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IMPORTANCE OF FITNESS FOR MARINE CADETS OR SEAFARERS

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ABSTRACT
Modern technology has simplified and standardized maritime operations, but it has also increased the responsibilities placed on the operator. Being in excellent health has become a significant safety factor: it is essential to avoid strain injuries as well as to maintain alertness and maximum performance at work. Maintaining excellent health and preventing obesity and musculoskeletal diseases may be achieved by regular physical exercise. The purpose of this article is to examine the physical activity habits and preferences of sailors. A Norwegian shipping firm polled its boats' crews about their personal health, physical activity, and work-related issues. Among the most popular forms of physical activity on board are walking, cycling, and manual labor. Training for strength is more popular aboard a cruise ship than at home. The three most significant motivating variables are preventing sickness and injury, having a nice and welcoming gym, and keeping your weight under control. In order to help seafarers, stay healthy and perform better, the study's findings suggest that enhancing and arranging activities connected to physical activity on board ships has a major upside. Soldiers' ability to carry out their job responsibilities in garrison and on the battlefield is directly linked to their degree of physical fitness and overall health. Finding out the physical condition of navy cadets at every step of their development will allow us to create an instruction plan that is specifically matched to your requirements.

KEYWORDS: Seafarers, offshore fleet, health, physical activity, survey

INTRODUCTION

One of the most difficult conditions faced by seafarers is spending lengthy periods of time away from their families and friends. For Höegh Autoliners, distance has a significant influence. As a result, Internet access has been made available to everyone on board, allowing sailors to stay in contact with friends and family back home. A healthy body and mind go hand in hand, according to the firm. Seafarers may benefit from physical activity, although it might be more difficult aboard because to the tight area. Aside from that, the ship's owner and crewing office must make certain that there are opportunities for physical and social exercise. It's also possible to alleviate stress and exhaustion with meditation, mindfulness exercises, enough sleep, and a nutritious diet.

"Seafarers must ensure that they make the most of their break periods when working in shifts." Seafarers working with Höegh Autoliners are guaranteed at least 10 hours of rest each 24-hour period and 77 hours per seven-day period, in accordance with the MLC standards. This concludes, in support of seafarers' well-being, the firm points out that most of the time it teaches its seafarers about the obstacles they will experience and how to cope with them before they go on an offshore career. For those who work irregular shifts, it's important to give meals that are appropriate for the beginning, middle, and conclusion of each shift. Eating is a need for survival, but it can also be a fun way to meet new people. Physical and mental well-being are intertwined. "

Some seafarers' waistlines are spreading as quickly as the issue at sea. While staff numbers are decreasing, it seems that an excessive number of crew members are expanding in size at the same time.

Obesity is becoming more and more of a problem at sea. Offshore employees' weight has risen by 20% in the last 30 years, according to research, and this trend seems to be mirrored on other ship types as well. Three-quarters of Danish sailors are overweight, according to a new survey. As many as 10% of Filipino seafarers are either fat or on the verge of becoming so, according to statistics from ship management.

Food quality, cooking skills, and a desire for soft drinks are all having negative effects on seafarers' well-being and even safety as a result of their increased snacking and caloric intake. As a seafarer, it's important to maintain a healthy lifestyle, but recent studies have identified some troubling tendencies. While at sea, people tend to smoke, drink, and exercise less. It's no surprise that their health isn't as fantastic as it might be. Additional lifestyle considerations, such as higher-than-average levels of stress, raise the stakes for good health and restful sleep at sea.

Exercising and maintaining a healthy weight have several advantages. Aside from the physical and mental advantages, exercising has a profound effect on your emotional and psychological well-being. Regular physical activity improves mental and emotional well-being through reducing stress. In addition to keeping their weight in check and improving their digestion, their blood sugar levels stabilize, their sleep and self-confidence increase as a result. Because of this, seafarers are clamoring to be given the opportunity to be active and in shape. In other words, getting the appropriate answers to this topic requires a significant investment of time, money, effort, and creative thinking. Sadly, there are many obstacles to exercise, such as time, exhaustion, and constant demands, which make it difficult for certain crew members to find time to exercise. Many of those who replied claimed that they wanted to exercise but struggled to find the time or inspiration to do so. As a result, it seems that we need to do more to promote and enable physical activity, as well as to guarantee that food on board ships is healthy and nutritious.

