one: Introduction to the study: This chapter introduced the topic and presented information on the basis of the area that is being researched; the marine operations department of Transnet National Ports Authority. It further elaborated on the aim of the study and the problem that motivated the study. The significance of the study is also described in the chapter.

Chapter two: Literature review: This chapter analyses the relevant scholarly literature about the study, which then lays the ground work for this study. The theoretical framework underpinning the study is also discussed.

Chapter three: Research Methodology: The research methodology serves as the road map for the research process. This chapter describes the methodology selected by the researcher, in order to answer the research questions. The chapter elaborates on the location of the study, the research

paradigm, the sampling technique that was used and the rationale behind the sampling, the target population, as well as the reliability and the validity of the study.

Chapter four: This chapter presents and analyses the findings of the study, based on the methodology described in Chapter 3.

Chapter five: this chapter highlights the conclusion and the recommendations of the study, based on the findings presented and analysed in Chapter 4.

### **1.9 Conclusion**

This chapter introduced the study on the retention of women in marine operations. The chapter also discussed the background to the study, the problem statement, as well as the aim of the study. The following chapter presents the literature related to the study.

## **CHAPTER 2**

### **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the literature related to the retention of women in the maritime industry, particularly the operations in the maritime industry. The chapter discusses the literature based on the women in the marine operations, discussing mainly the challenges that they encounter and how they overcome some of them. The retention of these women in the marine operations and their promotion in the marine, are also discussed. The key terms underpinning the study, which include tugboat, vessel, pilotage and marine engineering, are comprehensively defined. Before embarking on these issues, it is important to highlight the theoretical framework underpinning the study. On that, note the following section discusses the theory underpinning the study.

#### **2.2 Theoretical framework**

##### **2.2.1 Gender conflict theory**

Birkhoff (2012) states that the gender conflict theory sees the universal inequality between the sexes in societies as an outgrowth of patriarchy, the form of social organisation in which men dominate or rule over the women. The theory assumes that men are superior to women, based on sexism or the belief that one sex is inferior (the women) and thus deserves inferior treatment (Birkhoff, 2012).

According to the conflict theory, society is defined by the struggle for dominance between social groups that compete for resources. The conflict theory explains that gender inequality came to exist because men are trying to maintain power and privilege at the expense of the women. There is a conflict as women enter the work places and no longer position themselves at home doing household duties and looking after the children. The women are seeking the power that the men are holding on to, and apparently do not want to share it with the women. This is evident in numerous organisations where women do not occupy senior positions, or if they do, their remuneration is lower than that of the men who serve in the same positions. Sometimes the women holding a senior position may earn lower than a man who may be her subordinate. In the past, men have been known to be the more dominant people and women are expected submit to them. On the other hand, women have been known to be the gatherers in the hunter-gatherer system and the man to be

the hunter (Monash Council, 2015). This has allowed the man to be the only breadwinner in the family, whereas the woman is denied the opportunity to seek employment, as society has deemed her only fit to be the one to cook, clean and bear children in the home.

Society assumes that women are dependent on men for wages. At the workplace, men are entrusted with the implementation of ideas and more responsibility, whilst the female employees are entrusted mainly with administrative duties when they eventually do get employed. The men tend to be paid higher salaries than women in numerous workplaces (Cele, 2011; Dragomir and Surugiu, 2013). It is thus essential to reiterate that men and women are different and organisations need to be aware of this, as they cannot treat them the same. The women have a different approach to executing their duties to men and the way they resolve conflict is different as well. The challenges that the women may face on duty may not be identical to those faced by the men, therefore the organisations must have different strategies to ensure that both men and women's needs are recognised according to their satisfaction, for the safe and efficient work environment, predominantly for harmony between men and women (Birkhoff, 2012).

The link of the theory to the women in marine operations industry, may be that the ideas of the women in the operation are undermined. In the article by (Govender, 2016), the first deputy harbour master of the port of Durban reveals how the ships' Captains always seek assurance of how one is going to maintain the safety of navigating their vessel in or out of the harbour. The women are treated with less respect than the men, when it comes to competence in the marine industry, because of the past regime, where the marine industry or the sea was known to belong only to the males, the women are constantly having to break through the glass ceiling and having to prove their competence and efficiency (Szozda, Czyzowicz, Kalkowska, Raciborska, Raczkowska and Skowronek, 2014).

During the cadetship training at sea the female cadets were given the lighter duties which are "female friendly" while the male cadets were given the strenuous tasks that enabled them to be competent in all the aspects of the operation at sea, involving the deck work and the navigational duties. This treatment supports how the males perceive the females to be fragile and suited to certain kinds of careers, as compared to others as they are seen as being more suited to the males (Szozda et al., 2014). The female students were seen as a threat to the workmanship of the male, they were also understood to be a distraction to the male at sea. The one female student was quoted as saying, she was denied the cadetship program, as she was going to be the only female onboard

and therefore, she was going to be the cause for extra expenditure, as the cabins were designed to take two people at a time (Szozda et al; 2014).

### **2.3 Literature review**

The issues relating to marine operations are no longer a drop in the ocean when associated with the women in the marine industry, considering that the numbers of women embarking on careers in this field do not appear to be increasing. The numbers of the women involved in marine careers appear to be stagnant or decreasing. The focus of numerous studies has been predominantly on the promotion of the maritime industry to the women and the recruitment of the women sailing on merchant shipping vessels, revealing the challenges that these women encounter. Minimal literature was found for the retention of the women in the marine operations, relating to the harbour operations. Numerous studies investigated the aspect of women working on the foreign going vessels. Prior to discussing the literature pertaining to this study, the section that follows describes the key terms, as used in this study.

#### **2.3.1 Transnet National Ports Authority: The Marine department**

The marine department in Transnet National Ports Authority (TNPA) comprises the Pilots department, tugboats, berthing, vessel traffic control and the dredging services. All these departments play a huge role in the servicing of the vessels in TNPA's ports around the coasts of South Africa.

#### **2.3.2 A tugboat**

A tugboat is a vessel of approximately 30 to 50 meters in length. The duty of a tugboat is to assist the vessels in and out of the harbour. The tugboats can tow the vessels which are under power or have no power (Karan, 2015). Today's vessels have become larger and are built with powerful engines, but the engines only allow the forward and astern (backward) movement of the ship. The majority of the vessels have bow thrusters which allow them to move their bow (forward end) to side to side. However, they still require the tugboats assistance, especially during windy weathers, as the design of the large vessels allows limited side to side mobility (Karan, 2015).

#### **2.3.3 Pilotage**

Previously, the docking and sailing of vessels in the harbour was executed without charts and navigation aids such as the lighthouses. The only way to ascertain for safe and navigable waters was done with a weighted lead line. The lead line was thrown out in front of the vessel by a crew member or done by digging the bottom of the seabed with long marked poles. Both methods were

time consuming and inaccurate, sometimes leading a ship to strike the bottom whilst the line was being retrieved.

The lighthouses provided reference and bearings of fixed land buildings. The fixed bearings and lighthouses were used to determine the position of the vessels as they proceeded into the harbour. This position was an estimate of the vessel in the foreign waters, as the vessels' actual and true position was unknown to the foreign Captain entering the waters. For this reason, it was decided that local knowledge was necessary to assist the foreign captains. The local experts knew the waters, the seabed, tides and the currents of the area, for the safe and successful maneuvering of the vessels entering and leaving the harbours (Chakrabarty, 2017). In this view, the use of local knowledge was best preferred to allow the safe navigation of the vessels. The safe practice was to get the assistance of the local pilot onboard the vessel, as he was familiar with the waters and channels. The pilot would direct the vessels captain and helmsman to steer the vessel and avoid the under-water hazards, which the pilots knew and were familiar with. The ships' captains then used to pay good fees for this assistance and local knowledge. The piloting career was not perceived as a career or profession, but it was a sideline business for people in the area (Chakrabarty, 2017).

#### **2.3.4 Pilotage for TNPA**

The marine pilots are the local experts in the harbour; they guide the vessels and advise the Captain of the foreign vessels entering the harbour on navigable waters and assist in docking and undocking the vessels safely. In order to become a pilot for Transnet National Ports Authority, an individual has to undergo tertiary training in maritime studies, for at least a year and thereafter, acquire the practical training onboard the foreign going vessels. The individuals in training are known as cadets on board the vessels, they train on the bridge as navigating officers and on the deck, training for cargo operations and the daily maintenance of the vessel and safety gear. The navigational duties include the safe watch keeping of the vessel, ensuring that the vessel is on the correct course, counteracting currents at all times and ensuring that the vessel is navigated on safe, deep waters and avoiding close quarter situations with other vessels in the sea. The training of the cadets is a duration of approximately twelve months and thereafter, the individual has to complete an oral examination with the sea transport authority's department, SAMSA (South African Maritime Safety Authorities). Once the individual has passed the oral examination, Transnet then qualifies one to become a tug master, to train for 24 months and the person is then required to sit in another examination based only on the Port operations. Thereafter, TNPA promotes one to undergo pilot training on a 12 months training program offered by the organisation, it includes theoretical and practical training, done both in Durban and the Netherlands.



### **2.3.5 The Marine engineer**

The marine engineer qualification requires one to undergo tertiary theoretical training and thereafter, train in the engine rooms of foreign going vessels for 18 months to acquire the practical knowledge of the vessels' main engine. Upon completion of the engine room training or sea time training, the marine engineer in training has to sit for a board examination at SAMSA, and once qualified, TNPA appoints the individual as a marine engineer, operating only on the pilot boat. This position is known as Marine Engineer Officer (MEO) and one is required to obtain a 24 months experience on the pilot boat as the marine engineer officer, before sitting for the second oral examination at SAMSA, which is based on the Port operations. Thereafter, they are appointed as Chief marine engineer of a tug boat, where they take charge of the engine room of the tug boat, including the maintenance of the engine.

### **2.3.6 The Pilot**

The piloting career requires mental and physical ability. During the pilotage of a vessel, one has to take a couple of decisions in seconds of time and the decisions have to be implemented at the same rate. Hesitation to implement decisions during a job can cause incidents or accidents. Piloting is done in various kinds of weather, except in strong gale force winds (Chakrabarty, 2017). It can become impossible to dock or undock a vessel during gale force winds. For the boarding of the vessels coming into the port, the pilot's use either the pilot boat from which a pilot ladder is used for entry onboard the vessels. The pilot also requires physical strength in order to board and climb up or down the pilot ladder during the different weather patterns that may be in occurrence. The helicopter is used in the Ports of Durban and Richards Bay, although a pilot boat may be on standby at all times. The boarding of a pilot onto the ship from a helicopter is done by winching from the helicopter onto the vessel or by the helicopter landing on the vessels helicopter base. The pilot, on boarding or disembarking from the helicopter, must be able to fend themselves from objects around them, especially during different weather conditions.

### **2.3.7 The tug boat master**

The tug master works a shift pattern system in the day or in the night shift. The tugboat is driven in an in-house bridge. The master of the tug is required to have good communication skills, as they have to communicate with the port control, the pilots and all the other vessels that maneuver in the harbour. The tug master's duty is to implement the orders required by a marine pilot during the

docking or undocking of the vessels, offering assistance to the pilot during pilotage (Chakrabarty, 2017).

### **2.3.8 The marine engineer (on the tugboat)**

The marine engineer is based on the tugboat, he or she is responsible for the engine room and the main engine of the tugboat. The engine room is in the bottom structure of the tug boat. It has a temperature of over 28 degrees Celsius and has a control room which is at room temperature, cooled by air conditioning system. The engineer is required to be capable of maintaining the engine of the tugboat, to ensure it is effective and efficient all the time. The physical strength may be required during the overhauling and monthly servicing of the engine or twisting of the spanners.

## **2.4 The Women in Marine**

“Female seafarers are an under- utilised and underdeveloped but valuable resource that could provide part of the solution to the increasing problem of finding sufficient and adequately trained personnel to manage and operate the worlds growing and sophisticated merchant fleet” (Goldberg, 2015:22). In order to get more women to enter the marine sector, there needs to be a change of attitude, particularly amongst men in the industry and they need to be able to offer mentorships to the females. The men in the industry need to support the women and not treat them as outcasts. There are approximately 23000 women seafarers worldwide, representing a low 2 percent of the total workforce of 1.2 million seafarers in the globe, that is according to the International Maritime Organization . The women are clustered disproportionately in the ferry and cruise sector and in the service roles (Walker, 2015; Aggrey, 2000; Jones, 2008). The total number is slowly increasing, as is women’s representation in the ranks of ship officers and master, but it is a slow process.

The increase of females in the maritime industry will come from an effort that involves the industry and the government mitigation. The young women should have information on the marine industry as a career choice made in school. The industry leaders have to vigorously encourage and motivate the promotion of careers in this industry (Jones, 2008). “There also needs to be attention to the education of female mariners and the efforts by the shipping industry to enhance the gender mix by articulating the value that diversity brings to the industry performance”( Brickman, 2008:194). In this view, Nkosazana Dlamini-Zuma, the former chairperson of the African Union, noted that “The majority of the African countries are on the coastal and islands, the ocean space is larger than the land. The women have a key role to play in addressing the neglect of the African oceans. There are efforts made to focus on developing the women for the marine operational careers.” (Dudman,2015:

14). The IMO was the first organization to create strategies to integrate women into the marine sector. The development program by the IMO was initiated in 1989 (Dudman, 2015).

### **2.5 The Promotion of women in the Maritime Industry**

Maritime organisations are usually concerned and reluctant to employ females. The organisations are not confident in employing females on operational vacancies, as women are seen as fragile people and have to take time off often due to maternity and the care of children (Thomas, 2004). In her study, Cele (2011) states that if South Africa wanted to be an economically developed country, then the women must be involved in building the strengths of the economy. Leaving women out of the maritime industry is equal to denying the economy the resources to build a healthy economy (Cele, 2011).

In the University of the United States (USSMA), female students in the maritime class felt that there was unequal treatment between them and their male counterparts. The fact remains that women shall always be different from men, so they can never be treated the same, if one is practicing equality between the sexes. The University of the United States identified this gap of gender inequality of the marine class in the year 1989 and took steps to assist the female students to become involved and comfortable in the maritime department. There were sports games introduced to enhance the team spirit and the togetherness of the class. The sports activities were an achievement for the females, particularly as they gained more confidence to progress in the course of maritime studies in the university (Brickman, 2008). The university would invite females who were already working either as officers on board ships or as pilots, to motivate and encourage the students for the future in the maritime careers.

The opportunities in the marine operations careers should be given to both men and women equally. There should be a success in recruiting more women in the industry, as there are not enough numbers accounting for the women (Cele, 2011). The careers of medicine and law have in the past suffered the consequence of being male dominated, but the numbers of women have increased in these fields, the same must be practiced for the marine sector (Brickman, 2008). “If the female recruitment is to increase, the merchant marine and the reasons why a young person should aspire to become a ships officer must become part of a national and an international conversation”(Brickman, 2008:194). The IMO was the first organisation to acknowledge women and what they had to offer to the marine sector, and therefore developed strategies to assist the integration of women into the marine world. The IMO remains aware of the challenges faced by women mariners and together with other organisations like the United Nations, strive to further assist women into marine careers as appropriate as they see fit (Jones, 2008). The females joining

the marine operations department persistently face challenges to date. The females need the support, predominantly from the other females and males who have walked the path ahead of them.

There was very low retention and recruitment of females when the maritime career was introduced to the females in the 1970's. The women in the marine industry feared that their views were not accepted, but that should not have been reason enough for them to keep quiet when there was a need to share their ideas (Brickman, 2008).

The study by Bhirugnath-Bhookun Kitada ( 2017) acknowledges that the maritime industry is still male dominated, but the women have penetrated through it even though their numbers in management and in the overall marine operations is still low. When in these careers, the women focus only on the work, in an attempt to prove their competence in the industry. Hence they end up focusing only on the career, "they live a work-led life"(Bhirugnath-Bhookun and Kitada, 2017). In an article by Gold (2016) a female engineer called Jobela described how the career at sea is fulfilling financially, and how one gets to earn good money while travelling around the world. She added that in this career, one cannot be so successful if having a family (babies) is one of the goals, but instead, all that has to be on hold until "you reach a certain stage in your career, where you can put the career on hold to make the babies as you cannot achieve both". Jobela added that when interacting with men, they tend to be careful with her and treat her with respect, as naturally, men would treat a lady with tender care and respect.

## **2.6 Challenges faced by female mariners**

Most men believe that a woman is not physically capable of lifting heavy objects, for example, in the engine room of a vessel or the deck of the ship. As a result, most women work hard to prove to the men that they too are competent for the job, the same way that the men are. The women therefore have the challenge of exerting double the effort in order to prove their competence to their male counterparts. This requires a considerable amount of strength and stamina, but it should not be a reason for barring females from fulfilling their career dreams of becoming successful mariners. A woman is naturally a fragile being and does not often have the physical strength, but there are other areas of the marine industry where she can contribute to the success of many organisations in the industry. Therefore, they should not be penalised for not possessing physical strength that men naturally have (Kitada, 2013).

If the maritime career is to be equally appreciated by both females and males, there must be clarity on the difficulties and fears that the females encounter. There must be elimination of challenges like sexual harassment, abuse and bullying. All this must be communicated and there must be clear

indication of the way forward from all the challenges faced by the women (Jo, 2010). Jo (2012) further revealed that women tend to choose the marine career in order to travel and this career seems highly attractive to them because of its high income levels, as compared to other careers. However, it is important that they get attracted in more lucrative ways to the marine industry, rather than the fact that one gets to travel and earn more, as once all the travel and earning is done, the reality is, there is hard work to be done and the women's aspirations of the marine career must be more than travel and high-income salaries. It has been noted that women have a tendency to transfer from a sea-faring career to alternative careers much quicker than the males, they will find a marine career in the shore or change their careers after being involved in maritime industry for a short period (Jo, 2010).

