JOURNAL OF MARITIME RESEARCH

Vol XXII. No. I (2025) pp 119–126

ISSN: 1697-4840, www.jmr.unican.es

I Dare You: A 30 Day Challenge in Addressing Students to Lose Weight by Exposing Them into Physical Activity (PA)

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ARTICLE INFO

Article history:
Received 22 Jun 2024;
in revised from 30 Jun 2024;
accepted 24 Jul 2024.

Keywords:
30 Day Challenge, Lose Weight, Physical Activity.

ABSTRACT

The researcher implemented a 30-day customized fitness activity challenge targeting second-year students in the Bachelor of Science in Marine Transportation program at IMMS. This intervention aimed to enhance physical fitness by gradually increasing the intensity of aerobic and muscular strength exercises each day. Participants committed to the challenge through a signed agreement and were required to submit video evidence of their daily activities via a dedicated Google Classroom. Upon successful completion, participants received 30 merits, while any deviation resulted in demerits affecting their academic standing. The study found a statistically significant decrease in participants' weight, with an average loss of 1.59 kg over the 30 days. This outcome indicates the effectiveness of the challenge in promoting weight reduction among maritime students. The meticulous design of the challenge, coupled with the integration of incentives and accountability measures, contributed to its success. The collaboration with institutional offices and the purposive selection of participants facilitated engagement and commitment to the intervention. The researchers' thorough analysis of the data revealed meaningful insights, demonstrating the potential of tailored fitness interventions to positively impact students' physical well-being. The results contribute to the understanding of effective strategies for promoting health and fitness within educational settings, particularly among maritime students.

1. Context and Rationale.

Excess weight and obesity are recognized as a complex condition with wide-ranging implications for overall bodily health (Kelly et al., 2008). While formerly more prevalent in highly developed nations, there has been a noticeable increase in recent times, including in developing countries like Tanzania (Villamor et al., 2006). They were also considered health conditions for adults; currently, they are highly prevalent among children and adolescents (Wang et al., 2004).

Obesity presents an escalating global public health concern. Students grappling with obesity face a substantial risk of developing an array of concurrent conditions, spanning cardiovascular disease (CVD), gastrointestinal disorders, type 2 diabetes (T2D), joint and muscular ailments, respiratory challenges, and psychological issues. These conditions can significantly disrupt their daily lives and elevate mortality risks. While the spectrum of obesity-associated issues is diverse, even modest weight reduction efforts can potentially lower the risk of cardiovascular disease, diabetes, obstructive sleep apnea (OSA), hypertension, and numerous other comorbidities (Cefalu et al., 2015).

Conversely, obesity and overweight pose substantial health risks for seafarers. These concerns are prevalent in numerous countries, primarily due to their association with conditions such as cerebrovascular and coronary diseases, along with various causes of mortality (Frisardi et al., 2010). Moreover, obesity and metabolic syndrome are identified as risk factors for dementia, and they have been linked to diminished cognitive performance in population-based studies (Sirotkin & A Kolesárová, 2021).

Obesity has been noted as a factor contributing to physical limitations among seafarers. Beyond health concerns, be-

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ing overweight can pose safety risks aboard ships. Individuals with excess weight may face difficulties in executing emergency procedures, such as accessing emergency exits or boarding rescue boats. Studies have suggested that fatal accidents are more frequent in the maritime industry compared to sectors like construction and manufacturing (Miranda et al., 2015). This underscores the importance of seafarers maintaining a level of fitness suitable for handling the hazardous situations often encountered in maritime work conditions. Factors such as body mass index (BMI) and age have been closely correlated with work performance (Beehr & Bennett, 2014).

Seafarers constitute a demographic particularly vulnerable to cardiovascular diseases and cancer. For these individuals, the ship serves not only as a workplace but also as a prolonged living environment (Nittari et al., 2021). Numerous factors, including exposure to chemical substances, smoking, alcohol consumption, and obesity, heighten the susceptibility to developing tumors and cardiovascular conditions. Various studies have indicated that obesity and overweight are prevalent among seafarers (Nas & R. Fışkın, 2014)

In contrast, seafarers often endure extended periods of living in confined and unstable environments while at sea. The unique challenges of maritime life necessitate seafarers to exert increased physical and neurological effort to maintain their health (Zhan et al., 2023). It's important to recognize that physical inactivity serves as a modifiable risk factor for a range of chronic illnesses, including cardiovascular disease, diabetes mellitus, cancer (colon and breast), obesity, hypertension, as well as bone and joint conditions like osteoporosis and osteoarthritis. Additionally, mental health disorders such as depression are also linked to sedentary lifestyles (Shephard & Bouchard, 1994).

