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Evaluation of the Navy Shipshape Program at a Large Navy Military Treatment Facility: A Comprehensive Swot Analysis Approach

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EVALUATION OF THE NAVY SHIPSHAPE PROGRAM AT A LARGE NAVY MILITARY TREATMENT FACILITY: A COMPREHENSIVE SWOT ANALYSIS APPROACH

by

NIA NUR MAYE

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ABSTRACT

The increasing problem of obesity among Navy service members (SMs) is a public health concern that impacts operational readiness and health risks. To combat obesity, the Navy has an official weight management initiative called ShipShape. This project aimed to conduct a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of ShipShape at a large Military Treatment Facility (MTF) in Portsmouth, Virginia. This program evaluation aimed to identify the internal and external factors that influenced the program's effectiveness to propose suggestions for improvement. Using quantitative and qualitative methods, the evaluation focused on conducting a paired t-test to analyze changes in Body Mass Index (BMI) using the Outcome Based Evaluation (OBE) framework and analyzing qualitative insights gathered from semi-structured interviews using the SWOT framework. The findings revealed that the ShipShape Program effectively reduced participant weight, thus meeting its primary objectives. However, opportunities for improvement identified included leveraging technology to enhance accessibility and address barriers identified among participants with travel and location issues. Additionally, negative perceptions associated with participation in the program could be addressed through message framing in advertisements by promoting the program as inclusive and not punitive. A strategic plan was presented to program stakeholders as a blueprint using Kotter's 8-step method, incorporating insights from quantitative and qualitative analyses. Future research should assess the sustainability of health improvements and explore additional program

components. By addressing the identified threats and weaknesses, building on existing strengths, and leveraging identified opportunities, this plan was designed to enhance the program's effectiveness and improve the health and operational readiness of Navy and Marine Corps servicemembers (SMs).

INDEX WORDS: ShipShape, Weight Management Program, Navy, SWOT, Outcome Based Evaluation, OBE, Program Evaluation, Obesity, Overweight, Physical Activity, Readiness

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CHAPTER 1

INTRODUCTION

Background

The United States Navy (Navy) is charged with deterring threats, maintaining peace, and ensuring the nation's security (DoD, 2019). This means that health, physical fitness, and performance are fundamental for individual health and operational readiness. Therefore, the rise in obesity among Navy service members (SMs) is a public health concern due to the associated risks to their health and the impact on operational readiness (CDC, 2021; Stiegmann, R. A., Payne, C. B., 2023). The Navy has implemented an official weight management program called ShipShape to address these concerns. The ShipShape Program's objectives are to assist participants with developing long-term lifestyle modifications that lead to weight reduction and management (OPNAV 6100.2A, 2007). Despite the program's efforts, limited research has evaluated its effectiveness. Therefore, conducting a program evaluation using a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis can be a powerful tool in assessing ShipShape to measure its efficiency in addressing obesity. By identifying internal factors of the program's strengths and weaknesses, more targeted strategies can be proposed to improve the existing program. Additionally, the SWOT analysis can assist in recognizing external factors, such as opportunities and threats, like innovative technology or unhealthy eating patterns, that can be integrated into the program to maximize effectiveness in its objectives. An Outcome Based Evaluation (OBE) will complement the SWOT analysis by measuring specific changes in participant BMI, providing quantitative evidence of the program's impact on obesity management among Navy SMs.

Statement of the Problem

The increasing prevalence of obesity among Navy SMs presents a critical challenge to individual health and overall operational readiness. Despite existing efforts, there remains to be a gap in researching how effectively the program is managing this growing health concern. The necessity to evaluate and enhance the program is underscored by the potential risks obesity poses to operational efficiency. This program evaluation aims to evaluate the ShipShape Program by applying a SWOT analysis at a large medical treatment facility (MTF) in Portsmouth, Virginia, to identify areas for improvement.

Purpose

The aim is to evaluate the ShipShape Program to identify areas for improvement. The main objective is to provide stakeholders with recommendations to improve the ShipShape Program to effectively combat obesity prevalence among SMs, which can lead to improved health outcomes, physical fitness levels, and overall operational readiness.

Project Objectives

1. To evaluate the impact of the ShipShape Program on the Body Mass Index of SMs using the OBE framework.
2. To analyze and identify the internal and external factors influencing the effectiveness of the ShipShape Program through SWOT analysis.
3. To develop a strategic plan using the findings from the analysis to improve the ShipShape Program based on the SWOT analysis findings.

Significance of the Project

The significance of this project lies in its evaluation of the ShipShape Program using a mixed methods analysis to provide possible solutions to help obese SMs reduce weight and maintain it in the long term. Considering the increasing obesity rates among Navy personnel, this evaluation has implications for individual health and overall military readiness. Through evaluation of the ShipShape Program, this project contributes to improving the understanding of how current health initiatives at a large MTF in Portsmouth, Virginia, are performing in response to the current health challenges. The findings will offer insights into the program's outcomes, providing a nuanced perspective on its effectiveness. Additionally, this evaluation goes beyond examining factors by exploring external influences that can impact the program's success; by identifying opportunities and threats within the healthcare and military landscape, this evaluation addresses present challenges and anticipates future trends. This foresight is essential for ShipShape to adapt its health strategies to evolving healthcare environments and technological advancements.

Moreover, the outcomes of this evaluation will have practical applications. The recommendations from the SWOT analysis are expected to guide improvements to the ShipShape Program, which could lead to strategies to address obesity and overweight issues. These practical suggestions will offer real-world solutions to enhance SMs health and operational abilities. This evaluation sets a precedent for future research in health programs by establishing a framework to evaluate and improve health and fitness initiatives.

Scope of the Project

This project aims to evaluate the ShipShape Program at a large MTF in Portsmouth, Virginia, designed explicitly for Navy and Marine Corps SMs, beneficiaries, and qualifying

civilians. The main objective is to assess the program's effectiveness using an OBE and SWOT analysis in addressing the growing issue of obesity among SMs. This evaluation will encompass an in-depth examination of the program from 1 January 2022 to 31 December 2023 to ensure the relevancy of data and findings. Geographically, the evaluation will be limited to the ShipShape Program at a large MTF in Portsmouth, Virginia, and the target population includes participants and facilitators. By narrowing the scope to this population, the aim is to derive insights directly related to the program environment. In terms of methodology, a mixed methods approach will analyze quantitative data from participation records and BMI measurements. Qualitative data will be gathered through semi-structured interviews involving both participants and facilitators of the ShipShape Program. By establishing the scope, the evaluation aims to generate specific and practical insights into the effectiveness, challenges, and potential areas for improvement within the ShipShape Program.

CHAPTER 2

LITERATURE REVIEW

Introduction

The prevalence of obesity in the U.S. has been a focal point of public health concern, given its association with several chronic diseases and its impact on quality of life. Within specific populations such as the Navy, the implications of obesity extend beyond individual health, affecting operational readiness and overall organizational efficiency. The Navy ShipShape Program was designed as an intervention in this context, aiming to address obesity.

This literature review comprehensively examined several domains pertinent to the evaluation. Initially, it explored the broader landscape of obesity in the U.S., discussing its prevalence, contributing factors, and significance. The focus then narrowed to the specific challenges and dynamics of obesity within the Navy, elucidating how this issue aligned and diverged from the civilian population. Subsequently, an in-depth exploration of the Navy ShipShape Program was undertaken, explaining its policy, objectives, and strategies to foster health and wellness among SMs. A critical appraisal of existing research on the ShipShape Program was presented, highlighting key findings, identified gaps, and areas necessitating further exploration. Lastly, the literature review explored the SWOT analysis as a strategic assessment tool. SWOT analysis's application, benefits, and limitations in evaluating programs were discussed to assess the ShipShape Program at a large MTF in Portsmouth, Virginia.

Through this multifaceted examination of the existing literature, this chapter aimed to establish a robust foundation for the evaluation, enriching the understanding of the complexities surrounding obesity, the innovative approaches to address it, and the frameworks available for evaluating the efficacy of such interventions.

Obesity in the United States

Obesity has become a significant public health concern. According to the Centers for Disease Control and Prevention (CDC), the prevalence of obesity in the U.S. was around 42.4% in 2017-2018, a significant increase from the rates observed in the early 2000s (CDC, 2021). The rising trend in obesity highlighted a mounting public health challenge, with substantial repercussions for healthcare expenses, the prevalence of chronic illnesses, and the general well-being of the population (CDC, 2021; Cawley, J., Biener, A., 2021; CDC, 2022).

The World Health Organization (WHO) defines obesity as an excessive fat accumulation in the human body that presents a health risk. Obesity is primarily measured using the Body Mass Index (BMI), a tool that compares an individual's weight to height (WHO, 2022). The formula for calculating BMI is (see Figure 1):

Figure 1

BMI Formula

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height}^2(\text{m}^2)}$$

Based on BMI values, obesity is classified as follows:

- Underweight: BMI less than 18.5
- Normal weight: BMI 18.5–24.9
- Overweight: BMI 25–29.9
- Obesity, Class I: BMI 30–34.9
- Obesity, Class II: BMI 35–39.9
- Obesity, Class III: BMI 40 or higher

While BMI was a commonly used and simple tool that identified potential health risks in individuals, it had limitations. BMI did not differentiate between weight from fat and muscle, which could result in misclassifying risks, especially in very muscular individuals. (CDC, 2021; WHO, 2022). Therefore, other methods, such as measuring waist circumference, skinfold thickness, bioelectrical impedance, or dual-energy X-ray absorptiometry (DXA), could provide more accurate information about body fat percentage and distribution. However, for population-level assessments and primary clinical evaluations, BMI remained the standard measurement of obesity (Kuriyan R., 2018).

Obesity arose from a complex interplay of factors. While it was primarily associated with an imbalance between calorie intake and expenditure, other factors such as stress, sleep patterns, genetics, social determinants of health (SDOH), medical conditions like Cushing's Disease, and certain medications also played a significant role in increasing an individual's risk of developing obesity (WHO, 2021; CDC, 2022). Additionally, according to the CDC, individuals who developed obesity were predisposed to a higher risk of mortality, cardiovascular issues like hypertension, dyslipidemia, coronary heart disease, and stroke, as well as metabolic disorders such as type 2 diabetes (CDC, 2022). Individuals with obesity could experience structural problems such as osteoarthritis and gallbladder disease. Respiratory conditions like sleep apnea, specific cancers, and mental health issues like depression and anxiety were also more prevalent in this population (CDC, 2022). Obesity increases an individual's insulin resistance risk, which can progress into type 2 diabetes (Wondmkun Y. T., 2020; Zyoud, S.H., Shakhshir, M., 2022).

Moreover, those with obesity often reported reduced quality of life, accompanied by body aches and limitations in physical functionality (Stephenson, J., Smith, C.M., Kearns, B. et al., 2021; CDC, 2022). Obesity not only affected health but also had significant economic

implications. The research highlighted substantial economic impacts of obesity across countries; specifically, in the U.S., medical costs related to obesity significantly surpassed those of individuals with an average weight, culminating in a total annual expense of nearly $173 billion. (Okunogbe, A., Nugent, 2021; CDC, 2021; Cawley, J., Biener, A., 2021).

Obesity presented disparities in its prevalence among different racial and ethnic groups. In the U.S., these disparities were extensively documented, shedding light on the complex interplay of genetics, environment, culture, and socioeconomic status. For instance, according to the CDC, non-Hispanic black adults had the highest prevalence of self-reported obesity at approximately 38.4%, followed by Hispanic adults at 32.6% and non-Hispanic Whites at 28.6% (CDC, 2019). Such disparities suggested that while genetics played a role in obesity, socio-cultural and economic factors had a more pronounced impact.