According to Cele (2011), in various companies, women are locked up in administrative roles, whether it is a marine business or not. The majority of women work in the offices as admin clerks and not in senior office posts like port captains or port engineers (Cele, 2011). Thus females must also be encouraged to remain onboard the marines, they must be involved and treated as equal to men, in order to form uniform gender and non-discriminating structures in the maritime operations (Brickman, 2008).

With regard to choice on their careers, females want to balance their career choice with their family needs. They are aware that at some time in their life cycle, they may have to become a mother and a wife, if they are not yet already. Thus, when joining the maritime industry, some of the women are aware that the career would not allow them to continue with being efficiently operational whilst they are pregnant. When one falls pregnant as a mariner in the operation, participation in the operation is disturbed, as females cannot carry out their duties while pregnant, unlike in administrative duties, where a woman can carry her baby at the workplace until she is due to give birth.

The women believe that in order to be recognised as competent by their fellow male colleagues, they have to behave like the men, as though they have tough arms and walk around in a masculine look. In so doing, they lose their identity as women (Kitada, 2013 ; Jo, 2010). There is a great amount of discrimination towards the female mariner, there is the male prejudice and difficulties to work as a woman in the male dominated industry. Although some of the women choose the marine as a career of choice, they do not work for long in those male dominated careers before they choose the office-based, shore jobs. Some women join the marine careers for its apparent attractive

remuneration and to gain the skills required to qualify for the management roles (Dragomir and Surugiu, 2013). This is partially the reason why males in the industry feel it is a wasted effort to train a female for the operation, as she is not there for the long haul, but for the experience that would qualify her for the management positions and that may be her only purpose for joining the marine operations (Dragomir and Surugiu, 2013 ; Jo, 2010).

In order to increase and improve the recruitment and retention of the women in marine, there is a need for a change of attitudes towards women and there must be policies to govern the recruitment and retention of women in this particular industry. If these changes are implemented, the numbers of women being attracted and maintained in these careers may improve (Jo, 2010; Brickman, 2008). In her study, Kitada (2013) recognised how females on board merchant shipping vessels, serving as officers, appeared to be afraid to be themselves. With regards to femininity, the females felt safer to portray images of masculinity when onboard. The portrayal of men roles by the females enabled them to be one with the men and awarded them the sense of belonging to the onboard crew (Kitada , 2013).

The Korean Maritime University admitted female students as early as 1991 for the first time. In 1995, the first 5 female mariners graduated and sailed as navigating officers. Ever since then, there has been an increase in the numbers of females who have been accepted in the KMU as marine science students (Jo, 2010). There was a large number of students who graduated in the field, but when the results were compared , there were few females who had been retained in the work places. The numbers of the female students who were actually working as the mariners was low, as compared to the students who had graduated in the university. This clearly shows that the issue of retention had not been successfully resolved (Jo, 2010).

When the Korean government suffered the shortage of seafarers to work onboard merchant vessels, the utilisation of women seafarers was not recognised as a solution to this problem of skills shortage. The companies failed to perceive how hiring women could resolve the shortage of marine skills. Even though women may have been qualified in the field, the participation of the female seafarer was understood as a distraction to the crew of men onboard. They did not understand how having a woman onboard was going to assist in the daily duties (Jo, 2010 ; Thomas, 2004). The participation of women mariners was more evident in the developed countries, although the numbers were still in the growth phase. The women were perceived as people who were not

capable to participate in the daily duties, which are required in sea-faring, as their physical body abilities were doubted by the men (Jo, 2010).

In her interview with Govender (2016), Pinky Zungu, Durban's first female Deputy Harbour Master, expressed how difficult it was to con the vessels commanded by the experienced, old and grey Captains, because they needed reassurance of the safety of their vessels as soon as they realised that a female pilot would be navigating their vessels in or out of the harbour. On the contrary, the male pilots needed not explain nor re-assure the Captains of their piloting skills and years of experience. The male pilot is at an advantage of being accepted by the Captain of the vessel than the female. Pinky re-iterates the same sentiments about how females had to portray themselves as strong, mentally and physically, in order to perform their roles in the same altitude as their male colleagues (Govender, 2016).

Females are an under-utilized talent, many perceive the vulnerabilities of women and dismiss what women have to offer to the marine operations. The women are naturally different from men, hence, the way they think and behave would be different. The way they would manage or carry out their duties in the work place would have a different approach. Societies in various countries do not allow women to work in the maritime industry, because of the cultural and social beliefs about women's role in the society (Thomas, 2004).

“Transport is one of several sectors that have traditionally been regarded as no place for women” (Turnbull, 2013:1). Excluding women out of the transport industry, particularly the marine sectors, is denying the improvement of the economy of numerous countries, as women have a lot to offer to these industries (Turnbull, 2013).

There are marine companies that have not designed themselves or structured themselves in a way that should accommodate women, for example, on board their vessels, they would not have separate living facilities to accommodate the privacy of a woman and her personal needs. When companies do not have the necessary facilities to accommodate women, this becomes a hindrance to the effective and efficient training that a female student can attain when serving as a cadet (an apprentice onboard a ship) or serving as an officer (Jo, 2010). The international labour organization has made efforts in involving women in these sectors where they have been excluded, and encouraging gender equality between men and women (Turnbull, 2013).

In the beginning of the year 1973, the United States Maritime University administrator was the first federal service academy to admit women as students and the focal point was for the education at the institution to accommodate both men and women (Brickman, 2008). There were challenges in admitting women in the institution, as they were previously excluded from the maritime careers, and there were structures that had to be in place to welcome the women in the programme, in order to adjust the programme to suite the female student. There were numerous institutions which had difficulties in integrating the previously disadvantaged group of women into the maritime industry (Brickman, 2008; Jo, 2010). The first women who were accepted into the training institution were 15 and only 8 of those graduated from midshipmen and were able to train further as cadets at sea. The merchant shipping vessels that the female cadets were to join were inadequately prepared to accommodate the female students onboard. The sleeping arrangement, sanitation and contraception requirements were not met, all the necessities were unavailable to the female cadet. Therefore, from the year 1986, the university discovered the need for preparing the female students for the apprenticeship onboard vessels, following the gap for someone who would prepare them with the advice and share the onboard experiences, as well as enlighten them on the attitudes and behaviour of the men onboard, so that they were prepared in advance, of the environment that they were to embark on, following their graduation from the university. The university had failed to recognise that a female student cannot be treated like the male student, if one wanted to adhere to the practices of treating both the male and female students equally. It was for the university to acknowledge that the students were different, males are different from females and hence there were certain approaches in the treatment of the female student, that were not appropriate for the success of the female student in the career of marine operations ( Brickman, 2008).

The institution began the introduction of sports for extra mural activity, to allow the integration of the females into the marine world. The extra mural activities assisted in changing the attitudes and built good relationships within the different sexes. Although the relationships were improved, the males in the training school concluded that they would never allow their sisters or the women in their lives to join the marine academy, as they understood it to be a difficult career for women (Brickman, 2008). The numbers of the females who were graduating from the institution were increasing, but despite this increase, the numbers of women being absorbed by shipping companies were not matching the number of males who were employed. The shipping companies ostracised the female mariners, fearing that they would not be retained for longer than males in the marine careers. They concluded from the previous occasions that once the female employees start their families, they would seek more shore-based and office employment, where they were closer to their



families, and the jobs that would not require them to work in shift patterns which included the night shifts (Thomas, 2004). This was evident as numerous women were not able to complete their sea time training due to the challenges at sea and their family lives were suffering, from the time they had to spend away (Jo, 2010).

The women appear to be numerous represented in the cruise liner and shore-based careers of the marine operation. The perception was that women would, after a period of time, not be able to be away from their families or not withstand the night shift duties that these careers require (Thomas, 2004). The cruise liners and ferries are seen as the more “female friendly” places where women would fit well as they are perceived as fragile people. The cruise liners are for leisure and transporting passengers around the world. Therefore, the women employed there do not toil over strenuous duties. They are there for navigational and safety maintenance duties. They are spread around as cooks, officers and some beauty therapists on board the vessels. It would appear as though the women are more attracted to the vessels , for the enjoyment of the cruise liners and touring around the world, whilst enjoying the good income salaries ( Jo, 2010; Aggrey, 2000)

According to Hassan (2016), Ingy Abdekarim was the first female marine engineer in Egypt. It was challenging for her to gain acceptance into the school of marine engineering. The reason being that culture is highly respected in Egypt. Her family, particularly her father, did not expect her to associate herself with a male dominated career. She was fascinated by the marine industry and did her utmost best to achieve the marine engineering qualification, after her acceptance at the marine engineering institution. Ingy was the only female in a class of 30 males and she felt that the men did not appreciate her presence due to the stereotype that marine operational work was only for men. During her studies, the lecturers were part of the people who discouraged her towards pursuing this male dominated career (Hassan, 2016).

When she graduated and was serving as a cadet, she had to become stronger and accumulate an assertive character towards her engine room peers. She would receive comments like “you should be in the kitchen peeling potatoes” she recalled. She did not allow the negative comments to deter her from her passion of becoming a marine engineer. Ingy believed she could accommodate and balance her career and family life (Hassan, 2016).

For the women in the marine careers, the worst challenge is having to deal with sexual harassment that is evident at the workplace or onboard the vessels. The male crew members onboard expect the women who join the vessels to extend sexual favours to them, as opposed to the actual reason why

they are onboard. This attitude towards women may be encouraged by the social and cultural factors of how the women are portrayed by the society and by their male colleagues. There are some women who neglect the marine career as they cannot bear the brunt of men who harass them sexually. “Sexual harassment usually comes in the form of sexist comments, invitation to a cabin and offer of paid sex” (Tangi, 2016: line 89). A female onboard initially meant sexual favours in the past, as the seamen would hire prostitutes when the ship is docked in the various ports after months of a sea voyage. Previously, the women onboard vessels served as cooks and stewardesses and would offer the sexual favours to the men onboard, hence, it is now difficult for men to understand that women are onboard to focus on the operation alone and not the sexual favours (Tangi, 2016).

In contrast, there are some women who instead of working towards becoming competent in the job, would lure the men and seduce them in exchange for them to carry out their duties for them or in return for money.

In the Philippines, the merchant marine academy accepted the female students in 1993, the women in the Development and National Building Act, mandated the institution to integrate women students into the academy (Tangi, 2016). The female mariner may work in the operation, but as the years extend, they attract an urge to seek the more office-based careers. The shift system, predominantly the night shift may have disadvantages on the females when they are married and have children at home, the assistance of the child minder may be insufficient, and the mariner is then forced to leave the shift work and ultimately leaving the operation totally (Thomas, 2004). Being part of a team of male only colleagues can become lonely for the female mariner, men do not comprehend ideas the same way a female would and therefore, the misunderstanding may result in a negative atmosphere in the work place. The female mariner may find the workplace lonely due to not having people to talk to, or not having people who understand her as a woman. There are companies that will not hire female mariners and therefore, the availability of such careers becomes scarce for the females and their marine skill becomes redundant ( Szozda et al; 2014).

Regarding the promotion of young females in the maritime operations careers, the organisations involved need to be pro-active in holding seminars and workshops to assist in spreading the knowledge, predominantly to young females who find this sector lucrative to their future careers (Jones, 2008). The scarcity of women in marine operations may be caused by the lack of knowledge available to them, with regards to the careers available in this sector. If the national leaders, including the men in the nation and around the globe at large, would team up and provide the support that the women need in the marine sector, the numbers of women in maritime industry

would increase. As much as the IMO has been holding seminars and conferences to discuss more openly about involving women in this male dominated industry, there is still a huge gap on how to deal with the challenges or alleviate the challenges that women face on a daily basis in this industry (Jo, 2010; Jones, 2008). Another barrier causing fewer women to join the marines is that the men have created a perception that the marine operations require physical abilities equal to their masculine levels, in order for one to be successful and they aim at tarnishing the females' aspiration of becoming a mariner. The social and traditional views of men and communities in general, towards the marine careers can be discouraging to the female, as the society and some cultures do not allow women to be exposed in male dominated careers (Dragomir and Surugiu, 2013).

When joining a vessel, for a man, it usually takes a few hours before they are acquainted and accepted by the crew members, but for a woman, it can take some days for her to be accepted as one of the crew members (Dragomir and Surugiu, 2013). The reality of less women in the marine operations is not entirely due to the gender inequality, but some researches, like the study by Cele (2011), revealed that women are being paid less than men and the companies are reluctant to hire the females. There are a few women in the marine senior positions, and in the cases where the female is holding a senior position, the chances are high that she is underpaid. The marine operations careers are stressful to women, and the majority of them who survive in the maritime industry are generally strong-willed people and are often those people who come from disadvantaged backgrounds (Aggrey, 2000). They survive in these physically challenging careers to make a name for themselves and to support their families. The women have to constantly stand up for themselves against male prejudice and being undermined by their male colleagues. The ideas contributed by females towards the jobs are highly scrutinised and may be considered only when the plans by the male employees do not subside accordingly (Dragomir and Surugiu, 2013; Theotokas and Tsalichi, 2013).

The International Maritime Organization (IMO) acknowledged that there was a growing concern of the skills shortage and that measures to remedy the situation were needed before many shipping companies suffered the loss of no officers. In their acknowledgement of skills shortage, the participation of women in the industry was disregarded. The female mariner is different and has a different way of thinking and a different approach to life in general, the organisations need to accept this diversity of the females, in order to incorporate equal treatment of employees amongst men and women in the industry (Jo, 2010). The diversification of genders could be used for the success of the maritime industry, but there seems to be dismissal of the females' contribution to the industry.

Numerous companies will hire the women, but not because they had confidence in the skills that they possess, but in efforts to qualify for affirmative action ( Jo, 2010; Thomas, 2004).

“If the women in question occupy an officer rank, these difficulties may affect their ability to give orders and to lead, an ability which might be questioned by their male colleagues” (Theotokas and Tsalichi, 2013: 5). When a woman is in charge, the men find it difficult to follow her lead, they will question and doubt her decisions, resulting in some of them totally not implementing the orders given by the females (Theotokas and Tsalichi, 2013).

A female tug-master recalled taking on a shift as a young female tug-master, she recalled how it was difficult and intimidating to supervise her subordinates who were old men in the service for about 30 years and above. The tug crew would not take orders from her, which she described as detrimental for the operation of tying up a tugboat to the ship. During the operation, the tug-master must give orders, specifying how and where to fasten the line on the ship and if her crew does not follow the instruction, this could result in an accident and in some cases, a fatality.

Some organisations are reluctant to employ female employees, with the fear that they will not commit to the hard work that is expected of them. The women are excluded due to the fear of having the burden of the work to be carried by the men only. According to Thomas (2004), women are included in duties like navigating officers, cooks and stewardesses onboard the vessels, as the engine room duties and duties on deck of the ship will not be “physically suitable” for them (Thomas, 2004). “The women seem intelligent and more vigilant than men and may have the perfect solutions to the problems and tangible ideas, which would be beneficial to voyages onboard vessel.” The men do know this and acknowledge it, but continue disregarding the women’s ideas. The woman in the marine career exerts herself extra, in an effort to prove herself in the industry (Thomas, 2004).

In the past, if a ship had a woman onboard, that would mean bad luck for the ship and men to date believe this myth and this may be another reason that they attempt to put up barriers to women entering the industry, especially on the foreign going vessels (Horck, 2008). The women are naturally known to be strong willed people and when they overcome the challenges, including sexual harassment, they do come out stronger. This encourages some of them to progress in their careers, throughout the difficulties, but many do not survive. Therefore, the numbers of women in the marine operations, predominantly the women who are stationed on the foreign going vessels and the women in marine operations , do not increase. The women who are stationed in the ports as

engineers and tug masters, although they go through similar challenges, the challenges may be bearable due to the fact that their family support may be close by (Thomas, 2004).

The women seafarers often obscure their feminine side, in order to be part of the team of seafarers. The display of femininity often makes them feel uncomfortable and different from their team of males. They change the way they dress to ensure that the men do not notice any revealed part of their bodies, so that men are not attracted to them (Kitada, 2013). The women in the shore side jobs (not at the sea), like the crane drivers and stevedores ashore, all have a tendency to result into men behaviours, so that they do not reveal their natural being as women, they assume themselves in the male roles, so as to be part of the team and sometimes to keep the peace and unity of the work team (Horck, 2008).

According to Jones (2008), the women remain unequally represented in the maritime industry, the offerings that they have towards the industry are wasted. The world maritime university has increased the number of students that they register over the years, but the numbers of female employees are not increasing as expected, as the females registered in the marine educational courses (Jones, 2008).

The universities and maritime schools contribute towards the culture and stereotype towards women being outnumbered by men. The culture revolves around the male student being dominant in the marine and the men are given more responsibility for the physical work, as their cadetship program begins. The doubt of being a competent mariner is instilled at tertiary level in the female cadet and the doubt she carries with her until she qualifies as a mariner. Many women are confident in themselves to overcome the lack of confidence and the feeling of incompetence that is instilled at the tertiary stage (Acejo and Abila, 2016). Naturally, women have a skill to multi-task and they are individuals who diligently commit to their duties . The men do not understand how females function or work and there are sometimes conflicts between men and women in the workplace (Birkhoff, 2012).