The unique living conditions experienced by seafarers at sea necessitate profound lifestyle modifications, which in turn pose significant health risks. This demanding environment requires seafarers to exhibit increased physical and neurological resilience to maintain optimal health. Furthermore, an investigation into lifestyle-related cardiometabolic diseases among seafarers navigating the United States inland waterways uncovered a range of chronic disease risk factors. Notably, there was a prevalent incidence of physical inactivity and obesity within this population (Sagaro et al., 2020).

The importance of maintaining physical fitness among future seafarers is emphasized by researchers, yet examinations into the health status of seafaring populations have consistently revealed concerning trends. Individuals at sea exhibit higher rates of smoking and alcohol consumption while engaging in less physical activity, resulting in poorer health outcomes compared to the general population.

Recognizing the myriad benefits of regular exercise, it is crucial to highlight its significance. Physical activity not only enhances physical and cognitive functioning but also yields substantial emotional and psychological advantages. Regular exercisers tend to experience improved emotional equilibrium, reduced stress levels, better weight management, enhanced digestion, stabilized blood sugar levels, improved sleep quality, as well as heightened levels of concentration and self-confidence.

In the maritime industry, ensuring the health and fitness of crew members is paramount, particularly during their time at sea. As stipulated by the Maritime Labor Convention (2006) and its subsequent regulations, including regulation 1.2, seafarers are mandated to possess valid medical certification confirming their physical and medical fitness before commencing duties aboard a ship. This certification attests that they are fully capable of fulfilling their responsibilities at sea (Labor Organization, 2013).

The research in the maritime industry has primarily focused on ensuring seafarers' physical and medical fitness before they embark on their duties at sea, as mandated by regulations such as the Maritime Labor Convention. However, there remains a significant gap in addressing the specific challenges related to physical health and fitness faced by seafarers during their time onboard. Despite regulations requiring certification of fitness, practical strategies to support seafarers' physical well-being while at sea are limited. This gap highlights the need for research aimed at developing effective interventions tailored to the unique environment and demands of maritime work.

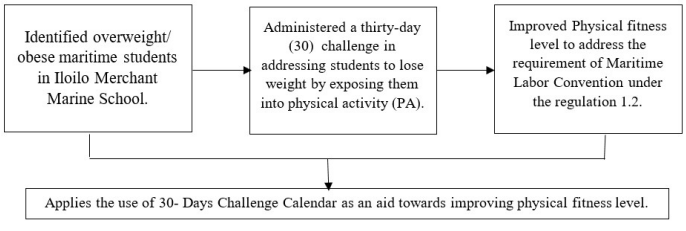
Therefore, this study aims to fill this gap by implementing a 30-day challenge focused on promoting weight loss through increased physical activity among seafarers. By addressing this research gap, the study aims to contribute to the development of targeted programs to improve the physical health and well-being of seafaring populations.

This study places particular emphasis on the physical well-being of seafarers, with a focus on implementing a 30-day challenge aimed at promoting weight loss through increased physical activity (PA) among participants. Addressing these risk factors through tailored interventions can not only mitigate the incidence of cardiovascular diseases and cancer but also enhance the overall well-being and longevity of seafarers.

2. Paradigm of the Study.

The schematic diagram below maps shows how the result of a thirty-day (30) days challenge in addressing students to lose weight by exposing them into physical activity (PA).

Figure 1



Source: Author.

3. Innovation, Intervention and Strategy.

The researcher devised a customized fitness activity challenge spanning 30 days, comprising a series of aerobic and muscular strength exercises. This challenge was tailored to

push participants beyond their comfort zones, fostering personal growth and rewarding completion as an integral part of the intervention. An innovative aspect of the challenge involved gradually escalating the intensity of physical activity each day, enhancing its effectiveness as an intervention strategy. To incentivize participation, the researcher collaborated with the dean's office and the Office of Midshipman Affairs (OMA) to grant 30 merits upon successful completion of the challenge.