Socioeconomic disparities are often correlated with limited access to fresh and nutritious foods in specific racial or ethnic communities (University of Texas at San Antonio, 2019; Bevel, M. S., Tsai, M.-H., 2023; Okobi, O. E., Beeko, P. K.; 2023). Individuals who resided in low-income communities experienced "food deserts," where they had limited access to healthier food options, and more had access to processed foods, which are high in unhealthy fats, sugars, and salts. Education revealed a complex association with health outcomes. Higher education correlated with lower obesity rates, whereas the opposite was observed in lower-income countries, especially among women (Cohen, A. K., Rai, M., 2013). Higher obesity trends were particularly evident in groups with lower income, who could not afford nutritious foods and were more likely to be affected by food desserts (Witkam, R., Gwinnutt, J. M., 2021; Lee H, Harris KM, Lee J., 2013). Furthermore, socio-cultural beliefs and norms influenced dietary choices and perceptions of body weight. For some communities, a fuller body was historically associated

with wealth, health, and beauty, potentially influencing individuals' attitudes toward weight gain. Additionally, systemic socioeconomic factors impacted activity levels. Lower-income neighborhoods, predominantly inhabited by racial and ethnic minorities, lacked safe recreational areas or gyms, reducing opportunities for physical activity (Lofton, H., Ard, J. D., et al., 2023).

Addressing the obesity crisis requires a comprehensive approach due to its complexity. A collaborative effort from policymakers, community figures, healthcare experts, and individuals was essential for promoting healthier living. While healthcare professionals typically focused on lifestyle modifications for weight management, certain situations benefited from treatments like weight-loss medications or surgery. Solutions ranged from lifestyle adjustments and weight management programs to medicinal interventions and specialized devices. Recommendations for patients with obesity included losing a minimum of 5 to 10% of their body weight to reduce weight-related complications and improve quality of life (NIDDK, 2018; NHLBI, NIH, 2022).

Prevalence of Obesity among Navy SMs

The Navy's operational efficiency and overall fleet health are under threat due to surging overweight and obesity rates among its SMs. A surprising 40 to 50% of Navy SMs were deemed overweight in 2015, with 10 to 15% recognized as obese (Omar A., Foong-Ming, M., 2020). Even before the pandemic, Periodic Health Assessments (PHA) illustrated a rising trend in military obesity rates. Between 2018 and 2021, there was a notable spike in diagnoses of obesity, prediabetes, and diabetes, with younger SMs under 30 witnessing the most significant relative increase. By 2021, the obesity rate had soared to 18.8% (Military Health System, 2022; CDC, 2022; Stiegmann, R. A., Payne, C. B., 2023). Alarmingly, this escalating health issue had operational consequences; 878 SMs were discharged in 2021 alone for failing to meet weight or body fat standards. This growing health issue hindered retention, leading to an estimated annual

loss of 658,000 workdays and costing the Department of Defense (DOD) around $103 million (CDC, 2022).

Congress placed high importance on ensuring a proficient military, with a primary challenge being recruiting healthy individuals. A 2016 DOD report pinpointed obesity as a chief deterrent to enlistment in the U.S. military (Obesity in the United States and Effects on Military Recruiting, 2020). The inherent demands on SMs accentuated the challenges posed by obesity. With an expectation to uphold high levels of physical fitness, an obese SM could face compromised mobility and agility, jeopardizing mission outcomes and safety. Such escalating rates can tarnish the military's image of discipline and might. Furthermore, the broader implications of obesity, such as heightened susceptibility to chronic diseases and escalated medical costs, may also result in prematurely ending military careers. Addressing obesity transcended individual health concerns; it is a matter of upholding the military's operational effectiveness and ensuring national security.

Historical Overview of Weight Standards in Military Settings

The military introduced its first weight standards in 1887 for men and 1942 for women, aiming to ensure SMs were physically fit for operational duties (Obesity in the United States and Effects on Military Recruiting, 2020). These standards were based on the significance of maintaining an ideal body weight for optimal health and upholding a professional military appearance. In 1981, the DOD released directive 1308.1, stating that an SMs body fat percentage would determine if they were overweight. This directive also required military services to establish body composition and fat standards aligned with their missions (Institute of Medicine, 2014; DOD INSTRUCTION 1308.03). Weight standards in the military were crucial for ensuring SMs maintain the physical fitness needed for a fit and ready force. An ideal body

weight was not only vital for optimal health but also upheld the standards of the military. Additionally, directives emphasized the military's posture on understanding health, shifting the focus from mere weight to body composition, ensuring a comprehensive approach to fitness and readiness.

Navy Weight Standards for SMs

To meet the DOD directive, the Navy's weight standards policy, as outlined in OPNAV 6110.1, the physical fitness assessment (PFA) encompassed two critical components: the body composition assessment (BCA) and the physical readiness test (PRT) (OPNAV6110.1, 2011). The BCA methodically assessed an SMs weight and body fat. The initial step in measuring BCA involved matching the SM against a height-weight chart. Those exceeding the weight norms then measured their abdominal circumference (AC), with set limits being 39 inches for males and 35.5 inches for females. If these measures were surpassed, a body fat measurement took place: for males, this covered the neck and abdomen, and for females, the neck, waist, and hips were used to determine body fat percentage. The Navy set maximum body fat percentages for both genders depending on age. Not adhering to these benchmarks brought about consequences. Officers and enlisted ranks facing such failures might experience stalled promotions and reenlistment hurdles and be mandated to complete the Fitness Enhancement Program (FEP). They could, however, retrieve their eligibility status by clearing the mock Physical Fitness Assessment (PFA). Persistent non-compliance could lead to administrative separation (OPNAV 6110.1, 2011; GUIDE 1 PHYSICAL READINESS PROGRAM, 2023). Despite these standards, it was noteworthy that an SM might fulfill the Navy's criteria yet still be categorized as overweight or obese based on their BMI.

Navy Weight Management Program

Recognizing the importance of maintaining the health and well-being of our SMs, the Chief of Naval Operations (CNO) initiated a program to promote good nutrition. This effort led to the development of the ShipShape Program, which served as the official weight management program for the Navy and Marine Corps. The program was regulated by the Navy Bureau of Medicine and Surgery (BUMED) (OPNAV 6100.2A, 2007; OPNAV 6110.1, 2011; BUMED 6110.1, 2023). Its primary objective was to assist duty and reserve SMs, beneficiaries, and civilians in adopting lifestyle behaviors contributing to weight loss (Navy and Marine Corps Force Health Protection Command., n.d.).

The ShipShape Program incorporated a combination of six courses, one online module, and five in-person sessions facilitated by trained instructors. Additionally, check-ins throughout the session ensured continuous engagement over six months. The program catered explicitly to Navy and Marine Corps SMs who needed to meet BCA standards by emphasizing nutrition, physical activity, mindset, and sleep. ShipShape commenced with an evaluation called Weight Loss Readiness Test II that gauged participants' emotional willingness and commitment towards shedding weight. Following this assessment, participants enrolled in a required introductory online course and attended in-person sessions before concluding with the last online module. This module introduced the program objectives and emphasized its potential for creating lifestyle changes. Through the in-person sessions, participants could reflect on their readiness for change and discuss the benefits and challenges of weight loss. By the end of the course, participants had set their weight loss goals and identified methods to track their progress. The program also provided information about available resources, such as obtaining referrals to Registered Dietitian Nutritionists (RDN) from primary care providers, nutrition materials, and access to

health coaching through Military One Source. Furthermore, participants could take advantage of fitness facilities provided by Morale Welfare and Recreation (MWR), such as group workout sessions. (Navy and Marine Corps Force Health Protection Command, n.d.).

Thematic Approach to Relevant Research

As highlighted earlier, the Navy and Marine Corps official weight management program, ShipShape, experienced both successes and challenges throughout the fleet. Despite being an evidenced-based initiative, only about half of its participants successfully pass BCA upon completion (Afari, N., Cuneo, J. G., 2019). Detailed evaluations of the program's effectiveness were limited, with few studies examining programs at specific locations. Existing research indicated varying program completion rates (Wisbach, G. G., Peters, J., et al., 2018; Afari, N., Yarish, N. et al., 2022). Interestingly, the virtual formats of the program provided better flexibility and user experience for SMs at an MTF in San Diego than traditional in-person sessions (Afari, N., Yarish, N. et al., 2022). Most participants in the program at an MTF in San Diego were identified as Hispanic female SMs, with an average age of 28 (Morse, J. L. et al., 2022; Miggantz, E. L., Materna, K., 2023). Additionally, emotional eating, stress, and mental health disorders were prevalent among those participants (Miggantz, E. L., Materna, K., 2023; Military Health System, 2022).

Afari et al. proposed an innovative approach to enhance the efficacy of the ShipShape Program by integrating acceptance and commitment therapy (ACT). This intervention aimed to evaluate its impact not just on weight loss outcomes but also on BMI, body fat percentage, physical activity levels, emotional eating patterns, overall functioning, quality of life, and psychological flexibility indices. The proposed research design involved a cohort-randomized controlled trial, contrasting the ACT-enhanced ShipShape Program with the conventional

ShipShape method (Afari, N., Cuneo, J. G., 2019). Significantly, this intervention was conceptualized based on prior research insights, particularly addressing concerns related to emotional eating. In another study, the researcher's use of peer coaching to tackle obesity in the Navy was favorably received. This study highlighted peer coaching as an additional tool to help SMs achieve their weight loss objectives. This exploratory method garnered positive feedback from the participants surveyed (Howell, J. A., 2018).

The Navy's ShipShape Program, while rooted in evidence-based practices, evidently required enhancements to address its varied effectiveness across the fleet. Given the intricacies of weight management, it was imperative to incorporate interventions addressing emotional eating, stress, and prevalent mental health disorders among participants. Innovative strategies, such as incorporating ACT into ShipShape and initiating peer coaching, demonstrated the potential for comprehensive, multifaceted interventions. Some gaps were identified by Afari N. et al. (2022), indicating the necessity to explore the potential moderating role of sociodemographic and baseline distress factors on obesity among SMs. There was a posited need for further research with larger samples to ascertain the program efficacy among overweight or obese active-duty SMs (Afari, N., Cuneo, J. G., 2019; Morse, J. L. et al., 2022). Furthermore, additional research focusing on the characteristics of SMs and an enriched curriculum for diverse SMs was essential. The insights from such research could enhance program efforts, improve SMs quality of life and fitness, and thus, operational readiness. To safeguard the Navy's operational readiness and the overall well-being of its SMs, ongoing program evaluations, modifications, and the pursuit of additional strategies were crucial in tackling the challenges of obesity.

Other Military Branches Weight Management Programs

Every branch aimed to enhance the well-being, health, and preparedness of SMs. Their approaches differed depending on their specific objectives. While the Navy ShipShape Program included the U.S. Marine Corps, the Air Force did not offer a weight reduction program. Instead, the Air Force employed a waist-to-height ratio to assess body fat composition. Although it was not solely focused on weight loss, it encouraged Airmen to prioritize their health and fitness by reducing health risks associated with excess body fat (Department of the Air Force, 2023). The U.S. Army (Army) weight management initiative was known as the Army Composition Body Composition Program (ABCP), which took an approach toward long-term Soldier wellness. The Army aimed to ensure that all Soldiers could maintain health and performance by mandating enrollment in ABCP when body fat standards were exceeded. ABCP offered Soldiers guidance and counseling on exercise and nutrition for six months (UNCLASSIFIED Army Regulation, 2019). Regular assessments were conducted where the Soldier's weight and body fat measurements were taken, with a target reduction rate of 1% body fat to demonstrate progress within the program. ABCP and FEP aimed to maintain SM health and preparedness through these measures.