Seafaring personnel must also avoid overindulging in sugary beverages and processed foods due to the increased sedentary nature of the job. Health and well-being are directly linked to nutrition; therefore it is imperative that proper nourishment be provided.

LITERATURE REVIEW

Ersan Başar Et Al (2015) For millennia, the sea has served as the primary means of transport and exchange. 90% of commerce items are still delivered by water. Accidents resulting in harm or death are all too prevalent on ships. In many cases, these mishaps are the result of a misalignment of the body and a lack of reflexes. Two pilots are reported to be killed and several more injured each year in transfer accidents, according to reports. Seafarers must maintain a healthy weight-to-balance ratio and be physically active. In spite of the presence of sports facilities aboard some of the most contemporary ships, officers often do not participate in sports throughout their maritime educations and do not use these facilities. A survey of shipboard sports habits was developed by researchers and sent to 251 officers and cadets as part of this study. Consequently, the study's findings suggest that ship commanders should engage in physical activity to enhance their coordination and stamina. The research also found that sports may assist to alleviate officers' stress and increase their productivity.... According to the survey, sailors between the ages of twenty-three and thirty-two had the greatest accident rates. During this time, most seafarers have a high degree of self-confidence, yet they often make errors and cause accidents because they lack experience.

Iris m. De oliveira et al (2021) To be physically ready for duty, soldiers must maintain a level of physical health and fitness that allows them to carry out their job responsibilities in both garrison and

deployment settings. We can better design a training regimen for navy cadets if we have a clear picture of their physical development throughout time. For the 2018–2019 academic year, cadets at the Military Naval Academy in Marn, Spain, were assessed for their physical fitness. To conduct this study, we used a longitudinal correlational-descriptive design. Pre- and post-tests of physical fitness were administered to 167 of the 292 students who took part in the global analysis (153 men and 14 women, mean age 21.9 3.5). The students were then divided into age groups. Measurements and statistics from the Spanish army's physical fitness evaluation system (push-ups, 1000- and 50-meter races, vertical leap, and 50-meter swimming) were utilized. A descriptive, inferential, and correlational analysis was performed, and the significance threshold for the research was chosen at p 0. 05.. There is a significant difference between the 1000 m and 50 m races, as well as a vertical jump test, between the whole sample and the age group markers (p 0.001). All five tests showed a high level of statistical association. Cadets at the Military Naval Academy in Marn, Spain, seem to have adequate levels of physical condition when compared to naval forces in other nations. I think re-evaluating stamina and strength training is probably the best course of action to ensure consistency between training and assessment.

RaphaelBaumler et al (2021) This article examines how sailors keep track of their compliance with the rules governing work and rest hours. It focuses on the factors that lead sailors to alter their logbooks in order to conceal their transgressions. Semi-structured interviews were used as part of the study technique to get a better understanding of this industry issue. These studies included 20 mariners, and the purpose was to examine how they recorded data and how they adjusted their records. This disparity between work load and manpower levels causes repeated infractions, notably during port-related activities and for sailors on the 6On/6Off watch schedule, according to participants. The data indicated that almost all of the mariners in our research altered their work and rest hours records to conceal their infractions and pretend to be in compliance. Adjusting records in this way is motivated mostly by concern about the potential implications of nonconformities discovered during third-party inspections. Seafarers are more likely to put the interests of the ship ahead of their own, due to worries about their jobs and the uncertainty of employment. Infractions and alterations tend to be ignored by the flag state, the port state, and even the shipping corporations themselves. As a result, changing records seems to be a low-risk alternative for sailors. In spite of this, the International Safety Management Code (ISM) and its audit system have been shown to be ineffective. In many circumstances, sailors are willing to put their careers on hold in order to put the ship first.