During the 30-day challenge, participants were required to sign a commitment letter, affirming their dedication to seeing the challenge through to completion. Any deviation from this commitment would result in a demerit being applied to their school scores regulation. Additionally, participants were instructed to enroll in a dedicated Google Classroom, serving as a platform for researchers to monitor their progress and distribute daily challenges. Participants were further required to provide video evidence of themselves performing the daily challenges, ensuring accountability and adherence to the program's guidelines. The challenge was meticulously designed to incrementally increase physical activity each day, adhering to the principles of progression and maximizing its effectiveness as a fitness intervention.

The researchers selected second-year students enrolled in the Bachelor of Science in Marine Transportation program at IMMS (Iloilo Merchant Marine School) as the study's participants. This purposive selection ensured that participants were readily available and willing to commit their time and effort to the study. Prior to their involvement, each participant was provided with a consent form, outlining the study's objectives and their role in it, and giving them the opportunity to voluntarily participate.

In collaboration with the school's dean's office and the Office of Midshipman Affairs, the researchers facilitated the distribution of the daily challenges directly to the students. This streamlined approach ensured that participants received consistent and timely communication regarding their involvement in the study.

With data collection now completed, the researchers proceeded to analyze the gathered information. This analysis involved organizing and examining the data to identify patterns, trends, and insights relevant to the study's objectives. Statistical tools and qualitative techniques were employed to interpret the data effectively. By systematically analyzing the data, the researchers aimed to derive meaningful conclusions and implications that could contribute to the understanding and enhancement of physical fitness interventions among maritime students.

4. Action Research Questions.

This study aimed to create a 30-days challenge in addressing students to lose weight by exposing them into physical activity (PA).

Specifically, this study seeks to answers the following research questions:

1. What is the weight of the students before and after engaging in a 30-day challenge when taken as an entire group?
2. How many pounds will lose if the student engages in a 30-day challenge when taken as an entire group?
3. Is there a significant difference between the weight of a student before and after engaging in a 30-day challenge?

5. Action Research Methods.

This action research will employ the single-group pretest-post-test design. The action research methods will include three parts, namely (a) Participants and Sources of Data and Information, (b) Data Gathering Methods, (c) Ethical Issues.

5.1. Participants and Other Sources of Data and Information.

The participants of this study will be the purposely chosen second year (2^{nd}) Bachelor of Science in Marine Transportation and Bachelor of Science in Marine Engineering students of Iloilo Merchant Marine School (IMMS) School for the School Year 2022 - 2023. These participants have a total number of 100 students.

The second-year students are identified by the researchers in College of Maritime Education that primarily focus on the physical aspect especially administering a 30-day challenge in addressing students to lose weight by exposing them into physical activity (PA) to address the requirement of Maritime Labor Convention under the regulation 1.2.

The researcher utilized a 30-day challenge calendar with corresponding numerous exercises; the upper and the core muscle strengthening exercises. The calendar was divided into four (4) weeks:

WEEK 1. In the entire first (1) week there are three selected exercises, these exercises will be done in one (1) set only, the muscle strengthening performs in twelve repetitions while the core exercises perform within one minute.

WEEK 2. In the entire second (2) week there are four selected exercises, these exercises will be done in two (2) sets only, the muscle strengthening performs in fifth teen repetitions while the core exercises perform within one minute.

WEEK 3. In addition, in the entire third weeks there are four selected exercises, these exercises will be done in three (3) sets only, the muscle strengthening performs in fifth teen repetitions while the core exercises perform within one minute.

WEEK 4. Lastly, in the entire fourth and final weeks there are four selected exercises, these exercises will be done in three (3) sets only, the muscle strengthening performs in eight teen repetitions while the core exercises perform within one minute. As such, the students are keep reminding and encouraging to have a warm-up and stretching exercises before and after engaging into the challenge to prevent injury and muscle pain.

In addition to the aforementioned sources of data, a researcher-made questionnaire and a behavior modification test was utilized to assess participants' perspectives on their experience with the 30-day challenge. This test consisted of inquiries related to participants' health, feelings, and behavior throughout the duration of the challenge. Participants were asked to consider their experiences and select responses from a scoring scale provided alongside each question.