In Sweden, the women and the men are paid equal salaries and the acceptance of women in the male dominated careers is encouraged by the politics and the gender equity policies. The organisations are mandated to employ women, although it may be against their beliefs to hire them, they are forced by the legislation to include women in the male dominated careers (Horck, 2008). If many countries would have such practices in their legislation, there would be improved numbers of women in the maritime industry. A tug master in Asia recalled when he began his duties, that he

was not confident when he began, and the size of the vessels intimidated him. He doubted whether he was going to be competent to carry out the job. But he needed to believe in himself and trust his crew and the job was successful (Fogarty, 2013). The same could be said about a female tug master, beginning her career as a new tug-master, but in various cases, as soon as a female portrays signs of fear or a lack of confidence as a newly appointed mariner or tug master, the male colleagues would conclude that she is not ready to take up the career, or the career is not for her. Being the only female onboard, a merchant vessel can be lonely, and the men tend to treat the females more gently and fragile, as the females appear in a fragile sense. But that is not how the females want to be treated, as they want to appear competent and strong like the men to carry out their duties. The females do not embark on these careers to be pitied upon and be handed the qualifications on a silver platter or the posts, they want to work hard and achieve the results according to the standards of the IMO. In many countries, men cannot accept that a female can handle their vessel coming into port, some captains of the ships, if they had a choice of turning their vessels away and continue to the port where there are no female pilots, they would do so, as they are still astonished when they see a female boarding their vessels for pilotage (Govender, 2016).

Although women may be taking on the duties that require the physical strength of a man, this is denying them the opportunity to be exposed and learn in these duties, for example, a female cadet may be instructed to only carry out her onboard duties at the navigating bridge, as the bridge is perceived as the safest place for a female to work in and the male cadets have to carry out their duties, both on deck, as they have the physical strength and they also then carry out their duties at the bridge. This discrimination denies the female cadet the exposure that is required to have her qualified as an officer or to attain her first qualification as a mariner (Aggrey, 2000). The segregation from the navigational duties for the female cadet only denies her the opportunity to learn everything that there is to learn on the deck of the ship, including the maintenance of the safety gear, which is of vital importance for someone who is training to become a navigating/deck officer. Every employee must be involved in safety, for their own safety and the safety of others. It has been emphasized that when women join the male dominated careers, they seem to focus on becoming and looking like the men, they feel they need to have the male traits in order for them to be the perfect fit to the career (Kitada, 2013). The women are not wholly accepted in the industry and they are made to feel as though they do not fit in this industry, hence, they pretend to be males. If the maritime industry is to accept the women as equally as the men, then the women must be allowed to be themselves, just like in any other careers.

At the University of Poland, women believe that having someone who was a mariner in their family is an advantage, as they can have a point of reference that is closer to them for the support that is required by them. They feel as though having someone in the family, who has walked the path in the maritime industry can improve one's career path and enable many doors to open for their growth in the industry (Szozda et al; 2014). The Polish female students showed results of how they were spared the strenuous and physical duties onboard the ships and were given the duties only for navigation. The female students, on joining the cadetship, knew that they had to work harder than their male counterparts to prove that they are equally qualified as the male student. The female student onboard the vessels is patient and focuses on the job, more than the male student. They possess a different approach to tackling problems onboard. The female students had difficulty in finding berths on the vessels for their cadetship training, as the shipping companies were reluctant to hire females as they were not physically strong and known for their "promiscuous" ways. The hiring agents were not afraid to voice it out that women were not to be hired in this male dominated industry (Szozda et al., 2014).

According to Aggrey (2000), it is hidden discrimination when females are given the lighter duties, where one does not get dirty and there is no need for physical strength to achieve the tasks, but the exclusion from these duties then eliminates the women from attaining the knowledge and experience that is required to be competent in her duties in the operation, and the open discrimination is where the women are expected to put in twice as much effort as the males, to the same job, so that she can prove her competence. Whereas the men do not have to prove themselves and yet they are accepted as able and competent in the maritime industry (Aggrey, 2000).

A few shipping companies regard the females as an extra cost to them, as they are physically disadvantaged and if one has to take a female onboard, they would have to be two females as the cabins are shared between two seafarers. Having one woman to use one cabin by herself is in the view of shipping companies, wasteful expenditure, hence, it is difficult for the women to complete their onboard apprenticeship (Szozda et al., 2014).

One student voiced out: "I was denied the planned apprenticeship because the cabins were double and I would have been the only woman on the vessel so it simply was not cost-effective for the ship owner"( Szozda et al; 2014).

In an article by Bhirugnath-Bhookhun and Kitada (2017), they add the fact that women work harder and focus more on their careers, for they are in efforts to prove that they are competent in the marine jobs, as much as the men are. The attitudes of men towards them are sometimes very

challenging, the stereotype that the marine is a man's world still weighs heavily on the female mariner.

Bhirugnath-Bhookhun and Kitada (2017) reveal that there is no proof of women in senior marine positions. There is no clear indication as to why the women are not climbing up the corporate ladder as fast as their male counterparts. The maritime sector is still male dominated, as women are not choosing the science and technology studies at tertiary level. The females' competence is also often being questioned by the males, according to literature, she is barely given an opportunity to explore her ideas without her colleagues, preparing for her failure or doubting if her ideas are to be used at first hand, or when their ideas do not succeed (Bhirugnath-Bhookhun and Kitada, 2017).

## **2.7 Conclusion**

This chapter provided an in-depth analysis of the literature related to this study. Prior to that, it was essential to highlight the theory associated with the study. It was indicated in the literature that if the attitude towards women in marine careers is to change, the men's attitudes towards the women must change, not only in the work environment, but at home as well. The women should not feel inferior to the men after years of their integration into the male dominated careers. In the same way, men also ought to accept that a woman is capable of being their equal at home and at the workplace. The woman does not need to work twice as much as the men to prove a point of competence to the men. Thus, women must be appreciated and be given equal opportunities with the men. The next chapter presents the research design and the methodology for the study.



## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

In the previous chapter, literature related to the study was reviewed. This chapter focuses on the research design and methodology of the study. The sections covered in the chapter include the research design, the research philosophy, the research strategy, the target population, sampling strategy, the research instrument, administration of the interview process, as well as the data analysis techniques used for the data gathering process. As highlighted in the first chapter, the purpose of this study is to investigate the main challenges experienced by female mariners, as well as to suggest ways of improving the retention of the women in marine operations careers of Transnet National Ports Authority.

#### 3.2 The research design

The study is a qualitative research and embarks on a qualitative and descriptive research design. A qualitative and descriptive design commits to studying a phenomenon in its naturalistic way within the research area (Creswell, 2014 and Creswell, 2017). The goal of this research design is to attain information, deep enough for the researcher to achieve a clear understanding of each respondent's views and experiences at the workplace. The researcher is determined to understand, what it is that the women are experiencing in this male dominated field. The researcher thus aims to further investigate if it is the challenges that women have to face, that deter them from occupying positions in offices, before their willingness, or is this their career plan to be employed in the operation for a short period and thereafter, embark on an office-based career. The qualitative approach was therefore deemed the best way to gather this in-depth knowledge, as qualitative research seeks the subjective view of the respondent (Welman, Kruger and Mitchell, 2005). The marine operations is a practical job, hence, employing the qualitative research method for this study assisted the researcher to gain valuable information from the respondents' points of view, as well as their experiences. When there is a need to understand how and why variables link, the qualitative methods are best used (Creswell, 2014).

Unlike in the quantitative study where objectivity is examined and standard instruments and tested formulas are used to measure the data, this qualitative study investigated how and why the women in the marine operation are not retained in the operational part of the career. The researcher thus sought the views and the opinions of the women in the workplace.

In this view, the research followed the inductive approach, whereby conclusions may only be reached after the observation and the data have been collected and interpreted. The phenomena may then only make sense. The inductive approach appreciates a bottom up process of the research, as the data may be collected as first step before the conclusion is drawn, no hypothesis may be accepted nor rejected before the observation or data is collected (Zalaghi and Khazaei, 2016). For this particular study, having a quantitative study would have been insufficient, as the researcher aims at gaining insights into the experiences of the female employees in the marine sector. The study thus employed the exploratory design associated with the qualitative method, which is aligned with the phenomenological philosophy, with the purpose of investigating the challenges affecting the women in the marine operations, as well as to suggest how best to improve their retention in this sector.

### **3.3 Research Paradigm**

The study was designed following the interpretive paradigm, where a phenomenon is observed and the views of the participants are taken in as an objective view. The participants' contribution to the study are their own perceptions of their experiences or opinions of the phenomena in its natural form, hence, even though their contributions may be true or false, there is no certain way for the researcher to approve nor disapprove of the respondents' views, but when the data that is being collected and analysed continuously reaches a point where no new information or story is being told, that is a point of saturation of the data, and there is no further reason for the researcher to continue collecting the data when it has reached a point of saturation (Noble and Smith, 2014).

### **3.4 Research methodology**

There are generally three main research approaches and these include the quantitative, qualitative and mixed methods (Cooper and Schindler, 2003). According to Saunders et al (2012), the quantitative methods align with the positivistic philosophy, while the qualitative methods are aligned with the phenomenological philosophy (Keele, 2011; Gray, 2013). According to George (2011), quantitative methods base their findings on numbers, measurements and statistical calculations and are highly structured, using scientific approaches, as compared to the qualitative research (Wiid and Diggins, 2010). Thus, from the onset, the sample sizes for quantitative methods are relatively larger, as compared to the qualitative methods. On the contrary, qualitative methods base their findings on the detailed descriptions by research participants, to gain more knowledge of a particular problem (Wiid and Diggins, 2010). This method generally has relatively low samples and is a more systematic and subjective approach towards problem solving, as compared to quantitative research (Keele, 2011).

This study employed the qualitative method since it sought to gain new knowledge on a relatively unique study regarding the challenges being faced by female mariners. The researcher thus interviewed the female mariners, with a view to gaining insights into their lived experiences of working as female mariners in the 8 ports of TNPA (Cape Town, Richards Bay, Saldanha, East London, Mossel Bay, Port Elizabeth, Gqura and Durban). The researcher was interested in all the females in the marine operations industry of TNPA (focusing on the females that are in pilotage, tug master and marine engineering duties). The quantitative method was deemed inappropriate, mindful of the fact that the method is suitable when samples are large. Further, qualitative methods have the advantage of facilitating an in-depth data searching process (Saunders, Lewis and Thornhill, 2012).

### **3.5 Location of the study**

The study took place in three provinces where all the 8 ports of TPNA are based and these include the Eastern Cape, Western Cape and KwaZulu-Natal. TNPA was chosen for the study, as the researcher is also a marine pilot in the organisation. During her experience in the industry, the researcher observed that women in this industry tend to be employed for shorter periods in the operation, before they seek office-based careers. This ignited interest in the researcher, hence, the motivation behind this study.

### **3.5 Target population and Sampling**

The target population included all the females in all the 8 ports of TNPA (Cape Town, Richards's bay, Saldanha, East London, Port Elizabeth, Gqura, Mossel Bay and Durban). These included the pilots, marine engineers, tug masters, harbour masters and their deputies, who were employed in the organisation at the time of the study. A sample is a portion that is drawn from the total population, as some studies are not able to include everyone in the study (Welman et al., 2005). Therefore, a sample is drawn to represent the total population.

In a qualitative study, the non-probability sampling is employed, as the aim is to retrieve subjective information from the participants (Cresswell, 2014). The non-probability sampling allows the researcher to select the participants according to the researcher's judgment. In purposive non-random sample, the number of people interviewed is less important than the criteria used to select them. The characteristics of individuals are used as the basis of selection, to reveal the diversity and the breath of the sample population (Sekaran and Bougie, 2016). There are numerous non-probability sampling techniques that include convenience, snowball, quota sampling and purposive sampling (Babbie & Mouton, 2009). In convenience sampling, researchers select participants on a

willing and availability basis. Snowball sampling entails the selection of the first participant towards matching the participant profile and let the selected participant refer other participants with traits. Purposive sampling entails the selection of participants who can provide the information necessary for the purpose of the study. Thus, a deliberate selection process is done by the researcher to select participants who meet certain preferred requirements. According to Kolb (2012), phenomenological qualitative studies such as this one can only be effective when suitable participants are chosen. In pursuit of this desired objective, this study employed the purposive sampling technique, with the aim of tapping into information from well experienced female mariners.

There are approximately 100 females in the marine operations of TNPA in South Africa. The sample size for the study was 18 female mariners (the marine pilots, marine engineers, tug masters) drawn from the 8 TNPA. For the intention of this study, the focus was on the females in the marine operation and only the females who are marine pilots, marine engineers and tug masters. The reason for this particular criterion was that although these women are responsible for the operation of harbour services, their careers began with a cadetship program, which means that one has to undergo training on the merchant shipping vessels, which leave the shore for months going to foreign countries and some of these women have experienced being on-board the vessels, sailing as the only woman, or a maximum of two. For the purpose of this study, the researcher focused on the females who had the experience of working at high seas, although it may be a cadetship experience and thereafter embarks on an operational marine career in the harbours of TNPA. In this view, Table 3.1 indicates the participants chosen and the stations to which they belonged.

**Table 3.1: Sample distribution**

<b>Port</b>	<b>Designation</b>
Durban	2 pilots 1 tug master 2 senior engineers 2 junior tug masters 1 senior tug master 1 junior pilot
Richards bay	1 senior engineer 1 senior tug master 1 engineer 1 tug master
Port Elizabeth	1 deputy harbour master/ pilot
Saldanha	1 deputy harbour master/pilot
Cape Town	1 pilot
Gqura	1 deputy harbour master/pilot 1 pilot

The participants for this study were also selected through a convenience sampling method, due to that convenience sampling is a cheaper method and allows the researcher to select the respondents who are readily available at a time and place of the researcher's convenience. The convenience sampling method stems under the non-probability sampling methods. It is a sampling method that is not time consuming and known to be cheaper, as the researcher selects the subjects readily available. The researcher was based in Durban due to her occupational duties, therefore the convenience sample was chosen from the 8 Ports of TNPA for the interviews (Noble and Smith, 2014).

### **3.6 Data collection**

#### **3.6.1 Questionnaire**

The first instrument for data collection was the questionnaire, which contained open-ended questions. It is important to highlight the fact that a questionnaire can be used to collect both qualitative and quantitative data, but what differentiates it is the type of questions asked. For a quantitative study, a well-structured questionnaire with closed-ended questions is used, while in a

qualitative study, the questionnaire contains open-ended questions which seek the respondents' opinions or views regarding certain phenomena ( Denzin and Lincoln, 2008).

The questionnaire employed in this study comprised 4 parts: the challenges, social factors, the promotion of the marine operations and the retention of the women in the marine operations. The questionnaire contained 4 to 5 unstructured questions under each section, which were to be answered in the respondents' own views. The researcher emailed the questionnaire to the employees at the ports nominated for the study. In addition, to facilitate more responses, the researcher printed out the questionnaire and distributed it to the participants, as mentioned above (marine pilots, tug masters and marine engineers), to be completed at their own convenient time.

### **3.6.2 In-depth Interviews**

In addition to the open-ended questionnaire, the researcher also used interviews to collect data. The interview is a form of data collection that is very common in descriptive research such as surveys, but can also be used to collect valid and reliable data in other types of research (Smith et al; 2016)

In contrast to questionnaires, interviews generally tend to:

- Make greater use of open-ended questions;
- Be associated more typically with qualitative, phenomenological-oriented research;
- Make use of small, deliberately selected purposive samples; and
- Give a large, and potentially unlimited information yield.

There are various types of interviews: the highly structured, interviewer administered questionnaire and the unstructured, open-ended, in-depth interview, as opposite ends of a continuum (Collis and Hussey, 2013). Each type of interview has a different purpose. The highly structured and structured interviews may be used in surveys and be processed quantitatively (Babbie and Mouton, 2001). In contrast, semi-structured and unstructured interviews are essentially qualitative, phenomenological-oriented data collection methods: they enable exploratory discussions that allow the researcher to understand the 'what' and the 'how', but also to grasp and explore the internal dynamics of the research topic. The various types of interviews can be used in a single study to increase the reliability of the findings. For example, in-depth, unstructured interviews may be used in the initial stages of the study to identify themes and variables (Babbie and Mouton, 2001). This data can then be used to design a structured interview to examine specific themes and the interaction of specific variables. Similarly, in the second stage of a quantitative questionnaire-based study, semi-structured

or unstructured interviews may be used to explore and to validate the findings from the questionnaire (Burns and Grove, 2005).

According to Cooper et al. (2003), it is generally not appropriate to make notes as the interview is in progress, as this is not only distracting to the subject, but it also disrupts the flow of the interview. The researcher may also give the subject clues about points of importance and so influence the subject's later responses. More appropriately, the interviewer may make use of a tape recorder (with the subject's consent) or use an accompanying note-taker or depend on his/her memory and make relevant notes as soon as possible after the interview. In short, the interview is an excellent technique for gathering certain kinds of research information (Wiid and Diggins, 2010: 310). However, because of its subjectivity, there are, as noted above, many potential sources of bias.

In view of the above, the researcher interviewed the 8 participants who included 4 seniors and 4 junior mariners. The reason for doing this was to follow up on some of the questions addressed in the questionnaire, but in this case, the researcher sought a more in-depth analysis of the situation under study, hence, the deliberate decision to supplement the information with one on one interviews.

### **3.7 Pilot study**

According to (Smith et al., 2016: 77), a pilot study refers to a data collection phase meant to test the readiness of the draft research instrument. This is done to ensure the correction of errors before the actual study, since discovering the weaknesses on the draft instrument during the study might be too late and disastrous in terms of costs. Babbie and Mouton (2001) highlight the importance of the pilot study as including the following:

- Detecting the flaws in terms of what the research instruments intends to measure;
- Identification of unclear or ambiguous items in the questionnaire and;
- Ascertaining the participant reactions capable of negatively affecting the study.