Kristine VedalStørkersen (2021) Seafarers have a strong interest in and impatience with safety management. It's possible to decrease accidents using safety management, but it may also limit the concentration and flexibility required for safe operations. Ideally, key activities should be supported by safety management duties in order to ensure their success (working according to procedures, harmonizing procedures to other professions, and documenting operations). Instead, fundamental responsibilities are occasionally displaced by safety management. There is no mention of safety management in prior studies on future vessel operations, despite this being the case. Consequently, this research investigates how safety management might assist the essential duties of remotely operated vessel operations. This research depends on past theoretical or small-scale empirical investigations to uncover instances of situations important to safety management since these operations are still in the trial stage. It's possible that future situations may involve dispersed organizational structures, new roles, and a high pressure on shore control centers. According to the results, the current deficiencies in safety management – a lack of concentration and adaptability – are likely to be exacerbated by the

anticipated future circumstances. Prior to the launch of remotely-operated boats, the findings of this research should be taken into consideration and applied.

Dariusz Jamro et al (2021) As a professional soldier, you should be able to perform at a high level both physically and intellectually. As a result, attention should be paid to the cadets who will make up the commanding officers of the future. It was the goal of the research to find links between cadets' levels of physical fitness and concentration, as well as their academic successes (AA) in various courses. 228 cadets from a military school in Poland participated in the study, which included 31 females and 197 males. To examine the relationships between the explanatory and elucidating factors, we used Pearson's correlation coefficient. The ideal regression approach, which makes use of the best subset method, was used to examine the relationships between AA and somatic and motor characteristics. The degree of somatic and motor development of men and women was statistically different; males also fared better in practical military topics. Hand strength is a major factor for both civilian and theoretical military women when it comes to AA. According to the results, more attention should be placed on building muscular strength in order to close the large gaps between men's and women's physical fitness.

HEALTHY FOOD AND PHYSICAL EXERCISE IMPROVES SEAFARERS' HEALTH

In order to be healthy while at sea, seafarers must make healthy eating and physical activity a priority in their daily routines. After all, seafarers spend significantly more time at sea than they do at home. Working at sea for an extended period of time necessitates the maintenance of good health and a decreased chance of contracting illnesses related to that health.

Crew members' health and well-being are directly impacted by the quality of food available on board. Skuld P&I Club says that a low-fat, high-nutrient diet gives sailors the energy they need to do their jobs, protects their health, and combats weariness. Food, on the other hand, may be a serious source of sickness and foodborne outbreaks if it is not managed correctly aboard. Unfortunately, Geir Jrgensen, Senior Vice President, Global Head of Loss Prevention at Skuld, believes that managers may not be ready to boost the victualing budget if healthier food is more costly.

One option is to engage more closely with the food suppliers or maritime catering services that are used. Training for the main chefs, weekly menu ideas, and inventory monitoring are some of the services offered by these companies. Reduced food waste and increased value from the victualing budget are two benefits of excellent inventory management.

SEAFARER'S HEALTH & LIFESTYLE

Many seafarers have physical and mental health issues, especially when we consider the nature and difficulty of their employment at sea. The health and lifestyle of seafarers should always be considered in light of the following factors: unstable work schedules and long working hours due to operational needs, the small community which one must adapt and work with, the feeling of being away from home and familiar faces, the difficult working environment as well as all the hazards that are involved, the restricted medical facilities and limited medical supplies." All of the aforementioned, together with the nature of the seafaring profession, adds pressure to a person, even if he or she is not aware of it and is not assisting in any way to maintain healthy habits like regular exercise, proper sleep intervals, healthy living environment, and so forth.

Smoking & Drinking

Compared to land-based professions, seamen are more likely to smoke and drink. This may be due to the fact that a person who works on a ship is more likely to get bored than a person who works on land,

where he has more options for occupying his time. A seafarer's off-duty activities are restricted compared to those available on land, and we must remember this. Another major consideration is the level of stress that crews are exposed to when at sea, which may be exacerbated by factors such as tight timetables, dangerous conditions, and cramped quarters. Smoking and drinking alcohol are both linked to sailors, as are the two variables listed above.

Consequently, it is believed that smoking and drinking may

- Smoking is thought to relieve stress and improve focus, however this is a fiction since smoking lowers oxygen levels in the blood, reducing oxygen delivery to the body's important organs, including the brain, resulting in extreme fatigue and exhaustion.
- Keep a watchful eye on the time throughout the night.
- Loneliness may be overcome.

As a last point, it's important to emphasize the societal perception that drinking and smoking make someone seem more masculine and confident. The ability to socialize with a large group is also seen as beneficial. Imagining yourself at a gathering where you are the sole non-smoker is difficult. For some who feel that smoking and drinking may break down boundaries between colleagues, this is seen as a key aspect in ensuring a successful seafarer's success.