Figure 2

FITNESS CALENDAR

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1 **MS:** *one (1) set; 12 repetitions* **CE:** *1 minute*	**Day 1** a. Regular Push-up b. Burpees c. Plank	**Day 2** a. Push-up and Rotation b. Curl-up c. Russian Twist	**Day 3** a. The Plank b. Curl-up c. Burpees	**Day 4** a. Regular Push-ups b. Push-up and rotation c. Russian Twist	**Day 5** a. Curl-up b. Russian Twist c. Plank	**Day 6** *REST DAY!*	***Day 7*** a. Regular Push-ups b. Push-Up and Rotation c. Burpees
Week 2 **MS:** two *(2) set; 15 repetitions* **CE:** *1 minute*	**Day 8** a. Push-Up and Rotation b. Curl-up c. Russian Twist d. Burpees	**Day 9** a. Regular Push-ups b. Burpees c. Plank d. Curl-up	**Day 10** a. Curl-up b. Russian Twist, c. Plank d. Burpees	**Day 11** a. Burpees b. Plank c. Russian Twist d. Push-Up and Rotation	**Day 12** *REST DAY!*	**Day 13** a. Burpees b. Plank c Russian Twist d. Regular Push-ups	**Day 14** a. Regular Push-ups b. Push-Up and Rotation c. Russian Twist d. Burpees
Week 3 **MS:** three *(3) set; 15 repetitions* **CE:** *1 minute*	**Day 15** a. Burpees b. Plank c. Russian Twist d. Regular Push-ups	**Day 16** a. Regular Push-ups b. Push-Up and Rotation c. Russian Twist d. Burpees	**Day 17** a. Push-up and rotation b. Curl-up c. Russian Twist d. Burpees	**Day 18** *REST DAY!*	**Day 19** a. Regular Push-up b. Burpees c. Plank d. Curl-up	**Day 20** a. Curl-up b. Russian Twist c. Plank d. Push-Up and Rotation	**Day 21** a. Burpees b. Plank c. Russian Twist d. Push-Up and Rotation
Week 4 **MS:** three *(3) set; 18 repetitions* **CE:** *1 minute*	**Day 22** a. Regular Push-ups b. Burpees c. Plank d. Curl-up	**Day 23** a. Curl-up b. Russian Twist c. Plank d. Burpees	**Day 24** *REST DAY!*	**Day 25** a. Push-Up and Rotation b. Curl-up c. Russian Twist d. Burpees	**Day 26** a. Burpees b. Plank c. Russian Twist d. Push-Up and Rotation	**Day 27** a. Regular Push-ups b. Push-Up and Rotation c. Russian Twist d. Burpees	**Day 28** a. Curl-up b. Russian Twist c. Plank d. Push-Up and Rotation
Week 5 **MS:** three *(3) set; 18 repetitions* **CE:** *1 minute*	**Day 29** a. Russian Twist b. Plank c. Curl-up d. Push-Up and Rotation	**Day 30** a. Plank b. Curl-up c. Burpees d. Russian Twist					
Legend: **MS-** *Muscle Strengthening* (*Regular, Push-up, Burpees and Push-Up and Rotation*) **CE-** *Core Exercise* (Curl-up, Russian Twist, and the Plank "elbow plank").							

Source: Author.

The scale ranged from options reflecting varying degrees of agreement or disagreement with the statements presented. This behavior modification test provided valuable insights into participants' subjective experiences and attitudes toward the challenge, complementing the quantitative data collected through other methods.

In analyzing the collected data, both descriptive and inferential statistical methods were employed. Descriptive statistics, including mean and standard deviation, were utilized to summarize and interpret the quantitative data obtained from the researcher-made questionnaire and behavior modification test.

Mean. The mean provided a measure of central tendency, offering insight into the average response or level of agreement among participants regarding specific aspects of the fitness challenge experience as well as their average weight for the duration of the intervention.

For the behavior modification test, a 5-point Likert scale was utilized to assess participants' perspectives on their experience with the 30-day challenge. The scale ranged from "Always" to "Never," with corresponding numerical values assigned as follows:

Scale	Description
5.00 – 4.01	Always
4.00 – 3.01	Often
3.00 – 2.01	Sometimes
2.00 – 1.01	Rarely
1.00 – 0.01	Never

Standard Deviation. It served as a measure of variability, indicating the extent to which responses diverged from the mean. This statistical analysis facilitated a comprehensive understanding of the distribution and variability of participants' perceptions and behaviors related to the challenge and including heir average weight for the duration of the intervention.