The Army also provided a program called Fit For Performance, which aimed to modify lifestyle and behavior for weight loss and management, similar to ShipShape. Fit for Performance was an evidence-based weight management program that assisted soldiers in enhancing readiness and job performance, achieving weight management goals, and reducing the risk of weight-related diseases. It focused on a combination of nutrition and exercise modifications, quality sleep, and mindfulness techniques to promote weight loss. The program offered sessions spanning 30 days, each covering topics such as optimizing sleep, setting goals,

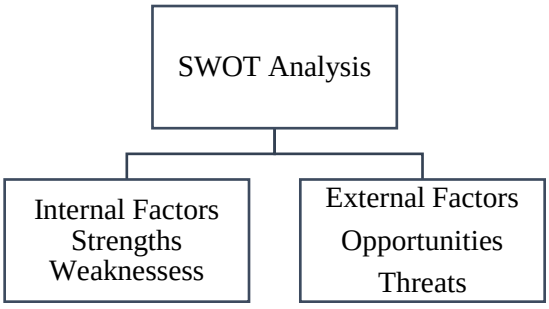
understanding nutrition basics, exploring the psychology behind weight loss, and managing stress (Nutrition Care Program, 2019). A retrospective cohort study on the Fit for Performance program findings suggested high dropout rates, with no statistical significance of participants who dropped out compared to those who completed the program (Wonn, J. & Khan, J., 2023). This study highlighted the need to encourage greater participation to improve program effectiveness. Both Army programs aimed to improve readiness by fostering nutrition habits, physical activity levels, and behavioral changes.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

The SWOT analysis was a framework utilized to assess an organization's strengths, weaknesses, and opportunities for planning purposes. It delved into external factors impacting the organization's performance (see Figure 2) (Teoli, D., Sanvictores, T., 2022; Dereziuk, A. V., Yaremyna, I. V., 2023).

Figure 2

SWOT Analysis



Strengths encompassed the factors that contributed positively to policies or programs within an organization. These factors provided organizations with an advantage over their rivals. Recognizing strengths enables organizations to optimize their programs or policies to achieve

objectives and enhance performance (Teoli, D., Sanvictores, T., 2022). Some examples of strengths included:

- An established reputation for programs.
- Dedicated workforce.
- Cutting-edge technology.
- Exclusive access to valuable natural resources.

On the other hand, weaknesses refer to limitations or deficiencies that impede an organization from meeting its goals. Identifying and addressing weaknesses was essential for managing risks and bolstering competitiveness (Teoli, D., Sanvictores, T., 2022). Some examples of weaknesses included:

- Subpar performance record and reputation.
- Outdated infrastructure.
- Inadequate Training
- Staffing shortages.

Opportunities refer to factors an organization or project could leverage to achieve its goals and make more informed decisions. Here are some examples of opportunities:

- Investing in updated technology.
- Updating programs or policies.
- Recruiting new staff members.
- Providing evidence-based amenities.

Threats, however, were elements that could pose harm to an organization. By identifying these threats, organizations could better prepare and develop strategies to mitigate or avoid impacts. Here are some examples of threats:

- Increasing competition.
- Changes in demand.
- Policy changes.

Conducting a SWOT Analysis involved the following steps:

- Evaluating data.
- Encouraging diverse perspectives.
- Formulating strategies based on the findings.

By conducting a SWOT Analysis on the ShipShape Program, valuable insights could be obtained for decision-making, resource allocation, and strategic planning. Ultimately, this analysis contributed to organizational programs' long-term sustainability and success. The SWOT analysis was a tool for program evaluation due to its ability to provide an understanding of strengths, weaknesses, opportunities, and threats an organization or program faces. SWOT analysis proved valuable as it offered a thorough knowledge of internal and external factors that impacted the program's success (Teoli, D., Sanvictores, T., 2022).

Outcome Based Evaluation Framework

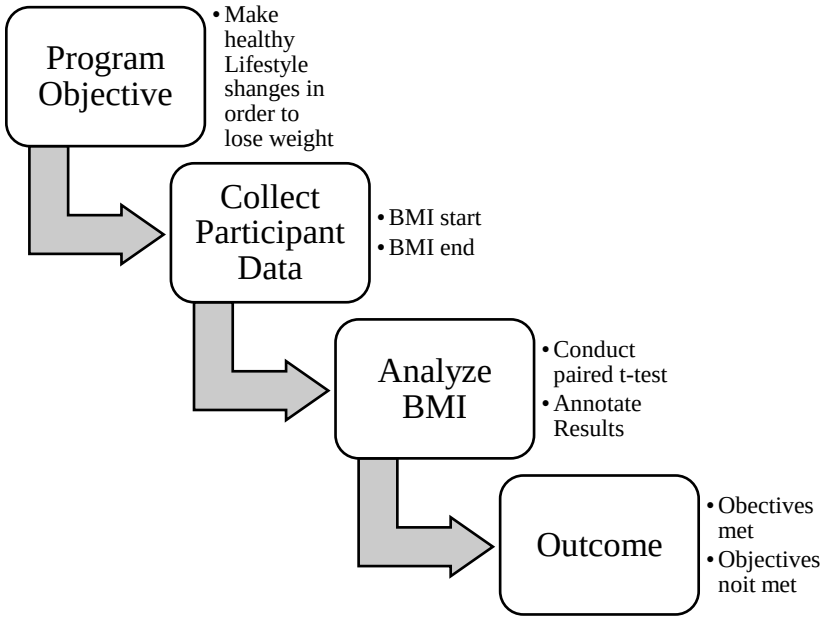
Outcomes refer to the benefits or improvements experienced by participants, like improved skills, knowledge, attitudes, actions, circumstances, or life situations. Programs that produce these kinds of advantages are described as having outcome targets. OBE evaluated these outcomes by pinpointing and gauging markers that showed transformation or attained states. This method entailed collecting data linked to these markers to showcase how effectively a program has accomplished its goals. (W.G. Spady, 1994).

The OBE-based approach could effectively assess the ShipShape Program results by directly connecting program activities to noticeable changes in participant BMI and

incorporating SWOT analysis results. By identifying outcome goals—such as BMI decreases—the OBE framework guided the collection of quantitative data on BMI pre and post-program. Simultaneously, the SWOT analysis enhanced this assessment by pinpointing strengths, weaknesses, opportunities, and threats that affected these results, offering a view of how the program's internal and external factors affect its effectiveness.

Figure 3

Outcome Based Evaluation Model



CHAPTER 3

METHODOLOGY

Introduction

This chapter outlines the methodology for evaluating the ShipShape Program at a large MTF in Portsmouth, Virginia. The ShipShape Program's objectives were to assist participants in improving health behavior habits that can lead to weight loss. To conduct a program evaluation, it was crucial to focus on the strengths of the program and its surroundings, the target audience, and the specific issue being addressed. This entailed identifying areas that needed improvement—doing so allowed for establishing program priorities, developing strategies, and determining the actions required to achieve goals (CDC, 2021). This program evaluation employed a mixed-methods approach, integrating quantitative and qualitative methods, to effectively evaluate and measure the program's objectives and effectiveness (Palinkas et al., 2019).

This evaluation analyzed retrospective quantitative data, including participant BMI, age, gender, status, and program completion rates, to measure participant demographics and impact on BMI. Additionally, the evaluation utilized the OBE and SWOT framework to identify the program's strengths, weaknesses, opportunities, threats, and outcomes to offer an in-depth view of the program's impact and highlight areas for potential improvement. This comprehensive approach aligned with the best practices for program evaluation, emphasizing the importance of achieving and accurately measuring the program's established objectives (CDC, 2022).

Outcome Based Evaluation Project Plan

The OBE-based project plan for the ShipShape Program took place in three phases. The following Table contains details outlining the project plan.

Table 1

Outcome Based Evaluation Research Project Plan

Phase	Project Component	Description
I	Quantitative Data Selection	Input participant demographics, BMI measurements, and program completion rates into Excel spreadsheet.
	Quantitative Data Analysis	Paired t-test for BMI variations and other statistical analyses to assess BMI and program effectiveness. Data stored and analyzed in a password-protected Excel spreadsheet.
II	Qualitative Data Collection	Semi-structured interviews with ShipShape Program facilitators and participants.
	Qualitative Data Analysis	Utilize NVivo to analyze interview data. Focus the analysis on identifying how the program's activities are linked to observable changes in participants (outcome-based focus). Complement this with a SWOT analysis to evaluate the program’s strengths, weaknesses, opportunities, and threats, highlighting actionable areas for enhancing program outcomes.
III	Stakeholder Presentation of Findings	Results in strategic plan presented to stakeholders through a PowerPoint presentation, including visual aids and a Q&A session.

Quantitative Methodology

Phase I started with utilizing existing relationships at the research site and selecting a mentor, Ms. Cheryl James. Ms. James then facilitated Zoom meetings between the principal investigator and Dr. Audra Stone (researcher) to discuss the evaluation's objectives in depth. Afterward, the principal investigator was directed to complete two training programs: the CITI Program's “Responsible Conduct of Research” under the Defense Health Agency and the Joint Knowledge Online (JKO) Cyber Awareness Challenge 2023 training. These were prerequisites for setting up an electronic IRB (eIRB) account at the research site.

After completing these trainings, the principal investigator was put in contact with Ms. Ehlers and initiated the process to start an Education Partnership Agreement (EPA) with Georgia

Southern University. The EPAs, sanctioned under 10 USC 2194, were designed to foster cooperative relationships between two organizations, allowing students to earn academic credit for projects (U.S. Naval Research Laboratory, n.d.). Following receipt of EPA approval, the principal investigator was instructed to route an eIRB to be provided access to existing quantitative data under the ShipShape Program for analysis. Table 2 outlines the quantitative data, methodology, and how it was measured to address the program evaluation objectives.

Table 2

Objectives for Quantitative Measurement and Analysis Description

Project Objectives	**Data Analysis and Methods**	**Notes**
Objective 1: To evaluate the impact of the ShipShape Program on the Body Mass Index of SMs.	Selected quantitative data on BMI measurements; and analyze in Statistical Package for the Social Sciences. (SPSS) using the Paired t-test to analyze for BMI variations	Analysis directly assessed impact on BMI before and after program participation. Personal identifying information removed. Outcome-Based Evaluation: The analysis not only assesses BMI variations but also evaluates these changes as direct outcomes of the program's health intervention strategies.

Table 3 explains how the quantitative data was analyzed using Microsoft Excel and SPSS software.

Table 3

Microsoft Excel and SPSS Quantitative Data Measurement Process

Microsoft Excel Data Measurement Process		
Stage	Task	Details
Data Entry and Organization	Open and Input Data	Opened Microsoft Excel and input the data on spreadsheet containing the following (Gender, Status, BMI start and finish, Course completion, Course Dropout).
	Organize Data	Ensured each column represented a variable (e.g., Gender, BMI) and that each row represented a different participant.

	Clean Data	Checked for and removed duplicates, corrected errors, and dealt with missing values when applicable.
Data Exploration	Excel Basic Formulas	Performed descriptive statistics and used Excel's formulas under “Auto Sum” to explore data and calculate gender percentage, status percentage, course completion percentage, and course dropout percentage by divide the numerator by the total number (denominator) and multiply by 100.
Exporting Data	Save into SPSS	Once data was organized and checked for errors, the Excel file was then exported in a format compatible with SPSS, as an Excel file.