Although it might be expected that seamen would abstain from drinking when onshore, this is not the case. For example, a study conducted by the Australian Maritime Safety Authority (AMSA) in 2007 found that seafarers' drinking habits differed significantly from those on land. Almost all employees reported drinking alcohol when onshore, and those who did reported consuming a greater number of drinks each week. Maritime industry restrictions for drinking at sea, as well as the availability of alcohol-free or "dry" ships in certain sectors, may be to blame for the disparity between sailors' alcohol use at sea and onshore, according to the report (i.e., Offshore Oil and Gas). Contrary to popular belief, the rate of smoking was almost unchanged. In spite of the survey's specific focus on Australian seafarers, the results are probably representative of seafarers from other countries, even if there are some subtle cultural variations.

Smoking	**Sea**	**Ashore**
Smokers (%)	28.3	28.8
Cigarettes per day	20.2	18.1
Drinking	**Sea**	**Ashore**
Drinkers (%)	52.2	90.3
Drinks per week	11.6	14.8

Smoking & drinking behaviours for maritime personnel at sea & ashore

A survey of the health, stress and fatigue of Australian Seafarers (AMSA, 2007)

Sleep

Due to the 24-hour nature of seafaring, sleep deprivation is unavoidable. Sleep deprivation is a common complaint among seafarers, and it may lead to feelings of exhaustion, tension, and inability to focus. The design and functioning of a ship is a major factor in why sailors sometimes have difficulty sleeping. Try to sleep at a factory that is open 24 hours a day, seven days a week.

When it comes to designing for sailors' exhaustion and sleep, MCA's "The Human Element a handbook to human behavior in the maritime industry" proposes several design considerations:

1. **Noise:** A ship is certain to make a lot of noise. Noise from shipboard equipment may be disruptive to sleep and can be distressing. Sleep is disrupted by noise levels of 40 to 50 decibels (dBA). Almost everyone's sleep is disrupted by a level of 70 decibels or more.
2. **Vibration:** Another aspect that impacts sleep is the movement of the ship itself, as well as the vibrations generated by the ship's equipment. A vibrating bed or an electric drill-like sensation in your arm as you sleep could seem terrifying, but imagine if it happened in the middle of the night, and you awoke to find your body leaning against a vibrating wall of your cabin. As long as they are aboard a ship, seafarers are in constant physical touch with the ship's surface, which causes vibrations that affect their health.
3. **Climate**: By "Climate," we mean the ship's temperature, airflow, and overall air quality. Trying to sleep on a hot summer day with your sheets clinging to you can wake someone in the middle of the night. As a result of its inability to generate heat via muscular action, too much causes the human body to quiver.
4. **Ship motion:** Pitch and roll of a ship may easily interrupt a person's sleep. Although you will ultimately fall asleep, you will wake up feeling as if someone is attempting to push you off your bed.

Stress

Almost all seafarers are subjected to constant stress, which has a detrimental effect on their physical and mental health, as well as their ability to perform at their best at work. Of course, depending on the kind and nature of the task allocated to a person, there may be varying amounts of stress. Work-life balance is a big cause of anxiety for many people. When individuals have to deal with expectations that they are unable to satisfy, they are likely to experience stress as a result. A person's stress is compounded when they are dealing with additional issues, such as a physical injury and stress from work, which may lead to a longer recovery time or worsen the injury.

Nutrition

Seafarers' health is heavily dependent on their nutrition because of the physical demands of working aboard a ship. According to an AMSA study on the health, stress, and exhaustion of Australian Seafarers, many seafarers, despite their less favourable views on nutrition, are curious in what they eat. As a result of poor dietary habits, chronic illnesses may arise. This includes obesity, which increases the risk for a variety of diseases and health issues, such as high blood pressure and type 2 diabetes, heart and circulatory system problems like angina and ischemic stroke, as well as gallbladder and joint problems like osteoarthritis.

A lack of physical activity at work is a possible cause of many illnesses. This holds true for those who work aboard ships as well. When it comes to chronic illness, poor diet might play a role:

1. One of the most common causes of sedentary lives is the use of sedentary work and leisure activities, such as watching television or reading a book.