For this study, 2 participants who did not form part of the main study were interviewed as part of the pilot study.

### **3.8 Data analysis**

The collected data were analysed using thematic content analysis, whereby similar phrases were colour-coded in the same group and themes deduced from the collected information. For this study,

the sample was not large enough to have become unbearable to the researcher for analysis, hence, there was no need to embark on the use of the software for analysing the data (Noble and Smith, 2014).

### **3.9 Validity and reliability**

Validity and reliability are known to be appropriate for quantitative studies, as these studies are interested in the comparison and measurement of variables by the application of standard tables and standard sampling methods. Qualitative study entails researching the non-numeric information and, unlike the quantitative study; the qualitative study aims to find reasoning behind certain phenomena, through the experience or opinions of the population that is being studied.

Validity and reliability are the basic requirements for every empirical study. Validity and reliability are critical for ensuring trustworthiness. Babbie and Mouton (2001) noted that validity refers to how far the research findings accurately and adequately address the real phenomena under study. On the other hand, reliability refers to the ability to obtain the same results if the study were to be repeated (Collis and Hussey, 2013). The various forms of validity include internal, external, content, construct and criterion related validity.

Mindful of the fact that this study is qualitative in nature, validity and reliability entailed trustworthiness based on credibility, transferability, dependability and conformability (Lietz and Zayas, 2010: 411). Credibility refers to the extent to which studies reflect the views of the research participant (Lincoln and Guba, 1985); as cited in Lietz and Zayas (2010). Credibility in this study was achieved by ensuring that findings were linked to the participant's experiences, insights and evidence on female mariners and the challenges that they encounter in the industry. To achieve this goal, the researcher only selected participants employed at TNPA in the study. Furthermore, the researcher is a qualified female mariner who understands the female mariners' work environment, which translated into a detailed analysis and interpretation with a view to simplify the findings. Babbie and Mouton (2001) define transferability as the extent to which the results of the study relate to other contexts. Dependability is also an important aspect of qualitative studies. According to Shenton (2004), dependability refers to a situation where a repetition of the same study in the same context continues to provide similar results. To ensure this, the same biographical data such as age and experience was analysed and described accordingly. Furthermore, interviews were conducted within the same environment, with all the respondents treated the same, with the same level of confidentiality and respect.



Conformability means that the findings of the study are informed by the experiences of the respondents (Shenton, 2004: 104). In this study, conformability was achieved by ensuring that the accurate data trace was linked to various sets aligned to data findings. Thus, the raw data from the interview notes and analysis tied to the themes enhanced conformability, thereby reducing bias.

### **3.10 Limitations of the study**

The study focused only on females in the marine operations services of TNPA. However, some of the participants were reluctant to respond to the questions, due to the confidentiality issue, but the researcher encouraged them and was careful not to force them in any way, to fill in the questionnaire against their will. As common with qualitative studies, many respondents lost interest towards the open-ended questionnaire and they were not motivated, as they preferred yes or no questions or one-word answers. The researcher therefore called the participants individually, politely encouraging them to participate.

#### *Elimination of bias*

(Pannucci and Wilkins, 2010) define bias as the tendency that prejudices consideration of a question. In the context of research, bias occurs when systematic error is introduced into sampling or testing by the researcher to influence the results to generate a particular outcome. There are various types of research bias that includes design bias, measurement bias, sampling bias and procedural bias. By using the qualitative approach for the study, an attempt is made to eliminate bias by triangulating data given by interviewees. The researcher also structured the interview questions in an impartial manner, thereby avoiding leading questions.

### **3.11 Ethical considerations**

According to Saunders et al (2012) research ethics refers to the appropriateness of the researcher's approach towards respecting the rights of the participants, the organisation and the public as a subject of the study. In this study, the first effort to ensure ethical considerations began with the UKZN Research Ethics Committee which approved this research topic, by ensuring that the topic was free from ethical violations. Secondly, permission was sought from the organisation under study, that is, Transnet National Ports Authority, to allow the study to be conducted. Additionally, the following ethical considerations were ensured.

The researcher adhered to the rules and regulations of TNPA, with regards to researches that are done within the organisation's setting. The researcher provided a consent form for the questionnaire and the interviews that took place. The consent form stated that no one was obliged to fill in the questionnaire and if a respondent preferred to be excluded from the study, they were free to do so at any time. A high level of confidentiality was maintained between the researcher and the supervisor of the project, with regards to the data that were collected from the respondents (Hollway and Jefferson, 2000). The names of the respondents were not required on the questionnaire. The questionnaires will be stored in a filing cabinet at the Graduate School of Business and Leadership. The researcher was granted the necessary permission to continue with the study from the heads of department of Transnet National Ports Authority and the Graduate School of Business and Leadership and the Researcher heads of the GSBL. The researcher did not require time off her duty at TNPA to carry out the research. All the work on the research was executed by the researcher during her time off work.

### **3.12 Conclusion**

The chapter laid down the foundation under which this study was conducted. It deliberated on the methodology carried out in order to answer the research questions. The study employed the qualitative research methods aligned with the phenomenological philosophy. In the chapter, the methodological approaches employed to answer the objectives of the study were laid down. These include the research philosophy, research approach, target population and sampling, location of the study, as well as the data collection procedures. The validity and reliability of the research instruments was ensured by firstly aligning the objectives of the study to the literature and the study, followed by the design of the interview questions. The pilot study also ensured the reliability of the study. The interview process and the administration were methodically conducted, allowing clarity and effective data collection process timeous data. The next chapter presents and analyses the findings of the study.

# CHAPTER 4

## DATA PRESENTATION AND ANALYSIS

### 4.1 Introduction

In the previous chapter, a detailed description of the methodology was provided. This chapter provides the presentation and analysis of the data that were collected in the way described in the previous chapter. Thus, the data are presented in form of the emerging themes that were noted by the researcher during the data analysis phase. The results were also discussed and linked to the literature as reviewed in Chapter 2. In the main, some of the themes include the reasons why women join the marine world, the challenges associated with their careers, as well as their future plans within their careers. It is important to note that all of the respondents in this study were women, who also indicated what it means to work in the male dominated marine world. Although the question of race was not asked by the researcher, it was noted, during data collection, that most, or all of the participants were Black/Indian and Coloured. The chapter was guided by the research objectives of the study.

### 4.2 Response Rate and Pilot study findings

All the participants selected participated in the study by responding to the questions, either through the questionnaire or the interviews, giving a response rate of 100 %. Saunders et al (2012) identify the importance of a good response rate as equating to the fact that the data collected using an adequate sample is more likely to be accepted as being generalisable to the total population. The pilot study revealed that the first and third interview questions were not aligned with the objectives. Thus, the interview guide was revised. The pilot study also revealed that the entire interview process lasted for almost an hour, which was presumed too long. Thus, the number of interview questions was reduced from 22 to 10 questions, excluding the demographic questions.

Effort was made to ensure that double-barrelled statements were clarified in order to reduce long narratives and discussions by participants, with the aim of addressing all the issues raised by the interviewer.

**Table 4.1: Demographic Data**

<b>Age range</b>	18-29	30-39	40-49	Above 50
<b>No of participants</b>	0	17	0	1

The findings shown in Table 4.1 above show that there were no participants younger than 30 years, but the majority of them were above 30 years. This may suggest the majority of the women mariners are still to get to the peak of their careers and might also be still limited in terms of work experience.

### **4.3 Participants' job positions**

Amongst the participants, it was found that most of them were marine pilots, tug masters, marine engineers, as well as harbour masters. In terms of their years of experience in the organisation, it was really amazing to note that the majority of them had between eight and thirteen years of working in the same organisation. Only a few has less than five years of working in the organisation.

### **4.4 Results based on primary study**

Based on the thematic content analysis of the data that was gathered through questionnaires and interviews, the following section presents and analyses the findings in terms of the objectives of the study. The manual thematic analysis was conducted under each question with various themes emerging. Finally, the literature reviewed in Chapter 2 was linked to the findings to confirm some relationship with what the other writers noted in the similar studies.

#### **4.4.1 Objective one: To identify the challenges encountered by females in marine operations**

Regarding the challenges that the female mariners face in their daily operations as women, some of the issues raised in this regard were quite intriguing. The following were the responses that emerged from some of the participants who responded to the questionnaire:

*Participant 3. One of the challenges females face in the maritime industry is that some of the male counterparts don't trust that females can do the job, females often feel undermined. The other challenge is that women have to break through the stereotype that women belong in a kitchen or must stay at home by working twice as hard as men just to prove themselves.*

*Participant 10. They are not seen as having the same capability as their male counterparts. One has to forever prove that they are capable, even if they have proven that they are capable, there are always doubts and are second guessed. Almost everything has to be confirmed with the male counterparts in the industry. There are unofficial men's clubs where things get discussed and they come as a united front to inform you without having an input, sometimes or one of them informs you that it has been decided that this is the way forward. Regardless of you having better ideas, you will always be treated as that person that is not experienced enough and this is not only done by males*

*in the organisation, but by other women too (basically we don't have confidence in each other). The growth part is also slow, unlike other career paths.*

*Participant 8. Lots of challenges and in particular, the ability to perform a given task that the males have been performing for many years. Age crops up from time to time due to the fact that the narrative is that women are fragile and unable to be decisive at the height of pressure.*

*Participant 5. Gender equality is still an issue. Having to prove your capabilities to the Captain of the ship. Sometimes your colleagues and masters try to overpower you. Being taken for granted by subordinates.*

*Participant 7. Integration to male-dominated environment, males feel threatened by females. Males don't trust that females can do their job, shift work, fatigue, sexual harassment.*

*Participant 6. One of the major challenges is undermining their competence for whatever reasons, as well as placing an unusual amount of pressure on them to perform without any guidance or support.*

*Participant 2. Constantly undermined and treated differently to male counterparts. Having to prove themselves and that they can do jobs just as well. Worse training conditions- people not wanting to train you or ask you weird questions and expectations*

*Participant 1. In my opinion, females are still second- guessed by their male counterparts and even worse, by their female colleagues as well. The maritime industry lacks on the soft skills and hence, females are at times under pressure to be aggressive in order to make a point or be heard, or listened to.*

*Participant 4. Racial and gender discrimination is a major issue, since this was a white male dominated industry. If you are a woman, you're expected to be a mother to someone and the working hours are not suitable for someone who still has to go home and fulfil her motherly chores. e.g. cooking*

*Participant 9. Gender discrimination. Have to prove themselves that they deserve to be in the industry. The marine operations jobs demand physical fitness at all times, which does become an issue with age. The industry is still to some degree male dominated and as a female, you have to constantly prove yourself, which creates pressure for any individual. Night shift is not family friendly because for a female with a family, it creates unintended absence which most females feel guilty about. The physical demands of the job, especially pilotage, at times have negative impacts on the female body, causing some back problems over time.*

From the responses presented above, the issue of harassment came out strongly in terms of gender discrimination and sexual harassment. Another intriguing thing was the fact that women are still not trusted to perform as equally as their male counterparts. This is a kind of stereotype that is not applicable in the twenty-first century. The responses thus indicate that women can still find it difficult to penetrate this industry, which is historically male-dominated. The stereotypes against women in this industry could be the reason for the under-representation of women in this field of operations. In this respect, it seems the marine industry has not yet fully developed its policies regarding the employment of women in this field, despite their positive job performance results. It is clear from the above responses that the employment of women in the marine world is still embroiled with many misconceptions and myths, for instance, the fact that women have to work twice as hard to prove themselves to the men, the fact that women are thought to be supposed to be in the kitchen taking care of families and not in the industry. In the main, the implication is still the fact that this industry is not yet ready to recruit women, as the responses clearly indicate that some men still think this kind of job is only suitable for them and not their female counterparts.

In some of their responses, the participants even indicated that women officers' presence in the maritime industry remains minimal, as sometimes they have to deal with being dominated by males, situations which sometimes make them feel out of place and uncomfortable working with men only. All the same, the researcher's experience in this same field has shown that it is very rare for female mariners to be promoted to senior levels, a process which is always very complicated and slow. Given such scenarios, it is perhaps high time that programmes and policies are implemented in order to ensure an end to gender discrimination in the maritime field. From the researcher's experience, the policies are there, but perhaps they should not only be rhetorical, but should be implemented to ensure that females especially reap their benefits.

Another question that the researcher sought answers for was how the challenges that women mariners face, are likely to discourage them towards their career in the operation. The following responses emerged from the participants:

*Participant 3. Some may feel incapable of doing the job, especially those who have a low self-esteem and confidence. Others may feel discriminated against, which may discourage an individual by not trusting herself. Some may feel they will not be given equal treatment as men just because they are females.*

*All the challenges that are there have given females encouragement to work harder and become successful at it with the team of 8, 4 being females. I would say 3 females are the best on what they are doing.*

*Participant 10. Fear that they will never be enough/ are not strong enough to withstand the challenges. Others choose to stay in insignificant positions because they do not have to face the challenges.*

*Participant 9. Not likely, if she has love and passion for that particular career.*

*Participant 8. Look, there is an element of self-doubt that would creep in and question because in some households, the male figure is seen to be strong in any situation. As much as the training is the same, the tools also the same, there may at times be that pressure that dictates that you are not capable of performing.*

*Participant 6. Doubting her confidence and competence. Questioning whether she will ever fit in with the team.*

*Participant 7. More likely – change management takes time. Likely - a lot of regulations/preventions majors already in place to discourage this behaviour. Males don't want to work hand in hand with females, they don't give them support and respect that they deserve, it is difficult to gain experience from males. Fatigue can affect the decision of the career since the master is responsible for the craft and its personnel.*

*Participant 4. Surprisingly, these challenges make women stronger and help them gain the courage to step up from their current positions. Since I've started working in the industry, I've noticed a greater number of females taking their place in major positions. e.g. pilots.*

*Participant 1. The challenges leave that woman tired of having to fight every day to prove to everyone that she is competent, and that weariness, if left unmanaged and unmotivated, will discourage her in pursuing a career further into the operation.*

*Participant 2. Bury yourself and work hard to prove that you are capable. Lose interest and then end up not caring. Loose confidence in yourself and capabilities. Change in career paths and look for alternative options.*

*Participant 5. They are not actually discouraging, they are more encouraging us to prove ourselves, our capabilities. That we are more than capable of performing the same duties as males. Very few females feel discouraged by the challenges that we face in the operation.*

*The higher an individual goes up the ladder, the more the stress that comes with increased responsibility. The fear of increased pressure and responsibility can discourage desire for new challenges. The dangers associated with the job increase with the grades and such, can be overwhelming and discouraging towards wanting to take even bigger challenges with higher stake*

*consequences. The higher you go up the ladder, the more the eyes you will have on you and it can be a frightening thought to think that there are always people looking at you.*

The researcher also posed a question on whether there was a time during their employment in the male dominated industry, that made them feel discouraged and tired of the challenges, so much that they would leave the career and sought a more 'female friendly' career. The following responses emerged from the interviews:

*Interviewee 3. I think preparing for the orals was always daunting, that for me was difficult especially for chiefs, there were a few of us and all previous people before me were failing, so I was a bit nervous about that but I never gave up, I think engineering makes you want to persevere as well, it teaches you hard work.*

*Interviewee 4. I think at one time, the ship was anchored outside Durban and uh, I told myself that once the ship comes in, I'm just signing off, I'm resigning, I'm quitting this because someone tried his luck with me I was still a cadet, but he didn't succeed and then I was like ey, I need to get away from this place, but then when the ship came to the harbour, I decided ey, if you start quitting now, what are you going to do at home, you going to go home and sit , you don't have parents, you've got a child and uh, you want to just resign, you don't have any other job, but then I decided to just forget about it and soldier on and I continued working.*

*Interview 6. When I first joined the ship in Italy, on my first voyage I felt sea sick it was so uncomfortable I thought twice about continuing with the career, but my colleagues encouraged me to allow more time, saying that it will eventually go away.*

*Interviewee 5. During the training at sea, they (the men) always made you feel small and feel stupid. They made you want you to take your bags and go, the way that they treat you. It was so unbearable.*

*Interviewee 2. Yah, like first night shift was a nightmare, shipping can be so heavy in such a way that even when you need the bathroom, you can't even go to the bathroom, if you have to go to the bathroom, you have to explain yourself, there is delays in shipping, I felt like you know, what I've been a tug master for 10 years, that's it, let me go and finish what I started...*



*Interviewee 7. When I was a cadet one time , i felt like giving up because one officer was approaching me in a manner that I did not like and ended up reporting him to the seniors onboard the vessel*

*Interviewee 1. Pilot training, climbing the climbing of the pilot ladder's, I become so fearful.*

From the data presented above, it is noted that women mariners have a mammoth task of the need to prove themselves that they are equally competent as their male counterparts, hence, they need to overcome gender-related barriers which often prevent them from gaining access to the industry, as well as to senior positions. This is a difficult position for women, as their participation in this industry is still perceived to be limited or even non-existent (Castells Sanabra et al., 2013). As indicated earlier, this calls for the need for programmes to eliminate gender discrimination in the maritime industry. In South Africa, this designated group (women) also suffered the most under the apartheid regime and seemingly, they continue to suffer, despite having passed these discriminatory practices. Amongst the Sustainable Development Goals (SDGs) is the promotion of gender equality, as well as the empowerment of women. These goals aim to eliminate gender disparities, especially in education. The focus is thus on the codification of women's rights, as well as their advancement. In this view, gender equality is not just a necessity and essential prerequisite for peace and development, but it is also influential in achieving most development goals.