SPSS Data Measurement Process

Stage	Task	Details
Importing Data into SPSS	Open SPSS and Select File	Opened SPSS, went to File, selected Open, then Data and select the exported Excel file.
	Define Variable Types and Data Formats	Following the import process, the following variables were redefined in SPSS in the file and cleaned to include only, BMI start and finish as scale variables. Then the data was checked for errors and to ensure they match their nature.
	Recode Variables	BMI was then labeled as BMI_Start and BMI_Finish
Perform assumptions checks for Paired T-Test		Th check assumptions in SPSS chose Descriptive Statistics to generate histograms, Q-Q plots, and boxplots to check for differences between paired observations. Chose Analyze, Compare Means, then Paired T-Test to compute the differences.
Perform paired t-test		In SPSS selected Analyze, Compare Means, and selected Paired T-Test. Then selected the Paired T-Test dialog box and chose BMI_Start and BMI_Finish variables to test the mean difference. Then clicked OK to run the test.
Interpreting SPSS Output	Analyze Output	In SPSS created output tables and charts to interpret results for statistical significance.

The paired t-test was used to compare BMI measurements at the start and end of the program to determine whether the data showed a statistically significant change in BMI. This analysis indicated whether the program impacted BMI by showing the mean difference among the participants.

Qualitative Methodology: SWOT Analysis

Phase II included a SWOT analysis for program evaluation, incorporating semi-structured interviews with the target audience to gather input from the program's facilitators and participants. This involved qualitatively measured inputs collected from the target audience from February to March 2024. Ms. Cheryl James invited the target audience via email to participate voluntarily in semi-structured interviews (see Appendix C), and each semi-structured interview was conducted over the phone. Semi-structured interviews were typed and transcribed by the principal investigator. The following semi-structured interview questions in Figure 4 (see Appendix B) addressed and measured the program evaluation objectives.

Figure 4

ShipShape Program Interview Questionnaire

ShipShape Program Interview Questions
Q1. Can you tell me a little bit about yourself?
Q2. What are the key strengths of the ShipShape Program?
Q3. What are the notable weaknesses of the ShipShape Program?
Q4. What opportunities exist for the ShipShape Program to grow or improve?
Q5. What external threats could impact the success of the ShipShape Program?
Q6. What recommendations do you have to enhance the effectiveness of the ShipShape Program?
Q7. Is there anything else you would like to add?

Table 4 contains the semi-structured questions and how they were measured to answer the program evaluation objectives.

Table 4

Objectives for Quantitative Measurement and Analysis Description

Project Objectives	Interview Questions	Data Analysis and Method	Details
Objective 2: Identify and analyze internal and external factors influencing ShipShape Program effectiveness (SWOT analysis)	Q1, Q2, Q3, Q4, Q5, Q6, Q7	Qualitative Analysis via NVivo	Q1-Q7 address analysis components directly: strengths, weaknesses, opportunities, and threats.
Objective 3: Develop strategic recommendations for enhancing the ShipShape Program based on SWOT findings	Q1, Q2, Q3, Q4, Q5, Q6, Q7	Qualitative Analysis via NVivo	Q1-Q7 seeks input on recommendations for program enhancement based on participant experiences.

Table 5 explains how the qualitative data was analyzed using NVivo.

Table 5

NVivo Qualitative Data Process

Stage	Activity	Details
Data Collection	Semi-structured Interviews	Conducted interviews with the target audience (program facilitators and participants) over the phone using the ARSSILEE digital voice recorder.
Transcription	Transcribing Interviews	Uploaded each recording into Amazon Transcribe and ensure accuracy in transcription.
Preparing for NVivo	Formatting Transcripts	Formatted the transcribed data to be compatible with NVivo by organizing the text and ensuring clarity in speaker identification.
Uploading to NVivo	Importing Transcripts into NVivo	Uploaded the formatted transcripts into NVivo using the import function.
Data Coding	Assigning Codes to Interview Responses	Used interview questions to develop initial codes for Strengths, Weaknesses, Opportunities, Threats, and Recommendations to code the responses.
Analysis	Qualitative Analysis in NVivo	Analyzed the coded data in NVivo to identify themes and patterns by focusing on strengths, weaknesses, opportunities, threats, and recommendations for enhancement.
Reporting	Extracting Insights for Reporting	Used NVivo query and visualization tools to extract insights and patterns from the coded data.

Inclusion and Exclusion Criteria

Table 6 provides information on the inclusion and exclusion criteria applied to the quantitative and qualitative methodology:

Table 6

Quantitative and Qualitative Inclusion and Exclusion Criteria

Quantitative Criteria Type	**Criteria Description**
Inclusion Criteria	
Participation Timeframe	Quantitative data from participant who actively participated in the ShipShape Program sessions from January 1, 2022, to December 31, 2023.
Data Type and De-identification	Quantitative data includes gender, status (military or beneficiary), BMI measurements at the beginning and end of the program, and program completion or dropout status, with personal identifying information removed.
Data Focus	Quantitative data will be analyzed to achieve program evaluation objectives related to BMI outcomes, program effectiveness, and development of recommendations based on SWOT analysis findings.
Exclusion Criteria	
Non-participation within timeframe	Quantitative data from ShipShape sessions outside of the specified timeframe (January 1, 2022 to December 31, 2023) will be excluded.
Irrelevant Data	Quantitative data that does not pertain to gender, status, BMI measurements, or program completion/dropout status. Names, emails, and phone numbers are excluded.
Non-contributory Data	Quantitative data that does not directly contribute to evaluating the program's impact on BMI outcomes, program effectiveness, or potential strategic improvements based on SWOT analysis will be excluded.
Qualitative Criteria Type	Criteria Description
Inclusion Criteria	
Participation	Participants who attended at least one ShipShape session or instructed one session at the MTF in Portsmouth, Virginia (participants and facilitators).
Consent	Participants who provide verbal consent.

Participant Age Range	Participants will be confirmed during interview to be between 18 and 65 years of age.
Data Focus	Qualitative data will focus on gathering responses to interview questions (Q1 to Q7) that aim to evaluate the impact of the ShipShape Program using the SWOT framework.
Exclusion Criteria	
Non-participation	Interviews with individuals who do not attend or facilitate one session of ShipShape.
Timeframe of Data	Quantitative data outside the specified timeframe will not be considered.
Lack of Consent	Participants who have not provided verbal consent.
Information not relevant	Any information unrelated to the interview questions (Q1 to Q7) or not addressing the program evaluation objectives regarding the impact of the ShipShape Program.

Strategic Plan and Presentation

Phase III included the stakeholders of the ShipShape Program, who were presented with evaluation results and a strategic plan through PowerPoint presentation. Table 7 provides details on the strategic plan and presentation.

Table 7

Strategic Plan Outline

Strategic Plan Presentation Outline	
Background of the Project	Discussion on the public health problem of obesity within the population, ShipShape Program weight management program, and other military weight management programs
Literature Review	Discussion on the existing literature on the ShipShape Program, literature gaps, and future research recommendations.
Methodology	Discussion on the comprehensive approach to conduct the program evaluation using existing quantitative data, and the collection of qualitative data from the target audience.
Results	Discussion of the results from the quantitative data, and SWOT Analysis
Strategic Plan	Discussion on the recommendations for improving the ShipShape Program by leveraging insights from quantitative and qualitative data analysis and existing literature.

Limitations of the Project

1. Geographic Limitation: This evaluation was conducted at a large MTF in Portsmouth, Virginia. As a result, the findings may not apply to other military installations where the ShipShape Program is implemented.
2. Participant Scope: The evaluation included participants and facilitators from the MTF. This narrow perspective might overlook organizational factors that impact the program's effectiveness.
3. Timeframe: Given the duration of this evaluation, it might not adequately capture the long-term effects and sustainability of the program's impact on weight management.
4. Methodological Limitations: Relying on BMI may not capture the intricacies of health improvements, while biases or inaccuracies could influence qualitative data in self-reporting. The use of semi-structured might oversimplify issues and overlook relevant factors that are not immediately evident to program participants and facilitators.
5. Potential for Bias: Feedback could be impacted by personal experiences and biases, potentially affecting the objectivity of the findings.
6. Limited Exploration of External Factors: Although the evaluation aimed to account for strengths and weaknesses, there might be limitations in exploring and understanding all external opportunities and threats. This could include policy changes or national health trends, impacting the program's effectiveness.

Ethical Considerations

The following methods for this evaluation ensured that the target audience was fully informed about the nature of the program evaluation. Participants were briefed on the purpose and benefits of the evaluation and provided verbal consent. Upon completion of the semi-

structured interviews, all questionnaire forms were stored in a file held by the principal investigator for three years following the completion of this project. All selected quantitative data were uploaded and stored in a password-protected Excel spreadsheet to provide data security and prevent unauthorized access. Ethical approval for this project was obtained from the Georgia Southern University Institutional Review Board (IRB) and the IRB at the research site to ensure the project was ethical and the usage of the data collected was solely for the intended purposes.

Conclusion

This chapter presented the methodology for evaluating the ShipShape Program at a large MTF in Portsmouth, Virginia, using the SWOT and OBE frameworks. The evaluation plan explained each phase to conduct the program evaluation and described the methodology employed to address the problem statement and program evaluation objectives. Semi-structured interviews gathered firsthand experiences and insights from program facilitators and participants, providing an understanding of the internal and external factors that affect the program using the SWOT framework. Additionally, a retrospective quantitative analysis of participant demographics, BMI measurements, and program completion rates was employed. This analysis was crucial in measuring the direct impacts of the program on participant outcomes, such as BMI changes, thereby aligning with the OBE framework. By quantitatively assessing these outcomes, the evaluation could more effectively demonstrate the tangible benefits of the program. Combining these two frameworks ensured a comprehensive program evaluation supported by evidence-based results and feedback. The findings contributed toward developing a strategic plan and presentation that provided insightful recommendations.

CHAPTER 4

IMPLEMENTATION PLAN

Gantt Chart

To effectively evaluate the ShipShape Program, a Gantt chart offered a framework for establishing this project's objectives and goals and determining the most effective approaches to achieve desired outcomes. This approach allowed for prioritizing tasks and anticipating challenges, enhancing timeliness and completion of this project. Table 8 is a crafted strategic plan that will serve as the roadmap for guiding the program evaluation process and ensuring that every step aligns with the objectives. This planning was essential because it helped manage the complexities and uncertainties in the project (Strategic Planning, 2009). Setting measurable goals while regularly assessing progress allowed for adjusted strategies based on discoveries or changing circumstances. Additionally, strategic planning promoted collaboration by giving everyone involved an understanding of their roles and responsibilities.

Table 8

Gantt Chart

	January 2024	Feb-Mar 2024	April 2024	May 2024
Obtain education partnership agreement at research site				
Submit for IRB approval at research site				
Access Quantitative Data Input and organize data De-identify data Analyze data				
Collect Qualitative data Send an email invitation. Conduct interviews Analyze data				
Present findings in strategic plan presentation				

Risk Mitigation Plan

A crucial part of the implementation plan for evaluating the ShipShape Program is the risk mitigation plan (see Table 9). This plan aims to identify risks that could arise during the evaluation and establish effective strategies to manage and minimize their impact. Incorporating a risk mitigation strategy ensures a plan is in place to handle challenges effectively while safeguarding the integrity of the evaluation to ensure its successful completion.

Table 9

Risk Mitigation Plan

	Risk Factors	**Mitigation Plan**
Education Partnership Agreement	Delays in receiving approval	Extend project timeline
Institutional Review Board	Delays in receiving approval	Adjust project timeline, and submit for changes at university IRB
Quantitative Data Selection	Login issues restricting access to data.	Maintain communication channels among site mentor, and program stakeholders to mitigate access issues.
Qualitative Data Collection	Delays in response from target audience	Engage with program coordinators to assist with program participant recruitment.
Strategic Plan Presentation	Issues gathering stakeholders for meeting	Maintain communication channels with program stakeholders and offer Zoom Meeting access to remediate meeting attendance.