2. Portion sizes that are too large
3. Consumption of beverages with added sugars is on the rise.

Many sailors' eating habits these days may best be described as excessive intake of highly processed foods, sugar, salt, and saturated fats on board ships. In contrast, the intake of fish, vegetables and fruit on board ships seems to be especially low, despite the fact that these foods are given. As a result of stress and inactivity, many people end up becoming overweight. A person's health, as well as the safety of the crew members on board, is jeopardized if he or she is overweight. For example, an overweight individual may have difficulty negotiating small areas or working in an engine room where high temperatures are common. That's not to mention the fact that being overweight may have a considerable negative impact on one's health and well-being.

Drug Use

Because of the ship's "isolated" atmosphere and the extended periods of time spent away from social activities and entertainments onshore, many sailors wish for a good time once they get ashore. As a result of their "attractiveness," drug dealers are more likely to approach sailors. As a result of the stress and isolation that comes with working at sea, many seafarers turn to drugs to help them get through the time until they can return home. This may have a negative impact on their mental health.

An addict's actions are intimately linked to both the substance they are using and the time they took their previous dosage. One of a drug addict's most defining characteristics is his proclivity for embellishing the truth about his habits, which he usually keeps to himself. It is common for drug users to gain the capacity to keep their habit a secret. The majority of the time, crew members aren't aware of the presence of a drug user in the group. A ship's crew may have deep relationships, making it difficult to suspect a spouse of using narcotics in such an isolated group.

PHYSICAL FITNESS AND MEDICAL REQUIREMENTS TO JOIN MERCHANT NAVY

There is no guarantee that you will receive a job in the merchant navy even if you have the necessary grades and a strong desire to spend your life at sea. You must meet the physical and medical standards for a career aboard ships in order to enter a merchant navy school. Any physical or mental impairment that might jeopardize a candidate's ability to function at sea must be remedied. Take the following physical fitness test to find out whether you're ready to join the merchant marine.

1. Constitution

Inadequate muscular growth or other significant abnormalities should not point to a weak constitution. We will not accept applicants who are under 42 kg in weight or under 150 cm in height. At a bare minimum, the chest should be able to expand by five centimeters. Applicants who are female may have their height and weight lowered by up to two inches (5 cm) and three kilograms (3 kg). An appropriate amount of weight for one's size and age.

2. Skeletal System

No disease or impairment of bone or joint functions, contracture of chest or any joint, abnormal curvature of spine, deformity of feet like bow legs or knock knees, flat feet, deformity of upper limbs or malformation of the head would disqualify.

3. Ear, nose and throat

It is essential that there be no tympanic membrane perforation or indicators of otitis media or evidence of mastoid surgery, as well as no evidence of nasopharyngeal polyps or nasopharyngitis. There should also be no evidence of nasopharyngeal or accessory sinusitis. The loss or deterioration of teeth to the point that mastication is hindered. Any sickness or injury that affects the normal function of either temporomandibular joint is not allowed. Pyorrhea sufferers should be sent away. Between 500 and 3000 Hz, an average of at least 30db in the better ear and at least 40db in the other may be heard without the use of hearing aids. A whisper from at least 5 meters away is audible.

4. Speech

In order to speak, there should be no barriers (e.g. stammering)

5. Lymphatic System

The neck and other regions of the body should be free of swollen glands caused by tuberculosis or other disorders. The thyroid gland should be in good condition.

6. Cardiovascular System

The heart and blood arteries should be free of any functional or valvular or other disorders. ECGs should be within normal ranges when they're taken. Systolic and diastolic blood pressure should not exceed 150 and 90 mm of Hg, respectively.

7. Respiratory System

No indication of chronic or respiratory tract illness, pulmonary TB, or any other chronic lung disease should be seen. Chest X-rays are usually clear. An ideal resting respiration rate is less than 20% and the holding duration should be at least 30 seconds.

8. Digestive System

The liver and spleen should not be visible, and there should be no abdominal pain when palpated. There should be no signs of any digestive system disorders.

9. Genitourinary System

The kidneys should not be noticeable or swollen. Kidney illness should not exist. Rejected cases will include those that indicate albuminuria, glycosuria, or blood (RBC) in the urine. There should be no signs of hernia or a predisposition for it. Surgery for a hernia may be performed on those who are considered fit if one year has passed after the surgery.