The discussion in this section thus confirms the gender conflict theory described in Chapter 2. The theory basically highlights the universal inequality between the sexes in societies as an outgrowth of patriarchy, the form of social organisation in which men dominate or rule over women. According to the theory, men are superior to women, thus, females deserve inferior treatment. The conflict element is evidenced when women enter the job market and no longer consider themselves just as housewives whose mandate is to look after the family (Dragomir and Surugiu, 2013). In actual fact, there is need to take cognisance of the fact that men and women are different, hence, they execute their duties differently, but that does not necessarily mean that women do not do as effectively as men do. In the same way, the challenges encountered by men and women in the workplace are also different, hence, their needs should also be recognised according to their satisfaction.

#### **4.4.2 Objective two: To establish the factors affecting women when carrying out their marine operations duties**

##### **4.4.2.1 Health and safety in the work place**

Health and safety issues are very important in any organisation. Likewise, the women in the maritime industry also need to take extra caution when it comes to health and safety, as the working conditions can be very intimidating. Asking them about how they ensure this, these were some of the responses from the participants:

*Participant 3. By adhering to the rules and regulations set by Health and Safety department. By ensuring that I wear safety PPE all time when I'm involved in any marine tasks. By undergoing periodical medical examination with the company doctor. By avoiding short cuts that may hamper safety.*

*Participant 10. Always be vigilant. keep a clear mind, observe regulatory requirements and always share your experiences with others who will probably have a different way of doing things which might be better than your own practices.*

*Participant 9. By taking good care of myself and be safety cautious always.*

*Participant 5. By using PPE, checking the status of the sea, weather, and planned jobs for the day and exercising. We do planned job observation which helps to check if we follow the right procedures and standards of performance which are placed by the company. Annually, each pilot undergoes medical examination which also includes blood tests, hearing, eye sight, lungs, glucose, etc.*

*Participant 8. There is a heightened; I think emphasis from the females when it comes to health and safety. Most Captains, at the end of the job, would comment to the effect that the ladies land softly. This would then be alluding to the fact that it is indeed the case; things should be done safely at all times.*

*Participant 7. Follow HSE procedures at the work place. Its moderate medical risk for all sexes. By applying health and safety rules and regulations at all times. Exercise, eat healthy, enough rest and regular visit your doctor*

*Participant 6. Ensuring that you are mentally and physically fit for the job. No distractions and entirely focused on the job at hand. Complying to work instructions and procedures. Safety always first.*

*Participant 1. I stay present in whatever task I am doing, as being absent minded has proven to cause unnecessary incidents in the work place. For my health I keep fit, physically through gym and running, mentally through reading inspiring books/magazines, and spiritually through the Word of God.*

*Participant 2. Work according to the company procedure. Check your PPE. Talk with the crew about my concerns. Training and reading*

*Participant 4. By ensuring that I keep active even when I am not at work. I mind my health and keep a constant check on my body balance. I am actively involved in my well-being not only physically but also mentally and emotionally because it is important to the job to a large extent. I try and learn and improve myself awareness techniques as it is the basis of my health physically, emotionally and mentally. And I keeping a mindset of non-complacency, the job has dangers that can become grow into a norm if not kept at check. By wearing protective gear (PPE) and adhering to the company's SHEQ policy.*

Another thing that the researcher was interested in knowing was how safe are the operations for all who work in the industry, especially the female mariners. Below are some of the responses given by the participants:

*Participant 3. This is quite a critical and risky operation which requires one to be always alert and have a safety mindset in order to be on the safety side.*

*Participant 9. Anything can go wrong at any line of work, so in marine SOLAS is priority and safe precautions are the key.*

*Participant 8. Very safe, there is no difference if the ladies were to be all female and all males. The situations are such that everyone would ensure the safety. The process of boarding is standard and so there are no short cuts that can be taken in any event. Experience takes over, this is the case world over and should be any different in maritime.*

*Participant 7. There precautions and PPE kit. The company has rules and regulations for safety, so people can abide by the rules*

*Participant 10. It is safe due to the environment being highly regulated and having more safety precautions than most industries. The only safety concerns regarding women would be when one is pregnant as there are the regulations are very generic which leaves it open for different interpretations by the different organizations and sometimes different departments within the same organization. This leaves women in a very uncomfortable situation as they sometimes might be*

*forced to work in not so comfortable environment for themselves and the foetus and don't have much say as the policies and regulations are not really clear.*

*Participant 6. It's up to the individual at hand to be vigilant to ensure that she works safely and within the safety parameters of the job.*

*Participant 1. It is not that safe as everything in it suits a male anatomy better than a female anatomy. Females are soft and they give birth to babies and that does something in their anatomy. The operation makes no room for such, it is also very physically demanding and even emotionally, as even when you bump yourself against a bulwark you are to grind your teeth and carry on with the job, otherwise you are a cry-baby.*

*Participant 2. It's fairly safe and similar conditions for everyone.*

*Participant 5. It is safe as there are securities in all company access areas. On the ships, the pilot is escorted by a navigating officer when coming onboard and disembarking on the ship. This that we are safe at all times.*

*But the operation is danger prone, which is the nature of the job. What is important is to be aware of the dangers and to learn means of avoiding or at least minimising the possible impacts of the dangers. The dangers range from the activities that are done e.g. the jumping on and off pilot ladders; the equipment used e.g. as a tug master you operate very powerful machinery. At times, even the people you work with can be a danger, especially at sea.*

*Participant 4. Very safe since females are very cautious.*

Despite some participants arguing that it is very safe, the fact of the matter is that it is a very risky job, as indicated by the other participants. From the researcher's experience, it is a very risky job. During the time of writing up this study, an incident involving a female mariner took place, which left most females traumatised:

*Last week, a marine trainee pilot drowned while trying to board a sailing vessel. Thandeka Mzimela had a fear of heights. On Wednesday, she tried to climb to an incoming vessel, became overwhelmed, lost her grip on the ladder, fell and subsequently drowned. She was with a senior pilot and another trainee. Mzimela had been with Transnet for 11 years and was previously a tug master. An investigation has been launched into the incident (Rall, 2017).*

Even though the researcher did not ask specific health related issues associated with the job, oftentimes, she has noticed many women complaining, especially of depression, stress, anxiety and even back pain, which could be a result of the strenuous task that they sometimes do. Headache is

also a common complaint from the people working in this industry, perhaps associated with stress. Because of the kind of the job which is a bit strenuous, most of the employees in this industry often worry about job security, in the event that they are diagnosed with certain medical diseases, they are not sure if they would be able to be re-hired (Stannard et al., 2015).

#### **4.4.2.2 Women mariners and work-life balance**

The purpose of posing a question in line with work-life balance was to establish the kind of challenges or difficulties associated with this job, especially for the female mariners. Unsurprisingly, the participants hinted that it is sometimes difficult to balance work and life, especially as women who have the main responsibility of taking care of their families. The sentiments below were highlighted by some of the participants:

*Participant 10. They can be under pressure, depending on the responsibilities they have, for those with kids and families. They sometimes have to skip important events within their families or for loved ones, just if the arrangements that also allow operations to continue do not materialise.*

*Participant 2. Pregnancy and motherhood. Missing out on a lot of family gathering due to work commitments*

*Participant 9. Whatever you intend to do socially needs proper planning and you need to be aware of your surroundings at all times, because you cannot afford to get hurt in any way because it will surely affect your work*

*Participant 6. One of the social factors is status. It can bring about arrogance and attitude once you have achieved a certain level in the marine field. The lifestyle can be one of extravagance because the job pays well.*

*Participant 7. The whole culture of marine has very little room for family life and socialising. Females enjoy family and friends and even in the work place they tend to want to have friends that they can talk to, now with marine you are to be good at enjoying your own company, as most of the time you are with work colleagues whom you can't befriend in order to keep your rank and respect.*

*Participant 4. From the sea, you are disconnected from family and can unfortunately find yourself surrounded by a large number of males. Also, you are absent from the lives of loved ones and you miss out a lot on a chunk of your life. Working shifts can create instabilities at home if improperly managed, again there are times of absence that cannot be compensated for. As you grow up the ranks, there seem to be a natural gap created between the progressing individual and those around.*

*Interviewee 3. It's very difficult with the shifts, uh, so that was one of the things that we found hard but my husband, I think he understands that this is my job, this is what it entails uh, I get with the*

*shifts now we get days off so it's a little bit easier but there is no weekends for family time, you have to make time.*

*Interviewee 2. I'm not sure how to answer that part, you know women, you always know how to multi task, you see, you always make sure before you leave home that you have done things for your kids and when you get back home you cook and do washing on your off days.*

*Interviewee 6. I think with the quad shift you get time off because you work 12 hours on and 36 hours off, so you get time to spend with the kids, but not all the time because sometimes there is like normally at school, they have evening events and if you do not find a relief at work then you miss out and when you go home and then you have to explain that you cannot, so I cannot always be there.*

*Interviewee 5. Fortunately, I use my time off or on duty to focus on my studies because I believe that a high leverage action that if routinely acted, will lead to the results we want. I wouldn't say there is much time off, as sometimes we have to cover more shifts as there is a shortage of tug masters, so you get called in for overtime.*

*Interviewee 4. What is good about this job is that after 12 hours you get to go home and wipe the slate clean and I always leave the pilot hat at the gangway and put on the mommy hat as soon as I head home.*

*Interviewee 1. Every time off, I ensure I spend time with my family*

*Interviewee 7. It is hard to balance it all out evenly, childbirth, illnesses or death in the family can result in your career being on hold. That is why it is important to pursue your dreams before starting your own family.*

*Interviewee 8. I make sure that during work time I work and when iam off I give myself time for my personal life and also attend to my family*

The responses provided by the participants indicate that most of them have family responsibilities, despite their marriage status, which the researcher did not bother asking about. Some of them have children, a situation which often puts pressure on them when they cannot be with their children due to work commitments. This shows that in most cases, professional women often suffer the double tragedy of having to fend for their families financially, while at the same time they have to be in

homes taking care of the family. These career related challenges often thwart the professional development process of female mariners (Suárez Ortega, 2008). From the researcher's experience, these are some of the factors that often lead to divorces in some instances, the fact that the family rarely enjoys family time due to work commitments. (Thomas, 2004) indicated that the divorce rate amongst maritime workforce in the UK was 9.3%, even though the reasons for the divorces were not specified. One of the participants in this study pointed to pregnancy as one of the challenges that female mariners have to deal with. The fact is that working on board is incompatible with maternity. Given the reasons highlighted herein, most women mariners often give up their jobs due to family reasons, while their male counterparts rise to the senior level positions and get promoted because they would have gained vast experience in the field. Seemingly, most females are left with few options rather than being pushed out of their profession.

#### **4.4.2.3 Female mariners' relationship with male colleagues**

The participants for this study indicated that they have good relationships with their male colleagues at work, even though a few of them pointed some few challenges. Generally, they heeded that their working relationship is good, even though sometimes it is difficult working in a male-dominated environment, where the male counterparts express different attitudes, feelings and opinions towards their female co-workers. At the beginning of the chapter when the challenges faced by women mariners are described, it was shown by some respondents that they always had to struggle or fight with their male counterparts who tried to advance at them, something that is professionally unethical. This is a real challenge that also affects women mariners in their day to day working environment. The following are some of the findings from the question regarding how the males and females work together:

*Participant 2. With some, we get along, while with others, we tolerate each other since we have to work together*

*Participant 10. Some females may feel alienated or left out in terms of conversations the males have, especially when you are the only female on a team of six males. Some females may feel victimized by males by the way they talk to them and the way they look at them. The need to belong sometimes become an issue and the way females have to express themselves.*

*...mainly Masters have a perception that the women pilots or tug masters have some fear of the unknown. Ship masters will assume that you, the female pilot, needs guidance from them whereas you have the expert advice for him. Socially, at times the assumption of your feminine voice over the radio, almost gives them this notion that they can question your decision or even attempt to override it.*

*Sexual harassment. Males taking advantage of females. Operating on a 1:10 ratio, where males dominate the space. Verbal abuse.*

*Participant 9. Wonderful, I am a happy person, so I like to be in a healthy environment, especially at work since our job is challenging.*

*Participant 6. Respectful! If you pull your weight and perform like any other male in the industry, you are respected and acknowledged for your job ethic*

*Participant 5. It is normal, just like any other relationship with my female colleagues.*

*Participant 8. Personally, I have had to fight tooth and nail for them to recognize that as much as female, as much as an experienced pilot. There have been instances where I have had to prove to them that the wind reacts the same to me and to them. It's never on equal footing that I have come into the wardroom, however the younger male pilots are seeing that it's not gender based but comes from experience that I along with others along the coast have these open licenses.*

*Participant 3. My relationship with my male colleagues I will describe it as friendly and accommodative. We get along on a professional level and on bit of a personal level, as we know each other's weaknesses and strength in terms of work. Though sometimes we will always clash somewhere but we always find a way to work and get along with each other.*

*Participant 1. It's a healthy relationship but I always have to be on guard. I can never be vulnerable around them because boys don't cry, so I become one of the boys.*

*Participant 4. Strictly professional*

*Participant 7. Some males have attitudes towards females. Some accept working with females so much they have good relationships with females. Good relationship, driven rank and responsibility*

*The relationships have to be consciously managed, it is never a one size fits all with all the colleagues. Maintaining a degree of professionalism seems to be the best approach...*

Upon enquiring about how much support was offered by the males already in the career, or the males in the same level of employment as them, the interviewees responded this way:

*Interviewee 5. I think we sailed with other 2 deck cadets as well, we received, I think as cadets you sort of bond together, so they were a support system for us as well, we did most of our stuff together, travelled together, went ashore together, it was just, but we try to keep, yeah, they did give support.*



*Interviewee 3. There is lots of support especially from the other Chiefs that were training us there is lots of support there, preparing us for orals, preparing us for the job that we were going to be doing, so yes, there is support.*

*Interviewee 4 Some of them you see that they are just being gentlemen, as a gentleman would be, they try and assist us, coz they know that women are weaker than men, that's how they are.*

*Like if you have to climb somewhere, they climb first and they assist you climbing up or something.*

*Interviewee 7. No support at all, instead they discourage us all the time, for example they say we (females) fall pregnant and cost the company time when we take maternity leave, as we have to be removed from the operation as soon as we find out that we are pregnant. When it is that time of the month (menstruation) some women get ill and they do not come to work, that also takes the company's time*

*Interviewee 2. I remember when I first joined my first ship, he was big and tall and he looked at us and he said you are all mine, I was scared because I didn't know what he meant, if he said we are all his, we were about 5 females, we joined on the same day, But on the long run, I found out that because he was the Bosun he was in charge of the cadets, that's what he meant you know so all the time they didn't say because you are a female we going to give you a lighter job and because you are a male we going to give you this harder job, we all give us the work equally the same job, we did it good.*

*Interviewee 1. Males colleagues in what we do, they don't support that much as we all go in different ships, it's a career where each is on their own, so there is not much support from the males.*

*Interviewee 8. To keep on pushing and never give up and don't look down on my capabilities*

*Interviewee 6. There is no support granted to you. If you make of being rude to them, you will be in trouble, the engineering department is still made of the older generation who still believe that the woman's work is at home, so any wrong move from one, resumes those feelings of how a woman doesn't belong in the engine room.*

The responses presented above continue to indicate that women mariners have a mammoth task of having to prove themselves every time, for them to be appreciated. One participant noted that she had to “fight tooth and nail” for them to recognise her. This shows that for women mariners, their

work demands are higher, and they continuously demonstrate their capabilities and values, or else their weaknesses would be more emphasised. This, in a way, shows some kind of stereotyped images, in as far as women capacities and abilities to work in the maritime field is concerned. In other words, the assumptions are that women are generally weaker in terms of strength, they have inferior abilities and less command qualities, which is not true. The men, because of their nature, always want to assist a woman when strength is involved. Therefore, the women work harder to prove that they too can handle the part of the job that requires strength, in efforts to show their independence. The men in the industry appear to be wanting to step in and assist in the career, as they only trust themselves to be able to teach the females the ropes of the job in the marine. In the end, the implication is that their male counterparts lack confidence in the women's professional performance. Hence, in the end, the general feeling is that despite demonstrating their vast experiences and value to the organisation, it is often difficult for female mariners to get promoted. This is not a good indication for the female mariners, as it happens that this kind of "glass ceiling" often tends to deprive them from fulfilling their professional expectations, which affects their morale and consequently, job satisfaction. The discussion again also echoes Goldberg (2015) assertion that:

*"Female seafarers are under- utilized and underdeveloped, but valuable resource that could provide part of the solution to the increasing problem of finding sufficient and adequately trained personnel to manage and operate the world's growing and sophisticated merchant fleet. In order to get more women to enter the marine sector, there needs to be a change of attitudes particularly amongst men in the industry and they need to be able to offer mentorships to the females."*

The point being raised above is that men should in fact support women mariners, rather than treating them as outcasts who do not belong in the industry. This gesture would help in increasing the number of women in the marine industry. In this view, the former AU chairperson, Dr. Nkosazana Dlamini-Zuma noted that "The majority of the African countries are on the coastal and islands, the ocean space is larger than the land. The women have a key role to play in addressing the neglect of the African oceans. There are efforts made to focus on developing the women for the marine operational careers" (Dudman, 2015).