Strengths and Limitations

The implementation plan for the ShipShape Program, as outlined in the Gantt chart and risk mitigation strategies, presented an organized approach with strengths and limitations.

Strengths

- Scheduling and strategic foresight

- Timeline for each phase of the evaluation
- Defines responsibilities and deadlines
- Obstacle identification and solutions

Limitations

- The plan may not fully account for delays
- Communication breakdown
- The ambitious timeline may not account for a lack of unexpected setbacks

Program Competencies and Deliverables

The competencies covered in the completion of this project include:

Data Analysis of Qualitative Interviews

- It explained qualitative, quantitative, mixed methods, policy analysis, and evaluation methods that addressed health issues at an organizational level.
- I designed a mixed methods evaluation project that addressed a public health issue.

Leadership Management and Governance

- Created a strategic plan.

DrPH Leadership Competencies

- Applied leadership skills to building partnerships in public health.

The deliverables covered in the completion of this project include:

Program Evaluation

- Comprehensively evaluated the ShipShape Program at an MTF in Portsmouth, Virginia.
- Utilized quantitative and qualitative methodologies to assess the program's effectiveness in achieving its objectives.

Strategic Plan and Stakeholder Presentation

- Presented evaluation results to the program stakeholders through a PowerPoint presentation.
- Summarized the findings from the data analysis and provided strategic recommendations.

Policy Analysis

- Conducted a policy analysis as part of the literature review to understand the regulatory frameworks and policies influencing the ShipShape Program.

CHAPTER 5

RESULTS

Introduction

This chapter presents the results of the quantitative and qualitative data and a supporting analytical discussion of the findings. It is divided into two sections that align with those detailed in the methodology chapter. The project's primary focus was on a SWOT qualitative thematic approach. The quantitative analysis identified the target audience's demographics and assessed BMI before and after the intervention among participants of the ShipShape Program. These analyses laid the groundwork for the qualitative results, framed using both SWOT analysis and OBE frameworks. The SWOT analysis evaluated the program's internal and external efficacies and identified areas for improvement. At the same time, the OBE approach examined how well the program's objectives—aimed explicitly at reducing BMI—aligned with the achieved outcomes. These insights were crucial as they provided a detailed account of the program's performance and effectiveness in meeting lifestyle changes and participant needs, offering a comprehensive overview of the program's impact. This dual-framework analysis facilitated a thorough exploration of the program's strengths, weaknesses, opportunities, threats, and recommendations, as discussed in earlier chapters.

Descriptive Statistics

This section sought to gather data on the demographics of the program's target audience to understand factors such as gender and their status, whether active duty military or beneficiaries comprised of spouses, qualifying family members, retirees, and civilian employees. Additionally, it aimed to identify the number of participants who completed the program and those who did not. The results are displayed in Table 10 below.

Table 10

ShipShape Participant Demographics

Category	Description	Total # of Participants	Percentage
Participant Status	Military-Self Referral	N=56	83.58%
	Military-Mandated	N=1	1.49%
	Beneficiary	N=10	14.92%
Program Completion	Did Not Complete	N=19	28.35%
	Completed	N=47	70.14%
	Unknown	N=1	1.49%
Participant Gender	Male	N=38	59.37%
	Female	N=29	45.31%
Total Participants		N=67	100%

Sixty-seven participants were enrolled in ShipShape for the years 2022 and 2023. Most participants (83.58%) were active duty military and identified as "Military Self-Referral," indicating they attended the program voluntarily. Only 1.49% of active duty participants attended the program on a mandatory basis. The program had a high completion rate of 70.14%, with only 28.35% of participants not completing the program. Notably, there was one participant whose completion status was not recorded. There was slightly higher participation among males, at 59.37%, compared with female participants, at 45.31%.

Paired t-Test Analysis

Out of 67 (100%) program participants, 48 (72%) had completed BMI measurements, with 19 (28%) having incomplete BMI measurements recorded. The average of the 48 BMI measurements was 35.61 ± 1.75 before and 35.16 ± 1.75 after the program. The mean difference between the BMI at the start and the end of the program was 0.44 (95% CI: -0.06 to 0.95, one-sided p=0.043). Cohen’s D was 0.25, indicating a medium effect size, which indicated a moderate noticeable difference between the two groups of BMI. This OBE provided quantitative

evidence of the ShipShape Program's impact on participants' BMI, indicating a modest reduction in BMI measurements following program participation.

Qualitative Analysis

Out of the 67 participants, 4 were repeat participants, resulting in an interview pool of 58. Additionally, phone numbers were missing for 2 participants, resulting in 56 contacts, of which 17 (25%) were interviewed. Out of the 17 interviewed, 1 was a facilitator of the ShipShape Program, and 16 were participants. The qualitative results were derived using NVivo, and qualitative data was imported into NVivo and coded according to emerging themes and their corresponding SWOT categories. NVivo facilitated the organization of data, enabling the extraction of representative quotes that vividly illustrated the strengths, weaknesses, opportunities, and threats perceived by the participants. Quotes were collected, and repetitive themes with at least two reoccurrences were reported; supporting quotes represented identified themes, but not all quotes were placed in the results table to reduce the size.

Strengths of the ShipShape Program

Recognizing the strengths of the ShipShape Program emphasized its accomplishments, laying the groundwork for growth and enhancement. This enabled stakeholders to acknowledge and utilize these strengths to boost the program’s effectiveness. Moreover, understanding these strengths could help demonstrate that the programs are worth obtaining additional funding for improvements. During the semi-structured interview, participants were asked the following questions:

What are the key strengths of the ShipShape Program?

Themes identified under weaknesses during the interviews are presented in Table 11.

Table 11

Strengths Identified in Semi-structured Interviews

Category	Theme	Freq	Example Supporting Quotes
Strengths	Education Content and Resources	12	"The program's recent updates to the slides, along with the useful links and resources provided, were very helpful" "The program effectively uses visual graphs" "The program excels at providing detailed information about macronutrients and the advantages and disadvantages of various diets" "The program's key strengths included the expertise of the nutritionist, engaging classroom activities, and practical tools like nutrition journals"
	Tailored Approach to Health and Wellness	13	"I lost 40 pounds by applying the information provided" "The program strongly emphasizes proper nutrition and regular exercise, which was incredibly beneficial to me" "The program excels at providing detailed information about macronutrients and the advantages and disadvantages of various diets" "The program effectively addresses nutrition and the mental health aspects related to emotional eating. It helps participants improve their eating habits, which is a major benefit"

Many participants asked about the ShipShape Program's strengths and emphasized the educational content. They particularly appreciated the program's resources, such as updated slides and a collection of helpful links to "Choose MyPlate," "Super Tracker," and "Calorie Calculator," and additional materials such as "Menu Plans," "Dietary Supplements: Red Flags," and "Staying Away From Fad Diets" for their practicality and application during the program. One participant mentioned, *"The program's recent updates to the slides, along with the useful links and resources provided, were very helpful."* This showed the program's commitment to its instruction and content, ensuring participants had access to additional health and wellness information. The second identified strength was the program's tailored approach to health and wellness experienced by the participants. This had an impact on participants health, as another

participant shared an achievement by stated *"The program excels at providing detailed information about macronutrients and the advantages and disadvantages of various diets."* This indicated that the educational components of the ShipShape Program were well-crafted and effectively empowered participants to make lifestyle changes. The blend of educational content and the resources mentioned above led to positive outcomes for participants. These factors created an environment where participants were equipped to reach their weight loss objectives, ultimately leading to reduced weight, as evidenced in the quantitative section.

Weaknesses of the ShipShape Program

Recognizing weaknesses in the ShipShape Program was important for pinpointing areas that required improvement, ensuring that issues could be identified and dealt with proactively. This approach enabled the creation of strategic plans to reduce or eradicate these shortcomings, ultimately improving the program's overall effectiveness. Additionally, awareness of weaknesses was essential for making informed choices and efficiently allocating resources. During the semi-structured interview, participants were asked the following questions:

What are the notable weaknesses of the ShipShape Program?

Themes identified under weaknesses during the interviews are presented in Table 12.

Table 12

Weaknesses Identified in Semi-structured Interviews

Category	Theme	Freq	Example Supporting Quotes
Weaknesses	Scheduling and Communication Issues	6	"The program's scheduling was a significant issue for me" "There was some confusion about the locations of the sessions" "A challenge I faced was the changing locations of the sessions" "The main issue lies in communication, especially with frequent changes in session locations and schedules" "The program started strong, but inconsistencies with facilitator availability and scheduling conflicts emerged halfway through" "A major issue was the

		difficulty in scheduling follow-up appointments with a nutritionist"
Travel and Location Issues	6	"The change of classroom to a less familiar building posed difficulties in locating the sessions" "Traveling from Virginia Beach to attend the course was challenging due to the 20-minute drive" "A significant challenge was the travel time from Oceana to the class location, which was in the middle of the day. It took about 20-25 minutes" "The main logistical challenge is the distance; the course is 30-45 minutes away from my workplace" "Scheduling conflicts and the geographic distance for some participants can pose challenges to consistent attendance"

When asking participants about the weaknesses of the ShipShape Program, most participants highlighted scheduling and communication issues. Regarding scheduling and communication, one participant mentioned, *"The program started strong, but inconsistencies with facilitator availability and scheduling conflicts emerged halfway through."* This emphasized how rigid or inconvenient scheduling could hinder consistent participant engagement. Effective and transparent communication also ensured that participants were well-informed and supported throughout their weight loss journey. Addressing these barriers was crucial for improving satisfaction and overall program success. Another theme identified as a weakness during the interviews was travel and location issues, with another participant stating, *"There was some confusion about the locations of the sessions."* This showed how unclear communication about session logistics could result in frustration and possible absenteeism. These barriers could negatively impact the program's effectiveness by creating obstacles that may impede participants from participating. Regular attendance was essential for program success, as consistent engagement was necessary to sustain motivation and attain results.

Opportunities of the ShipShape Program

Recognizing opportunities within the ShipShape Program was vital to discovering areas with growth potential, enabling the program to adjust and develop. This approach allowed the program to take advantage of trends, technologies, and collaborations that could improve its impact and scope. Acknowledging these opportunities helped the program stay competitive and pertinent, fostering long-term viability and success. During the semi-structured interviews, participants were asked the following questions:

What opportunities exist for the ShipShape Program to grow or improve?

The themes identified under weaknesses during the interviews are presented in Table 13.