- The applicant must offer verification of his or her credentials.
- Abdominal muscles should be in excellent shape and in good condition.
- The hernia has not returned or the surgery has been complicated. A hydrocele, spermatocele, or any other genital organ abnormality should be absent, as should any indication of haemorrhoids, an anal fissure, or an anal fissure, or any sign of spermatocele. If the other testicle is normal and the undescended testicle is not having any physical or psychological effects, an undescended intraabdominal testicle will be permitted as long as there are no active latent or congenital venereal illnesses. When a testicle is left in the inguinal canal or on the extra abdominal ring, it is considered an undescended testicle and must be removed.

10. Skin

No skin condition should exist unless it is short-lived or minor. In the case of scars that are expected to result in handicap or significant deformity, they are likely to be rejected.

11. Nervous System

Candidates and their families should not have any history or symptoms of mental illness at any point in their lives. Candidates with a history of urinary incontinence, enuresis, or fits will be excluded from consideration. Any signs of mental or neurological agitation, aberrant gait, cranial nerve dysfunction, incoordination, motor or sensory defaults, or any combination of these will be deemed unacceptable.

12. Eye Sight

Patients with trachoma and its subsequent sequels should have no squint or any eye or eyelid ailment that is likely to worsen or return. Candidate must be able to see with both eyes (fusion faculty and a full field of vision in both eyes). The pupils must respond properly to light and accommodation, with complete eyeball movement in all directions.

SEAFARER FATIGUE: THE IMPORTANCE OF GOOD NIGHT SLEEP

A good night's sleep is something that we all strive for; it makes us feel better and makes us feel worse. However, getting enough sleep and relaxation is more than just a question of personal preference; it's essential to one's physical and mental health. In addition, those who don't get enough sleep are more prone to make errors and get into accidents. Particularly aboard working ships, where crews must do physically and intellectually taxing tasks, sometimes in hazardous environments, while also keeping to tight and demanding work schedules for the sake of everyone on board.

This may be shown by asking any parent reading this to recall the first few months after their child was born and how disrupted their sleep was. Imagine having to do hazardous job while dealing with the side effects of continuous sleep deprivation. You are both physically and intellectually weaker than you were before. That can't be fixed with a big cup of coffee. Fatigue wears down the human body over time, which may result in long-term health and psychological problems. Additionally, if the ship's working environment is suitable to encourage crew members to return after shore leave, then they will be more likely. Retaining skilled personnel and making the work an appealing long-term career choice are two of the most difficult challenges the sector faces. The safe operation of ships and the profitability of the business they are involved in depend on the expertise of experienced seafarers.

Accidents Will Happen If Crew Do Not Have Sufficient Rest And Sleep

1. Over the years, Skuld P&I Club has dealt with several issues involving weariness, both directly and inadvertently. From small abrasions to catastrophic explosions, these incidents vary widely.
2. The grounding in the southern Mediterranean of a cargo ship where the captain thought he was well rested, but fell asleep next to the chart table, hidden from view by his assistant's chart table. On autopilot and with the deadman warning off, the ship quickly slammed into the earth, resulting in extensive damage.
3. The vessel's thermal oil system was being maintained by a Chief Engineer who had been working nonstop on main engine repairs for about two days without enough rest. To avoid the risk of an engine room fire, he hurriedly cleaned out the system of waste material, which resulted in his own death and the deaths of many others on board.

4. A member of a ship's crew who was going through the Iberian Peninsula went through a mental collapse and ended up drowning. This seafarer had been aboard the ship for seven months without a break and had joined her immediately after his previous ship employment ended, according to investigations.