#### **4.4.2.4 The age factor**

There seems to be a misconception that age is a factor when it comes to the physical ability of the female in the marine operations. Asking the participants about this, they tended to brush off the sentiments:

*Participant 3. I don't see age as being a factor when it comes to physical ability of a female, as long as someone is fit and healthy. You find that some females are young or older, but they are much stronger than their male colleagues of the same age.*

*Participant 10. The female body goes through so much, as in giving birth and other changes that a female body goes through, throughout the female life cycle. Most of the times women gain weight that is not easy to lose, which then becomes a problem when one has to be able to pull out their weight in out of the tricky areas in the vessel, or if there are pilots up and down the pilot ladder*

*Participant 6. If you are healthy and fit, then age is not a factor affecting the physical ability of the job.*

*Participant 8. It is such because these guys have been conditioned by society that pilots have the most experience and hence should be grey haired and speak of their travel far and wide. Although due to modern simulations and practice, pilotage has become accelerated and need not require grey hair for execution. There is always a notion of the younger and you are still wet behind the ears*

*Participant 9. I don't think age is a factor but the level of fitness.*

*Participant 7. Depending on the nature of the work- age can enable or disable either male or female, gender is immaterial. Young people don't put much effort in their work. The female performance drops when they get older.*

*Participant 5. Our work entails climbing up and down a pilot ladder and about 5-9 flight of stairs on each ship. On each day, you get to do about 3-5 jobs. As much our job requires you to be physically fit with a good upper strength for lifting yourself up whilst climbing a pilot ladder, I feel age is not a factor, it depends on the fitness of each individual.*

*Participant 2. I do not think it is a factor, the challenge is that the marine operation was male dominated and with the aging work force, so accepting young blood is the challenge and I guess the fact that most women look young physically compared to guys*

*Participant 1. Females age differently, as compared to males and they reach a childbearing age which has a period before it passes, therefore they (females) are better at starting a marine career earlier and climb the operations ladder before the time to have babies.*

*Participant 4. As you grow, so does the level of discipline needed to keep in physical form for the job. And at times, the minor injuries that you were able to bear whilst younger start taking toll. With most individuals, keeping in shape and being able to maintain high adrenaline pressure*

*becomes difficult and results in health issues. It also starts with being less desire to expose yourself to all the pressures of work when you have a responsibility towards your own family. And the responsibility usually increases with age.*

Another question related to that of age implored the participants to indicate when they intended to retire from the operation into the management or office-based position. Various responses emerged from the participants:

*Participant 3. When the time is right and my body is no longer able to carry me to my duties.*

*Participant 2. I will stop piloting when my management duties really do not afford an opportunity to be on the water or if the aches and pains render it unviable for me to do. I still enjoy now and then to do piloting, partly because it is what I have done for the bulk of my career life, compared to all other things. I will still do it once in a while, for some time to come.*

*Participant 8. Not in the next 3 years, and not completely. It's refreshing being out in the water and getting the first-hand account of how the pilots treat masters of vessels. It assists in the back-office work, when new process must be put in place and how best to serve the client. If both can be done, then better*

*Participant 9. Have not considered it yet, ask in the next 5yrs.*

*Participant 6. I do not have a time frame. If and when an opportunity arises, and it is in my capacity, if it's my time the position will be mine.*

*Participant 5. At 38 years*

*Participant 4. As soon as possible*

*Participant 7. At 65*

Having deliberated on this, the researcher also asked the participants if they would recommend the marine operations career to females over the age of 40. The majority of the participants indicated that they would proudly do so, while a few were a bit sceptical about the idea, as they argued that the job is physically demanding, has its own many challenges and involves a lot of stress:

*Participant 3. Yes. As long as the person is fit. If a person goes to gym and takes care of her body, I don't think age can define a person, this is a just number, you know what they say, "it's all in the mind". I would recommend it to the fit, agile and committed women, no matter the age. I do not think it is so much the age that is the determinant. It is more about being in the required physical*

*form, having the mental strength and will do it. There are 25-year olds I would not recommend it to and there are 60-year olds I would recommend it to.*

*Participant 10. Yes, I would, but depending on which area they will be performing at. For sure they will not be able to get in at UOT (university of technology) which is one of the reasons, it would depend, but wherever they can be able to perform and are physically able, I do not see a problem. There are areas like Berthing, Port Control, vessel agent etc. where even though the physical ability is required but because they work in groups it is not much of a challenge.*

*Participant 9. Yes. I don't believe it's about age but about fitness rather (mental and physically)*

*Participant 8. Yes and no. depending on attitude. Marine operations have elements of very steep learning curves and so that individual would have to be able to adapt and do that very well and absorb that information as well. Some persons that have other work experience may not be willing to be taught the ropes by the young ones*

*Participant 5. No, I wouldn't. I feel it is better if you start this career at an early age as it has quite a lot of challenges, physically and mentally.*

*Participant 6. Yes, I would. Experience cannot be bought and at that age, you would probably have a wealth of knowledge to share.*

*Participant 7. Yes, because people of this age and above have a high sense of responsibility and they are energetic*

*Participant 4. No, unless she is physically fit, she will not cope with the physical stresses this job requires.*

*Participant 2. Yes. I do not think age is a factor at all it's a matter of interest. Most women were given bursaries and employed before they turned 21 years. Some will move to the office while others will stay in the operations*

*Participant 1. Yes, I would, if they are still physically fit.*

The issue of age being such an influential factor on female mariners is that men have created a perception that the marine world requires physical abilities equal to their masculine level, in order for one to be successful. This is a demotivation for the female mariners and even those aspiring ones, tarnishing the female's aspiration of becoming a mariner (Dragomir and Surugiu, 2013). In the same way, companies are usually concerned and reluctant to employ female mariners, the reason being that they are not confident in females on operational vacancies, as women are seen as fragile

people and have to often take time off due to maternity and the care of children (Brickman, 2008). Female seafarers are often structurally left out in the areas of remuneration, age ceiling, and conditions of service. Unfortunately, this kind of stereotyping is not only common in the marine industry, but in most training institutions (Magramo and Eler, 2012).

#### **4.4.3 Objective three: To suggest ways on how best to promote the retention of women in marine operations**

Prior to asking the participants about what they thought should be done to encourage more women to join the industry, it was necessary to first of all get an understanding of how they found themselves in this field. In this view, some of the questions posed to the respondents was how they found out about maritime studies, or why they decided to do maritime studies. Surprisingly, most of the participants got to do maritime studies by chance, or because they had limited choices. Below are some of their responses, regarding how they found out about this field:

*Participant 3. I found out at the school I was attending that time from a teacher who got information about a school that was offering maritime studies for the first time. I became interested in maritime even though I knew nothing about it that how the journey started.*

*Participant 9. I was in the SA Navy, so I had a colleague that had a relative working at Transnet and she told me they were recruiting girls.*

*Participant 10. It was by chance at a Science festival in Grahamstown.*

*Participant 8. I got the bursary application from a friend of my mom that had a boyfriend that worked as a GPR at Durban. I was busy trying to complete my electronics engineering at DUT.*

*Participant 7. Advert from newspaper*

*Participant 1. I went to DUT and most of the courses were already full and maritime studies still had space, so I was in.*

*Participant 6. The maritime career, I first heard of through the first female pilot who was recruiting other females into the industry. At that time, it was a predominantly male dominated environment and the urge for females to enter the industry was now on the uprising.*

*Participant 5. It was introduced to our high school in Standard 8, which is now grade 10 while I was in grade 7 as a new career trade in addition to Commerce, Technical and Mechanical Engineering.*

*Participant 2. My sister saw a bursary advert on the newspaper, send me the address and told me to apply*

*Participant 4. From a relative*

*Interviewee 3. I think online, I did a lot of research on that because it wasn't something that was known. It was new, no one in my family or friends that I knew that was in the maritime industry. So, I went online and did a lot of research and found out what an engineer does and then from there I think. Only when I was on campus, I got a broader view of what was expected of a marine engineer.*

*Interviewee 4. A friend of mine in high school was in the same high school where they offered maritime studies. The school was in Esikhawini.*

*Interviewee 8. It was advertised in the Sunday Times and I applied for the bursary.*

*Interviewee 5. I was working in the court of law as an interpreter (language services) close to the sea and every day, I used to look at the sea and see lots of ships moving. I used to ask myself how can I get a job in the ship, it was so interesting. One day, I saw an advertisement on the newspaper Learnership. I grabbed a chance and I resigned from the court, look where I am now.*

*Interviewee 2. So when I was doing my second year quantity surveying, I heard about the bursary that Transnet was looking for people who got Maths and Science..., so I applied and when I applied before that, because when I was at school doing matric, we used to go to excursion, we come to the port, we cruise around, so I used to see this small thing pulling the big ship, I was like, oh my God I want to drive that small thing because its powerful , but in that time I didn't know what is it, I didn't know where to go, how to do, what to do to get there, to drive that small thing, so I applied and then in the application it said pilot and it said tug master, so I had to research what is a pilot ok I find out the pilot, I'm like noam afraid of heights, I cannot go for pilots , and then yea, tug master, I said yea tug master, when I research what is a tug master , I came here and they told me that no we driving this thing , this small thing that push and pull the big ship and then I was like wow.*

*Interviewee 1. On radio station, while I was back home in Venda, I heard about the Transnet bursary programme over the radio.*

*Interviewee 7. It was when I was upgrading my Math's at Mooiriver. Representatives from DUT gave us an insight into Maritime career and I fell in love with this maritime industry.*

*Interviewee 6. It was introduced by one of the managers at shop 24, this is a workshop where we do our practical training as mechanical engineers.*

From the above responses, it is clear that very few of the participants entered the field by passion, but for most of them, it was by chance or coincidence. For some of them, they had not been successful in the areas that they were interested in, then ended up joining maritime studies because that was the only option for them. Most women working in the shipping industry become cleaners, waitresses and cabin service.

The Occupational Observatory of University of Coruña indicates that both men and women acquire same competences in the maritime studies, even though women tend to be fewer than men in all aspects of this industry (Freire, 2013). As mentioned earlier, regarding some of the challenges faced by female mariners, it shows that gender related barriers are still a reality in this industry, which prevents females from ascending to senior level positions, despite working under the same conditions with their male counterparts. Sadly, despite acquiring the same qualifications as men, some women still find it difficult to enter the labour market and gain the necessary professional experience which would also qualify them to assume senior positions. In this regard, (Popescu and Varsami, 2010: 184) argue that:

*The relevance of sea experience for many shore-based jobs means the resource of women with appropriate skills is limited and will continue to act as a long-term constraint on the representation of women in the maritime sector as a whole.*

The researcher further inquired about the aspirations of the interviewees whilst growing up, in order to gain insights into whether the female mariners were from an early stage of their lives aspiring or passionate about the marine industry. The participants' responses are presented below:

*Interviewee 6. I think it was the usual stuff, for the long time I wanted to be a doctor, lawyer and towards the end I was interested in engineering.*

*Interviewee 3. Towards the end of high school yes, between Grade 11 and 12. Engineering seemed like the best .It was mechanical engineering that is what I was going to study, I applied and was accepted for that. Transnet then advertised for the marine bursaries and I applied, it was marine and mechanical engineering was very similar so I accepted the bursary, and that would be a better option.*



*I did not intentionally want to do marine engineering, it just happened, yes it was unplanned. Marine engineering fell into place.*

*Interviewee 1. At first, I wanted to become a lawyer, uhm I was so interested in history and all of those studies, but then I got to learn about maritime studies when I was doing Grade 8, and then all of that changed.*

*Interviewee 5. My aspirations were to be a social worker, but I ended up becoming a teacher and later got employed as an interpreter at the court. It is only then that I heard about Maritime studies.*

*Interviewee 2. I think everybody wanted to be a doctor, but I couldn't because my parents couldn't afford the registration fee, and I ended up doing the quality surveying, so I did my first year in service training, second year and then when I was about to do my third year, I heard about the bursary. My second year, I was about to do my third year in the following year and I heard about the bursary that Transnet was offering.*

*Interviewee 7. While growing up my dreams were limited to being a teacher, nurse or a doctor. I wanted to do more than what my limits were and that inspired me into looking at careers in a different light.*

*Interviewee 4. I wanted to be an IT specialist but unfortunately, because of financial constraints, I was unable to pursue that career.*

*Interviewee 8. To be a pilot.*

From the responses provided by the participants, it is clearly indicated that for some of them, nautical studies were not their first option. The responses also clearly show that the participants did not have a clear picture of what their professional future looks like. The majority of them indicated that they heard about maritime studies through relatives and friends, while others took advantage of a bursary opportunity and others just got into it by chance. Some of the participants were already in other non-marine related careers and studies in universities, when they decided to revert to maritime studies mainly due to a bursary being offered by Transnet for maritime studies. Due to them learning about the maritime careers, they decided to join the career, they revealed that they were attracted to the maritime industry. The participants revealed that their aspirations whilst growing up included being doctors, lawyers and social workers. Only one woman who mentioned that she

always wanted to be a pilot while growing up, which is also a male dominated industry. In this technologically advanced societies, one would expect to hear that someone went online to search for this particular industry and what it entails, but from the responses, most of the participants heard about maritime studies from secondary sources. Freire (2013) indicated that more men choose maritime studies as their first options, which is not the case with many women. Freire further noted that the motivation behind females taking up of maritime studies include the love for the sea and sailing, as well as the interest in the subjects and professional opportunities presented by the industry. This sounds true, as some of the participants in this study indicated that their first impressions upon joining the industry included the fact that the jobs pay very well and the need to travel to places. García et al (2011) also noted some differences on why men and women choose this particular career, highlighting the gender-based stereotypes as a major cause. They also indicated the lack of information and self-knowledge as some of the reasons why some women cannot make the right professional decisions. It was found, from this study, that the participants, upon joining this industry, had diverse expectations. A question about their initial reactions towards the marine career yielded the following responses:

*Participant 3. My reaction was an exciting one and scared at the same time, as I was going to explore new adventures, when they explain to me what the maritime career was all about I knew that was what I wanted to do*

*Participant 9. It was ok for me because I had already been exposed to it.*

*Participant 4. Excited*

*Participant 8. Interesting, coming from Durban, we are exposed to the vessels that disappear off past the horizon. Not knowing where to and how they propel themselves and how they ascertain where in the world geographically they are.*

*Participant 10. They had my attention when they mentioned that I could earn a doctor's salary. With only one year of study. Because my mother was not really well-off, one was worried if she would be able to have fees for 7 years at university for me to study.*

*Participant 6. It was one of great expectations of travelling abroad and earning money in foreign currency.*

*Participant 5. At first, I was a bit hesitant until I was exposed to different types of jobs within the industry through excursions that we used to have at school every Thursday.*

*Participant 1. I was excited as there was a promise to travel the world and make good money.*

*Participant 2. That we will get lots of money.*

*Participant 7. I became excited wanted to learn more about it.*

During the interviews, the researcher further inquired about what was it that attracted them to this male dominated career when they eventually heard about it. The majority of them appeared to be fascinated by the travelling and exploring countries abroad, or leaving home to go study in Cape Town as the bursary awarded them that opportunity. They were young at the time and travelling seemed like going on holiday and the thought of what the career or industry entailed was the least of their concerns. They revealed that they were attracted by the uniqueness of the job and the idea of doing something that not many people do. Below are some of the responses from the interviews:

*Interviewee 2. I was attracted by the fact that this career is a male dominated career.*

*It gives one a chance to visit other countries and meet different people and see how they do things.*

*Interviewee 4. It's the travelling and uniqueness of the job*

*Interviewee 8. I love working at sea you get to know the sea life.*

*Interviewee 3. No, I definitely was attracted to it, we were going to study in Cape Town, I was going to leave home and study in Cape Town, I think the travelling was the one thing that I was really interested in, they said you spend a year at sea travelling around the world and I was like yes, It's the best thing. What teenager gets an opportunity to travel all over the world? none of us.*

*Interviewee 1. The uniqueness of doing something that people are not used to and you know when you grow up and when you about to go to university or tertiary, everyone is expecting you to become a doctor, or become a nurse or something or a teacher, the maritime industry is something that not everyone knows anything about.*

*Interviewee 7. It's different, challenging and always keeps you on your toes and that I got to sleep at home every night.*

*Interviewee 6. The shipping industry is a unique working environment and that was going to be a huge opportunity for me, with good pay. A different experience from many worked on the shore. This was like a dream come true.*

From the responses presented above, the prospect of earning high monetary rewards came out strongly as one of the factors influencing the decision to pursue marine studies, followed by the love of travelling abroad. The findings confirm Gould (2010) assertion that people are more likely to be influenced by other factors which are not necessarily economic, when it comes to pursuing the seafaring career. However, due to advanced technology which is reducing the time spent in the ports, seafaring is slowly becoming less attractive in terms of being an adventurous career (Cahoon et al., 2014). Essentially, it has been noted that the shipping industry employers do not effectively obtain detailed information about the people that they employ, arguing that there is limited awareness regarding new recruits' career expectations and ambitions (Caesar and Cahoon, 2014; Cahoon et al., 2014). This is risky, as it might result in reduced retention of women mariner's on-board ships. The argument is that not knowing their career expectations and aspirations could result into poor management of these expectations (Leong, 2012). The point is that issues of career expectations and ambitions greatly influence people's decisions to work in any field. On that note, it is essential for the employers, including those in the maritime industry, to have a better understanding of their new recruits' career expectations. This is essential in helping to adequately manage these expectations. If the expectations and aspirations are not clearly understood, their poor management might result in the erosion from the ships to other careers (Gould, 2010). Understanding the recruits' expectations include appreciating the factors influencing their choices for the seafaring career. It is important to note that unfulfilled expectations often result in loss of loyalty, job satisfaction and organisational commitment (Progoulaki and Roe, 2011).