Table 13

Opportunities Identified in Semi-structured Interviews

Category	Theme	Freq	Example Supporting Quotes
Opportunities	Increasing Accessibility and Location	6	"There is an opportunity to enhance the program by incorporating video conferencing" "Maintaining a consistent location for the sessions would be helpful" "Increasing the frequency of the courses could be beneficial" "Expanding the program to additional locations, such as Virginia Beach" "Expanding the program to multiple locations would make it more accessible"
	Incorporate Additional Resources	4	"Incorporating a certified nutritionist with formal education" "To seriously address health and nutrition, the Navy needs to ensure that resources like nutritionists are readily available" "Incorporating more hands-on activities could enhance learning" "Enhancing the personalization of the program would be beneficial"

When interviewing participants about what opportunities could enhance the ShipShape Program, many emphasized the potential benefits of increasing accessibility and locations, with some

interviews suggesting specific opportunities such as *"Expanding the program to additional locations, such as Virginia Beach," and "Expanding the program to multiple locations would make it more accessible."* This highlighted how expanding the program outside of Portsmouth to include additional locations, such as Virginia Beach, Hampton, and Norfolk, could broaden access and enable more participants to join regardless of their geographical limitations or travel constraints. Another theme identified during the interviews was incorporating additional resources, where one participant mentioned, *"Incorporating a certified nutritionist with formal education."* Participants highlighted the potential opportunity of hiring a Registered Dietitian Nutritionist (RDN) dedicated to the program. By outsourcing and incorporating an RDN, the program could more effectively meet the individual nutritional needs of participants. As mentioned in Chapter 2, ShipShape provides referrals for participants to make an appointment with an RDN. However, as uncovered during the interview, participants mentioned that it was hard to get seen by an RDN due to their limited availability. ShipShape taking the opportunity to add an RDN as a resource would likely improve the program's overall effectiveness, foster greater engagement, and increase participant satisfaction. Additionally, by adding a dedicated RDN to the program, ShipShape could more effectively support participants in achieving their weight loss goals. Leveraging these opportunities could lead to a higher rate of success and participant satisfaction, thereby strengthening the overall value and appeal of the program.

Threats to the ShipShape Program

Recognizing threats enabled stakeholders to anticipate and prepare for obstacles that might impede the program's progress—taking this proactive stance aided in creating plans and strategies to reduce the effects of these threats. Moreover, comprehending these challenges

ensured the program could adjust and stay strong amidst external influences and shifts. During the semi-structured interviews, participants were asked the following questions:

What external threats could impact the success of the ShipShape Program?

Themes identified under weaknesses during the interviews are presented in Table 14.

Table 14

Threats Identified in Semi-structured Interviews

Category	Theme	Freq	Example Supporting Quotes
Threats	Negative Perceptions	4	"A potential threat is the misconception that participation might lead to penalties. It's important to communicate that the program is supportive and non-punitive, designed to help participants improve" "Negative perceptions among servicemembers, particularly those facing separation, could discourage participation" "There is a remedial perception of the course, and I likely wouldn't have attended if not for being ordered to" "Disparaging remarks from leadership about attending the program can be discouraging"

During the interviews, participants emphasized that negative perceptions posed a challenge when discussing the external threats to the ShipShape Program. One specific concern raised was the belief that participation in the program was punitive and mandated for individuals who failed the BCA. They further expressed that non-attendance could lead to repercussions when the program was primarily voluntary. During the interview, one participant expressed this concern by saying, *"A potential threat is the misconception that participation might lead to penalties. It's important to communicate that the program is supportive and non-punitive, designed to help participants improve."* Another negative perception was disparaging remarks concerning participation in the program, with one participant stating, *"Disparaging remarks from leadership about attending the program can be discouraging."* This underscored the importance of incorporating positive

perceptions regarding the program's objectives. Misunderstandings like these could discourage participants who view the program negatively rather than as an opportunity for positive health, weight, and lifestyle changes. These threats could lead to decreased participation as potential participants may fear enrolling rather than recognizing the supportive nature of the program. Moreover, the perception of the program being punitive rather than voluntary could create a stigma around participation, discouraging individuals who could benefit most from the program. This stigma could also affect the program's reputation, making it harder to attract new participants and gain stakeholder support.

To address these misconceptions, it was vital to promote an understanding that the program was meant to be supportive and geared towards enhancing participants' well-being. Clear and consistent communication should emphasize the program’s voluntary nature, its goals of promoting health and wellness, and the benefits it offers. This could include testimonials from past participants, success stories, and detailed information about the program’s structure and objectives. If the ShipShape Program could address these threats and promote a comprehensive program designed for everyone, it could build trust and encourage more participation.

Recommendations for the ShipShape Program

Providing recommendations for improving the ShipShape Program involved gathering participant feedback to help provide ideas that could boost its efficiency and tackle any identified weaknesses. These suggestions helped in planning and allocating resources effectively, ensuring productive enhancements. Furthermore, putting recommendations into practice could result in the program's sustained success in the long run. During the semi-structured interviews, participants were asked the following questions:

What recommendations do you have to enhance the effectiveness of the ShipShape Program?

Themes identified under weaknesses during the interviews are presented in Table 15.

Table 15

Recommendations Identified in Semi-structured Interviews

Category	Theme	Freq	Example Supporting Quotes
Recommendations	Virtual Format	2	"Recommend making the sessions available online to increase accessibility for all participants" "Offering the program in a virtual format would make it more accessible"
	Engagement and Personalization	5	"Facilitators could enhance the program's effectiveness by engaging more actively and creatively in delivering the information" "Focusing on making the program more personal rather than just a group setting could improve its effectiveness" "Implementing a follow-up system to check in with participants after they complete the program" "Incorporating more interactive, movement-based learning activities" "Increasing the number of dedicated workout days compared to classroom sessions could improve the program"

When it came to the recommendations, participants gave valuable feedback. Many mentioned adding a virtual format, which could help improve the program's accessibility. One participant said, *"Offering the program in a virtual format would make it more accessible."* Another stated, *"Improving the visibility and frequency of the course offerings would likely boost participation and effectiveness."* The second recommendation identified by participants was improving program engagement and personalization. By increasing the advertisement and frequency of sessions, more people could participate at times that suited them best, ultimately boosting engagement rates. One participant stated, *"Focusing on making the program more personal rather than just a group setting could improve its effectiveness."* Personalizing the program could also help tailor health strategies to needs, making it more effective and improving

satisfaction and outcomes. These enhancements would likely increase participation, encourage engagement, and improve health outcomes for all attendees.

Conclusion

This chapter outlines the results of quantitative and qualitative data analyses in evaluating the ShipShape Program, which addressed lifestyle changes and reduced participants' BMI. The quantitative section delved into the participants' demographic data, highlighting that 83.58% were active-duty military who joined the program voluntarily, with a notable completion rate of 70.14%. Furthermore, a paired t-test analysis on participants' BMI measurements showed a modest reduction post-program, indicating a small effect size and substantiating the program's impact on participants' health metrics.

The qualitative analysis was significantly richer, employing SWOT analysis and OBE principles to frame the findings. The strengths noted included effective educational content and resources that led to tangible health improvements for participants. However, scheduling and location issues were cited as weaknesses that hampered the program's delivery. Opportunities for improvement were identified in enhancing accessibility, increasing resource availability, and improving program advertising to broaden its reach and efficacy. Threats involved negative perceptions that the program was punitive and disparaging remarks from leadership, which could undermine participant engagement.

NVivo was employed to organize and analyze qualitative data, which enabled a detailed depiction of the program’s operational dynamics and its perceived impact on participants. This analysis highlighted the program's successful elements and provided explicit recommendations for future improvements, such as expanding session availability and incorporating more

personalized and interactive elements. These insights were crucial for iterating on and improving the program, ensuring it effectively met its objectives.

CHAPTER 6

DISCUSSION

Introduction

This chapter will discuss lessons learned from the program evaluation and provide a strategic plan to the stakeholders. This discussion will focus on three main takeaways from the findings and detail their implementation. Additionally, the findings from the evaluation will serve as the foundational tool that frames the baseline for those main takeaways. This comprehensive approach ensures that the strategic plan is grounded in real-world data and experiences, providing a clear roadmap for enhancing the ShipShape Program's effectiveness and sustainability.

Lessons Learned

An effective weight management program should have focused on preventing the accumulation of excess body fat. For organizations such as the Navy, which enlisted individuals based on height, weight, and body fat requirements, it had a unique position to provide preventive measures. The main goal should have been establishing an environment promoting a fitness culture. With evidence showing that weight management and loss were challenging, it was crucial to equip SMs with strategies to uphold healthy lifestyle habits as part of their daily routine (Institute of Medicine, 2014).

The first key takeaway was that ShipShape successfully met its objectives with an average of 48 BMI measurements of 35.61 ± 1.75 before and 35.16 ± 1.75 after the program. The mean difference reported in participant BMI was 0.44 with a Cohen’s D score of 0.25, indicating a moderate noticeable difference in BMI. This showed that the program met its objectives and outcomes for participants who attended the 2022 and 2023 sessions. This supported the OBE

framework by demonstrating that the program's structured activities and educational elements effectively led to measurable health improvements (W. G. Spady, 1994; Fynn, J. F. et al., 2020). Given that the program was six weeks, the moderate reduction in BMI aligned with previous studies' recommendations of losing weight at a gradual and steady pace. Previous studies discussed recommendations for losing a minimum of five to 10% of body weight to reduce weight-related risks (NIDDK, 2018; NHLBI, NIH, 2022). This showed that the ShipShape Program was effective and aligned well with previous research, setting a foundation for maintaining a healthy body weight given the observed decreases in BMI. The ShipShape Program's impact, as evidenced by a moderate decrease in BMI among participants, aligned with the principles of OBE by linking program activities to concrete health outcomes. By documenting these shifts in BMI, the program demonstrated its efficacy in achieving its objectives of encouraging weight loss and supporting weight control among SMs. This outcomes-driven approach enabled an evaluation of the program’s effectiveness in tackling obesity, providing evidence that the structured activities and educational elements effectively shaped participants' lifestyle habits and attained the desired outcomes.

The SWOT analysis was designed to analyze the ShipShape Program's strengths, weaknesses, opportunities, and threats. Additionally, it provided recommendations by conducting semi-structured interviews with facilitators and participants. This qualitative assessment offered insights into the program's effectiveness in encouraging healthy behavior changes and weight loss. From a pool of 67 participants, 17 (25%) voluntarily participated in semi-structured interviews. These responses showcased the program's strengths, identified areas for improvement, and provided recommendations based on the participants' and facilitators' experiences and perspectives.

The ShipShape Program significantly contributed to weight loss success through its comprehensive educational resources and personalized fitness strategies. Research showed that education paired with ongoing follow-up to ensure adherence to teachings could yield positive outcomes. This occurred because continuous interaction played a part in strengthening the understanding of weight management program concepts. Additionally, consistent follow-up sessions offered tailored assistance and feedback, elevating the impact of this initiative (Ostovan, M. A., Zibaeenezhad, M. J., et al., 2013). The approaches of ShipShape, offering six sessions, educational materials, and customized fitness plans, were further evidenced in the quantitative results, where participants showed a moderate decrease in BMI.

There were notable strengths experienced among participants, and the second key takeaway was improving program accessibility by using virtual formats to cater to those who lived far away and had concerns about attending in person, thus expanding the program's reach (Kim, K. J., et al., 2022). Additionally, a study by Afari et al. reported positive responses among ShipShape participants with virtual formats. Moreover, though the program was effective, participants shared that they found out about it through flyers and had never heard of it before despite frequently visiting the MTF for years. Based on research, stepping up advertisements for the ShipShape Program through social media could help spread awareness of the program and improve participation (Fossen, B. L., Bleier, A., 2021).

Lastly, the third takeaway was that program advertisements could share a message that the program was for everyone to help change the identified negative perceptions participants expressed experiencing through attendance. Negative perceptions about individuals who struggled with overweight and obesity were compounded by the stigma associated with and

general attitudes towards weight loss, which were often viewed negatively (Puhl, R. M., & Heuer, C. A., 2010). Such perceptions could deter participation, as individuals might feel singled out or judged rather than supported. Qualitative results showed that participants discussed experiencing negative perceptions stemming from the program being viewed as punitive and designed primarily for individuals who failed the BCA portion of the PFA. Addressing these negative connotations by promoting a new message that advertised the ShipShape Program for everyone was crucial for creating a more inclusive and encouraging environment that promoted healthy lifestyle changes.