In addition to descriptive statistics, inferential statistical methods were employed to analyze the collected data, including the use of a paired sample t-test. This statistical test was utilized to compare the mean scores of participants before and after their participation in the 30-day fitness challenge.

By examining changes within the same group of participants over time, the paired sample t-test allowed for the assessment of the effectiveness of the intervention in promoting positive outcomes, such as improvements in physical fitness, health behaviors, or psychological well-being. This analysis provided valuable insights into the impact of the fitness challenge on participants' health and overall well-being, enhancing depth of the study's findings.

6. Data Gathering Methods.

The researchers employed a mixed-methods approach to gather data for the study. Firstly, a structured questionnaire was administered to collect quantitative data from the participants. The questionnaire included items related to participants' demographic information, such as age, gender, and previous physical activity levels. Additionally, it assessed their perceptions of the fitness activity challenge, including its effectiveness, perceived benefits, and overall satisfaction.

In conjunction with the questionnaire, participants were asked to select the response that most accurately reflected their experiences and perceptions regarding various aspects of the fitness challenge. This scale provided a structured framework for participants to articulate their thoughts and feelings, allowing for a comprehensive assessment of their attitudes and behaviors throughout the duration of the challenge.

Furthermore, the researchers utilized direct observation to gather supplementary data during the 30-day challenge. They observed participants' adherence to the daily exercise routines, noting any deviations or difficulties encountered.

By employing a combination of quantitative surveys, and direct observation, the researchers ensured a comprehensive understanding of participants' experiences and perceptions regarding the fitness activity challenge. This multi-faceted approach facilitated the gathering of rich and diverse data, enhancing the depth and validity of the study's findings.

7. Ethical Issues.

In conducting this study, adherence to the principles outlined in the Data Privacy Act of 2012 was paramount in ensuring the protection of participants' personal information. All data collected from participants were treated with the utmost confidentiality and handled in accordance with the provisions of the Act.

Measures were implemented to safeguard participants' privacy, including the secure storage and handling of all data collected. Participants were assured that their responses would be anonymized and used solely for research purposes, with no unauthorized access or disclosure to third parties.

Additionally, measures were implemented to safeguard the physical and mental well-being of participants throughout the study. The fitness activity challenge was designed with consideration for participants' safety and physical capabilities, and they were encouraged to consult with healthcare professionals if they had any concerns about their participation.

Additionally, participants were provided with clear information regarding their rights under the Data Privacy Act and were given the opportunity to withdraw their consent or request the deletion of their data at any time. By adhering to the principles of the Data Privacy Act, this study upheld the rights and privacy of all participants involved.

Overall, this study was conducted with the utmost ethical integrity, prioritizing the rights, safety, and well-being of all participants involved.

8. Discussion of Results and Reflection.

8.1. Students' weight before and after the 30-day challenge.

Table 1: Weight of the Students Before and After Engaging in a 30-day Challenge when taken as an Entire Group.

Weight	N	M	SD
Before Engaging	100	63.14	11.02
After Engaging	100	61.55	9.66

Source: Author.

Initially, the average weight of the participants stood at 63.14 kg, accompanied by a standard deviation of 11.02. Post the 30-day challenge, there was a noticeable reduction in the average weight, which decreased to 61.55 kg.

The standard deviation also exhibited a decrease, reaching 9.66 by the conclusion of the intervention. These findings indicate a collective trend towards reduced participant weight following the 30-day challenge, as supported by the shift in both average values and standard deviations.

8.2. Difference in Students' weight before and after the 30-day challenge.

Before the initiation of the intervention, participants exhibited an average weight of 63.14 kg, accompanied by a standard deviation of 11.02. Following their engagement in the 30-day challenge, the collective weight average experienced a reduction to 61.55 kg, with a corresponding standard deviation of 9.66 after the intervention period.

Analyzing these results reveals an evident decrease in the average weight of the participants, amounting to 1.59 kg after the intervention's implementation. This substantial reduction underscores the impact of the 30-day challenge on the overall weight metrics of the participants, suggesting a noteworthy positive change in response to the intervention.