Physical Fitness Come into Play for A Marine Engineer

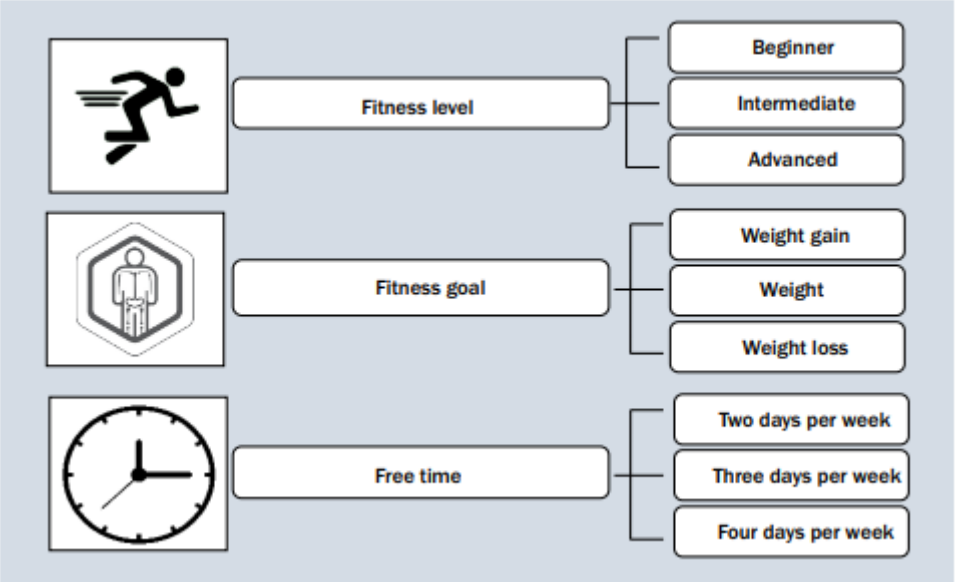
The most essential thing for everyone right now is to stay healthy. There is nothing unique about maritime engineers. Every time they board a ship, they must be examined by a DGS-approved doctor to ensure that they are physically fit for maritime duty. An important consideration is the length of time a marine engineer must spend at home without pay while he works on regaining his physical condition. Taking care of one's health while pursuing one's professional goals is essential.

DEVELOPMENT OF PHYSICAL TRAINING SMARTPHONE APPLICATION TO MAINTAIN FITNESS LEVELS IN SEAFARERS

Fitness is an integral part of a healthy lifestyle. Type 2 diabetes, cardiovascular diseases (CVDs), and cancer may all be prevented by regular physical activity or exercise. There are immediate and long-term health advantages for those who put in the time and effort. A person may become more physically active and fit even if they just spend a short amount of time doing it. The most essential benefit of regular exercise is that it may raise an individual's fitness level. The World Health Organization (WHO) recommends that males between the ages of 18 and 64 engage in at least 150 minutes of moderate aerobic activity (such as brisk walking or jogging at a moderate pace) or 75 minutes of strong aerobic activity (such as strenuous running). These sorts of tasks are simple to carry out and may be made better with no additional effort on the part of the user. As a result of a variety of factors (such as a desire to look better), many people engage in physical activity on a regular basis. Starting point, aim, time, age, personal talents, and preferences all influence the quantity of training needed. Taking responsibility for one's own health in the workplace and operational environment may have a significant impact on one's overall health.

Wellness on a ship (WOS) is a smartphone application designed to help sailors maintain a healthy lifestyle by encouraging them to engage in physical exercise. To help the sailors who participated in the experiment improve their fitness, they were given workouts that were personalized to their physical abilities and traits. Increasing lung, heart, and muscular capacity are the main goals of the workout regimen recommended. As the trainee progresses, his or her performance is closely monitored through update reports, and the training plan is adjusted to take it into account. Also, since seafarers don't have a lot of internet connectivity, the aforesaid programme was built to function offline. As a result, a user-friendly smartphone app is vital for sailors to get physical training.

Create an exercise for seafarers. A rigorous exercise regimen should be tailored to each individual's unique physiology, age, aspirations, food, and other factors, such as available free time. Seafarers who want to construct an exercise regimen in three easy stages may use this workout.



Creating a seafarer's workout routine

CONCLUSION

When compared to other nations' military naval corps, the XXXX cadets seem to have a respectable degree of physical condition. Coherence between training and assessment is critical, and maybe a reconsideration of resistance and power strength is required. To avoid work-related diseases and repetitive strain injuries among seafarers, maintain good health, and therefore improve their performance at work, the findings reveal that there is significant room for improvement and organization of exercise-related activities on board offshore boats. The time and facilities available for physical activity at work and at home are vastly different. An additional element influencing physical activity is a lack of desire and seasonal conditions such as cold or hot weather.

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