Strategic Plan

To ensure the success of the ShipShape Program, leveraging John Kotter's change management framework will provide stakeholders with a structured approach to increasing program accessibility and participation, enhancing advertisement efforts, and improving perceptions. Below, figure 5 provides a summarized strategic plan to be shared with ShipShape stakeholders as recommendations for to generate discussion and input around.

Figure 5

Strategic Plan for ShipShape Program Summary

Mission: Deliver a comprehensive and evidence-based weight management program that supports the health and well-being of all Navy and Marine Corps personnel, beneficiaries, and government civilians in accordance with OPNAV6100.2A
Objectives: The ShipShape Program is a comprehensive weight management initiative focused on promoting healthy lifestyle changes in areas like nutrition, physical activity, mindset, and sleep that result in weight loss

Strategic Plan Objectives:

Increase Program Accessibility and Participation:

- Ensure that the ShipShape Program is more accessible by adding virtual formats
- Target a participation increase of 15% annually by enhancing program accessibility

Enhance Program Advertisement:

- Launch a multimedia advertising campaign using social media, military networks, and installation newsletters to reach a broader audience.
- Collaborate with Command Fitness Leader, Provider, and Nutritionist within the Navy Medicine to serve as program ambassadors.

Improve Negative Perceptions:

- Market the ShipShape Program as a comprehensive weight management tool suitable for all eligible members, not solely for those who have failed a component of the Physical Fitness Assessment (PFA), emphasizing inclusivity.

Action Plan:

Initiate – First and Second Quarter:

- Expand digital infrastructures to accommodate an online platform for virtual participation.

Implement – Third and Fourth Quarter:

- Develop and implement visibility campaigns, including emails, posters, and announcements, to promote awareness of the program.
- Launch virtual formats to ensure accessibility, particularly for remote participants.

Review – Annually:

- Annually analyze data collected from the program; adjust strategies as needed based on feedback and outcomes

Evaluation Metrics:

- Participation rates across demographics at the MTF
- Changes in participant health metrics (e.g., weight, BMI)
- Feedback from participants and facilitators regarding program satisfaction and perceived effectiveness

The ShipShape Program is committed to improving the health and well-being of Navy and Marine Corps members by enhancing program accessibility, improving quality, and integrating with health efforts. Its goal is to provide a weight management program supported by evidence that encourages lifestyle changes in nutrition, physical activity, mindset, and sleep for effective weight loss. The following strategic plan leverages Kotter's 8-step process, which involves creating a sense of urgency regarding implementing the identified recommendations from the program evaluation (Kotter, J., 2014; Pollack, R., Pollack, J., 2015). Kotter's 8-step framework for implementing change in the ShipShape Program will involve the following steps:

Creating a Sense of Urgency

Initiating this strategic plan will involve acknowledging the need for more accessible weight management programs. By highlighting existing challenges in participation and expanding accessibility to a virtual format, the program will ensure it can reach more participants regardless of location. It will be essential to recognize the need for weight management programs that provide easier accessibility for participants. Feedback on obstacles people face when trying to participate, such as location and time constraints, will underscore the need for this initiative. Setting up the virtual platform will allow participants to access resources, attend live sessions, and engage with facilitators from anywhere. This platform will be easy to use and feature video guides, live chat support, and downloadable materials.

Creating a session schedule will also cater to participants across different time zones and busy schedules. Teaming up with the Information Management Department (IMD) within the MTF will facilitate equipment installation to ensure streaming access and engaging user experiences (Alsabawy, A. Y. et al., 2013). Furthermore, coordinating with the Public Affairs Office (PAO) will help design flyers and advertisements to ramp up program marketing efforts to

improve awareness and engagement for ShipShape. Using social media platforms like Facebook and Instagram, email, and the MTF newsletter will help reach a wider audience. Keeping the program content updated regularly and incorporating a positive message about ShipShape being a comprehensive weight management program for everyone will help improve perceptions and overcome obstacles, ultimately resulting in better health outcomes for a more significant number of SMs.

Building a Guiding Coalition

Establishing a team will be vital. This team should consist of the ShipShape Director, Coordinators, Facilitators, Command Fitness Leaders, Providers, and Nutritionists who will serve as program advocates. They will advocate for the program's benefits and establish an influential support network for participants trying to make healthier lifestyle changes. The ShipShape Director will oversee ShipShape, ensuring all aspects align with program objectives and goals. They will coordinate efforts among coordinators, oversee funding for resources, and report on program progress to Navy Medicine.

Additionally, the Director will advocate for the program, maintaining support and funding. Coordinators will handle the annual program schedule and daily operations, such as session scheduling and participant inquiries. They will collaborate closely with Facilitators to ensure they are assigned sessions to teach and provide participant support. Facilitators will teach both in-person and virtual sessions for scheduled participants. Their responsibilities will include delivering content, fostering engagement, monitoring progress, and gathering feedback using questionnaires at the end of each session for program enhancement. Command Fitness Leaders will act as liaisons for ShipShape by endorsing a positive perception of the program. Their responsibilities will include promoting the program within their respective roles to encourage

involvement and assist participants in reaching their fitness goals. Healthcare providers will be tasked with recommending ShipShape to patients following regular evaluations where participants' health status identifies them as having a BMI above 24.9 by handing them program pamphlets. They will collaborate closely with Nutritionists to provide patients with referrals for additional tailored nutrition plans. Nutritionists will share expertise on personalized eating plans, design meal schedules, and educate participants on optimal nutritional practices. They will conduct consultations and provide group sessions to equip participants with the knowledge and resources needed for dietary changes. Together, this team will champion the program's advantages, establishing a support system for participants. Ensuring the incorporation of these steps will guarantee that the right leaders steer the change and that those involved comprehend the purpose of this change (Carman, A. L., et al., 2019).

Form a Strategic Vision and Plan

The vision for the ShipShape Program will be to become a comprehensive weight management resource that is inclusive for all. This vision will be backed by the current mission and objectives to increase program engagement by 15% through virtual format options while reshaping perceptions by promoting the program as suitable for everyone (Sarvenaz S., 2020). To achieve this vision, the program will build on these steps to create a sense of urgency by boosting engagement by introducing virtual formats and marketing aimed at changing perceptions of the program to make it fit for everyone, not just PFA failures. The program will enhance its offerings to make participation more manageable and accessible, which will involve creating a virtual platform with features like live session streaming and recorded sessions. This platform will enable people to join from anywhere, breaking down barriers. The flexible

scheduling of sessions will cater to various schedules, fostering increased involvement and accessibility.

Regarding changing perceptions, a targeted marketing campaign will emphasize that ShipShape is for everyone, regardless of PFA, BMI, or fitness background. Promotional materials will feature success stories from past participants. Social media initiatives will spread awareness that the program is inclusive and advantageous for everyone. Furthermore, by collaborating with coordinators, facilitators, CFLs, healthcare providers, and nutritionists, the director will help amplify and share the program's benefits. These advocates will encourage individuals to attend if they want to learn more about fitness, nutrition, and lifestyle changes. By crafting a vision and plan, the program's services can convey its message and enhance involvement, positioning ShipShape as a valuable resource for holistic weight control.

Sharing the Vision for Change

The strategic plan will aim to increase program awareness through a multimedia advertising strategy using media, military networks, and newsletters within the MTF. This approach will ensure everyone knows about the program's benefits and new initiatives. To achieve this, the program will launch a comprehensive campaign featuring informative digital advertisements to promote ShipShape on the MTF television monitors in buildings 2 and 3. Program coordinators will promote digital flyers by posting program schedules and testimonials from successful participants on social media platforms. Regular program schedule updates will be included in the MTF newsletter to keep the community informed. ShipShape flyers and brochures will be distributed to the core team and handed out to interested individuals. The program will effectively reach and engage a broader audience by utilizing these diverse channels.

Step 5: Encouraging Action by Removing Barriers

Successfully implementing a new initiative into the ShipShape Program will require empowerment, which will be achieved by building digital systems supporting a virtual engagement platform. This will be especially important for personnel living further away from the MTF and those who need help traveling due to expensive toll charges. The aim of empowering collective action is to create systems that facilitate interaction. This will particularly benefit participants who reside far from the MTF and those facing travel challenges. The strategy will involve developing a virtual platform with live-streaming features for real-time engagement in sessions and interactive chat forums for participant exchanges. The virtual platform will offer access to recorded sessions to cater to different schedules. Virtual sessions will nurture community and collaboration among participants, encouraging them to share insights. By leveraging technology to overcome travel and time constraints, this initiative aims to promote participation and empower individuals to embrace healthier lifestyles through collective efforts.

Achieving Quick Wins

Setting and achieving quick wins will be essential for applying and sustaining momentum in the change initiative. By launching virtual formats and program advertisement campaigns, the goal will be to achieve quick victories, as these early successes will help maintain program momentum and demonstrate advantages. To achieve quick wins through the launch of virtual formats and program advertisement campaigns, a realistic timeline will be structured as follows:
First Quarter and Second Quarter – Initiate

- Month 1: Form a team comprising the ShipShape Director, Coordinator, Facilitator, Command Fitness Leader, Provider, and Nutritionist.
- Month 2 and 3: Develop a user-friendly virtual platform with features like live streaming, recorded sessions, and interactive chat forums.

- Month 4: Produce marketing materials such as flyers featuring success stories, informational brochures with schedules, social media content, and MTF newsletter announcements.
- Month 5: Pilot the initial marketing campaign and softly introduce the marketing materials to a pilot group to identify glitches and gather feedback for enhancements.
- Month 6: Revise the marketing campaign based on feedback, emphasizing the program's advantages and new virtual accessibility. Utilize customer reviews and success stories to establish interest and attract participants.

Third and Fourth Quarter – Implement

- Month 7 and 8: Officially launch the virtual format. Roll out virtual formats to all participants. Ensure that the platform functions smoothly and assistance is readily available from IMD.
- Month 9 and 10: Launch marketing efforts through brochures, flyers, television digital ads, emails, social media, and MTF newsletters to reach a wider audience, promoting the new virtual format and sharing the message that the program is for everyone.
- Month 11 and 12: Monitor progress and highlight early wins. Track participation rates using Microsoft Excel spreadsheets to compare current participation metrics to previous ones.

Adhering to this schedule will help the program achieve quick wins by launching virtual formats, running a robust marketing campaign, showcasing program benefits, and maintaining program momentum.

Strengthening Progress and Driving Further Change

Having successfully demonstrated effectiveness through this program evaluation, program coordinators will annually assess data gathered, including participation rates and BMI changes, using a paired t-test to analyze variations in participant BMI. Additionally, they will utilize a questionnaire to gather feedback from participants. Feedback will be crucial for improving and redeveloping the program to meet needs and program goals effectively. To achieve strengthening progress and drive further change a realistic timeline will be structured as follows:

Annually – Review:

- Analyze data collected from the program and adjust strategies based on participant metrics (BMI variations) and feedback to assess experiences and outcomes. Program facilitators will collect BMI at the beginning and end of the program, as is the current practice. Coordinators will keep participant demographics on file and use the existing metric collected to perform a paired t-test on participant BMI.

The paired t-test will be performed using Microsoft Excel by following these steps:

1. Open Microsoft Excel and open the ShipShape dataset.
2. Organize participant data into columns: Column A for BMI start and Column B for BMI end.
3. Select the data analysis tool by going to the data tab in Excel and clicking on data analysis (File > Options > Add-Ins > Manage: Excel Add-ins > Go > Check Analysis ToolPak > OK).
4. Choose "Paired Two Sample for Means."
5. Input the data ranges: Variable 1 for pre-test and 2 for post-test scores.