8.3. Effect of the 30-day challenge.

The statistical data presented in Table 2 reveals a noteworthy finding as the p-value is less than 0.05, indicating a significant difference in the participants' weight before and after engaging in the 30-day challenge.

Table 2

Variables	*N*	*SD*	*M*	Z	p
Weight					
Before the 30-day challenge	100	11.02	63.14	6.684**	.000
After the 30-day challenge	100	9.66	61.55		

*Note: *p < .05, **p<.01*

Source: Author.

Examining the mean values further underscores this observation. Before the intervention, the participants had an average weight of 63.14 kg, with a standard deviation of 11.02. Following the 30-day challenge, the average weight decreased to 61.55 kg, and the standard deviation reduced to 9.66. This implies that the observed change in weight is not merely due to chance but holds statistical significance.

The notation $p < .05$ emphasizes that the observed difference is significant at a confidence level of 95%, reinforcing the reliability of the findings. Furthermore, the double asterisk notation $p<.01$ would indicate an even higher level of significance at 99%. The calculated difference in the Mean weights before and after the challenge is 1.59 kg, reinforcing the statistical significance indicated by the p-value.

The use of the Paired Samples Test as a statistical tool adds validity to these findings, confirming that the observed changes in weight are not random fluctuations but rather a consistent trend linked to the participants' engagement in the 30-day challenge.

The data presented represents responses from 100 participants regarding their experiences and perceptions of engaging in a 30-day fitness challenge. Each statement was rated on a 5-point Likert scale, ranging from 1 (Never) to 5 (Always).

Overall, the mean scores for most statements fell between 3 and 4, indicating a generally positive perception of the 30-day challenge among participants. Specifically, participants reported noticing enhancements in muscle strength (M = 4.17) and experiencing positive outcomes such as increased energy levels and improved relaxation and sleep quality (M = 4.16). Additionally, the challenge was perceived as encouraging participants to be more physically active (M = 4.15) and enhancing their confidence (M = 3.96).

However, some statements received lower mean scores, suggesting areas of concern or dissatisfaction. For example, participants expressed challenges in completing the exercises due to their difficulty (M = 3.30) and reported experiencing physical discomfort such as headaches, body pain, and chest discomfort (M ranging from 2.53 to 2.85). Moreover, feelings of lack of motivation (M = 2.88) and preference for sedentary activities over exercise (M = 2.26) were also noted.

In summary, while participants generally perceived positive benefits from the 30-day challenge, there were also areas of concern related to exercise difficulty, physical discomfort, and motivation. These findings suggest the need for further examination and potential modifications to the challenge to address participants' concerns and enhance their overall experience and adherence to the program.

In simpler terms, the data suggests that the 30-day challenge had a notable impact on the participants' weight, resulting in a statistically significant decrease. This indicates a positive outcome associated with the intervention, demonstrating its effectiveness in promoting weight reduction among the participants.

9. Findings.

This study aimed to design a 30-day challenge focused on encouraging students to lose weight through increased engagement in physical activity (PA).

The results of this action research include the following:

1. The weight of the students before the 30-day challenge was an average of 63.14 kg, and after the challenge, it decreased to an average of 61.55 kg.
2. On average, a student will lose approximately 1.59 kg if they engage in the 30-day challenge as part of the entire group.
3. There is a significant difference in the weight of students before and after engaging in the 30-day challenge, as indicated by a p-value less than 0.05. This suggests that the observed changes provide statistical evidence that the 30-day challenge has a meaningful impact on students' weight.
4. The 30-day challenge, designed to encourage students to lose weight through increased physical activity, proved successful, showing a notable impact on the weight of the participants with a statistically significant decrease and affirming its effectiveness in promoting weight reduction.

10. Summary.

The study revolves around an innovative 30-day fitness activity challenge designed by the researcher to encourage aerobic and muscular strength exercises among second-year students pursuing Bachelor of Science in Marine Transportation and Bachelor of Science in Marine Engineering at Iloilo Merchant Marine School (IMMS).

This challenge, constituting the intervention, aims to increase daily physical activity, with merits as rewards upon completion. To ensure commitment, participants sign a commitment letter, with withdrawal incurring demerits. The challenge is implemented through a Google Classroom, requiring participants to record themselves daily, aligning with the principles of progression in physical activity.