#### **4.4.3.1 The need for the relevant traits**

In the context of the above description, that is, having realised that it is not easy for women mariners to survive in this field, it is thus essential to dissect some of the important elements needed for one to survive in such an atmosphere. In this way, the researcher asked the participants about the traits that are essential for female mariners to be able to work in the marine field. Interestingly, the participants indicated that one has to be “firm and decisive”, “assertive”, “resilient”, “courageous”, “think on your toes”, to mention a few. The following sentiments strongly emerged from the majority of them:

*Participant 3. One has to have self- confidence. Assertiveness is also one of the traits in order to be successful in the operation, especially when one has to face those old male mariners who are still sceptical of the female mariner. One has to be firm and decisive on every decision she has to take, as sometimes you find that no room for error and you have to make the decision promptly.*

*Participant 8. Self-confidence is a must; willingness to receive constructive criticism, at times having a chip on your shoulder can be a saving grace. Willingness to learn, fail and the courage to get up when errors occur. Being bold as well and great conflict management, and of course an open mind.*

*Participant 1. Education, mental strength, resilience, physical/ spiritual fitness*

*Participant 10. Resilience, team player, open minded, think on your toes, problem solver, flexibility, maturity, confidence, a planner (someone who always plan ahead), discipline*

*Participant 6. Confident, decisive, courageous, mental strong, physically strong and assertive.*

*Participant 7. must be flexible, loyal, honest and hard-working person. Strong leadership qualities. Consistency. More resolute and decisions focus*

*Participant 5. You need to love your job, be dedicated, disciplined and have respect for yourself, your colleagues and the crew members on the ship. Assertiveness, being able to work with others (teamwork)*

*Participant 4. You have to be very optimistic, persistent, passionate, patient, goal-oriented and most importantly- hard working,*

*Participant 2. Be yourself, educate yourself, do your job, discipline and accountability, work hard and also have a bit of fun*

*Participant 9. Love, know and believe in yourself. Love your work, be humble and try your best in every situation you face. Respect everyone because you need each other. Don't compromise your safety over anything.*

From the above descriptions, it is clearly indicated that the female mariners have to adopt some survival mechanisms, for them to be able to work in this male-dominated industry where they always have to work extra hard in order to prove themselves. Difficult as it maybe, the responses also indicate that the women mariners are always willing to learn, they educate themselves and take criticism constructively. In addition, they do possess self-confidence, which is a very important aspect of every human being, they do love their job and always strive to portray good and strong leadership qualities.

#### **4.4.3.2 Family support**

Despite most of the participants indicating that they received support from their families from the beginning, it was also indicated that some of them had to sail through the road alone, as their families had no idea regarding this kind of work. This sounds familiar for most people, simply

because in most cases, our societies lack knowledge or are not aware of certain professions, which then result in them not supporting their children whenever they decide to follow such professions. Below were the responses from some of the participants, when they were asked about the extent of support that they received from the families upon deciding to take up the marine profession:

*Participant 4. I had a lot of support from my family members.*

*Participant 8. Mine was that of “we know nothing about ships but since it’s a bursary: good luck” There was mystery, surprise and generally not much interest in the goings on in the class room*

*Participant 6. I had all the support and encouragement towards my studies from family and friends.*

*Participant 9. They had no idea what I was doing, so it didn’t bother them much.*

*Participant 10. They were very supportive though their support was limited because no one knew of the industry I was getting into.*

*Participant 5. My family was behind me all the way from the beginning of my career. I was actually approached by my mother to pursue this career of working at sea as this was a new course which was introduced in high school. I was a bit hesitant as I was the only girl in class, but I started to enjoy the course after being exposed to different work areas in the Maritime sector.*

*Participant 1. Not much, as they had no clue what I was doing. They didn’t know what I needed. But they were just there and I think on my side, knowing that they were there brought comfort.*

*Participant 7. Enough support- helped with research. They supported the fact that the job entails working awkward hours and shifts.*

*Participant 3. I had a great support from my family, they were always there for me in tough times encouraging me not to give up and focus on a bigger price. They will often check up on me telephonically on how I was coping and how everything was going with my studies.*

*Participant 2. They were supportive and willing to assist, but I could not complain to them about the challenges.*

*Interviewee 7. No support was given , they also had no idea what the career was all about*

*Interviewee 3. They were very supportive, I think they also didn’t realize what an undertaking it would be because it was leaving home and doing a lot of travelling and a lots of hard work, but yeah, they were very supportive, my dad especially.*

*Interviewee 4. They've always supported me, when my father was still alive he wanted me to do whatever career, I wanted, he didn't have anything against maritime.*

*Interviewee 2. Ya, my sister my mom my dad, everybody, they supported me, my sister helped me to apply, she helped me to do the research...*

*Interviewee 5. They gave me moral support.*

*Interviewee 8. They always encourage me look forward with my career.*

*Interviewee 1. When I have to travel overseas, my family looks after my son.*

*Family is far, but my mom still wonders how I do what I do and supports this crazy job that she never will understand.*

*Interviewee 6. Family can let you know they are there for you even if they cannot solve your work problems emotionally, informationally and physically support is all they can offer.*

The next question asked them about how much support they are currently getting from their families, now that they are established in the career. Interestingly, the participants seem to be receiving the support that they deserve, given the nature of their jobs. With regards to this, they had the following to say:

*Participant 3. The support is still great, and they are even happier that I have finished what I started, even though it was hard sometimes and still encouraging me to do even better and stay humble and committed.*

*Participant 7. A lot of support by not giving pressure and stress at home so that I can be able to perform at work*

*Participant 8. Look, now it's that of interest and pride. The sea and whatever that is associated with it now everyone would like to either work for the organization or out at sea. Kids around our area want to know what you were studying, how was the sea time, sort of all of those type questions*

*Participant 2. They are still supportive and understand that at times I may need to go to work at awkward times.*

*Participant 6. There is still a level of support but more admiration for the type of job and a level of pride that comes with it.*

*Participant 10. Still the same but still the same their knowledge is limited on the subject sometimes*

*Participant 5. They still give me full support*

*Participant 4. They really support me and my career*

*Participant 1. A lot, but its more expectations than support. It's one sided, I am never to ask anything of them but to do everything for them, which is not so cool.*

*Participant 9. They are my cheerleaders*

Perhaps the question that needs to be asked at this point is what can be done to increase women's participation in this industry. As indicated above, some participants argued that they received minimum support because their family members had no idea what their job was all about. This shows lack of awareness, as far as the industry is concerned. In this view, in 1988, the International Maritime Organisation launched the 'Women in Development', aimed at increasing access in terms of training in the maritime field. This was aimed at supporting women participation in this industry, as well as to close the gender gaps in the industry (Lares, 2017). In this view, it is important to attract women in this field and whilst they join the industry, it is very important that they are equipped with the necessary information regarding the industry, so that they make informed decisions upon joining the industry. This is very important, because when the researcher asked the participants whether they got in-depth information upon induction, some of them noted that they got adequate information to know about the job, while others felt that the information was not enough, especially considering that the majority of the emerged from the "previously disadvantaged groups". This is what some of them had to say, regarding the information that was given to them upon joining the industry.

*Participant 3. Not much was given in terms of advancing yourself towards management after you have achieved highest level on the operation side.*

*The training managers tried to give us information on what the path career path would look like. They broke it down from studies post matric, being cadets at sea, training as tug masters to being tug masters and eventually training as marine pilots to being marine pilots. The timelines that were given were different from what actually took place though. And the amount of money to be earned was a bit exaggerated.*

*Participant 8. Minimum, they could have done better now that I am where I am. It was a case of training, class 3, tug master, pilot. And as far as that presentation went, the end of the ladder. Maybe an HM, but that at the time also was not explained.*



*Participant 2. We were told about being tug masters and pilots. Information relevant to our career paths and some of them came to visit us during the tech days*

*Participant 7. Enough information about my career path everything I needed to know. Enough to get me the position I'm currently holding in the form of inductions*

*Participant 5. A lot of information was given to me regarding the whole studies, training and work.*

*Participant 10. I first came in contact with the company while I was still at technikon / university of technology. We had a chance of working part time on the tugs and at port control, so even though one knew the different career paths available, we did not really know what they really did up until we worked part time. I also don't think that even at the time we knew we had a real understanding of the jobs.*

*Participant 6. We were well aware of Transnet's plan of action for us and it went as planned, with unlimited windows of opportunity still at hand to explore other avenues in the marine industry.*

*Participant 1. Not much, I think this is still new for us as the previously disadvantaged group, it's almost like everyone is still finding their own feet.*

*Participant 9. Not much but I had to find out on my own*

*Participant 4. The information given to us was insufficient.*

Therefore, adequate information is very important, so that the people joining the industry know what to expect, as well as how to deal with situations as they arise.

The researcher additionally enquired during the interviews, if the participants had a career map going forward in their marine operations career, and a number of participants revealed that they were interested in being managers, they felt their time in the marine operations had come to an end and they were looking to be safety and port managers.

*Interviewee 4. I would to become a port manager one day because, I've noticed that most of the time, the career path that is followed is becoming a harbour master and we do not have port managers with a marine background.*

*Interviewee 3. I think the next step for me to continue to study, I think the engineering department might be over, maybe yes for me to manage it, uh safety for me, I think on the tug is all about safety, for me would be a natural progression. Safety management.*

*Interviewee 8. At this stage, I am a pilot trainee and looking forward to be a pilot*

*Interviewee 5. My career path was to become Harbour Master, which has now changed because of some circumstances. I am now focused on being in a management (CEO) of the company, since I have a degree in supply chain management.*

*Interviewee 1. I want to become a marine pilot and I am in the training process.*

*Interviewee 2. I'm not gonna leave maritime totally, because initially I wanted to be a marine quality surveyor, so because they are building ships in and out, and we are starting to build our own tugs, 'am thinking who is doing all the quantities for all the stuff that is there that they need on the tug ,so I can do that so I will see how it goes, because here at Transnet we got infrastructure department that deals with the quayside maintaining the quayside, maintaining there and there, yah so I can still go in the company.*

*Interviewee 7. I would like to tap into maritime law because I feel like most of the maritime lawyers or lawyers in our country don't have the maritime background. I want to be the voice of all the women in the maritime industry and represent women who work hard to be where they are today.*

*Interviewee 6 Going forward, I would like to get off the tug boat, stop working night shift that does not add more to my salary. I would like to get a management degree and apply for an office-based job.*

#### **4.4.3.3 Management support for female mariners**

The researcher also asked the participants if they received any support from the management, as well as whether they felt the support was adequate, especially considering that they were females joining a male-dominated industry. The following responses emerged from the participants.

*Participant 3. I don't think there is any much of support besides financing the studies you have chosen yourself, but in terms of guidance, none. Through encouragement, development of skills and offering support when opportunities arise for females to grow and gain experience.*

*Participant 5. We are treated just like male colleagues*

*Participant 4. There is no special treatment for women*

*Participant 7. Taking them for training*

*Participant 8. It depends where you are, who your up line is and what the relationship is. Of late (last 3 years, there has been some sort of emphasis on the opportunity to grow.*

*Participant 2. There is no special support for females. Policies are a way of ensuring everyone is treated fairly and equally.*

*Participant 1. They do their best, but must they also need to be taught or trained on how to show support to females in operations. Females are complex beings and one needs to understand them and understand what makes them thrive.*

*Participant 9. No special treatment.*

*Participant 6. Management have the interest of females within the company in terms of acknowledging their place in the industry, placing them in the forefront of operations and giving them opportunities to take the lead and control through managerial positions.*

*Participant 10. There is support from management, depending on a lot of things, in my experience though I have been offered a great deal of support though there is still a gap in mentoring and coaching. Females are employed and thrown at a deep end and they really have to find out what is it they really need to be able to perform. Also, because we are working for a bigger company the information especially on previous decisions becomes difficult to find, which makes it a bit more challenging*

Regarding the question of support from the management, it came out strongly that all the employees are treated equally, whether male or female. However, some of the participants argued to have received maximum support as females, while others felt that they needed much more, especially considering the fact that females are “complex beings”, as indicated by one of the participants. It was interesting to note that some participants acknowledged the fact that the management offered them good coaching and mentoring, “placing them in the forefront of operations and giving them opportunities to take the lead and control through managerial positions”, as well as “through encouragement, development of skills and offering support when opportunities arise for females to grow and gain experience”. This is important, as the general perception is that in many cases, women do not get recognised and rewarded. As a result, most women resort to work hard and elevate themselves, searching for their freedom and identity, which often gets hindered by gender-related obstacles. To deal with some of the obstacles, the South African government enforced some legislations aimed at protecting women as well, for instance, the Employment Equity Act, as well as the Affirmative Action. It is essential to highlight the fact that gender stereotypes have often compromised the development process and in particular, the empowerment of women. Thus, the

South African government took it upon itself to mainstream gender, particularly in government administration. Despite this though, the empowerment of women and equality are still a dream to be realised in South Africa.

#### **4.4.3.4 Encouraging females to work in the marine industry**

Concerning their perceptions regarding the marine industry, the participants acknowledged that it is indeed a man's territory. However, they also believed that women can equally do what men can do. When asked if they could encourage more females to join the marine world, they had interesting responses to share with the researcher:

*Participant 3. I will tell them that maritime industry is one of the promising industry and there are lot of opportunities especially for the females, as long as they are prepared to face the challenges that come with the nature of work. I would tell them about both the positive and the negative of working in the industry. The positives encourage the individual to work hard, with a view of something better to come. Knowing the negatives allows the individual to prepare themselves for such and to take better informed decisions. I would share my own lessons and experiences.*

*Participant 10. It is bit of a challenge currently, to be able to encourage even males to work in the industry because of the challenges the industry is facing. As much as the industry is growing in our country, but the issue is that to find spaces for one to train so that they can get to the employable phase is difficult, as there are very limited companies that cater for the industry. On the other side, once they get in, there are so many opportunities, not to say they are easily available and one can easily get to any part they want. But we do need females to change the perception that the industry is very masculine and women can't work in it. So, showing them the opportunities that are there and really widening their perspective so that they can see the bigger picture.*

*Participant 9. If you have dreamt about it, have passion and brave enough, go for it.*

*Participant 7. By telling them about a lot of opportunities for females in the industry. By travelling around the world*

*Participant 8. It's not a man's world, but that of those who want it and want it badly. It's doable, just put your big girl panties and go for gold. We are not too far off from having all ports managed well, efficiently by the females.*

*Participant 6. There are summits and information days that encourage woman to work in the marine industry, so being involved in those areas of encouragement with experience in the field is one way of encouraging females.*

*Participant 5. This is a great industry as it offers a lot of different job opportunities. You can manoeuvre to any position that is related to maritime through experience and studying. For us females, we are more at an advantage as the state is still trying to balance the male and female gender in the workplace. As this is a male dominated industry, there are even greater opportunities for us to progress in our career to higher positions.*

*Participant 8. To only pursue such a career if you are a career-driven woman.*

*Participant 2. By sharing the challenges in the industry and also support them*

*Participant 1. I would advise them to know themselves first and know what it is they are passionate about within the marine industry and do that, not to succumb to what is expected and end up being stuck in a career that they are not passionate about as that would come with lots of frustrations.*

*Interviewee 3. I think most kids that are applying to universities don't know of the maritime industry, they just know the basic engineering, the mechanical, chemical engineering they don't know marine, I think maybe if we could promote it at schools and that would be the first step because even at university, the department is quite small, nobody knows much about it so yea advertising. I know Transnet does that, they go out to schools.*

*Interviewee 2. Maybe like sort of seminars or, what do you call these things, expos, visiting school, things like that, so that people in the industry, ladies especially, can go around and speak to the kids at school. The ladies that are already in the marine operations.*

*Interviewee 8. Maritime industry needs to be advertised in rural areas or schools some of the young people who may be interested in this career they know nothing about it.*

*Interviewee 5. The media may be used, newspapers. Maritime people must be sent to different schools to talk to students about maritime and show them posters of what is actually happening with the maritime industry.*

*Interviewee 6. I think we need to visit schools like in rural areas and the preach about maritime, and if they see like another female who has done it, so and start going to rural areas and townships, as a group of females, and like most of us would be speaking their language and they would understand like wow, because in our minds, we that that it was a non-blacks job, but if they can see another female doing it, they can be encouraged.*

*Interviewee 1. can be promoted through radio stations and going to schools.*

*Interviewee 4. Maritime industry is a hard career to break in and it needs someone who can stand being looked down on sometimes and being judged as a woman in that field. So, it should be put up as bluntly and straightforward as it can be hard, but worth the sleepless nights and the months away from home and all the hard work.*

*Interviewee 7. Institutions alone are not enough because they don't prepare the females about the marine environment. Workshops should be conducted and the labour law should come forth and assist in assuring a safe life at sea and their protection at sea.*

The responses given above show that there is more room and opportunities for females in the marine world. However, the industry is for the strong-hearted ones who are driven by passion. But, as indicated earlier in this chapter, there is need to provide potential female mariners with as adequate information as possible, regarding the profession. Many potential mariners suffer lack of information and as a result, are scared to take unformed decisions. As indicated by some participants, they could not get the support that they needed from their family members, mainly because none of the family members had a clue of what the job entails. On that note, it is imperative to implement some career fairs, raising awareness about the job, so that those willing to join the industry would have all the necessary information prior to coming on-board.