6. Set the hypothesized mean difference to 0 if testing whether the same means exist.
7. Choose the output to be displayed.
8. Execute the test by clicking OK to run the paired t-test.
9. Review the results.

Figure 6 is a suggested questionnaire that can be used to collect participant feedback.

Figure 6

Example Questionnaire for ShipShape Participant Feedback

1. How satisfied are you with the virtual format of the ShipShape Program?
    1. Very Satisfied
    2. Satisfied
    3. Neutral
    4. Dissatisfied
2. Which aspects of the virtual platform do you find most beneficial?
    1. Live streaming sessions
    2. Recorded videos
    3. Interactive forums
    4. Other
3. How has participating in the ShipShape Program impacted your ability to achieve your weight management goals?
    1. Significantly improved
    2. Somewhat improved
    3. No change
    4. Somewhat worsened
    5. Significantly worsened
4. What challenges, if any, have you faced while using the virtual platform?
    1. Technical difficulties (e.g., connectivity issues, platform navigation)
    2. Time management (e.g., fitting sessions into your schedule)
    3. Lack of motivation or engagement
    4. Insufficient support or resources
    5. Other (please specify): _____
5. What additional features or improvements would you like to see in the ShipShape Program to enhance your experience?
    1. More live sessions at varied times
    2. Additional resources on nutrition and exercise
    3. Enhanced community support (e.g., more interactive forums, peer groups)
    4. Better technical support and troubleshooting
    5. Other (please specify): _____

Embedding New Practices in the Organizational Culture

The longevity of a change will primarily center on the activities undertaken during this step. Ultimately, the goal will be to integrate these changes into the ShipShape Program by incorporating virtual formats and changing negative perceptions to expand accessibility and promote positive perceptions of the program within the organizational culture. Furthermore, assessing the program using participant metrics and gathering participant feedback will be essential to continually enhance the ShipShape Program and offer insights into user experiences. By addressing the needs and challenges of participants, the program will continue to improve the platform and resources, ultimately increasing satisfaction and success rates (Burgess, A., et al., 2020). Coupling this with a positive shift in perception will encourage individuals to participate, further embedding the positive benefits of the ShipShape Program in organizational culture.

Conclusion

In concluding Chapter 6, we reflect on the insights gathered from the program evaluation of the ShipShape Program and the strategic planning endeavors. The evaluation emphasized the necessity of using a comprehensive approach to weight management within the MTF, revealing successes and areas for improvement. The quantitative data analysis from the ShipShape Program indicated a decrease in BMI among participants in the 2022 and 2023 sessions, aligning with previous research and the weight loss guidelines recommended by the CDC. This accomplishment confirmed that the program is effective in meeting its objectives and demonstrated its ability to follow established public health standards for weight loss (CDC, 2023).

Moreover, the evaluation extended beyond mere numerical success; it incorporated a SWOT analysis and qualitative feedback from participants and facilitators. This method offered

nuanced insights into how the program operates, highlighting strengths such as its resources and tailored fitness activities while identifying areas for potential improvement, such as enhancing accessibility and increasing advertising tactics. Strategic planning based on these insights resulted in John Kotter's 8-step change management model to create a framework for implementing changes into the program. Key initiatives include expanding resources to include a virtual format to facilitate more engagement and launching targeted multimedia campaigns to increase awareness and participation and change negative perceptions of the program. These initiatives are set to cater to the needs and preferences expressed by participants to promote an inclusive environment for everyone. Furthermore, the strategy to perform an annual assessment of the program based on feedback and participant BMI metrics will encourage a more flexible approach, allowing the program to adapt alongside changing health trends.

Future research should focus on several key areas to enhance the effectiveness and reach of the ShipShape Program. First, evaluations should assess the sustainability of BMI reductions and overall health improvements beyond the initial program completion. Expanding the demographic analysis to include more characteristics of the participants, such as enrollment purpose, reasons for non-completion, ranks, and geographic location, will help identify more variations in program effectiveness. Additionally, future evaluations should investigate specific components of the ShipShape Program, such as referrals, physical exercise, and mental health support, to determine if they effectively help participants achieve weight loss and improve overall health. Lastly, evaluating the impact of the policies that govern the ShipShape Program is essential to understand how organizational factors influence program success.

In essence, the proposed strategic plan aims to change the current lifestyle and behaviors of SMs that have led to obesity within the Navy. By reshaping perspectives and enhancing

accessibility, the program aims to enhance health outcomes and bolster operational readiness. This comprehensive approach ensures that ShipShape remains a vital component in the Navy's commitment to fostering a culture of fitness and well-being, paving the way for a healthier, more capable military force.

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APPENDIX A: QUANTITATIVE DATA FROM 2022 - 2023 SHIPSHAPE PARTICIPANTS

#	Year	Gender	Status	BMI(start)	BMI(end)	Enrollment Status
1	**2023**	**Female**	**MIL-Self Referral**	**48.4**	**36.8**	**Completed**
2	2023	Female	MIL-Self Referral	39.9	39.2	Completed
3	2023	Female	MIL-Self Referral	37.1	36	Completed
4	2023	Female	MIL-Self Referral	55	55.6	Completed
5	2023	Male	MIL-Self Referral	35.8	0	Completed
6	2023	Male	MIL-Self Referral	35.5	0	Completed
7	2023	Female	MIL-Self Referral	32.5	0	Completed
8	2023	Female	MIL-Self Referral	27.8	0	Completed
9	2023	Female	MIL-Self Referral	32.1	0	Completed
10	2023	Female	MIL-Self Referral	46.8	0	Did not complete
11	2023	Male	MIL-Self Referral	51.6	50.8	Completed
12	2023	Female	Beneficiary	41.9	41.4	Completed
13	2023	Female	Beneficiary	37.1	0	Did not complete
14	2023	Male	MIL-Self Referral	40.9	0	Did not complete
15	2023	Female	MIL-Self Referral	0	0	Completed
16	2023	Female	MIL-Self Referral	0	0	Did not complete
1	**2022**	**Female**	**MIL-Self Referral**	**31.4**	**31.3**	**Completed**
2	2022	Female	MIL-Self Referral	32.5	31.9	Completed
3	2022	Male	MIL-Self Referral	33	31.8	Completed
4	2022	Female	MIL-Self Referral	39.6	39.7	Completed
5	2022	Female	Beneficiary	28.3	27.1	Completed
6	2022	Male	MIL-Self Referral	31.1	31	Did not complete
7	2022	Female	MIL-Self Referral	30.8	30.8	Did not complete
8	2022	Male	MIL-Mandated	0	0	Did not complete
9	2022	Female	Beneficiary	24.3	24.9	Completed
10	2022	Male	MIL-Self Referral	33.1	32.8	Did not complete
11	2022	Male	MIL-Self Referral	30.7	32.1	Completed
12	2022	Male	MIL-Self Referral	35.4	35	Completed
13	2022	Male	MIL-Self Referral	41.4	41.4	Completed
14	2022	Male	MIL-Self Referral	37.4	36.5	Completed
15	2022	Male	MIL-Self Referral	36.9	0	Completed
16	2022	Male	MIL-Self Referral	33.2	32.9	Did not complete
17	2022	Male	MIL-Self Referral	41.7	40.1	Completed
18	2022	Male	MIL-Self Referral	33.2	32.4	Completed
19	2022	Male	MIL-Self Referral	31.3	31.1	Completed
20	2022	Female	MIL-Self Referral	37.6	37.7	Did not complete
21	2022	Male	MIL-Self Referral	37.1	36.6	Completed
22	2022	Male	MIL-Self Referral	38.9	39.3	Completed
23	2022	Female	MIL-Self Referral	36.5	36.4	Did not complete
24	2022	Female	MIL-Self Referral	29.6	30	Did not complete
25	2022	Male	MIL-Self Referral	35	0	Did not complete
26	2022	Female	Beneficiary	27.1	0	Completed
27	2022	Female	Beneficiary	24.6	0	Completed
28	2022	Female	Beneficiary	0	0	Did not complete
29	2022	Female	MIL-Self Referral	29.3	29	Did not complete
30	2022	Male	MIL-Self Referral	46	46.8	Completed
31	2022	Male	MIL-Self Referral	34.7	35.1	Completed
32	2022	Male	MIL-Self Referral	39.2	38.4	Completed
33	2022	Male	MIL-Self Referral	34.4	34.8	Completed
34	2022	Male	MIL-Self Referral	35.3	35.5	Completed
35	2022	Male	MIL-Self Referral	39	37.8	Completed
36	2022	Male	MIL-Self Referral	33.5	33	Completed
37	2022	Male	MIL-Self Referral	32.4	32.1	Completed
38	2022	Male	MIL-Self Referral	0	0	Completed
39	2022	Male	MIL-Self Referral	29.7	29.5	Completed
40	2022	Male	MIL-Self Referral	0	0	Completed
41	2022	Male	MIL-Self Referral	38.7	39.3	Completed
42	2022	Female	Beneficiary	24.3	24.6	Completed
43	2022	Male	MIL-Self Referral	32.5	32.1	Did not complete
44	2022	Female	MIL-Self Referral	36.6	36.6	Did not complete
45	2022	Male	MIL-Self Referral	37.2	36.5	Unknown
46	2022	Male	MIL-Self Referral	35.2	34.8	Completed
47	2022	Female	Beneficiary	24.6	24.9	Completed
48	2022	Male	MIL-Self Referral	42.3	42	Did not complete
49	2022	Male	MIL-Self Referral	37.6	37.5	Did not complete
50	2022	Male	MIL-Self Referral	0	0	Completed
51	2022	Female	Beneficiary	24.6	24.9	Completed

APPENDIX B: SHIPSHAPE PROGRAM SCRIPT AND INTERVIEW QUESTIONS

Date:

Start Time:

End Time:

ShipShape Program Facilitator or Participant (circle or highlight one)

Purpose of the evaluation:

This evaluation aims to evaluate the effectiveness of the 2022 - 2023 ShipShape Program and assess how well the program achieves its objectives by identifying its strengths, weaknesses, opportunities, and threats.

Benefits:

The benefit of program evaluation is providing recommendations to enhance program effectiveness, leading to better health outcomes for participants.

Script:

Hello, my name's [interviewer], and I'm going to walk you through today's session. As I mentioned over email, I am conducting interviews to gauge your experience with the ShipShape Program. I'd like to begin by thanking you for making time to speak with me. Your feedback is valuable and will help provide insight to improve the program; just to confirm, I would like to keep this interview to 20 minutes. Does that still work for you?
Great. Please let me know if you need a break or to stop at any time.
During this session, I'll start by asking you a few questions, and If you have any questions as we go along, please feel free to ask them. With your permission, I'd like to record this call [answer]
Great. Do you have any questions for me at this time?

[RECORD]

Q1. Can you tell me a little bit about yourself?

Q2. What are the key strengths of the ShipShape Program?

Q3. What are the notable weaknesses of the ShipShape Program?

Q4. What opportunities exist for the ShipShape Program to grow or improve?

Q5. What external threats could impact the success of the ShipShape Program?

Q6. What recommendations do you have to enhance the effectiveness of the ShipShape Program?

Q7. Is there anything else you would like to add?

APPENDIX C: EMAIL FOR PARTICIPANTS

Subject Line: Invitation to Provide Feedback on the ShipShape Program

Good Morning,

I was given your contact information because you were involved with the ShipShape. I am conducting a program evaluation on the ShipShape Program and would like to hear your feedback about the program. Your contribution is highly valued. Please reply to this email if you choose to participate. This will enable us to schedule a brief, 20-minute interview at your convenience over the phone.

I appreciate your consideration and look forward to hearing from you.

Respectfully,

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