The research questions focus on assessing weight changes in the participants before and after the 30-day challenge. The study employs a single-group pretest-post-test design, with the participants comprising 100 second-year students selected purposively. Collaboration with the dean's office and the office of Midshipman Affairs facilitates the delivery of daily challenges. The action research methodology encompasses participants and data sources, data gathering methods, and ethical considerations.

Upon completion of the challenge, the research presented results that quantitatively assessed weight changes among participants. This included an analysis of the pounds lost on average during the 30 days, supported by statistical evaluations such as p-values to determine the significance of observed differences. The anticipated outcomes held the potential to offer valuable insights into the impact of physical activity on weight management, providing a foundation for future health and fitness interventions within the maritime education context.

The results of this study indicate that the 30-day challenge significantly lowered the participants' weight, showing a positive result and highlighting the intervention's success in encouraging weight reduction.

This study combines creative fitness ideas with careful research to help students and the wider maritime education community in a meaningful way. The goal is to improve the health of students in maritime education by looking at the bigger picture. The use of inventive fitness ideas shows the project's dedication to finding new and helpful ways to boost health and fitness.

11. Recommendations.

Based on the results and drawn findings, the following recommendations are suggested:

1. Implement a system for ongoing monitoring and evaluation of participants' progress even after the 30-day challenge. This will help track the sustainability of weight reduction and identify areas for potential improvement or additional support.
2. Expand the range of physical activities included in the challenge to cater to varying preferences and fitness levels among participants. This ensures inclusivity and keeps participants engaged with the program.
3. Integrate nutritional guidance and education into the challenge to balance the emphasis on physical activity. Providing information on healthy eating habits can further enhance the effectiveness of the intervention in promoting overall well-being.
4. Foster a sense of community among participants by incorporating group activities or challenges that encourage mutual support and motivation. This can contribute to a positive and encouraging environment, fostering long-term adherence to healthier lifestyles.
5. It is recommended to adopt teaching methods that accommodate diverse learning styles among students, fostering an inclusive educational environment. This approach not only acknowledges individual differences but also enhances the overall effectiveness of the learning process.

12. Plans for Dissemination and Advocacy.

Primarily, the researcher would like to recommend that school administrators to consider integrating the study findings into the maritime education curriculum to emphasize the importance of physical fitness and health promotion. Teachers could incorporate relevant topics, activities, and discussions into their lesson plans, focusing on the benefits of regular exercise and healthy lifestyle choices.

The Physical Education teacher should also initiate interactive sessions in the classroom where students can openly discuss their experiences with physical fitness challenges. Encourage peer learning, motivation, and support by providing a platform for students to share success stories and exchange tips for maintaining an active lifestyle.

Consider conducting practical demonstrations of exercises and physical activities during classroom sessions to engage students in hands-on learning can also be beneficial. Demonstrating exercises related to the fitness challenge can inspire students to participate actively and demonstrate the feasibility of incorporating physical activity into their daily routines.

Physical education teachers should also personalized support and guidance to students who may encounter challenges or barriers to participation in the fitness challenge. Provide individualized fitness assessments, goal-setting sessions, and tailored exercise plans to meet the unique needs and abilities of each student.

There is also a possibility to engage parents and caregivers in discussions about the importance of physical fitness and encourage their support for students' participation in the fitness challenge. Send home informational materials, organize parent-teacher meetings, or host family fitness events to promote collaboration between home and school environments.

Table 3

Suggestions	Description
Curriculum Integration	Integrate study findings into maritime education curriculum to emphasize importance of physical fitness and health promotion.
Interactive Sessions	Facilitate discussions in class where students share experiences with fitness challenges, promoting peer learning and support.
Practical Demonstrations	Conduct hands-on demonstrations of exercises to engage students and showcase feasibility of incorporating physical activity.
Personalized Support	Provide individualized guidance and support for students facing challenges with participation in the fitness challenge.
Role Modeling	Lead by example by actively participating in the fitness challenge, inspiring students to prioritize their health and well-being.
Parental Involvement	Engage parents in discussions about importance of physical fitness and encourage support for students' participation in the challenge.

Source: Author.

By considering these suggestions, teachers can play a vital role in disseminating the study findings, advocating for physical fitness, and creating a supportive classroom environment that promotes health and well-being among maritime students.

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