#### **4.4.3.5 Advocating for women acceptance in the marine industry**

The researcher also prompted the participants as to what can be done to encourage their male colleagues to accept that women are as qualified and competent as they are in the operation. In this view, the female mariners provided diversified responses:

*Participant 1. They just need to be preached to, until it sinks, because women are only getting in now, so there is a whole lot of them still to come.*

*Participant 9. Nothing, females just need to do what they are qualified for with or without the acceptance of their male colleagues*

*Participant 10. By not nursing their feelings and every time anything is to be done by a female needs a nod from a male colleague. Continue employing more females and with time, the male colleagues will get used to women being around and doing things as they would. Empower both sexes that the females need to take responsibility on the job and also that males understand the*

*capability of a female, it might be physical strength there is definitely other aspects of the job where they complement men.*

*Participant 8. Time, unfortunately some of the male colleagues come from backgrounds that say the opposite of the equal standing of operations. Experience will be the teacher in this case.*

*Participant 7. They must attend workshops,*

*Must be given the same amount of work,*

*Create games where there will be competitions between males and females.*

*Participant 6. They will have to have a mind change through management support and acceptance of the females and continuous reiteration of the evolution of the intake of females into the industry.*

*Participant 5. The company needs to create an awareness to male colleagues about gender equality and also that females are as much capable of performing the same duties as them.*

*Participant 4. By giving women more opportunities to prove themselves.*

*Participant 2. They need Jesus (laughs). I think they know that women are competent, they want women to behave like men which will never happen. We are constantly reminder that we should look at HM calibre and compare ourselves to them then we will be ready to be HMs. I don't think anything can be done to encourage them, I think women occupying more seat will force them to eventually accept the fact that women are competent since they will be reporting to women and having other women reporting to them.*

*Participant 3. I think it is the manner and attitude with which we approach the whole discussion that still holds us back from gaining a feeling of equality between ourselves. As women, we generally see ourselves as females in a male dominated industry and to some degree we live up to that subconscious belief. Some men and not all, do have a rigid mindset of what is expected of women. If we approach the conversation realistically and objectively we can actually uncover that it has less to do with qualification and competence. It has more to do with belief, expectation and what is societal acceptance.*

It is clearly indicated in the findings above that most male mariners still find it hard to accept female mariners. This could be the reason why most females who join the marine industry tend to focus on looking and behaving like men, so that they have the same traits as men in order for them to be regarded as fit for the job (Kitada, 2013). Unfortunately, or fortunately, if the maritime industry is to accept women as equally as the men, then the women must be allowed to be

themselves, just like in any other careers. It is a fact that some men still show negative attitudes towards their female counterparts, which becomes very challenging for the females, as the stereotype that the marine is a man's world still weighs negatively on the female mariners (Bhirugnath-Bhookhun and Kitada, 2017).

The researcher also posed a question of how much of the females' ideas were accepted by their male counterparts during decision making. Surprisingly, most of them still felt that their decisions were not fairly considered and obviously to them, it would be, like because they are females, so they are not taken seriously in whatever they say or do. The following responses emerged from some of the participants.

*Participant 3. None so far as I have not really involved in decision make and have not yet put my ideas through.*

*Participant 4. Our company does take our decisions into consideration regardless of our gender.*

*Participant 1. About 60%*

*Participant 9. Not much*

*Participant 10. Not much because you can say the same thing a man says but it sounds better when a man says it. So, most ideas are not always taken seriously until a man says it. Sometimes you say something, then a man opposes regardless of how much knowledge they have on the subject, yours as a woman would be questioned and more weight would be carried by that of a junior male sometimes. 60% of my ideas are accepted, even though they are accepted after being pitched by a male counterpart.*

*Participant 2. In the department mostly accepted. In the port, minimum*

*Participant 7. About 60% ideas*

*Participant 6. At my level, there is no decision making as such, but observations of unsafe practices and non-conformances will be taken into consideration.*

*Participant 5. My ideas are accepted most of the time, and my colleagues do listen and consider my ideas before making decisions.*

*Participant 8. For me, 50%. I will have to bring that across with evidence because at times that is the only thing that the males will not question. Facts will speak when everything else fails. Sometimes in pilotage, we cannot reinvent the wheel.*



The above sentiments echo (Dragomir and Surugiu, 2013) who noted that women have to constantly stand up for themselves against male prejudice and being looked down upon by the male colleagues. This is because their ideas towards their jobs are highly scrutinised and may be considered only when the plans by the male employee do not subside accordingly. It is surprising that females' competences are still being questioned by the males, as women are barely given an opportunity to explore their ideas without their colleagues, preparing them for failure or doubting if their ideas are to be used at firsthand (Bhirugnath-Bhookhun and Kitada, 2017).

It was also intriguing to enquire about how long females remain in the marine operations career, to which most of the participants did not have a clear idea on the issue. However, from their responses, it was clearly indicated that women do not really stay in the operations for long, perhaps due to the issue of age discussed earlier, or due to other reasons. The following were some of the responses from the participants:

*Participant 3. Unfortunately, I don't have stats for that, I cannot really be sure of the exact time women stay in marine operation.*

*Participant 8. Roughly 5 to 10 years, again depending on when they started and what was their interaction with the male colleagues.*

*I do not think we have been in the field long enough to determine such so I would not know. I would not generalise based on my current experience and knowledge, considering that I am not sure of the actual reasons why those who have left it have done so. Also, I do not think the number of those who have left would substantiate the basis for the period determination, considering the numbers that still remain.*

*Participant 10. Not too long, because of either the strain caused by the shifts or because they can no longer lift and pull heavy things.*

*Participant 6. Over the years it's been seen that females tend to want to retire to the office-based environment rather than the adrenalin rush operations have to offer, so we tend to see a short stay operationally.*

*Participant 5. Most females move to the office environment before they turn 40 years old. There are very few females who remain in the operations up to retirement.*

*Participant 7. Until they retire*

*Participant 9. Short enough to run to the office work*

*Participant 4. We haven't had female for that long, so I cannot answer that question.*

*Participant 2. It's been few years since female are working in the operations and most of them have been doing for more than 10 years. It will be interesting to see a female pilot at the age of 60 but it is not impossible. Most women start their first jobs as tug masters and hence the interest in learning and changing careers and the rate is the same as with men.*

*Participant 1. Currently not very long, once they reach their middle thirties it gets tiring because of the shift patterns that deny one of a healthy social/ family life.*

The issue of retention in the marine industry is a critical one, just like in any other business (Phillips, 2012). Unfortunately, it seems one of the reasons why women do not stay for long in the marine industry is the stigma that comes with the profession, the idea that women cannot afford to do the strenuous jobs that their male counterparts can easily do. Most men still believe that women may not be physically capable to lift heavy objects or spanners, for example, in the engine room of a vessel, but the women work hard to prove to the men that they too are competent for the job and capable to twist and turn spanners in the engine room, as equally as the men themselves, even though they may need to put in double the effort. This obviously requires lots of strength and stamina, but it should not be a reason for barring females from fulfilling their career dreams of becoming successful engineers or mariners. Naturally, women are fragile beings and often do not have the physical strength, but there are other areas of the marine industry where they can contribute to the success of many organisations in the industry. In this view, they should therefore not be penalised for not being able to have the physical strength that the men naturally possess (Kitada, 2013). As indicated in the previous chapters of this study, if the maritime career is to be appreciated by both females and males equally, there must be clarity on the difficulties and fears of the females, like sexual harassment, abuse and bullying. All this must be communicated and there must be clear indication of the way forward from all the challenges faced by the women.

The fact is that there is a lot of discrimination towards the female mariners, which makes it difficult for the women to perform in this male dominated industry. Although some women choose the marine as a career of choice, they do not work for long in those male dominated careers before they are choosing the more office based, shore jobs. Some women join the marine careers for its apparent large income and to gain the skills required to qualify for the management roles (Dragomir and Surugiu, 2013). This is partially the reason why the males in the industry feel it is wasted efforts to train the females for the operations, as they do not intend to stay for the long haul, but for the experience that would qualify them for the management positions (Dragomir and Surugiu,

2013). Thus, in order to increase and improve the retention and recruitment of women in marine industry, there must be policies that govern the recruitment and retention of women. If these changes are implemented, the numbers of women being attracted and maintained in these careers may improve (Jo, 2010).

#### **4.5 Conclusion**

This chapter has presented and discussed the findings of the study, based on the methodology described in the previous chapter, as well as the objectives of the study. Interestingly, very insightful information emerged from the participants, regarding their daily experiences as female mariners. Among other things, it was unanimously agreed that the marine industry is a male dominated one, which needs strong and resilient women who are passionate about the job, or else they would surrender. The findings of the study also indicated that female mariners experience a lot of challenges in this industry, among them include sexual harassment, striving for work-life balance, having to work extra hard to prove themselves that they are equally capable as men, as well as having most of their decisions not being considered. Reflecting on the sustainable development goals, one can conclude that serious steps have to be taken towards addressing issues that mostly affect women, for instance, empowerment, gender discrimination and equality.

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The previous chapter presented the findings of the study, based on the methodology presented in Chapter 3. The purpose of this chapter is to conclude the study. Prior to that, it is essential to provide an overview of the study. Chapter 1 introduced the study and major issues are highlighted in the chapter. The purpose of Chapter 2 was to introduce the theoretical framework on which the study is based, followed by a discussion of the relevant literature. Chapter 3 described the ways in which data for the study were collected. As indicated already, in Chapter 4, the findings of the study were presented and analysed. This final chapter thus concludes the study. It is important to reiterate that the objectives of the study included establishing the challenges faced by female mariners in the marine industry, the factors affecting them in their daily operations, as well as suggesting what can be done to encourage more females to join the industry. In this view, this chapter presents the summary of findings, recommendations, areas for further research, as well as the limitations of the study. The section that follows is a summary of the main findings of the study.

#### 5.2 Summary of findings from the study

##### 5.2.1 Findings based on objective one: To identify the challenges encountered by females in marine operation

The findings presented in the previous chapter indicate that the maritime sector is male dominated, and the women who choose to work in that industry need to put extra effort in order for them to be visible, that is, for them to be recognised, they have to work much more than their male counterparts. In this view, the female participants highlighted some of their daily challenges as they go about their day to day job and these include gender discrimination, sexual harassment, struggling with work-family balance, lack of support from their male counterparts, to mention a few. The major point highlighted was that most males still believe that the marine industry belongs to men, hence, perhaps the reason why they do not give their female colleagues the support that they need to flourish in the industry. As a result of this, most females get demoralised working in this male-dominated industry, to an extent that sometimes they feel out of place when they work with men who would talk about some issues which have nothing to do with females. The participants highlighted that the gender stereotypes are something that need to be dealt with in this industry, for men to accept that women are equally capable of doing what they can do.

The participants strongly believed that perhaps those gender stereotypes are what is preventing them from occupying senior positions, as they are still being perceived as the weaker sex and cannot make sound decisions. This was reiterated in their responses when they indicated that most of the decisions that they make are not taken into account, except in few cases. These findings reflect (Reskin and Ross, 1992: 145) assertions that women are still not given the recognition that they deserve. In their own words, they argued that:

*Women's increased access to managerial jobs is beyond dispute, but the sexes' more equitable representation in managerial jobs has not eliminated the significance of gender in the distribution of organisational authority and the monetary rewards that authority traditionally brings. Women managers are concentrated near the bottom of the chains of command; they tend to supervise workers of their own sex, consistent with conventions that women should not supervise men; they were substantially less likely than men to exercise decision-making authority; and their involvement in decision making was largely confined to offering input into decisions that men make.*

The findings presented in the previous chapter clearly indicate that women in the maritime industry are still more disadvantaged, because of the strong belief that the industry is for the men only. As a result, the females in this industry still have to work in somehow adverse situations which then compromise their performance in the job and eventually, reduces their productivity. In this view, the participants in this study indicated that the industry should strive on ensuring equality of access, by eliminating the systematic and institutional barriers, as well as providing them the support that they need.

### **5.2.2 Findings based on objective two: To establish the factors affecting women when carrying out their marine operations duties**

Seemingly, the main reason why most females join this industry is the prospect of a good salary, coupled with the opportunity to travel a lot, which most women enjoy. However, the challenges associated with the job outweigh the benefits. For instance, the participants indicated that the job is very strenuous and risky, which render most of them into depression, stress and anxiety. Because of the nature of the job, most women tend to spend a lot of time away from their families and loved ones, which then brings in the issue of conflict between work and family. Most of them indicated that they miss on a lot of family gatherings and events, because of the nature of their job. The conflict between work and family remains a sensitive issue, especially for the married women, as this often results in the incompatibility between family and career goals. This conflict can result

into different emotions for the women in marine, as she wants to be there for her family and work at the same time.

### **5.2.3 Findings based on objective three: To suggest ways on how best to promote the retention of women in marine operations**

It was also indicated in the findings of the study, that the maritime industry is not so familiar with most people, which obviously affects the potential mariners in decision-making, regarding joining the industry. Most of the participants indicated that when they joined the industry, they did not receive the support that they needed from their family members, mainly because the family members had no knowledge of what the job entails, hence, the participants had to walk the journey alone. They however indicated that after training, they began to receive support from the families. The important point that they raised in this regard is that it is very important that the aspiring mariners be provided with as much information as possible, about the job, so that they know what they want to get themselves into and the career path. Again, they also indicated that if they were to recommend the kind of job to other women, there are some personalities that the potential mariners should possess, because the industry is not for the faint-hearted. In response to the question of age, the participants indicated that age has got nothing to do with working in the operations, as opposed to the general belief that the older a woman gets, the more difficult it is to remain in this industry. For the participants, the industry needs someone who is really passionate about her job, someone who is willing to learn and face the challenges associated with the profession. The challenges are quite intense as some of the participants have added, that you have to be strong mentally and spiritually to survive. Given the findings summarised in this section, the section that follows highlights some of the recommendations. The participants emphasised that as much as age was not an issue to be an effective mariner, one's physical ability and fitness had to be at a good level, as the career is mentally and physically demanding.

### **5.3 Recommendations**

Given the above findings, the following recommendations are made.

The fact that the industry is still male dominate implies that the industry is not so popular to most women. In this view, there is need to raise awareness about the industry, and indicate that everyone qualifies to join the industry. For instance, maritime education should be made compulsory basic schooling, in order to get rid of the traditional and cultural barriers for women. Also, the positive image of the industry should be made public in different media platforms for everyone to access. Enough information should be sent out there, for people to be knowledgeable about the industry. In the same way, the education sector has a mammoth task of attracting more females to pursue

education in this field, so as to increase the number of women in this male dominated industry. The more women are attracted to the industry, the more they will get accepted and supported by their male counterparts. There is a need for the nautical studies to be made a norm to all cultures, all races and genders.

This therefore goes back to the policy makers, who should ensure that the policies about the recruitment and retention of women in this industry are favourable. Possibly, financial resources in form of grants and scholarships should be made available, specifically for women to pursue education in this particular field. Providing financial assistance would definitely increase the intake of women in the marine education and training.

Essentially, the stereotypes that the industry demands physical strength, which disadvantages most women, should be erased and be replaced by notions of supporting women to contribute their skills, knowledge and competences to the industry.

For those women who are already in the industry, it is proposed that they receive high levels of mentoring and be guided in professional planning. Regarding career planning, the women should be guided through designing and managing long-term goals, as well as how the goals can be achieved. This is to reduce frustration, as some of the participants indicated that they would love to retire as soon as possible from the operations side of the industry, another one saying she would love to retire at 38 years. The female mariner needs to be encouraged into the operation for as long as possible in order to transfer knowledge to the upcoming mariners and to stand as an example to the future female mariners. Thus, career planning would help in accelerating their career development, allowing them to reach managerial positions while at the same time acquiring expertise in the field. The management need to discuss the retention of the females in the maritime industry in great depth. There is also a need for plans on how to alleviate the challenges that the females face on the operation. The first step would be to accept that the females are different from the males and if you are to treat them equally, that would mean you realise that they are different and cannot be treated exactly the same way that you would treat a man. Maybe thereafter there would be an increase in the females in the marine operations.

In the main, a lot still needs to be done in order to ensure women acceptance in the maritime industry. The obstacles that the participants highlighted: sexual harassment, gender discrimination, inequalities in terms of fewer opportunities to rise to management positions, all should be addressed at both institutional and national level, as these are not only common in the marine industry, but they cut across the board. This therefore ensures stringent laws that prohibit gender discrimination and sexual harassment. It should be emphasised in the legislation that failure to abide by this law,

the respective employers should pay damages to the affected victims. Importantly, gender barriers should be broken, and policy makers should ensure that affirmative decisions are in favour of women.

#### **5.4 Limitations of the study**

The target population for this study was drawn from the TNPA and the organisation did not grant the permission for the researcher to use *all* of the information available from the respondents. This could have affected the results and subsequently, the quality of the study in totality. Another issue was that of the unavailability of enough mariners for sampling, due to an incident involving one of the female marine trainee pilot who drowned while trying to board an incoming vessel. This incident left the employees, especially the female mariners, traumatised. The employees became reluctant to respond during this period, so the interviews had to be rescheduled, and there was poor participation during the interviews, as the respondents felt traumatised.

#### **5.5 Areas for future research**

This study has focused on the retention of female mariners in the maritime industry. It highlighted some of the challenges experienced by the women in their day to day work. To extend on this, future studies should perhaps focus on investigating these challenges in depth, to identify why these obstacles occur and what could be done to minimise them. Also, other studies could focus on investigating why there are few women in the maritime industry, as the results of this study have shown, but could not go further in examining the major causes. From a policy perspective, it has to be investigated, what kind of policies are in place, which support the injection of women in this industry. Most importantly, the effectiveness of the policies should be examined. Lastly, research also need to focus on why sexual harassment is rife in this industry, as the participants in this study indicated this as a major challenge that they have to deal with on a frequent basis.

#### **5.6 Conclusion**

This study has indicated that the maritime sector is one masculinised field. Among other things, it was highlighted that the lack of information and awareness on the industry is one reason why most women are not attracted to the industry. Another contentious issue is that of gender stereotypes and sexual harassment, which tend to stifle women's abilities to perform to their maximum in this industry. Due to the nature of the job, as well as other commitments, most women find it difficult to balance between their career and family life, which results in most of them taking early retirement from the operation. These are some of the main challenges or barriers to women participation in the marine industry. However, it has to be noted that the marine sector is a very important one, just like any other sectors, hence, efforts should be made that it also attracts as many



women as possible, to ensure gender balance. The maritime industry needs to reach a point where it is normal to have women onboard.

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**Appendices**